Does Individuals' Perception of CCTV Cameras in Public Spaces Influence Their Behaviour and Sense of Safety? The Case of Winnipeg

by

Graham Baffour Adumata

A thesis submitted to the Faculty of Graduate Studies of

the University of Manitoba

in partial fulfillment of the requirements of the degree of

MASTER OF ARTS

Department of Sociology and Criminology

University of Manitoba

Winnipeg

ABSTRACT

The safety issue in downtown Winnipeg has become a significant topic of debate in the media and government circles, prompting the implementation of various safety strategies, including closed-circuit television (CCTV) cameras. This research examines whether individuals' perception of CCTV in public spaces influences their behaviour and sense of public safety. Based on surveillance and governmentality theories and semi-structured in-depth interviews, the study addresses these critical questions: How do individuals perceive CCTV cameras in public spaces in Winnipeg, and do their perceptions influence/shape their behaviour and sense of safety? While some participants welcomed surveillance for its potential to enhance safety, others expressed distrust, citing concerns about privacy, data insecurity, racial profiling, and civil liberties. Mixed opinions emerged regarding the cameras' effectiveness in deterring crime and influencing behavior. While participants acknowledged that surveillance cameras can create a sense of awareness that influences them to modify their behaviour and potentially discourage anti-social acts, they also voiced significant concerns about their ability to truly prevent crime, believing that criminals can devise ways to evade detection. The study highlights that public safety extends beyond technology, emphasizing the need for real-time human intervention and community-based initiatives. Although surveillance cameras are perceived as a tool for monitoring, they are not seen as sufficient to ensure safety without complementary measures such as police patrols, better lighting, community bonding, and community initiatives such as Bear Clan and the Downtown Community Safety Partnership. The study contributes to knowledge by providing a nuanced understanding of public perceptions of CCTV surveillance and its impact on safety and behaviour.

Keywords: CCTV cameras, surveillance, public space, safety, behaviour, deterrence, crime prevention, displacement, privacy, racial profiling, Winnipeg

ACKNOWLEDGEMENT

I thank the most gracious God for his mercies and protection of my life since birth. I extend my heartfelt gratitude to my advisor, Professor Joseph Asomah, for his guidance, patience, motivation, support, and encouragement throughout this research project. I am also grateful to my thesis committee members, Professors Jeremy Patzer and Michael Baffoe, for their in-depth knowledge and constructive feedback they contributed to this research project.

I would like to thank the faculty, staff, and students of the Department of Sociology and Criminology at the University of Manitoba for their support and assistance throughout my graduate studies. I could not have asked for a better academic community. I also want to thank my friends and course mates for helping recruit participants.

I cannot go on without mentioning the Puhach family of Winnipeg for their warm reception and emotional support. Finally, I express my deepest gratitude to my family for their unwavering support throughout my life and academic journey.

DEDICATION

For my family, Kingsley Adumata, Hannah Quansah and Fiifi Andam Adumata

TABLE OF CONTENTS

LIST OF TABLES

CHAPTER 1

INTRODUCTION

Over the past thirty years, closed-circuit television (CCTV) camera systems have experienced a notable rise globally, with the United Kingdom's leading example of public space video surveillance overtaken by China in recent years (Matczak et al., 2021; Graham et al., 1996: Fussey & Coaffee, 2012). They are prevalent in various locations, such as streets, automated teller machines (ATMs), shopping centers, hotels, universities, public towers, public transportation facilities (including trains and buses), and private residences. The proliferation of surveillance camera systems is driven by advancements in technology and growing public demand for increased security measures in public spaces, with stakeholders such as governments, private owners, and law enforcement agencies at the forefront of its implementation (Matczak et al., 2021; Porter, 2009; Taylor, 2010; Cuevas et al., 2016; Shrivastava, 2020; Kurdi, 2014; Hulmes & Morgan, 2015; Keval & Sasse, 2010; Ratcliffe, 2006). The demand for CCTV has led to significant capital investment into its implementation and operation, with various stakeholders across the world allocating a substantial portion of their annual budgets toward the operation of open-space surveillance cameras (Cerezo, 2013; Ratcliffe, 2006; Welsh & Farrington, 2009; Beck & Willis, 1999; Poyers, 2004; Carr, 2016).

As part of the new forms of surveillance technology, the terminology "closed circuit television" was initially employed to distinguish between publicly disseminated television transmissions and privately operated camera-monitor systems. Smart closed-circuit television (CCTV) involves visual surveillance systems that utilize pattern recognition technologies to analyze and interpret video footage. Currently, the term CCTV is commonly used to refer to diverse video surveillance technologies, such as Police Observation Devices (POD) or Portal Overt

Digital Surveillance Systems (PODS). Typical CCTV installations consist of multiple cameras linked to a control room, with either an unmonitored data storage system or human operators who monitor a bank of television screens or an unmonitored data storage system (Ratcliffe, 2006; Mollers & Halterlein, 2013; Weller, 2012: Kroener & Neyland, 2012).

The adoption of surveillance cameras has yet to achieve universal consensus since stakeholders hold divergent views regarding its effectiveness and the apprehensions surrounding its use in public spaces. Some scholars (such as Ratcliffe, 2006; Willis et al., 2017) see surveillance cameras such as CCTV as helpful in combating crime in public spaces by deterring potential offenders from participating in illegal conduct. They also argue that the surveillance systems increase the rate of detecting potential criminal acts, leading to an expeditious resolution of criminal cases involving individuals captured on surveillance footage that provides evidence for law enforcement officials (Cuevas et al., 2016; Cerezo, 2013; Gill & Turbin, 1998; Levesley et al., 2005; Short & Ditton, 2017; Ratcliffe, 2006; Welsh & Farrington, 2009; Sivarajasingam et al., 2003).

However, critics have raised concerns over the effectiveness of closed-circuit television (CCTV) systems in crime fighting. One notable criticism of closed-circuit television (CCTV) cameras as a means of deterrence is their limited efficiency in preventing crime since they tend to displace criminal activities to areas perceived as less risky, potentially exacerbating the crime rate in those regions (Hesseling, 1994). Critics have also argued that the advantages of closed-circuit television (CCTV) systems are insufficient to warrant the considerable financial burdens imposed on taxpayers for their installation, monitoring, and upkeep. Additionally, it has been argued that surveillance cameras affect the civil liberties of the citizenry due to their placement, continuous

monitoring, and lack of regulations attached to their operations (Goold, 2002; Poyser, 2004; Taylor, 2010; Carr, 2016). In other words, CCTV camera use is widely perceived as potentially violating individuals' rights, as it involves the practice of profiling and monitoring specific groups of people based on their appearance or behaviour. For example, surveillance systems were used to observe and identify social groups that were perceived as non-conforming to the standards of newly established commercial areas in Oslo, Norway (Lomell, 2004; Fay, 1998; Stutzer & Zehnder, 2013; Beck & Willis, 1999; Hulmes et al., 2015; Levesley et al., 2005; Gill et al., 2006; Klauser, 2007).

Further research is needed to inform this ongoing debate on surveillance cameras. As previously mentioned, surveillance cameras in public spaces have demonstrated their importance as a situational crime prevention strategy (Brands et al., 2016; Welsh & Farrington, 2009; Cerezo, 2013; Levesley et al., 2005; Ratcliffe, 2006; Bennett & Gelsthorpe, 1996). However, they also raise significant concerns, including displacement effects, financial costs, infringement on civil liberties, racial profiling and a false sense of security (Welsh & Farrington, 2003; Gills et al., 2006; Weisburd et al., 2006; Waples et al., 2009; Park et al., 2012; Hulmes et al., 2015; Wilson & Sutton, 2003; Armitage, 2002; Carr, 2016; Robin et al., 2021: Poyser, 2004; Möllers, & Hälterlein, 2013; Radcliffe, 2006). Additionally, although surveillance studies in Canada, as evidenced by the works of Walby (2006; 2005), Lippert (2007), and Hier (2011), have made significant contributions to the Canadian surveillance literature, they do not address the public perception of closed-circuit television (CCTV) and its influence on perceptions of public safety in different cities across Canada. This study contributes to filling this gap in knowledge.

This research aims to understand whether individuals' perception of CCTV cameras in public spaces influences their behaviour and sense of public safety. The study addresses these

critical questions: How do individuals perceive CCTV cameras in public spaces in Winnipeg, and do their perceptions influence their behaviour and sense of safety? This study is grounded in surveillance and governmentality theories and employs qualitative data from in-depth semi-structured interviews. Scholars employ multiple theories to explain contemporary surveillance; these theories are grouped into panoptic and post-panoptic theories (Galic et al., 2017). Jeremy Bentham and Michel Foucault are the pioneers of panopticon theories, with the latter extending the arguments of the former. Foucault and Bentham's concepts of surveillance involve physical structures and visibility, meaning people watch over others from a building. According to Bentham's panopticon and Foucault's panopticism, this concept involves a central watchtower enabling complete surveillance by a single observer of all prisoners, who are unaware of when they are being observed (Galic et al., 2017; Foucault, 1979; Bentham, 2020). Post-panoptic theorists like Deleuze, Haggerty, Ericson, and Zuboff offered alternative explanations for contemporary surveillance. They characterized it as a network that predominantly utilizes digital technology over physical methods. This entails decentralized forms of surveillance, characterized by a growing physical separation from the subjects and frequently involving data management (Galic et al., 2017; Haggerty & Ericson, 2017; Deleuze, 2017). In the context of public surveillance, CCTV cameras are pervasive and centrally controlled, allowing authorities or security personnel to monitor large areas effectively from a single location at a distance through sophisticated technologies (Haggerty & Ericson, 2017; Galic et al., 2017; Ratcliffe, 2006). Research (Klauser, 2007; Yussuf, 2011; Gill & Turbin, 1998) shows that being observed can have psychological consequences for individuals, leading to increased uncertainty.

Foucault also introduced the concept of "governmentality" in his lectures at the College de France in 1978 and 1979. This concept has become a prominent framework for understanding

neoliberal governance practices and social control (Madsen, 2014; Lemke, 2015; Pearce & Tombs, 1998). Governmentality has been utilized in surveillance literature to analyze the use of closed-circuit television cameras by state and non-state actors to monitor and regulate individuals from a distance. Surveillance and governmentality theories are significant to this study because they emphasize the power dynamics inherent in surveillance. CCTV cameras primarily concern territorial division, leading to the emergence of two clearly defined spatial categories and two distinct social groups: the monitor and the monitored (Klauser, 2007). Governments and property owners use CCTV cameras to protect their properties and as a conformity tool to control the masses (Simon, 2020). Beneath this class of actors are personnel in control rooms who possess unseen power over those they monitor without being questioned by the observed individuals (Foucault, 1979; Goold, 1992; Klauser, 2007).

Winnipeg was chosen for this study because it has witnessed high crime rates for some time (Comack & Silver, 2008). Comack and Silver (2008) described the city as having "garnered a reputation as a major site of crime and violence" (p. 819). Despite this assertion, data from 1998 to 2023 indicates that overall, there has been a decline in crime rates in Winnipeg (Statistics Canada, 2024). The year 2006 saw a decrease in crime rates, with figures remaining low for a sustained period. However, statistical trends do not always align with public perceptions. Since this study focuses on public perception, how safe individuals feel is significant, as perceptions of crime can shape behaviour and attitudes regardless of actual crime trends.

It is also worth noting that the COVID-19 pandemic also slowed crime rates, as 62,845 and 58,326 cases were reported for 2020 and 2021, respectively (Statistics Canada, 2024), which can be explained by the restrictions imposed by the government to halt the spread of the disease. However, the post-pandemic period saw a jump in these figures as 2022 and 2023 recorded 73,443

and 71,434 actual incidents, with an increase and decline in certain crimes. For example, in 2022, Winnipeg experienced a surge in homicides, resulting in 53 fatalities (Statistics Canada, 2024). Thus, despite periods of decline, crime remains a significant concern in the city.

Particular areas, such as the west and central districts—including Point Douglas and Downtown—are known hotspots for criminal activity (Modjeski, 2023). Specifically, the bus shelter at Portage Place has been the focal point of numerous notable criminal incidents, encompassing acts of stabbings and shootings (Greenslade, 2018). In January 2018, an incident occurred wherein a 17-year-old international student was subjected to an unprovoked assault at this bus shelter (Greenslade, 2018). Such occurrences have become a common feature of Winnipeg downtown, with the stabbing of a young man at the Millennium Library, the dual shooting of two young men at Portage Avenue, and the stabbing of a Ukrainian refugee on Canada Day in 2023 offering some current examples of the worsening security situation in the city's downtown which has attracted significant media attention (Prentice, 2023: Barhardt & Maclean, 2023; Thompson, 2023). These incidents have contributed to a heightened sense of uneasiness among downtown residents and visitors. According to a resident interviewed by CityNews, it is perceived as unsafe to be out at night, particularly in downtown Winnipeg and the Portage Avenue region. Some residents advise against going out alone in the late evening hours—typically after 8, 9, or 10 p.m.—due to concerns about personal safety; others have shared firsthand experiences of physical aggression, including being attacked, assaulted, and even threatened with knives in the downtown area (Olatunde, 2023).

These statistics and incidents have led to calls for action against the insecurity situation in Winnipeg, prompting stakeholders to act towards this problem in the central business district and other parts of the city with various interventions being rolled out (Manitoba Government, 2023).

In this regard, the Manitoba government aims to address the issue of violent crime in downtown Winnipeg by introducing new safety measures, involving a financial commitment of $10 million over two years. The proposed strategy incorporates 24 additional law enforcement personnel stationed in the downtown region, improved illumination infrastructure within the vicinity, installation of 75 novel closed-circuit television (CCTV) cameras, and establishment of a centralized hub dedicated to crime prevention efforts (Thompson, 2023; Manitoba government, 2023). The procurement of surveillance cameras re-echoes calls by a downtown community organization to establish a surveillance camera network to enhance safety within the central district. According to Greg Burnett, a Downtown Community Safety Partnership representative, implementing increased monitoring measures will benefit the most marginalized individuals in downtown areas and provide advantages to other relevant organizations (Thompson, 2023).

The proposed installation of surveillance cameras by stakeholders, namely the government and interest groups, is expected to assist law enforcement agencies in their operations. An example is how surveillance cameras aided the detection and apprehension of offenders in the killing of Stony Stanley Bushie, a 48-year-old man whose lifeless body was located behind 333 Portage Ave, and the stabbing of a 17-year-old international student at Portage Place bus shelter (CBC, 2015). This policy will add to the already existing public space CCTV operations by the Winnipeg Police Service, which has existed since 2009. The acquisition and implementation of surveillance cameras will help replace old cameras that have been permanently inoperative and non-functional due to their advanced age. Due to the persistent occurrence of equipment failures, proponents of CCTV cameras feel it is vital to undertake a process of equipment modernization alongside augmenting the number of cameras in the downtown region (Winnipeg Police Service, n.a; Manitoba government, 2023; Thompson, 2023).

By allocating a substantial financial expenditure towards security in the province, the Manitoba government aims to improve public safety and cultivate a secure atmosphere for downtown Winnipeg residents, employees, and visitors. The government expects this measure to instill confidence in the public, demonstrating the government's commitment to fostering a safer downtown environment. Stakeholders hope that a safe and secure Winnipeg Downtown will promote revitalization and restoration of the once vibrant business district, an agenda of the Manitoba government (Manitoba Government, 2023; Thompson, 2023). However, limited research has investigated people's perception of surveillance infrastructure such as CCTV cameras and whether their perception influences their behaviour and sense of safety in the city. This study, therefore, enriches the surveillance literature, especially in the Canadian context, and it also has the potential to inform surveillance and public safety policies.

CHAPTER 2

LITERATURE REVIEW

This section provides an overview of public space, surveillance, the proliferation of CCTV, the growth of CCTV in Canada, and arguments regarding the benefits of public CCTV cameras, such as improved situational awareness, enhanced monitoring and detection capabilities, and their assistance in investigations. The section also addresses public concerns regarding surveillance cameras, including privacy concerns and their potential displacement of crime.

2.1 Public Space

Public spaces are ever-present in our surroundings and have played a significant role throughout the history and evolution of human settlements. They are influenced by and impact society, including power dynamics, priorities, and fears. In modern societies, we frequently encounter them in our daily activities. For example, public roads and sidewalks are used for commuting to work and school (Neal, 2010; Mehta, 2022; Carmona, 2010).

However, there has been no consensus on the definition of public space. According to Lee (2022), using various terms such as urban public space, public space, public place, public realm, and the public sphere by different authors without providing a clear definition or interpretation adds further complexities to the definitional challenge of public space. The perceptions and meanings of public space vary significantly across different cultural practices (Lim, 2014; Mehta, 2022). Mehta (2022) notes that public space is commonly understood as open and accessible to everyone, typically owned and managed by the state on behalf of the public.

Nevertheless, the concept of public space has been defined by various academic fields in the social sciences (Zhang & He, 2020; Lee, 2022; Murphy & O'Driscoll, 2021; Carmona, 2010; Gehl & Matan, 2009). For example, Garcia-Ramon et al. (2004) defined public spaces as "places

of interrelation, social encounter and exchange, where a great diversity of people can go for a wide variety of activities" (p 224). Tonnelat (2010, p.1) notes that public space has traditionally been called "open space." "This term encompasses various outdoor areas such as streets, parks, recreational areas, plazas, and other publicly owned and managed spaces." For Yussuf (2011), a public space is a location where individuals cannot control who is close to them or possess any legal authority to limit or regulate the entry and exit of others. Welsh and Farrington (2009) describe public spaces as areas accessible to individuals without restrictions or fees. Commonly observed public spaces comprise urban and suburban hubs, public transit infrastructure such as underground rail networks, publicly accessible parking facilities, and communal residential areas. Neal (2010) further argues that any physical location that allows individuals and groups to engage in social interactions has the potential to be considered a public space.

Ownership and access are two main criteria for describing space as public or private (Yussuf, 2011; Tonnelet, 2010; Garcia-Ramon et al., 2004; Mehta, 2022). Ownership of public space is currently entangled in legal, economic, and management challenges. Public space is commonly understood as open and accessible to everyone, typically owned and managed by the state on behalf of the public. Also, one criterion frequently used to distinguish between private and public spaces is by considering their respective funding sources. Private spaces are typically funded by non-governmental entities, such as businesses or individuals (Newell et al., 2018). However, in the current era, public space is no longer solely controlled by the state as in the ancient Greek era. For example, contemporary societies have seen the emergence of public-private places (Mehta, 2022).

Globalization has substantially influenced quasi-public spaces like shopping malls and private gardens, leading to the privatization of these spaces. This poses a threat to the preservation

of public space (Lim, 2004). For instance, private buildings such as shopping malls or restaurants may be considered public spaces. However, the final decision on their use lies with the owner or operator of such spaces (Neal, 2010). With the funding and ownership of public spaces by private entities (Newell et al., 2018), the issue of accessibility takes centre stage in the discussion of public spaces, as access to such places may be limited to a specific group (Lee, 2022; Neal, 2020; Zhang & He, 2020).

The concept of risk has garnered considerable interest in sociological discourse over the years. This interest has been influenced by the works of Beck (1992), a German sociologist who argues that society's shift from pre-industrialization to contemporary industrialization has led to dangers associated with this shift. In his theory of the *risk society*, Beck (1992) contends that modern societies are increasingly preoccupied with managing and mitigating risks that are both produced by and embedded within social structures. In a risk society where concerns about crime and disorder are heightened, , excluding some individuals from public spaces may be seen as a preventive measure against potential offenders, aiming to deter certain crimes. For example, exclusionary measures for addressing (potential) criminal activity, antisocial behaviour, and political demonstrations have been recently implemented in the United Kingdom, the United States, and Switzerland (Moeckli, 2016; Mehta, 2022).

In addition, when privately owned entities control a publicly accessible space, individuals considered "undesirable" may no longer possess the characteristics associated with Hannah Arendt's concept of appearance (Zhang & He, 2020). Informal rules can play a significant role in determining the inclusion or exclusion of individuals from the public sphere, thus giving organizations the power to choose people who can access their physical spaces (Neal, 2010). The exclusive right and authority exercised by modern-day business owners of public spaces can be

likened to the Greek agora, which was exclusively reserved for free citizens, with women, children, and the enslaved excluded from discussions and negotiations (Mehta, 2022). The exclusion of the marginalized may affect their social well-being. For instance, when individuals are excluded from public spaces and rendered invisible, they are deprived of their personhood and worth (Murphy & O'Driscoll, 2021). Also, if the marginalized are allowed in public spaces, they will likely be monitored more closely than others. For instance, CCTV cameras can be used to target minority groups, such as the youth, unjustly (Wilson et al., 2010).

For this research, *public space* refers to public and privately owned spaces that are easily accessible to everyone regardless of race, gender, social status, religion, or ability. These spaces include parks, bus stops, theatres, shopping malls, reception spaces, and walkways.

2.2 Security Issues in Public Spaces

The occurrence of crime that people encounter regularly is increasing, raising concerns about solitary presence in public spaces (Sayin et al., 2015). Crime captivates the collective imagination of the population, and upon careful consideration, it is not unexpected. Specific social interactions, such as becoming a target of criminal activity, can be distressing experiences due to the potential impact of both immediate and long-term physical and psychological harm inflicted upon victims and their close relations (Jackson, 2004; Rehren, 2022; Ceccato, 2012). From the above arguments, security encompasses the likelihood of individuals becoming targets of criminal activity and their subjective sense of safety (Ceccato, 2012). This makes safety issues crucial in densely populated urban areas (Erkan et al., 2021), leading to debates about the quality of public places, which have emerged as a significant topic of discourse in recent years. Discussions on safe spaces emerged in the 1960s when there was considerable emphasis on researching and creating a secure living environment (Socha & Kogut, 2020).

According to Ceccato and Nalla (2020), a safe environment is characterized by the optimal utilization of public spaces, fostering social engagement. Ensuring a secure public environment necessitates the active participation of individuals in local crime prevention programs, which can contribute to reducing crime and enhancing safety (Ceccato & Assiago, 2020). An environment's safety is contingent upon the frequency of crime, which in turn is influenced by the perception of its level of safety (Ceccato & Nalla, 2020). This makes safety a subjective concept that can be defined in various ways, thus making it a social construct (Rezvani & Sadra, 2017; Rehren, 2022). Subjective safety is guaranteed when the residents of a city have the freedom to engage in public life actively, leading to an increase in public confidence and the flourishing of enterprises (Rehren, 2022; Boothy, 2023). In criminology, safety encompasses more than the absence of violence, crime, and hazards. It also includes positive connotations such as belongingness, familiarity, and trust (Rehren, 2022).

Linked to the subjective nature of safety, it can be argued that context determines how safe an area seems; inhabitants in high-crime, disorderly areas tend to be more fearful. Nonetheless, academics have proposed that a region may start to feel normal if violence becomes ingrained in the daily lives of its residents (Kochel & Nouri, 2021). While it may be impossible to eliminate crime, it is widely believed that a desirable city should strive to manage the potential for crime and its associated anxiety to ensure the safety of its citizens (Ceccato, 2012). However, this has become problematic, as various open spaces across North America have grappled with safety issues in public spaces over the years, which have been generated and exacerbated by multiple variables such as drug addiction, poverty, and homelessness (Ali et al., 2015; Rezvani & Sadra, 2017: Duggan, 2023; Taylor, 2023; Gunter, 2023; Scace, 2023: Chen, 2023; Fox, 2023: James, 2023).

Public space safety has been a significant issue in Canada, with the country's downtowns experiencing acts of social disorder such as stabbings, break-ins, property crimes, physical confrontations, shoplifting, and violence towards employees and patrons, which have been partly influenced by social activities such as drug use and homelessness in such spaces (Duggan, 2023; Taylor, 2023; Gunter, 2023; Scace, 2023: Chen, 2023; Fox, 2023: James, 2023). These acts of social disorder in public spaces have led to negative public perceptions of such places, which have been featured extensively in the media, shaping people's perception of such places as unsafe (Rehren, 2022).

Existing research indicates that the sensation of safety does not stem from a single factor and that many factors promote a sense of safety (Kochel & Nouri, 2021). In criminology, the three most common determinants of sense of safety are police visibility, crime prevention through environmental design (CPTED), and a sense of community (Lo et al., 2023; Zhao et al., 2002; Van de Veer et al., 2012; Ramachandran & Ritchie, 2023; Totikidis et al., 2005; Jajoriyah & Singh, 2023; Turner, 2020). Research shows that police presence at a particular location can instill trust and belief in commuters that such spaces are safe, thus increasing their perception of safety (Lo et al., 2023). This was reiterated by Van de Veer et al. (2012), who stated that the presence of uniform police officers could impact the perceived level of safety in each circumstance and individuals' sentiments of safety by increasing the activation of mental concepts associated with crime and unsafety. The visibility of uniform police patrol operatives in open spaces is seen as a deterrent to potential criminals who shift their criminal intentions to other places where they are less likely to be apprehended (Van de Veer et al., 2012; Weisburd et al., 2006). Historically, it has been argued that not every individual feels safe in public spaces when law enforcement agencies are present, with the homeless, low-income communities, youth, and minority groups being clear examples of

those who feel threatened by the presence of police officers (Selkirk, 2020; Dandurand et al., 2022; Light, 2023). Recent research indicates that most young people and adults perceive the police as reducing their sense of safety (Light, 2023).

Over the years, there has been a shift from police to community-based solutions to crime prevention through collaborations with different stakeholders. A sense of community and belonging has been noted to be one of the safety factors for many people who do not subscribe to technology as a crime intervention strategy, as community members take charge of the ownership of their neighbourhoods. Natural surveillance, which entails the unstructured observation of public areas by inhabitants, pedestrians, and other community members, is vital in improving the safety and security of neighbourhoods by discouraging criminal activity and encouraging social contact. This can be achieved through informal social control where strong bonds, trust among community members and the willingness to intervene in crime lead to the regulation of the society (Berger, 2024: Totikidis et al., 2005; Jajoriyah & Singh, 2023).

Due to the sophistication of crime and the advent of technology, one program being promoted to ensure safety in public spaces is Crime Prevention Through Environmental Design (CPTED). Crime Prevention through Environmental Design (CPTED) is a method that seeks to diminish criminal activity and improve safety by altering the physical and social surroundings (Jajoriya et al., 2023; Cozens et al., 2005; Knutt, 2023). This crime prevention system promotes the use of lighting, adequately maintained spaces, natural surveillance, and new forms of surveillance, such as CCTV cameras (Jajoriya et al., 2023). The public widely perceives closed-circuit television (CCTV) as a surveillance system effective in capturing criminals, discouraging criminal activity, and decreasing the fear of crime (Ramachandran & Ritchie, 2023). Surveillance cameras thus serve as capable guardians that deter criminals from engaging in acts of criminality,

moving their criminal activities to a different place. With this crime prevention solution, individuals patronizing CCTV-monitored areas perceive such locations as safe due to the low number of crimes in such jurisdictions (Beck & Willis, 1999; Taylor, 2012). Nevertheless, a disparity exists between closed-circuit television (CCTV) cameras and the feeling of safety due to the continuous occurrence of crime in CCTV-operated jurisdictions (Ramachandran & Ritchie, 2023), leading to discussions about the efficiency of surveillance cameras as a crime prevention tool due to their inconsistencies in fighting crime (Cerazo, 2013; Taylor, 2012).

Concerns exist about the relationship between CCTV cameras and the perceived sense of safety. One such issue is privacy invasion, which is a significant determinant of people's perceived safety. Increased concerns about privacy invasion from CCTV cameras lead to decreased perceived safety throughout the day. This circumstance does not apply to nighttime (Kula, 2015). One possible reason is that individuals may see crime as more likely to occur during nighttime, and CCTV serves as a crucial deterrent against criminal activities. Some individuals prioritize avoiding being a victim of crime over concerns about their privacy being violated at night (Kula, 2015). Also, there is a noticeable variation in how different genders and age groups perceive CCTV cameras. Research by Ardabili et al. (2024) revealed that despite their heightened sense of insecurity, younger women in Charlotte (USA) continue to put their faith in video surveillance systems. Although women generally support the use of CCTV, some men have opposed its presence in public spaces, viewing it as a violation of civil liberties (Bennett & Gelsthorpe, 1996).

Furthermore, the experience of feeling insecure in public spaces can provide challenges both on an individual level and within the broader social context (Ramachandran & Ritchie, 2023; Rezvani & Sadra, 2017). Experiencing insecurity while outdoors and the apprehension of criminal activity might result in a lack of physical activity, limited social interactions, diminished economic

activity, lower utilization of public areas, and unfavourable opinions of safety. This might result in a recurring pattern of fear and criminal activity, burdening community relationships (Ramachandran & Ritchie, 2023; Rezvani & Sadra, 2017; Tandogan & llhan, 2016). Insecurity in public spaces and its associated effect of fear of crime poses a significant challenge to stakeholders of all levels of government, shop owners, and patrons. This is evident as numerous entrepreneurs in the central business districts across Canada have encountered such difficulties, compelling them to modify their operating hours and use measures to discourage criminal activities at their business locations (Knutt, 2023; Reynoldson, 2023).

An example is when Fresh Carnival, a Regina-based restaurant, closed its doors two hours earlier due to safety concerns. To most business owners, the catalyst for this measure was acts of violence toward employees (Reynoldson, 2023). Insecurity also induces psychological distress, which leads to the avoidance of locations that are viewed as dangerous, which may have adverse financial implications for stakeholders (Sayin et al., 2015; Duggan, 2023). For instance, if individuals view the car park of a shopping center as unsafe, they are likely to avoid visiting that mall, resulting in a decline in the income of businesses in that location (Sayin et al., 2015). Research indicates that women, children, and older people are the worst affected when it comes to safety issues in public spaces due to their vulnerability (Tandogan & Illhan, 2016). However, numerous empirical investigations have endeavoured to demonstrate that the experience of feeling unsafe does not consistently align with the actual threat. Conversely, individuals may perceive a sense of unsafety in a setting that appears entirely secure (Rezvani & Sadra, 2017).

In summary, with the subjectivity of safety, it is feasible to implement environmental and community modifications to improve overall perceptions of safety, hence creating a more welcoming atmosphere in public spaces. Enhancements targeting lighting, CCTV, design, and

community-police integration are identified as more impactful in enhancing perceptions of safety. Some scholars suggest that considering these aspects when making policy and financial decisions can improve quality of life and stimulate economic growth. They indicate that through inclusive policies, people's perceptions of safety can be addressed by involving local parties, such as police, safety experts, community groups, and people whose opinions are not usually considered in planning decisions (Ramachandran & Ritchie, 2023; Ceccato, 2020).

2.3 Surveillance

Data gathering of human activities and movements has been a common feature of modern-day surveillance due to record-keeping's integral role in human life, the advent of technology, and the need for governments and organizations to protect their interests (Andrejvic, 2012; Rule, 2012). As far back as the nineteenth century, surveillance was purposefully carried out for welfare and warfare. This is not different from modern-day surveillance, judging by the insecure situations and the need for social conformity. Surveillance was discrete in the past, but with new forms of technology, information that was physically collected is now gathered remotely in large central databases. Thus, digital surveillance has replaced the panopticon (Weller, 2012; Marx, 2015; Su et al., 2021; Trimek, 2016). Lyon et al. (2012) note that the economic, political, and cultural importance of personal data in the twentieth century contributed to the emergence of surveillance. Ruppert (2012) and Weller (2012) argue that a more organized and structured data-gathering method ushered in modern surveillance, which differs from the pre-industrialization era. As a multidisciplinary study, it encompasses politics, social control, law and society, and criminology. This intersectionality provides an analytical grasp when studying it (Marx, 2015; Lyon et al., 2012).

In their arguments, Wood et al. (2006) believe that society has moved towards a surveillance state due to the use of surveillance technologies in organizing and structuring it. Surveillance can be defined as the monitoring and gathering of information about an individual or a group of individuals who are part of a broader population. Therefore, look, watch, observe, supervise, control, gaze, stare, examine, scrutinize, scan, check out, spy, glean, scope, monitor, inspect, and follow are some words associated with surveillance (Marx, 2015). Over the years, governments and private organizations have been at the forefront of mass surveillance (Lyon, 2012; Weller, 2012; Ball, 2010; Ball, 2012; Introna, 2000).

The existing literature indicates that democratic and autocratic governments have relied on surveillance as a governing strategy. The state, as one of the users of surveillance, employs an extensive data collection network to analyze and manage populations under its jurisdiction using constant monitoring, physical training, house searches, spies, secret agents and informers. (Lyon et al., 2012: Weller, 2012: Feldstein, 2021). In authoritarian regimes such as Nazi Germany and Stalinist Russia, surveillance was not only carried out by the government on citizens, but also citizen-to-citizen surveillance was possible (Weller, 2012). However, with modern-day societies being termed as risk societies because of the insecurities and awareness of risk (Kroener & Neyland, 2012), governments employ "social supervision" (Weller, 2012, p:59) as a means of data collection and management to protect their citizens. In other words, governments often consider public safety and social order as the reasons for surveillance (Su et al., 2021; Marx, 2015).

Research has shown that autocratic governments abuse surveillance systems more than liberal states due to undemocratic practices in such states (Liu, 2023: Feldstein, 2022). Examples are the misuse of surveillance and the over-surveillance of citizens in the People's Republic of China (Su et al., 2021). In such countries, governments use surveillance to monitor dissenting

voices, keep an eye on many citizens and collect information about public opinions, which helps them exert dominance over the governed (Feldstein, 2021: Liu, 2023). These unregulated surveillance practices lead to distrust among citizens and the state, which is not the case in democratic countries such as Denmark, where a study revealed that citizens' trust in their government leads to their acceptance of state surveillance (Jorgensen, 2023).

Border and territory are concepts of surveillance primarily associated with state monitoring. There has been an argument that some spaces need protection and others do not (Saunders, 2020). Adey (2012) further notes that "borders are the focus of such intense practices of monitoring, surveillance and sorting because they are 'pinch points,' the filters in a hydraulic system of flow of movement that circulate and move between and within national state and supra-national state boundaries"(p.193). As a site of visibility, state authorities use surveillance technologies to regulate the movement of people in a particular territory. By regulating territories and borders, some communities have been over-monitored and excluded from some public spaces because of their religion, race, economic status and ethnicity. For example, surveillance cameras have been used as a counterterrorism tool to regulate the movement of people in the United States of America, which is evident after the September 11 and other terrorist attacks. In the monitoring of borders, people who are considered unwelcome have been prevented from accessing public spaces (Fussey & Coaffee, 2012; Adey, 2012; Wester & Giesecke, 2019; Scan & Diesman, 2009: Saunders, 2020). Research by O'Connor and Jahan (2014) revealed that American Muslims suffered the brunt of government surveillance after the 9/11 suicide bombing attacks. Although surveillance cameras do not overly focus on terrorist attacks as they have been commonly used to monitor public spaces, they are funded mainly by the anti-terror budgets of most countries (Kroener and Neyland, 2012). As indicated earlier (Weller, 2012), surveillance can be a citizen-to-citizen approach. In this

instance, private entities and businesses have widely used organizational surveillance as a supervision and crime prevention strategy (Ball, 2010; Ball, 2022: Introna, 2000; Ball, 2005).

Institutional surveillance, another form of contemporary surveillance, has increased despite the declining numbers of surveillance by communities, families, and local organizations in Western societies, and one avenue of such surveillance is workplace monitoring, which has been necessitated by consumerism and the rise of capitalism. Research indicates that most business owners institute surveillance to protect their assets and gain an advantage over their rivals. There is nothing new about workplace surveillance when considering the interrelation between capitalism and monitoring (Ball, 2010; Ball, 2022; Introna, 2000; Ball, 2005). An example is the clock-in and clock-out systems, which are synonymous with most businesses. As the name suggests, simple direct surveillance, the most common form of workplace monitoring, involves collecting information about an employee's performance through observation and using the human senses. With the advent of technology, this form of surveillance has been taken over by security cameras, where an individual sits behind the monitor to observe the activities of their employees (Sewell, 2012: Rule, 2012: Weller, 2012). The surveillance of employees by their supervisors may affect their performance due to the invasion of their privacy, a limitation to their creative abilities, discrimination and the distrust they may have for business owners (Ball, 2022: Ball, 2010: Introna, 2000).

From the two primary surveillance users, namely the government and organizations, the common characteristics that run through these types of surveillance are power, identity and control (Feldstein, 2022; Marx, 2015; Lyon et al., 2012). As a key concept in surveillance, identity involves who is watching and who is being watched. Usually, for effective surveillance to occur, there must be a target, which often are individuals monitored by representatives of governments

and institutions who work in control rooms. Surveillance serves as an avenue for executing power, which is impactful when hidden. In this instance, those with power can focus their gaze on other individuals who are mostly unaware. The ability to watch a large set of people with minimal human effort makes this form of surveillance a cost-effective venture. Workers at the various CCTV camera control rooms interpret and make sense of social reality by giving meaning to people's behaviour and movements. In most cases, the watcher has the power to watch others without their consent and does not share their interpretation with the one being monitored, sometimes leading to bias and discrimination as people and groups are monitored differently (Jenkins, 2012; Lyon et al., 2012; Introna, 2000; Smith, 2012; Marx, 2015). This inequality often leads to discrimination, mostly racial profiling and the over-surveillance of minorities such as the youth, homeless, and low-income individuals, among other over-monitored populations. Some of this discrimination is based on the appearance of such individuals and the prejudices those behind surveillance have about such groups (Norris & Armstrong, 1999: 2019; Isnard & Council, 2001; Scan & Deisman, 2009; Wilson et al., 2010).

According to Browne (2012), space and time influence how things are racially ordered. Surveillance at different points in history has been embedded with racial discrimination against minority groups, which dates to the colonial era (Lyon, 2012; Sa'di, 2012; Poulx, 2014). Colonial authorities used different forms of surveillance to maintain and consolidate their dominance over their colonies. One such strategy was through religion, where early converts to Christianity were made to believe they were being watched by a supreme being, leading to their obedience and self-regulation of their behaviour (Sa'di, 2012). Until now, the surveillance strategies employed by the colonial powers have had a severe impact on native communities. For example, ethnic cleansing and civil wars occurred due to the racial profiling and grouping of these communities (Sa'di, 2012).

From these arguments, Lyon et al. (2012) state that history plays a role in the discrimination and over-surveillance of some minorities. An example is the over-surveillance of indigenous groups in Canada, which has its roots in the colonial experiences of such communities. This is because of their social construction as potential lawbreakers who collectively or individually threaten the Canadian Oligarch state (Proulx, 2014). Isnard and Council (2001) propose that public spaces should be made safe with authorities tasked with protecting the public's interests and that people with criminal mindsets and aggression should not be tolerated. They, however, argue that the homeless, economically unstable, disabled, unemployed and minorities should not be subjected to over-surveillance, which excludes them from public spaces. The past experiences of specific social demographics regarding surveillance have raised questions about their trust and acceptance of the surveillance systems.

Trust is one of the crucial concepts of surveillance, and according to Wester and Giesecke (2019), it is linked to its acceptance; per their arguments, trust is a complex concept and should be seen as such. The argument is that a society based on trust does not need surveillance. In contrast, a society based on distrust should more readily perform and justify the logic of surveillance, such as control, monitoring, and verification (Bjorklund, 2021). Though society sees surveillance as distrust by the state, political trust may lead to its acceptance by citizens. Citizens can accept surveillance with enough information about its use and the risks involved. For example, when citizens believe the information collected via surveillance systems will not be misused, they will accept surveillance. The same thing can be said of workplace surveillance because when employees feel that their data might be misused, they will not trust those who monitor them and, to a more considerable extent, the institution (Ball, 2010 Ball, 2022: Introna, 2000: Ball, 2005).

The trust in surveillance authorities can be associated with how the powers in control manage surveillance systems (Trudinger et al., 2017; Su et al., 20 21; Wester and Giesecke, 2019).

Several forms of surveillance exist, including email interception, DNA registers, computer matching and profiling, GPS, and electronic work monitoring, often referred to as new forms of surveillance (Wester & Giesecke, 2019; Marx, 2015). However, the most common one is video surveillance, a constant feature of urban societies (Ratcliffe, 2006).

2.4 The Proliferation of CCTV Cameras

The historical trajectory of the interplay between the photographic image and crime control can be traced back to the early days of photography's inception (Norris et al., 2004). In contemporary times, there has been an increase in the utilization of closed-circuit television (CCTV) camera monitoring systems to deter criminal activities in public spaces across many Western countries (Welsh & Farrington, 2008; Piza et al., 2014; Cerezo, 2013; Lomell, 2004). The United Kingdom, which was the world's most monitored society, had its first camera installation in public locations in the 1980s. Gerrard and Constabulary (2007) argue that the initial application of CCTV cameras in the UK involved monitoring and observing political demonstrations held in the central region of London. However, the rapid spread of town center CCTV began in 1994 when the government announced financing through the CCTV Challenge Competition, which made £38.5 million available for 585 CCTV installations nationwide. The Home Office provided an additional £170 million as part of the Crime Reduction Programme between 1999 and 2003, installing over 680 CCTV systems in town centers and public spaces. The government's implementation of the CCTV expansion initiative resulted in significant augmentation of surveillance cameras across various urban areas in the United Kingdom (Gerrard & Constabulary, 2007; Doyle et al., 2013; Williams, 2003). Surveillance cameras protect government and

ministerial buildings in some parts of the European Union. However, they do not record but offer an avenue for immediate intervention. Countries such as the Czech Republic, Italy, Netherlands, Lithuania, Poland and Slovenia have seen rising numbers of surveillance cameras. In the Scandinavian countries, Denmark has enacted strict regulations on the use of CCTV cameras, which is opposite to that of the Netherlands, where they are prevalent in every facet of their lives just as we have globally (Kroener and Neyland, 2012: Doyle et al., 2013). There has been a statistical challenge in determining the number of public CCTV cameras in operation due to the influx of private surveillance cameras, which has made it difficult to account for the total number of CCTV cameras in most countries (Kroener & Neyland, 2012).

Various factors have driven the spread of surveillance cameras worldwide. These factors include deterrence, retrospective prosecution of offenders, and instilling a sense of security in individuals (Gills et al., 2006; Park et al., 2012; Taylor, 2012; Norris et al., 2004; Radcliffe, 2006; Welsh & Farrington, 2008; Doyle et al., 2013).

2. 5 The Growth of CCTV in Canada

The first CCTV program in Canada was introduced in 1992 in Sherbrooke, a small Quebec City. Local police implemented it to monitor antisocial behaviour on the streets in the downtown bar district. However, it was during the mid-1990s that open-street CCTV began to gain prominence within the Canadian crime control culture (Lippert, 2007; Walby, 2005). After Canada's first CCTV program was successfully implemented in Sherbrooke, Quebec City, it was replicated across the country in London, Hamilton, Toronto, Guelph, Barrie, Kelowna, and Vancouver. The success of the Sudbury project, which the Lions Club championed, played a part in this spread. Citizen organizations' role in expanding CCTV cameras in Canada cannot be underestimated, with these groups often referred to as moral entrepreneurs. An ethical entrepreneur

uses moral grievances to justify using CCTV cameras for city safety. For example, the murder of Michael Goldie-Ryder in 1999, which took place in London, Ontario, led to the creation of Friends Against Senseless Endings (FASE), a citizens' group against community violence that raised funds for a 16-camera initiative to check murder in its localities. Also, the collaborative effort between the police and local government authorities led to the Royal Canadian Mounted Police operating the most publicized Canadian open-street CCTV system in Kelowna, British Columbia. A CCTV camera was installed in a park in 1999, and another was added to monitor the drug trade in an outdoor downtown bus transit area (Lippert, 2007; Walby, 2005).

Since its initial introduction in the 1990s, the growth of CCTV in Canada has been a collective effort, with various provincial and local governments and citizen groups coming together to champion its implementation based on a host of factors, as stated earlier by Lippert (2007), Walby (2005), Walby (2006) and Vonn and Boyle (2013). Prominent among the growth of surveillance cameras in the Canadian context is the Winter Olympics held in Vancouver, British Columbia, Canada, in February 2010, which was deemed the most extensive security operation in the history of Canada. During the Games, public authorities employed around 1,000 surveillance cameras to oversee event venues and their surroundings, two outdoor 'live sites,' prominent transportation hubs and corridors, and several other areas in Vancouver. The Vancouver Games is a contemporary illustration of how significant events contribute to expanding surveillance cameras within urban environments, with Canada not an exception (Vonn & Boyle, 2013).

Just like in Africa and elsewhere, where business interests have championed the expansion of CCTV cameras (Jili, 2022; Sedky et al., 2005: 2013; Woodhams, 2020), private business entities have also immensely contributed to the expansion of CCTV camera implementation in Canada with the installation of surveillance cameras in taxis in the city of Ottawa a clear indication of the

role technological firms play in the growth of surveillance cameras across the globe. In the case of Ottawa, Verifye, a Toronto-based company, was seen as using the installation of cameras in taxis as a business strategy to market their products through the help of the Ottawa City Council. Such installations are controlled and maintained by business interests, separate from police or citizens' interests. Nonetheless, the involvement of distributors in the expansion of open-street CCTV appears to be more prominent in the United Kingdom than in Canada (Walby, 2006: Walby, 2005; Doyle & Walby, 2013).

The installation of CCTV cameras in Canada has met resistance from various quarters. Citizens' groups in different Canadian cities have resisted implementing open-street CCTV programs. This rejection has been influenced by multiple factors such as public and government deliberation and debate, the organization of formal protest groups, informal community resistance networks, concerns regarding funding in the short and long term, as well as the establishment and enforcement of privacy laws and policy frameworks (Hier, 2010: 28). Brockville, Ontario is noteworthy example of civic resistance to CCTV camera implementation because it is the only community in Canada to have successfully dissolved an urban camera monitoring system through civic resistance, highlighting the occasional failure of regulatory projects. Also, the federal commissioner stopped a privately run open-street camera operation in Yellowknife due to privacy concerns. Citizens' groups can contest regulatory measures in their communities because power moves through populations (Lippert, 2007; Walby, 2005; Walby, 2006; Hier, 2010; Doyle & Walby, 2013; Kroener & Neyland, 2012).

In summary, political and business entities and citizen groups have championed the implementation of open-street CCTV in Canada within the broader governance framework. However, this process has been challenging, with some active citizen groups in various Canadian

cities at the center of this mass opposition. Privacy and regulation issues have fueled the rejection of the implementation of CCTV in Canada (Walby, 2005; Walby, 2006; Lippert, 2007; Hier, 2010; Doyle & Walby, 2013). The proliferation of surveillance cameras in Canadian society is closely linked to many factors, such as checking crime and antisocial behaviours (Lippert, 2007: Walby, 2005: Walby, 2006: Vonn & Boyle, 2013). However, according to Walby (2006), the sociological analysis of the increasing popularity of open-street CCTV in Canada is a subject of interest due to the contrasting trends of dropping crime rates and the proliferation of surveillance cameras.

2.6 Benefits of CCTV Cameras

Closed-circuit Circuit Television (CCTV) camera systems have become part of contemporary culture, transforming the human approach to security and surveillance. Closed-circuit television (CCTV) technology is utilized in many locations, providing numerous advantages beyond simple surveillance. In a time characterized by growing worries about safety and security, CCTV systems are essential for preventing crime, gathering evidence, deterring criminal activities, and protecting the public. This part of the literature review discusses the benefits of CCTV cameras for individuals and communities.

2.7 Situational Awareness of CCTV Cameras

The concept of awareness is closely interconnected with various topics, such as the influence of closed-circuit television (CCTV) on human behaviours and the role of surveillance cameras as a preventive measure against criminal acts. Research indicates that individuals need to possess knowledge of the existence of CCTV cameras in their surroundings to comprehend and discuss any of these phenomena (Taylor, 2012). According to Brands et al. (2016), geography influences awareness of CCTV cameras in two ways. Firstly, it refers to people's knowledge of the

physical presence of CCTV cameras in their surroundings, which they may or may not be able to identify. Secondly, it relates to their beliefs about the presence of CCTV in specific locations.

One essential means of open surveillance camera awareness is using signages and notices required within a country's privacy laws. Mostly, signage and notifications accompanying CCTV camera operations, such as "Smile, you are on camera," "Surveillance cameras are in operation," "24-hour surveillance," and "This area is under video surveillance," are common (SCAN & Diesman, 2009). Public space users have the right to be notified about collecting their details upon arrival at such spaces using visible and articulated notices (SCAN & Diesman, 2009; Isnard & Council, 2001). However, this has not been the case, as a study conducted in four Ontario cities revealed the failure of signs to fulfil the above requirement because individuals did not give their informed consent to be videoed (SCAN & Diesman, 2009). It has been argued that the visibility of cameras to individuals has the potential to heighten the perception of being at risk of apprehension, resulting in restraining themselves from acts that conflict with the law (Radcliffe, 2006; Willis et al., 2017; Robin et al., 2021: Cuevas et al., 2016). The writers also argue that CCTV can increase the likelihood of compliance due to the potential for public scrutiny and subsequent embarrassment resulting from non-compliance. Thus, installing closed-circuit (CCTV) systems may remind individuals to exercise caution.

The awareness of CCTV cameras' presence has yielded mixed results. While some public members know its presence (Cerezo, 2013; Levesley et al., 2005), others are unaware (Taylor, 2012). For example, participants in a study in Cracow, Poland, indicated that they were indifferent to cameras in public spaces, choosing to disregard them, and have never contemplated whether their residence is under surveillance (Wójcik, 2015). Research indicates that despite installing a system, implementing a publicity campaign, and placing signage, there is no assurance that the

general population will be adequately informed about the presence of cameras (Ratcliffe, 2006). As a result, it is unlikely that these cameras would significantly reduce criminal activity (Robin et al., 2021; Levesley et al., 2005).

Several studies have investigated whether the awareness of surveillance cameras in public spaces alleviates the fear of crime among individuals who frequent these areas (Kula, 2015; Bennett & Gelsthorpe, 1996). The presence of closed-circuit television (CCTV) cameras has the potential to foster an increased sense of security awareness among individuals by making members of the public feel safe about their surroundings through the live monitoring of events, thus improving the overall community safety within a given locality (Cuevas et al., 2016). Security cameras also further boost establishments' security, such as retail outlets and educational institutions. For instance, studies on consumer buying behaviour indicated that locations of businesses would experience favourable economic outcomes because of increased safety perceptions among individuals due to the awareness of CCTV installations (Brands et al., 2016; Welsh & Farrington, 2009; Cerezo, 2013; Levesley et al., 2005; Ratcliffe, 2006: Bennett & Gelsthorpe, 1996). However, authors such as Levesley et al. (2005), Fay (1998) and Wojcik (2015) argue that the implementation of CCTV does not entirely alleviate public fear of crime, nor does it imply the absence of public apprehension towards CCTV cameras, an indication of its limitation. The impact of CCTV cameras on fear of crime may vary depending on an individual's gender and differences in awareness (Ratcliffe, 2006). Gender differences in awareness levels were more prominent among female than male participants (Brands et al., 2016; Bennett and Gelsthorpe, 1996). However, Armitage (2002) argues that the approach to assessing fear of crime warrants scrutiny before drawing any conclusions. Ditton (1998) emphasized that when participants were first asked pro-CCTV questions and then asked about their support for CCTV, 91% expressed a

favourable opinion. When a separate sample was surveyed with anti-CCTV questions, followed by an inquiry about their stance on CCTV, only 56% expressed support for it. The figures indicate that 71% of respondents expressed support when not presented with any preliminary inquiries.

2.8 The Deterrent Role of CCTV Cameras

One of the primary roles of CCTV cameras in society is deterring potential offenders from engaging in criminal activities. The employment of surveillance cameras to prevent criminal activities in public areas has experienced a notable and consistent expansion in the United States and other Western countries in recent years. Evidence suggests that numerous nations, in addition to the United Kingdom and the United States, are progressively trialling closed-circuit television (CCTV) cameras to deter criminal activity in communal areas. In March 2007, the camera network in Malaga, Spain, was established with a capital funding of €435,000, solely provided by the City Hall because of its potential to deter crime in that historic city and protect cultural artifacts (Cerezo, 2013)**.** Despite its popularity, much discourse has arisen regarding the influence of closed-circuit television (CCTV) cameras in deterring criminal activity and, consequently, the reason for allocating substantial financial resources towards this technology. These discourses have not prevented authors such as Becks and Willis (1999) and Falangon (2022) from highlighting its deterrence role.

Deterrence in the context of CCTV cameras has its background in routine activity theory, which states that for crime to be possible, there must be a suitable target, the absence of a guardian, and a motivated offender (Cohen & Felson, 2010). Within the context of surveillance, it pertains to the idea that prospective perpetrators are dissuaded from engaging in criminal activities due to the possibility of being captured on video surveillance and subsequently apprehended or identified. Prospective wrongdoers may be discouraged from committing offences, implying that there is a

possibility for behavioural modification, albeit among a minority of offenders who lack strong motivation (Willis et al., 2017). Authors such as Becks and Willis (1999) and Taylor (2012) lean towards the rationalization process of criminals in explaining how this affects their operations. They noted that surveillance cameras deter criminal behaviour by serving as a prompt or reminder of the active presence of guardianship.

While it may be improbable for potential offenders to consistently assess the potential benefits of criminal activity against its drawbacks, it is certainly possible that closed-circuit television (comprising cameras, monitors, and signage) serves as an intermittent situational cue that fosters rationality in determining whether to engage in criminal behaviour or not (Beck & Willis, 1999). A study conducted by Falangon (2022) in Bontoc, Philippines, affirmed this claim that there was a substantial decrease in criminal activity, specifically theft, robbery, and shoplifting, after the implementation of closed-circuit television (CCTV) cameras in public and private edifices. This success can be achieved when offenders know the placement of surveillance cameras in their target places and desist from committing crimes. The notion that closed-circuit television (CCTV), when widely advertised, may deter criminal activity is a subject of debate (Willis, 2017; Welsh & Farrington, 2009; Falangon, 2022; Cerezo, 2013; Becks and Willis, 1999). Nevertheless, another researcher put forth an alternative perspective that contested the notion that every offender undergoes a cognitive process of justifying their behaviour before engaging in criminal activities (Piza et al., 2014). Challenging the thought process of criminals, Taylor (2002) states that not all individuals who engage in criminal behaviour can make logical and well-informed choices regarding the commission of unlawful acts.

The role of closed-circuit television (CCTV) as a deterrent has yielded inconclusive results, with authors such as Gills et al. (2006), Taylor (2012), Levesley et al. (2005), and Willis et al. (2017) raising concerns about its role in averting crime. Per their arguments, contextual factors should be considered when assessing the impact of surveillance cameras on deterring crime (Leidka et al., 2022; Park et al., 2021; Matczak et al., 2021). A significant critique that has been levelled against the deterrent effect of CCTV cameras in averting crime is the argument that it cannot solve all types of crime (Gills et al., 2006; Radcliffe, 2006). The impact of surveillance technology is contingent upon the nature of the targeted criminal activity, as this factor influences the adaptability of offenders. While a closed-circuit television (CCTV) system may decrease the probability of burglary at a business establishment located within the camera's coverage area, specific indications exist that drug market operations can persist despite the presence of CCTV by modifying their modus operandi (Radcliffe, 2006). Also, offenders of crimes such as murder and rape cannot be deterred because of the impulsiveness and the lack of rational calculation that characterize such crimes. From the above instances, Klauser (2007) contended that closed-circuit television (CCTV) systems are more inclined to avert premeditated crimes through rational cost-benefit analysis than impulsive crimes such as alcohol-related offences.

According to previous studies, the initial deterrent effect of closed-circuit television (CCTV) may diminish over time as the novelty of the cameras wears off. Perpetrators may swiftly become familiar with the types of offences that trigger a law enforcement reaction and the promptness of such a reaction. However, it is still being determined whether the reductive impact on crime diminishes over time (Levesley et al., 2005; Radcliffe, 2006). Researchers such as (Welsh and Farrington (2003), Gills et al. (2006), Waples et al. (2009), Park et al. (2012), Barr and Pease (1990), Eck (1993), Cerezo (2013), Levesley et al. (2005), Gill et al. (2006) and Klausser (2007)

argue that CCTV does not avert criminal activities but rather displaces crime to places where no security measures impede the commission of crime.

2.9 Monitoring and Detection of Antisocial Social Behaviour by CCTV Cameras

Improving security through monitoring and detecting suspicious activities has been touted as one of the practical uses of CCTV cameras. The police, local council operatives, security personnel of institutions, and shop owners rely on surveillance cameras to monitor activities within their premises and jurisdictions that fall under their watch. Open street surveillance cameras in public spaces have been noted to correlate positively with the police's ability to detect suspicious characters and instances of violence (Klauser, 2007; Beck & Willis, 1999). By monitoring public areas, operatives at CCTV control rooms can detect and pre-empt criminal activities. By so doing, CCTV cameras help keep track of individuals exhibiting suspicious behaviour in public spaces while monitoring the entrance and exit of individuals from various establishments. Some of these suspicious behaviours can be anomalies or disruptions that deviate from the standard display, such as increased walking speed, frequent checking of one's surroundings, heightened attentiveness toward others, and access to restricted areas. Criminal activities such as possessing firearms, acts of assault, drug transactions, engagement in prostitution, acts of vandalism, and instances of burglary, theft, and robbery, among others, are detected because of constant monitoring of public spaces (Gill &Turbin, 1998: Cuevas et al., 2016; Taylor, 2010; Loveday & Gill, 2004; Lomell, 2004; Wójcik, 2015; Beck & Willis, 1999; Robin et al., 2021; Brookman & Jones, 2022; Sivarajasingam et al., 2003).

In retail outlets, such suspicious behaviours include repetitive item selections, observing other shoppers, waiting for empty aisles, and selecting multiple high-value goods without inspecting them. Thus, surveillance cameras enable individuals responsible for monitoring the

footage to address the situation appropriately, protecting employees within such institutions by preventing unauthorized access from external individuals. Also, cameras provide reassurance and support and serve as a form of backup in various ways. Operators of CCTV cameras in multiple institutions feel more in control by informing the offender that they are being recorded on camera. This approach empowers them to use documented evidence to elicit information from suspects, regardless of whether the cameras captured the incident or not. The most probable outcome of surveillance cameras as situational crime prevention is that it heightens the apprehension of potential offenders, as they perceive an increased likelihood of being detected and apprehended (Gill &Turbin, 1998; Cuevas et al., 2016; Taylor, 2010; Loveday & Gill, 2004; Lomell, 2004; Wójcik, 2015; Beck & Willis, 1999; Robin et al., 2021; Brookman & Jones, 2022; Sivarajasingam et al., 2003).

Despite its importance in detecting criminal activities, questions have been raised about the limitations of CCTV in surveillance literature. Arguments against its role in detecting criminal offences border on the type of crime it can detect and how criminals evade apprehension (Taylor, 2012; Levesley et al., 2005; Loveday & Gill, 2004). As stated earlier, CCTV operatives are not likely to see every illegal activity. For example, drug-related offences, fraud, and public order violations are difficult to notice because of their nature. Comparatively, violent crimes have a higher detection rate than acquisitive crimes in situations where CCTV is unavailable for surveillance. It is further argued that this phenomenon could be attributed to the fact that in cases of violent crimes, there is typically a minimum of one witness (i.e., the victim) at the location of the incident. Nonetheless, beneficial closed-circuit television (CCTV) correlates with notably elevated detection rates for various forms of assault, including sexual offences (Ashby, 2017).

Also, the likelihood of real-time police interventions in criminal activities has been challenged. Although crime scenes may be transmitted to officers monitoring the camera at the control room, by the time the police arrive at the crime scene, the crime has typically concluded, and the resulting damage has already occurred (Klauser, 2007; Gill & Loveday, 2003; Yusuff, 2011; Brands et al., 2016). This problem can be explained by the considerable spatial distance separating monitored territories from the CCTV control room, which impedes the possibility of immediate interventions by law enforcement authorities (Klauser, 2007; Gill and Loveday, 2003).

The existing literature states that CCTV camera monitoring enhances standards at different institutions by creating a sense of accountability among employees due to their awareness of being under surveillance. CCTV camera monitoring leads to greater adherence to organizational procedures when workers know they are being monitored by surveillance cameras, resulting in higher productivity (Sacheda, 2019; Iienstitu, 2023). Thus, closed-circuit television (CCTV) cameras serve as a valuable tool in enhancing standards and promoting a level of professionalism that arises from the knowledge of being under surveillance, thereby reducing workplace crime and increasing organizational success. For example, implementing CCTV systems allows police officers to perform their law enforcement responsibilities with lowered inhibition and increased efficiency, particularly concerning patrol duties, thus preventing them from engaging in acts that tarnish the profession's image. An example is how citizen surveillance footage helped provide evidence for the brutal killing of George Floyd in 2020 (Levenson, 2021). Educational institutions have also benefited from the oversight of surveillance cameras as they help monitor examinations and prevent students from engaging in examination malpractices (Levesley et al., 2005; Loveday & Gill, 2004; Yusuff, 2011; Taylor, 2012).

Despite the importance of the monitoring role of surveillance cameras, the human element as a concept of CCTV monitoring has been problematic, resulting in discussions in the surveillance literature (Radcliffe, 2006). Levesley et al. (2005) note that the operator holds a crucial role within a closed-circuit television (CCTV) system and that a skilled operator has the potential to impact the efficiency of CCTV cameras significantly. The mode of operation of CCTV operators includes preservation of the initial closed-circuit television (CCTV) footage and extraction of the footage in its original file format, after which a functional duplicate is created, and the recording footage is reviewed. After processing captured data and detecting an incident, there are two available approaches for implementing system reaction: manual reaction, which involves skilled observers analyzing captured scenes and making decisions, and automatic response, which involves intelligent modules reacting or making decisions in the event of hazards. The process of reviewing footage may take the form of taking notes or identification of infractions in real-time (Brookman & Jones, 2022; Radcliffe, 2006; Piza et al., 2014; Kurdi, 2014; Cuevas et al., 2016). All these activities occur in a space popularly called a control room (Morgan & Dowling, 1999). According to Keval and Sasse (2010), ambulance and CCTV control rooms share similar operations. Both settings involve operators who monitor and respond to incidents. These operators are supported by tools such as CCTV, maps, and communication devices.

As discussed, monitoring is essential to an efficient surveillance system. Two types of surveillance monitoring are active (or dedicated) and passive (or casual). The definition of "active" monitoring can vary, but it generally refers to operators consistently using the camera system to conduct dedicated patrols (Wilson & Sutton, 2003). During active patrols, operators maintain vigilance for potential incidents and promptly respond to incidents based on received information,

typically from the police. Real-time monitoring of CCTV is essential for its optimal effectiveness due to the need for constant staff presence (Radcliffe, 2006).

Passive monitoring refers to having monitors within sight and casually observed by operators or designated personnel (Wilson & Sutton, 2003; Hulme et al., 2015). These individuals may respond if they receive an alert or notice an ongoing incident. In a passive monitoring situation, individuals perform administrative or other tasks while observing a pre-set camera tour displayed on screens. Implementing actively monitored closed-circuit television (CCTV) systems resulted in noteworthy decreases in criminal activity, whereas passive systems did not yield any significant impact. In actuality, numerous systems exhibit a hybrid nature, wherein recording devices capture all visual data while an operator selectively monitors specific feeds on display. This type of surveillance monitoring involves law enforcement agencies and municipal guards employed by the various local councils (Welsh & Farrington, 2009; Falangon, 2022; Firmino & Trevisan, 2012; Khoudour et al., 2001; Robin et al., 2021; Radcliffe, 2006; Wilson & Sutton, 2003).

Despite its importance in monitoring suspicious behaviours and public spaces, the use of CCTV cameras for this purpose is not devoid of challenges, which can be attributed to the vast amount of data generated as well as the human element that characterizes this aspect of surveillance cameras usage making it fallible (Levesley et al., 2005; Khoudour et al., 2001; Radcliffe, 2001; Firmino & Trevisan, 2021; Brookman & Jones, 2002). According to Piza et al. (2014), these challenges can be described as surveillance barriers (p. 1016). Some of these challenges involve office space, expertise, and fatigue. The limited physical space within control rooms often results in a situation where the monitors responsible for displaying real-time closed-

circuit television (CCTV) images can only accommodate a fraction, approximately 5-10%, of the total number of cameras deployed within the surveyed area (Khodour et al., 2001).

In addition, operators are typically obligated to perform various tasks in conjunction with their monitoring responsibilities. These tasks include handling incoming calls, documenting events, overseeing mobile staff, and other related duties. Hence, their ability to engage in real-time monitoring activities could be improved. The individuals find themselves in a tedious circumstance due to the requirement of prolonged periods of image observation that lack significant training. This challenge associated with lengthy periods of observation may lead to "Inattentional blindness" (the inability to perceive unattended items) and "change blindness" (the failure to detect significant changes) when they can examine CCTV images (Khoudour et al., 2001; Firmino & Trevisan, 2021; Levesley, 2005; Klauser, 2007; Brookman & Jones, 2002). An analysis by Loveday and Gill (2004) revealed that assigning operators to monitor systems without additional responsibilities resulted in a higher detection rate of shop theft incidents. This, in turn, led to subsequent actions being taken, such as making arrests.

2.10 The Use of CCTV Footage for Investigations

CCTV is highly touted as an investigative tool for many organizations in solving petty theft and skilled crimes. Individuals must safeguard their interests in a society characterized by a prevalence of legal disputes and accusations. The documentation of the accurate rendition of events is imperative. The resolution of disputes through legal proceedings renders the conflict not merely a matter of conflicting assertions, as the veracity of the claims does not always determine the outcome. It is vital to exercise utmost caution, as possessing a verifiable account of events has regrettably emerged as an inherent consequence of our contemporary society (Taylor, 2012). Some institutions that rely heavily on surveillance cameras include law enforcement agencies and

educational institutions. Some law enforcement officers regard the implementation of closed-circuit television (CCTV) surveillance as equally significant as the advancements facilitated by DNA technology in its capacity to apprehend perpetrators and furnish indisputable proof (Radcliffe, 2006; Wills et al., 2017; Levesley et al., 2005; Robin et al., 2015; Brookman & Jones, 2022; Gills et al., 2006). Despite its popularity as a situational crime prevention aid, scant attention has yet been paid to its utility as a means of investigation (Ashby, 2017).

Law enforcement agencies use CCTV footage as evidence in investigating crimes or misconduct that may have gone unnoticed by human effort, which helps in legal proceedings (Cerezo, 2013). It is widely acknowledged that following the occurrence of a criminal act, video recordings are accessible for examination to determine the characteristics of the incident precisely, illustrating the magnitude of occurrence and identifying the individuals implicated (Khoudour et al., 2001; Levesley et al., 2005). During their investigations, law enforcement officials may encounter multiple and, at times, contradictory testimonies regarding incidents, particularly in cases where suspects are taken into custody at the event's location. CCTV footage can potentially be a significant mediator in reconciling divergent narratives (Dowling et al.,2019). Thus, surveillance camera footage helps investigators substantiate evidence for perpetrators who may refute their participation in criminal activities. One example pertains to offenders who have committed crimes while under the influence of substances, such as drugs and alcohol, which impairs their recall of events during such instances (Gills et al., 2006). Such instances are cleared by using closed-circuit television (CCTV) footage, ensuring a resolution of cases, as it may prompt early admissions of guilt (Levesley et al., 2005; Short & Ditton, 2017; Fay, 1998).

In addition, CCTV cameras have the potential to safeguard individuals who are innocent from unfounded accusations (Taylor, 2012). The underlying assumption was that closed-circuit

television (CCTV) can provide a reliable source of information, acting as a 'guardian of truth' (p. 331). According to Taylor (2021), some educators embraced its impartial nature, as it provided a means to refute any unfounded accusations directed towards them, typically from students or parents. Similarly, some educators approved using cameras as they perceived them valuable for eliciting an authentic account of student incidents. They were referred to as an omniscient entity capable of corroborating or refuting a student's account of incidents (Taylor, 2012). Likewise, surveillance cameras help improve clearance rates and aid the certainty of punishments. Piza et al. (2014) argue that implementing Closed-Circuit Television (CCTV) cameras enhances the certainty regarding punishment in a specific case. Specifically, incidents reported through CCTV tend to have a higher probability of being resolved through police enforcement than incidents reported through other means, such as the Crime Reporting System (CFS) (Piza et al., 2014).

Although CCTV is highly effective in criminal and organizational investigations, it has many challenges. Some of these challenges include poor quality of the footage, which poses challenges for identification, and deficiencies in the technological abilities of investigators, which results in delays and inefficiencies in the retrieval of surveillance footage. Nevertheless, despite the challenges investigators face in its usage, it can be inferred that CCTV is a commonly effective tool in the investigation of diverse criminal activities, albeit its efficiency may significantly differ depending on the nature of the crime (Ashby, 2017; Brookman & Jones, 2022; Radcliffe, 2006; Levesley et al., 2005).

2.11 Concerns about CCTV Camera Use

Closed Circuit Television (CCTV) systems are becoming more common in metropolitan areas and private spaces, raising many issues related to displacement and privacy. CCTV technology offers improved security and surveillance features, but its use raises significant concerns about the trade-

off between safety and personal liberties. This section of the literature review examines displacement and privacy issues in the context of CCTV, highlighting the ever-evolving relationship between monitoring methods and individual freedoms.

2.11.1 The Displacement Effect of CCTV Cameras

A significant critique of CCTV cameras as a deterrent is that it does not stop crime but pushes it to a less risky jurisdiction for criminals. This agrees with Barr and Pease (1990), who stated that the persistent and recurring concept within criminology is that criminal activity tends to be concentrated within specific geographic regions without concerns of timeframe. This phenomenon is what (Welsh & Farrington, 2003; Gills et al., 2006; Weisburd et al., 2006; Waples et al., 2009; Park et al., 2012; Barr & Pease, 1990; Eck, 1993; Cerezo, 2013; Hesseling, 1994; Levesley et al., 2005; Reppetto, 1976; Gill et al., 2006; Klauser, 2007) describes as crime displacement or the "balloon effect" as stated by (Park et al., 2012).

According to Reppetto (1976), at least five potential forms of displacement could arise after implementing a crime control program such as surveillance cameras. These forms include temporal, tactical, target, territorial, and functional displacement. Barr and Pease (1990: 279) propose a sixth form of displacement, called 'perpetrator displacement,' which occurs when a highly attractive crime opportunity leads to various offenders' involvement. Displacement refers to the unintended consequence of such programs, whereby attempts to prevent one type of crime may result in the commission of a different type of crime or the same type of crime in a different manner. Displacement falls beyond the boundaries of legal regulations. Crime displacement or deflection is a phenomenon that occurs because of alterations in societal norms and is met with varying degrees of acceptance (Barr & Pease, 1990).

In the surveillance camera literature, displacement is a concept closely associated with the themes of awareness and deterrence. It is argued that once potential offenders are aware of the presence of cameras, they alter their criminal operations by relocating. Law enforcement officers also acknowledged that individuals who engage in criminal behaviour have demonstrated the ability to adjust their actions in response to surveillance cameras. These individuals could ascertain the locations of the cameras and subsequently evade those regions, thereby successfully mitigating criminal activities. Detractors of situational crime prevention measures, such as CCTV, frequently argue that the strategy is ineffective as it merely relocates criminal activity to alternative temporal or spatial contexts. Not only do criminals alter their location, but they also change their mode of operation. The phenomenon of displacement has primarily been examined in practical contexts of initiatives designed to diminish the likelihood of criminal activity within geographic regions, such as shopping centers, parking lots, housing developments, and residential communities (Hessling, 1994; Levesley, 2005; Park et al., 2012 Willis et al., 2017; Taylor, 2012). The phenomenon could yield a net positive effect on crime prevention, as the modifications typically necessitate increased exertion, thereby diminishing the incidence of misconduct among specific individuals (Weisburd et al., 2006; Park et al., 2012).

The literature on CCTV primarily focuses on the potential side effects of territorial displacement caused by monitoring specific locations and not tracking others. While previous studies generally consider displacement effects to be adverse, it is essential to note that they may not always be unintentional. The intentional outcome of displacing criminal, illegitimate, or 'antisocial' behaviour to less centrally located areas can occur (Stutzer & Zehnder, 2013). For example, displacing groups such as drug users, prostitutes or beggars from a particular location may promote community development (Levesley et al., 2005). Displacement of crime and its

patrons to other areas promotes a secure, easily navigable, and enjoyable urban setting (Klauser, 2007).

However, it is essential to note that such displacement does not occur consistently or uniformly across various offences or spatial locations. Attributing changes in offence numbers and patterns to a crime reduction measure is a multifaceted phenomenon that necessitates the utilization of multiple data and techniques to ensure accuracy and confidence in the analysis (Waples, 2009). Additionally, the identification of displacement effects poses methodological challenges. To accurately measure territorial displacement and the diffusion of benefits, it is necessary to analyze at least two control areas: one adjacent and another non-adjacent but comparable (Stutzer & Zehnder, 2013).

2.11.2 Privacy and Regulatory Issues of Surveillance Camera Operations

Recently, there have been debates about the relationship between privacy and surveillance in the media landscape. Erroneously, surveillance is seen as the opposite of privacy (Marx, 2015). The emergence of CCTV camera systems as a novel societal phenomenon has given rise to ethical concerns about privacy, leading to numerous social discussions (Porter, 2009; Mollers & Halterlein, 2013), with authors such as Wojcik (2015) asking about the extent to which society is willing to relinquish its freedom to attain a heightened sense of security. Cerezo (2013) also asks how being observed by a closed-circuit television (CCTV) camera differs from being monitored by an unfamiliar individual on a park bench or by a law enforcement officer on a street corner. Some of these questions have arisen due to the significant costs associated with installing and maintaining CCTV in public and private locations, along with the political, thematic, and conceptual difficulties related to the binary concept of CCTV, where it serves as a form of security and simultaneously infringes on the civil liberties of the very people it protects (Robin et al., 2021;

Poyser, 2004; Möllers & Hälterlein, 2013; Radcliffe, 2006). According to Radcliffe (2006, p. 6), CCTV evokes images of an Orwellian "Big Brother" because of its ubiquitous nature. Despite the various debates about how CCTV cameras invade the privacy of the public (Fay, 1998; Mollers & Halterlein, 2013; Cerezo, 2013), there has been a dearth of research on the implications that the use of closed-circuit television (CCTV) may have on the privacy of society, especially the younger population (Taylor, 2010). Taylor (2010) notes that in evaluating the potential impact of Closed-Circuit Television (CCTV) cameras on privacy, it is imperative to understand the concept of "privacy." Nevertheless, proving a universally accepted definition of privacy is a challenging endeavour. Nonetheless, scholars have reached a consensus in their scholarly discourse to challenge the notion of privacy as an analytical concept and defining theme in surveillance (Möllers & Hälterlein, 2013).

Privacy encompasses various aspects, including informational, geographical, spatial, and decisional privacy, as mentioned in the questions. Privacy as a concept relies on the context of an occurrence and the culture of the individuals involved. It is often ill-defined, contested and negotiated (Yussuf, 2010; Marx, 2015). Defining privacy in a normative or precise manner is exceedingly challenging. Privacy can be defined as "informational self-determination," which refers to an individual's ability to control the collection of their data in a specific context (Yusuff, 2010). Privacy encompasses the freedom to establish and maintain a personal domain under the individual's control. Privacy is highly esteemed, as it is crucial in establishing boundaries and safeguarding ourselves against unauthorized intrusions into our personal lives. It allows us to assert our identity and determine how we interact with the external environment. Privacy serves as a fundamental construct that restricts the accessibility to domains that are intricately associated with individuals. Many international conventions and charters have been established to strengthen the

prevailing norm that the right to privacy is a fundamental aspect of human existence, elevating life beyond mere animalistic existence. If privacy is not a valued or desired attribute in social life, then objecting to the increasing prevalence of surveillance practices may have limited utility (Shrivastava, 2020; Yussuf, 2010; Taylor, 2010).

There has been support for installing surveillance cameras, especially in certain parts of Eastern Europe. Yet, anecdotal evidence suggests that many law-abiding citizens are not concerned about occasionally being captured by CCTV cameras and issues about privacy. Those who support this stance argue that individuals who adhere to the law and have no concealed activities should not experience a sense of intimidation in response to the existence of surveillance cameras (Wojcik, 2015; Yussuff, 2011). There has been a suggestion that the potential infringement upon individuals' privacy is counterbalanced by the heightened level of security that closed-circuit television (CCTV) offers individuals when they navigate through public areas (Porter, 2009).

Despite the arguments in favour of CCTV, there is growing concern among the general populace regarding the possible abuse of surveillance cameras. For example, countries such as the United Arab Emirates (UAE) have witnessed a growing number of incidents involving the misuse of closed-circuit television (CCTV) as a tool for violating individuals' privacy. Some of these forms of abuse and misuse of CCTV involve targeting specific individuals for surveillance, frequently rooted in stereotypes or biases related to their physical appearance (Taylor, 2010; Cerezo, 2013; Shrivastava, 2020).

The marginalization and discrimination against minority groups have featured extensively in the discussions of CCTV and how it infringes on the civil liberties of the people it purports to protect (Bennett & Gelsthorpe, 1996; Fay, 1998; Lomell, 2004; Norris & Armstrong, 1997). The

examination of security camera footage inherently involves selectivity. Control room operators and judges have discretionary authority over the outcomes of comprehensive monitoring. Profiling, stereotyping, and discrimination are more likely to occur when no formal imperatives or specific guidelines are in place. The implicit utilization of markers through profiling has the potential to result in a self-fulfilling prophecy. These negative implications of CCTV as a means of perpetuating injustice are often overlooked in the many positive and biased narratives provided by CCTV system administrators and law enforcement agencies (Fay, 1998; Stutzer & Zehnder, 2013). Supporters of CCTV cameras argue that they do not discriminate or use subjective judgments when identifying individuals as potential suspects on their monitors. They further note that the surveillance system does not discriminate based on socio-economic status but instead captures criminal activities of individuals within its range (Yussuff, 2011). This position is untrue, as the utilization of CCTV is alleged to confine economically and socially disadvantaged groups within public housing estates. Surveillance systems are employed to monitor and identify groups perceived as not belonging in these newly established areas of commercial activity (Lomell, 2004).

Exclusionary practices vary across different sites, with their prevalence increasing as private capital interests play a larger role in shaping and operating surveillance systems. These practices restrict the democratic public sphere, fostering a fortress mentality that seeks to separate impoverished individuals from the rest of society. Commentators argue that CCTV systems facilitate the moral regulation of urban spaces by selectively excluding those who do not contribute to its consumption or are deemed troublesome, such as the homeless, unemployed, and low-income individuals. Exclusion mechanisms rely on punitive rules enforced through national and regional legislation, local by-laws, and loosely defined regulations. CCTV operators, wielding significant

authority, subjectively determine individuals' level of access, scrutiny, and control, often reinforcing social inequalities (Fay, 1998; Doherty et al., 2008; Lomell, 2004).

Research highlights that CCTV operators disproportionately target specific social and subcultural groups. For instance, Norris and Armstrong (1997) found that young black males are overrepresented in surveillance monitoring, with operators often labelling individuals as potentially deviant based on stereotypes tied to appearance and behaviour. This results in heightened authoritative intervention and official stigmatization of socially and economically disadvantaged youth (Loveday & Gill, 2004). A comparative study in shopping malls in Oslo, Norway, revealed that individuals with a dishevelled appearance were routinely expelled, regardless of their intent to shop or make purchases. Among the spaces studied, shopping malls demonstrated the strictest ejection policies (Lomell, 2004).

The ability to ascertain the identity of individuals observing us is of utmost importance to make informed decisions regarding potential adjustments to human behaviour in response to such surveillance. This explains why many individuals feel highly unsettled by the conspicuous presence of cameras (Goold, 2002). The act of perceiving, recognizing, and comprehending the intentions of an observer is crucial in determining our emotional response and subsequent actions toward being watched. The contention put forth is that closed-circuit television (CCTV) serves to create spatial and psychological separation between the individuals being observed (referred to as "monitored individuals") and those who are conducting the surveillance (referred to as "operators") (Klauser, 2007). The limited sensory capabilities of video screens and the physical distance between the observer and the observed appear to promote the tendency to form categorical suspicions based on a limited set of easily noticeable characteristics (Lomell, 2004).

Although it is widely acknowledged that a certain degree of personal privacy is relinquished upon leaving one's residence, it is rare for individuals to recognize the absence of any expectation of privacy when occupying public spaces such as streets or parks (Goold, 2002). It is conceivable that human actions are under surveillance by an adept and principled camera operator, adhering to explicit ethical guidelines, or by a voyeuristic individual and a group of ten acquaintances who have unexpectedly congregated in the control room to indulge in amusement. From this perspective, the apprehensions primarily pertain to the equitable and responsible conduct of individuals and entities utilizing these camera technologies rather than the technologies themselves and how they leverage their data (Cerezo, 2013). To address the issue of the "unobservable observer," it is evident that there is a need for CCTV cameras to possess attributes beyond mere visibility to the public. It is imperative to ensure the public is adequately informed about the entities responsible for surveillance activities and the specific objectives behind such monitoring (Goold, 2002).

To rectify this problem, establishing an independent agency with public accountability is necessary to oversee the utilization of closed-circuit television (CCTV) cameras and monitor the conduct of camera operators. Ideally, this agency should be authorized to conduct account licensing, implement statutory codes of practice, and unannounced inspections of closed-circuit television (CCTV) control rooms. Additionally, it should be mandated to publish comprehensive reports about operator targeting practices and regularly use information obtained through CCTV surveillance. In addition, the proposed regulatory body would assume the role of a monitoring entity, ensuring transparency in implementing closed-circuit television (CCTV) surveillance. Moreover, it would safeguard the public by ensuring that individuals are not subjected to unwarranted or excessive surveillance (Goold, 2002; Fay, 1998).

Despite countries having implemented codes of conduct to regulate the proper use of CCTV systems, which encompasses aspects such as camera placement, audio capabilities, video storage, and the utilization of videotapes as evidence, there have been regulation issues in certain jurisdictions which can be partially attributed to legal institutions' hesitancy in addressing the issue of whether individuals possess a valid expectation of privacy in public areas (Kurdi, 2014; Goold, 2002). For example, the British High Court recognized that English law does not acknowledge a broad right to privacy. Still, it emphasized the importance of providing clear guidance to prevent unwarranted intrusions on privacy (Fay, 1998).

Implementing closed-circuit television (CCTV) systems raises substantial worries about privacy violations and possible consequences of displacement. Although CCTV technology provides security benefits and deters criminal activities, it can sometimes shift crime to less risky areas and violate the civil liberties of individuals it aims to safeguard, leading to doubts about its effectiveness as a crime prevention tool.

CHAPTER 3

THEORETICAL BACKGROUND

This section provides an overview of surveillance and governmentality theories, which serve as the theoretical framework for this research. These theories are foundational to the thesis, offering critical lenses to explore contemporary surveillance practices.

3.1 Surveillance and Governmentality Theories

The multidisciplinary nature of surveillance studies has led researchers to employ various theoretical approaches rather than relying on a singular perspective. These theories are grouped into panoptic and post-panoptic theories, with the latter extending and offering an alternative analysis of the earlier works of the former (Galic et al., 2017; Marx, 2015). The panopticon, a concept that has become the basis for most surveillance theories, was introduced by Jeremy Bentham, an 18th-century social reformer (Bentham 1995, cited in Haggerty, 2006). The panopticon has emerged as the predominant metaphor for surveillance and has become synonymous with the concept itself (Galic et al., 2017). In Bentham's argument, the panopticon was a conceptual architectural design where a single observer monitored all the prisoners from a circular building without their knowledge (Galic et al., 2017; Bentham, 2020; Miller & Miller, 1987). This created a sense of constant monitoring where the prisoners are not looked over but believe they are (Galic et al., 2017; Foucault, 1979). The watcher's apparent omnipresence maintained flawless discipline in the prison panopticon; even a glance at the eyes of the inmates would undermine the concept of his omnipresence in the prisoners' minds. According to the convicts, the inspector is all-seeing, omniscient and almighty, making his power centralized (Galic et al., 2017).

Bentham’s objective in establishing the prison Panopticon was not to produce a "society of control" where people would be watched constantly; instead, the goal was to internalize discipline that would abolish the necessity for the observer and the watching itself. Thus, continuous and all-seeing inspection was not required (Bentham, 2020; Galic et al., 2017; Miller & Miller, 1987). According to Galic et al. (2017), Bentham's prison panopticon was not genuinely all-seeing, and such central inspection was aimed at avoiding the necessity for watching, punishment and the panopticon itself. The Panopticon ought to be regarded as a model that can and should be tailored to the unique conditions of various societal sectors, where control mechanisms are more intricate and characterized by a growing number of exceptions to constant person oversight (Galic et al., 2017).

Bentham’s idea of the panopticon was further developed by Michel Foucault, a French philosopher and historian who introduced the concept of panopticism (Foucault, 1979; Galic et al., 2017). Foucault characterizes panopticism as a form of power that is not just about surveillance but also control, punishment, compensation, and correction. It is about shaping and transforming individuals according to specific norms (Foucault, 2002). The term ‘panoptic’ denotes the capability of always observing everything and everyone (Foucault, 2006). Foucault’s notion of panopticism aligns with Bentham’s description of the prison panopticon, which theorizes surveillance as comprising an omniscient observer (Galic et al., 2017). The panopticon served as the architectural centrepiece of the prison, consisting of a design that features a central tower surrounded by an annular building. The tower contains expansive windows that face the interior of the ring. The peripheral building is divided into cells that span its entire width. Each cell has two windows that connect to the tower, while another window on the exterior allows light to pass through the whole cell. The Panopticon employs spatial arrangements that enable continuous

observation and immediate recognition (Foucault, 1979). According to Lyon (2006), the prison represents the extreme manifestation of panoptic power. However, the Panopticon is distinct from typical jails, where the warden intentionally exposes themselves to the prisoners to maintain discipline through their physical presence (Bozovic, 1995).

In *Discipline and Punish: The Birth of the Prison*, Foucault elucidates that since the eighteenth and nineteenth centuries, Western societies are characterized by a novel form of power that is capillary, influencing the very essence of individuals, permeating their bodies and integrating into their actions, attitudes, discourses, learning processes, and daily lives (Foucault, 1979; Galic et al., 2017). According to Foucault (1979) and Galic et al. (2017), the Panopticon prison system of governance has become prevalent and operational in numerous facets of Western cultures, as seen in schools, hospitals, military installations and factories. These institutions control and normalize individual behaviour using surveillance, hence fostering discipline. However, as Foucault illustrates, these systems frequently remain concealed or overlooked, primarily because they are embedded in everyday life, rendering them both potent and pervasive (Galic et al., 2017).

The Panopticon was not just a tool for observation but a powerful force that worked alongside explicitly defined behavioural norms from the emerging social sciences. Its purpose was not merely to watch but to change how prisoners viewed themselves. Panopticism transitions from overt and violent forms of power to subtle psychological control, where the disciplinary aspect of panoptic observation focuses on the productive training of the soul, motivating inmates to reflect on the details of their behaviour and continuously work towards self-transformation (Haggerty & Ericson, 2017; Foucault, 1979; Galic et al., 2017). This role of the Panopticon can be likened to the function of a laboratory in conducting human experiments and, in the process, modifying and correcting individual behaviours (Foucault, 1979). Hence, the Panopticon was expected to

demonstrate its most significant effects by potentially creating morally reformed individuals based on Bentham's and Foucault's concepts of docile bodies that conform to societal norms (Lyon, 2006).

Regarding public surveillance, it is common for CCTV cameras to be under centralized control, enabling authorities or security personnel to monitor expansive areas from a single point. This may psychologically impact those observed due to the sense of uncertainty that individuals under observation encounter. Concerning the Panopticon, incarcerated individuals are constantly uncertain about their level of surveillance, prompting them to adapt their actions under the assumption that they are under constant observation. The installation of CCTV cameras in public areas has a psychological impact on individuals, as it instils a sense of continuous surveillance and prompts them to regulate their behaviour, accordingly, thus serving as a deterrent to antisocial and criminal behaviour (Foucault, 1979; Khoudour et al., 2001; Firmino & Trevisan, 2021; Levesley, 2005; Klauser, 2007; Brookman & Jones, 2002). One significant commonality between Foucault and Bentham’s concepts of the panopticon lies in the emphasis on physical structures and visibility: both envision surveillance as a mechanism in which individuals are observed from a central vantage point within a structured space (Galic et al., 2017).

Deleuze and other scholars developed alternative concepts for explaining surveillance, which Galic et al. (2017) called post-panoptic theories. These authors criticized Bentham and Foucault's writings, asserting the necessity for new insights in establishing a post-panoptic framework of surveillance theory. Building on Foucault’s panopticism, these scholars argue that the objects of research today demand a different interpretation because current power dynamics between institutions and individuals are not defined as they were in Foucault's study. Deleuze noted that Foucauldian institutions and their methods of discipline no longer exist, or at least are

moving into different forms of monitoring and power exercise (Galic et al., 2017; Haggerty, 2006; Haggerty & Ericson, 2017). In his work *'Postscript on the Societies of Control,'* Deleuze explicitly rejects the notion of discipline as the motivating factor of governance; instead, he suggests it must be located within mechanisms of control (Galic et al., 2017; Deleuze, 2017).

Deleuze examines the transformative impact of capitalism and globalization on (Western) society, noting that institutions like schools, hospitals, and factories have evolved into businesses, thus shifting from discipline to control of societies. The distinction resides in the procedure and the technique. While discipline seeks to establish a long-term, stable, and compliant society that optimally utilizes resources to attain governmental objectives, companies prioritize immediate outcomes. To accomplish this, they require ongoing oversight through perpetual monitoring and evaluation of markets, workforces, plans, and other factors (Galic et al., 2017; Deleuze, 2017). This shift marked an evolution from watchwords in disciplinary societies to passwords in control societies. In explaining the term "dividual," Deleuze argued that society has become fragmented like the person. Concerning surveillance, Deleuze further argues that individuals become less relevant as subjects of surveillance; that is, it is no longer actual persons and their bodies that need to be subjected and disciplined, but rather the individuals' representations. Consumers and their purchasing behaviours have become essential to monitoring and controlling through data, algorithms, codes, and technologies. In a Deleuzian society, the objective shifts from rendering bodies docile to shaping customers, whose data embodiments assume greater significance than their physical forms. Deleuze further emphasizes open spaces and highlights the concept of control at a distance, utilizing power technologies that reshape bodies and minds through daily regimes implemented by authorities (Galic et al., 2017; Deleuze, 2017).

Inspired by Deleuze and Guattari's idea of "assemblages" and the concept of control societies, Haggerty and Ericson suggested the notion of surveillant assemblages to offer a fresh set of analytical tools to capture contemporary surveillance (Galic et al., 2017; Haggerty & Ericson, 2017). Deleuze and Guattari describe assemblages as a collection of diverse elements, unified only by their ability to operate collectively, functioning as a cohesive unit (Haggerty & Ericson, 2000). In Haggerty and Ericson's arguments, surveillance is decentralized compared to Bentham's era, where a single observer monitored many people. Through decentralization, a host of stakeholders, such as governments, private corporations, schools, factories, and hospitals, carry out surveillance through technological means. Furthering their arguments about decentralizing contemporary surveillance, Haggerty and Ericson argued that surveillance has become rhizomatic owing to its proliferation and diverse applications. In other words, they describe the assemblages as roots that spread in all directions, making them difficult to trace. In the context of CCTV cameras, they are pervasive and operated by many operators who rely on technological means to monitor individuals, thus making it challenging to link surveillance to a single source.

The surveillance assemblage is based on the notion of a disciplined society being replaced by control societies, wherein citizens are no longer subjected to disciplinary surveillance but are progressively shaped as customers enticed into the market economy due to neo-liberal policies. As an essential concept in the surveillance assemblage, the body is abstracted into data flows that become the point of surveillance. In this sense, individuals are monitored not only as physical beings but as data points because of their digital activities, representing a shift from traditional forms of surveillance. Operating within state and non-state entities, surveillance assemblages mostly rely on digital technologies to conduct and document observations of human bodies. They

are a hybrid composition of flesh, technology, and information (Haggerty & Ericson, 2017; Galic et al., 2017).

The wide use of surveillance cameras in society has come about because of the risky nature of society. Risk society has been used to describe modern society due to insecurity and risk awareness (Kroener & Neyland, 2012). With technological advancements, there is a notion that risks are bound to happen, which can be partially addressed using technology; this is why surveillance cameras are widely used. Following the 9/11 attacks, security needs have been elevated to a high level in nation-states globally. The subsequent rise in routine surveillance of residents, particularly travellers, prompts sociological inquiries concerning the increased reliance on technology-dependent governance prevalent in numerous nations (Lyon, 2007; Kroener & Neyland, 2012). Wood et al. (2006) believed that society has moved towards a surveillance state due to the use of surveillance technologies in organizing and structuring it.

The French philosopher Michel Foucault coined the term governmentality during his lectures at the College de France in 1978 and 1979, and it has emerged as a leading intellectual framework for analyzing the practices of neoliberal governance (Madsen, 2014; Lemke, 2015; Pearce & Tombs, 1998). Society is structured and administered through a system of government and governance supported by a form of governmentality (Kitchin et al., 2020). According to Lemke (2015), government can be defined as a structured and regulated system of power that goes beyond the natural exercise of authority. It follows a precise type of reasoning that determines the purpose of action and the appropriate methods to achieve it. To begin, the concept of governmentality illustrates Foucault's hypothesis regarding the interconnectedness of power techniques, knowledge forms, representation regimes, and modes of intervention (Lemke, 2009). Foucault expands our comprehension of power to encompass the mechanisms of social regulation

within disciplinary establishments (such as schools, hospitals, psychiatric facilities, etc.) and many types of knowledge (Madsen, 2014).

Foucault defines governmentality as the management of individuals' behaviour or the skill of governing, encompassing many methods of control that render individuals governable (Madsen, 2014). Furthering his arguments, he noted that governmentality refers to the comprehensive system that comprises institutions, procedures, analyses, reflections, calculations, and tactics that enable the exercise of specific and intricate power, primarily focusing on the population (Madsen, 2014). However, the concept of governmentality changes over time, and occasionally, its essence can undergo a fundamental transformation. For instance, in transitioning from a feudal society to a modern society, more organized methods of managing and controlling individuals through centralized and institutionalized authority were implemented (Kitchin et al., 2020; Lysova, 2022).

Lysova (2022) argues that the government's primary objective is to assess and address risks that arise within a population. Foucault introduced a ground-breaking notion known as "the conduct of conduct," which refers to the sophisticated methods employed by the Western liberal advanced states to govern its citizens (Madsen, 2014). This form of state control can be traced to the 1950s when governments in the global North utilized digital technologies to control people. With the advancement of hardware and software and the establishment of the internet, the utilization of digital technologies for governance has grown extensively in both range and complexity (Kitchin et al., 2020). As earlier stated by Ceyhan (2012), Madsen (2014), and Kitchin et al. (2020), governments across the globe, while protecting their citizens, use various methods and strategies. These systems were specifically created to target the identification, monitoring, and surveillance of persons deemed hazardous to the overall welfare of the population, as was the case in the eighteenth century. The primary objective is to exercise control and regulation over the

movements of populations and to prevent the emergence of undesirable characteristics, such as what Foucault referred to as the circulation of marginalized groups like beggars, vagrants, delinquents, criminals, thieves, murderers, and so on. It also seeks to reassure populations in the face of fear and uncertainty resulting from terrorist attacks (Ceyhan, 2012).

Governmentality has been applied to surveillance literature by explaining how governments and institutions use closed-circuit television cameras to control their citizens from a distance. Surveillance and surveillance systems such as CCTV cameras are not new in urban areas. There are two main reasons why governments put public video surveillance systems in place: first, they are supposed to keep practical criminals away, and second, they help improve people's lives by making people feel safe in public spaces (Lysova, 2022). Surveillance cameras serve as a tool for liberal and communist governments to achieve optimal efficiency and control over the population by closely monitoring and categorizing individuals (Ceyham, 2012). Other jurisdictions, such as Tokyo and Rio de Janeiro, exhibit indications of the rise of a globalized technocratic surveillance system characterized by the proliferation of camera surveillance. This phenomenon is partly driven by the needs of a transnational elite class that is becoming increasingly segregated and is willing to subject themselves to surveillance measures to enhance their security. Both Tokyo and Rio exhibit elements of governmentality that contribute to their status as partial surveillance societies (Doyle et al., 2013). Many Western countries are experiencing heightened government and public apprehension around crime and security. An indication that has become increasingly prevalent is the increased utilization of closed-circuit television (CCTV) to monitor public areas and protect its populace and assets (William & Sutton, 2003; Falagon, 2022)

Surveillance cameras may be employed to gather information on individual bodies, which is subsequently analyzed, and punishment may be implemented if a deviation from the norm is detected through this analysis. This function is achieved through the work of individuals in CCTV control rooms employed by different levels of government and property owners to monitor suspicious activities of individuals who use open spaces. Footage of those caught on cameras is given to law enforcement agencies, which helps speed up the court process, and when found guilty of their actions, they are punished by the law (Lysova, 2022; Kitchin et al., 2020; Ratcliffe, 2006; Gillis et al., 2007; Cerezo, 2013).

Another form of governmentality has to do with self-discipline. Foucault proposed this concept of governmentality to examine individuals' ability to exercise self-control and how this is connected to various forms of political governance (Lemke, 2015). Disciplinary governmentality entails individuals being aware that they are under surveillance and being incorporated into systems of measurement and calculation. This has involved implementing protocols and technologies for the organized, large-scale production and evaluation of data regarding individuals and their activities (Kitchin et al., 2020). In the context of public surveillance cameras, discipline governmentality is linked to situational awareness, deterrence, and displacement such that prospective perpetrators are dissuaded from engaging in criminal activities due to the possibility of being captured on video surveillance and subsequently apprehended or identified (Willis et al., 2017). This concept of a surveillance society suggests that individuals internalize the awareness of being monitored, reducing deviant behaviour over time, thus leading to a disciplined society that limits the occurrence of crime. This could mean surveillance and inspection technologies are crucial for organizing individual bodies into a visibility field and customizing their functionality (Willis et al., 2017; Lysova, 2022).

In summary, Foucault's concept of panopticism offers a foundational framework for understanding surveillance as a tool of institutional power. However, the theories of Deleuze's control societies and Haggerty and Ericson's surveillant assemblage illustrate how surveillance has adapted alongside technological advancements. While Foucault's model centers on visibility and self-regulation, Deleuze, Haggerty, and Ericson describe a world where power increasingly operates through data and interconnected networks, exerting control in subtler, more pervasive ways. Additionally, the concepts of *surveillance society* and *security state* are interconnected, describing how modern societies and governments increasingly depend on surveillance technologies and practices to enforce control, governance, and security (Lyon, 2001, 2018; Monahan, 2011; Zuboff, 2019). Governmentality highlights a shift from reliance solely on coercive or legal measures to more sophisticated strategies, practices, and policies—such as neoliberalism and surveillance—to manage and regulate populations (Foucault, 1991, 2006).

CHAPTER 4

METHODOLOGY

This chapter elucidates the methodological decisions that formed the foundation of this investigation. It explores the study area, justification for qualitative investigations, the research field, sampling methods, participant recruitment, data collection, and analysis procedures. The section ends by examining the researcher's reflexive techniques and ethical considerations made during this research.

4.1 Rationale for Qualitative Studies

This section examines the justification for choosing a qualitative methodology for this research. High-quality qualitative research employs methodical and rigorous methods to address inquiries about the nature of a phenomenon and individuals' perceptions or emotions regarding a specific event and potentially explore the underlying reasons for the occurrence of that event (Seers, 2012). Consequently, qualitative research is particularly well-suited for investigating participants' perceptions of surveillance cameras, offering depth and insight that other methodologies may lack.

A qualitative research paradigm prioritizes examining phenomena through the lens of individuals who possess intimate knowledge (Lapan et al., 2011). Qualitative investigations are designed to offer insight and comprehension into intricate psychosocial matters, primarily addressing humanistic inquiries related to the reasons behind phenomena and the mechanisms through which they occur (Marshall, 1999; Barrett & Twycross, 2018). Since the perception of CCTV cameras in public spaces is inherently subjective and context-dependent, the use of a qualitative approach was helpful in this research as it allowed participants to share their unique sociocultural factors that inform their interpretations of surveillance and safety (Lapan et al., 2011;

Liedka et al., 2019; Park et al., 2012; Matczak et al., 2021). A qualitative research data collection approach, such as interviews (Merriam & Tisdell, 2015; Gill et al., 2008), allowed participants to express their perceptions in their own words, providing insights into the subjective meanings they attach to surveillance. From the above arguments, the qualitative research design was preferred to other designs due to the inherent unpredictability of human nature in investigating human judgment and actions (Lehnert et al., 2016).

Similarly, qualitative research typically follows a constructivist perspective, which argues that for an understanding of the world, meanings should be constructed by people about how they perceive their surroundings (Schwandt, 1994; Keilman, 2012). This philosophical paradigm implies that reality is subjective and can vary among individuals and that there is no singular reality for a particular phenomenon but rather multiple and relative dimensions of reality. These dimensions can only be partially understood through subjective and naturalistic methods such as qualitative research (Keilmann, 2012). Constructivists posit the assumption that social processes construct reality. They perceive the research objective as the genuine comprehension of diverse constructs about reality (Lapan et al., 2011).

Furthermore, social constructionists argue that the origins of meaning, and comprehension can be traced back to social interactions and that the meaning-making processes, integrally intertwined with socio-cultural dynamics, are contingent upon specific temporal and spatial contexts. Hence, the interpretations of occurrences and our methods of comprehending them vary across circumstances (Lock, 2010). Through a constructionist philosophical approach, linguistic and cognitive skills were used to extract information from my research participants through interviews. Acquiring their opinions on the research topic helped discover new public space

surveillance and safety concepts. Through their narrations, I understood how different individuals define their sense of safety and social control through the lens of surveillance.

Theory generation is one of the main features of qualitative research (Glaser, 2002; Lehnert et al., 2016). Morse (1994) highlights the importance of theory as a guide to investigating a social phenomenon. Grounded theory aims to develop a theoretical framework that elucidates a social phenomenon, encompassing processes, actions, or interactions. The theory is developed or "grounded" based on the evidence collected from people who have firsthand experience with the topic being investigated (Petty et al., 2012). This methodological approach suits the current problem, which aims to uncover new surveillance concepts that can be applied to similar studies in different jurisdictions. This can be realized using interpretive frameworks to examine and understand phenomena under investigation (Lapan et al., 2011).

In addition, qualitative methodologies possess inherent flexibility and adaptability, allowing researchers to modify their methods in response to emerging discoveries (Petty et al., 2012; Higginbottom, 2004). Its iterative nature promotes refinement and revision of research. In this case, qualitative studies refrain from exerting control over the numerous factors implicated in the phenomenon being investigated, instead aiming to comprehensively explore the entirety of the phenomenon in its intricate complexity (Petty et al., 2012: Keilman, 2012). The flexible nature of qualitative research was used as changes were made to the research and interview questions, among other issues that needed amendments throughout the research process. As argued by Jacelon and O'Dell (2005), I assumed the role of the primary instrument for data analysis during that stage of this research. This capacity to adapt and be flexible helped the researcher delve into the public perception of closed-circuit television (CCTV) cameras.

In qualitative research, case studies are rigorous examinations of a singular entity that draw broader conclusions applicable to a larger group of entities (Gerring, 2004). Flyvberg (2005) argued that a strategic and careful selection of cases could yield the required generalization, which is crucial for generating knowledge and testing hypotheses, not limited to research activities alone. Seawright and Gerring (2008) further assert that it is imperative for researchers to retrospectively comprehend how the characteristics of the chosen cases align with the broader population, even if pragmatic considerations drove the initial selection. The choice of Downtown Winnipeg was essential for investigating the fundamental factors that elucidate the public's view of CCTV cameras and their influence on safety due to its central location, high population density, and frequent incidents of criminal activities in this area. Safety and crime prevention are prominent issues in several urban centres (Ceccato, 2012), and Downtown Winnipeg is no exception (Manitoba Government, 2023). Therefore, a qualitative approach was the most appropriate method for this academic investigation based on the research objectives.

4.2 Sampling and Participant Recruitment

Sampling is crucial in any research endeavour. Qualitative research aims to make sense of experience and the observed phenomenon through in-depth interviews with carefully selected participants and cases (Marshall, 1996). Qualitative researchers acknowledge the varying levels of richness among informants, realizing that specific individuals possess a greater depth of knowledge and are more likely to offer valuable insights and understanding to the researcher. Thus, qualitative researchers use purposive sampling, which involves selecting participants who satisfy characteristics relevant to the research question or topic (Tongco, 2007; Higginbottom, 2004; Watson, 2006; Flyvberg, 2006; Marshall, 1996). Purposive sampling was used to recruit potential participants who met the inclusion criteria, including individuals aged 18 and beyond with

opinions of public spaces surveillance cameras, residents of Winnipeg for at least six months, awareness of public surveillance cameras, and those willing to partake in the study. Marshall (1996) argues that the determination of the sample size is based on identifying the optimal number required to generate accurate inferences regarding the population. A sample size of 25 participants from diverse socio-cultural backgrounds was used for this research after reaching data saturation, as participants' responses no longer provided new information (Mwita, 2022).

Research participants were identified in several ways. For example, my friends and people I know assisted in the distribution of recruitment posters to some of my research participants. Also, I physically distributed flyers to participants I met on the Winnipeg transit bus, patrons of the Millennium Library, users of the various walkways downtown, and users of the various open public spaces in Downtown Winnipeg. Additionally, posters were posted on the various notice boards of public spaces after approval from the appropriate authorities. These posters and flyers contained information on the inclusion criteria, the mode and duration of the interview, and the honorarium. Once the participants were identified, they were screened through telephone interviews to ensure their suitability for the study. Participants who met the eligibility criteria were selected for an interview. Table 1 shows the participants' socio-demographic characteristics.

Table 1. Social Demographic of Research Participants

Pseudonyms	**Sex**	**Age**	**Education**	**Occupation**
A1	Female	35-44	Bachelor's Degree	Student
A2	Male	35-44	Bachelor's Degree	Support Worker
A3	Female	25-34	Bachelor's Degree	Student
B1	Female	25-34	Bachelor's Degree	Student
B3	Male	25-34	Master's Degree	Administrator
B3	Male	35-44	Master's Degree	Student
C1	Female	25-34	Bachelor's Degree	Banker
C2	Female	18-24	Bachelor's Degree	Student

C3	Male	25-34	Bachelor's Degree	Support Worker
D1	Male	25-34	High School	Arborist
D2	Female	25-34	Bachelor's Degree	Student
D3	Male	55-64	Bachelor's Degree	Administrator
E1	Female	25-34	Bachelor's Degree	Administrator
E2	Male	18-24	College	Unemployed
E3	Female	45-54	Bachelor’s Degree	Administrator
F1	Female	35-44	Diploma	Mental Health worker
F2	Female	35-44	Diploma	Nursing Assistant
F3	Female	25-34	Bachelor's Degree	Student
G1	Male	35-44	High School	Tax preparer
G2	Male	25-34	College	Support Worker
G3	Female	25-34	Bachelor's Degree	Administrator
H1	Male	35-44	Bachelor's Degree	Politician
H2	Male	35-44	Master's Degree	Student
H3	Female	25-34	Bachelor's Degree	Student
H4	Male	25-34	Master’s Degree	Unemployed

The research participants were students (N=9), administrators (N=5), support workers (N=3), health workers (N=2), bankers (N=1), arborists (N=1), tax preparers (N=1), politicians (N=1) and the unemployed (N=2) who met the eligibility criteria. Table 2 presents descriptive statistics of the research participants.

Table 2. Descriptive statistics of participants social-demographics features

Social Demographics	**Number of Participants**	**Percentage**
Sex		
Female	13	52
Male	12	48
Total	**25**	**100**
Occupation		
Student	9	36
Administrators	5	20
Support Workers	3	12
Health workers	2	8

Banker	1	4
Arborist	1	4
Tax Preparer	1	4
Politician	1	4
Unemployed	2	8
Total	**25**	**100**
Education		
Master's Degree	4	16
Bachelor's Degree	15	60
Diploma	2	8
College	3	12
High School	1	4
Total	**25**	**100**
Age		
18-24	2	12
25-34	13	44
35-44	8	36
45-54	1	4
55-64	1	4
65-74	0	0
75+	0	0
Total	**25**	**100**

Source: Fieldwork 2024

Fifty-two percent of the interviewees in this study were women (13), while the remaining forty-eight percent were men (12), as the table indicates. Table 2 shows that the study was dominated by participants with bachelor's degrees representing (60%), followed by master's degree (16%), college (12%), diplomas (8%) and high school certificates (4%). The table also describes the age of participants in this study as participants between the ages of 25-34 dominated the study with (52%), followed by the age group of 35-44 (32%), with the age group of 18-24 making up (8%),

(4%) for age groups of 45-54 and (4%) of interviewees who fell in the age group of 55-64. There were no participants for 65-74 and 75 and above.

4.3 Data Sources and Collection Strategies

Information collected from various sources such as observations, interviews, focus groups, ethnography, documents, and visuals can be termed data in qualitative research. Qualitative data frequently manifests in textual information, encompassing words and images found in the environment (Seers, 2012; Merriam & Tisdell, 2015; Beach, 2005; Taylor, 1997; Zuev & Blatchford, 2020; Kamberlis & Dimitriadis, 2013; Petty et al., 2012). This data can be primary and secondary (Polkinghorne, 2005). Hox and Boejie (2005) define primary data as information the researcher directly and explicitly gathers for the study subject, employing methods most suitable for addressing the research problem. Since this thesis examined how downtown public space users perceive the use of CCTV cameras in public spaces and how it impacts their safety, primary data from in-depth semi-structured interviews was considered most appropriate.

In qualitative research, interviews are often used to investigate individual participants' perspectives, experiences, personal encounters, and convictions (Gill et al., 2008). Three primary categories of research interviews exist: structured, semi-structured, and unstructured. The semi-structured interview approach is commonly employed in social sciences because it offers participants guidance regarding discussing topics. This is characterized by a prepared list of questions and issues to be addressed. However, these questions' specific phrasing and sequence must still be pre-established (Petty et al., 2012; Gill et al., 2008; Merriam & Tisdell, 2015; Atkinson & Delamont, 2007).

The face-to-face semi-structured interview method, the most popular data collection method in social sciences (Petty et al., 2012; Gill et al., 2008; Merriam & Tisdell, 2015; Atkinson

& Delamont, 2007), was employed to gather primary data for this study. This data collection strategy was helpful as public space users shared their unique experiences with surveillance cameras in an unadulterated form, bringing different perspectives to the research. This approach helped the researcher pay attention to the non-verbal cues and assess participants' emotional responses to a question (Marcinowicz et al., 2010). It also helped the researcher tap into the participants' natural experiences, perceptions, and behaviours (Seers, 2012; Gill et al., 2008), potentially resulting in rich data about the topic. Before the interview, consent forms were sent to the interviewee via their email. Interviews took place in locations participants chose, such as their private residences, office spaces, and enclosed public libraries, with some interviews lasting close to an hour. In addition to in-person interviews, an online interview via UM Zoom was made available to research participants. However, most participants opted for an in-person interview, with ten choosing Zoom interviews.

Acquiring high-quality data through interviews is contingent upon formulating practical questions, which ensures that information collected from respondents is suitable for providing good answers to research questions (Buschle et al., 2021; Merriam & Tisdell, 2015). In the research, interviews focused on participants' perceptions of CCTV in public spaces and whether such perceptions influence their behaviour and sense of safety. Participants were asked questions such as the following: what are your general perceptions of CCTV cameras in public spaces? Do CCTV cameras affect the overall security in public spaces? Please explain your answer. Have you ever altered your behaviour or actions in public spaces because you knew there were CCTV cameras? Do CCTV cameras make you feel safer in public spaces in Winnipeg, or do they have the opposite effect? Do you think CCTV cameras affect marginalized groups in Winnipeg? If yes, can you please explain? Does that vary by location within the city? Also, probing questions such

as “Can you please give me an example; can you talk more about this? Can you please explain this point?” were used for clarifications when necessary. Following the participants’ informed consent, the semi-structured interviews were audio-recorded for analysis, as is often done in qualitative studies (Merriam & Tisdell, 2015). The researcher used Otter.ai for transcription but had to supplement it with manual transcription as the transcription application failed to capture all details accurately. This manual transcription process was exhaustive as the researcher had to play back the recording several times before he could decipher the actual statements of the interviewees.

4.4 Data Analysis and Strategies

The analysis and interpretation of data are integral parts of qualitative research and coincide with the data-gathering phase. These processes exhibit overlapping characteristics and are mutually recursive. At this stage, the researcher makes sense of the different opinions of their participants (Morse, 1994; Ely et al., 1997; Jacelon & O'Dell, 2005). In this study, the audio recordings of participants were first transcribed by carefully listening and accurately typing participants’ responses verbatim. The next stage for the analysis was the coding of the data.

Coding serves as a fundamental process used by qualitative researchers. The researcher employs coding to dissect the data and systematically arrange it based on the underlying concepts it encompasses. The coding process does not have a universally correct or incorrect approach. Identifying ideas in the data relies on the researcher's expertise and perspectives (Jacelon & O'Dell, 2005). Coffey and Atkinson (1996) describe it as the first step in identifying themes and patterns in the research data, forming the basis of qualitative data analysis. In this sense, commonalities, differences, and structures are identified. Coding can be seen as a range of approaches that helps organize, retrieve, and analyze data (Coffey & Atkinson, 1996). The coding can be done manually or electronically using qualitative software such as NVivo (Zamawe, 2015). Manual coding was

favoured because it brought the researcher closer to the data, which was helpful during the analysis stage. The interview data were coded concerning the interview questions, and a code denoted each theme. Microsoft Word 2021 was employed as I used colours to highlight a theme, with every identified piece represented by a different colour for easier identification of the major and sub-themes. The themes identified were grouped into primary and secondary themes based on their similarities and differences, thus forming the basis of a thematic network (Attride-Stirling, 2001). Similar themes were grouped to form one big concept.

This study used thematic analysis, an inductive process involving identifying patterns and threads in the data without pre-determined categories (Javadi & Zarea, 2016). According to Eakin and Gladstone (2020), data do not exist independently of the practices that generate them since they are interpretative actions performed by study participants and researchers. In my interpretation of the data, I searched for threads, associations, and contrasts related to the data. In doing so, I questioned how the data linked to broader contexts such as surveillance, security/public safety, and power. Once the themes were identified, I proceeded with the report writing, which took the form of narrative writing.

4.5 Reflexivity

One of the most lauded techniques among qualitative researchers is reflexivity, a method often used to bring legitimacy and validity to their research practices. It also means the time researchers spend thinking about and discussing their preconceptions and experiences as they conduct the research (Pillow, 2002; Potts & Brown, 2005; Petty et al., 2012). As the principal investigator in such a project, reflexivity was practiced by reflecting on my values and assumptions that could influence the research. As a citizen of a country with less emphasis on technology in fighting crime and a greater focus on community policing in crime detection, I was surprised by

the sheer number of CCTV cameras in Winnipeg public spaces, and sometimes, I asked myself why all these unseen eyes. These cultural shocks made me reflect on how Canadian public space users may perceive the presence of surveillance cameras in public malls, which led me to my research topic.

Despite having nothing negative to hide, CCTV cameras make me feel uncomfortable. Though I live in a democratic and free society, I think the state is watching me. Also, CCTV is like the concept of omnipresence among Christians, that there is a supreme being somewhere who watches over man's actions. As a Christian, I align myself with such perceptions. Is this perception of mine different from that of Canadian society? I used this self-reflection to ensure that potential biases did not cloud my interpretation of the data. I also checked participants by sharing the preliminary themes/findings with the participants and asking for their feedback. This helped me identify potential biases that may have influenced my interpretation of data.

4.6 Ethical Consideration

Ethics, as one of the fundamental components of academic integrity, is inherent in various studies. It comprises the principles and practices that promote morally beneficial actions and discourage those that cause damage or social harm. The prevention or reduction of harm can be achieved by applying suitable ethical standards (David, 2015; Orb et al., 2001). Lapan et al. (2011) note that researchers must adhere to ethical guidelines and values demonstrated by government regulations and codes of ethics established by professional associations.

Since this research involved human participants sharing their experiences about the use of CCTV cameras and how it affects their safety, ethics protocols were followed to protect participants' rights and dignity. Ethics approval was sought from the Research Ethics Board (REB1) of the University of Manitoba. Research participants who willingly provided their

informed consent were contacted and interviewed. The informed consent form contained important information such as the purpose of the research, potential benefits and risks, the nature of the interview, withdrawal from the study, confidentiality, data storage, and contact details of the researcher and the University of Manitoba Research Ethics Board (REB1). Participants were allowed to withdraw from the study at any time of the study without giving any explanation. Also, to ensure participants' confidentiality and anonymity (Orb et al., 2001), pseudonyms or identification codes such as X1 were employed.

CHAPTER 5

AWARENESS AND INDIVIDUAL PERCEPTIONS OF CCTV CAMERAS

The main objective of this research was to investigate how individuals perceive the use of CCTV cameras in Winnipeg's downtown public spaces and whether their perception influences their behaviour and sense of safety. Awareness of surveillance cameras is crucial in the discussions of public surveillance cameras. The need for safety and the proliferation of CCTV cameras has become normal in contemporary societies, with most public space users leaning towards its acceptance. Other schools of thought argue that privacy, data apprehension, transparency, and discrimination are reasons surveillance cameras should not be solely relied on as a crime prevention strategy, thus leading to their disagreement with public surveillance. Overall, there were mixed opinions about using CCTV cameras in public spaces.

5.1 Setting the Context: Individual Awareness of CCTV Cameras

The effectiveness of surveillance cameras is often linked to the visibility and awareness of their existence. In some locations, they are boldly advertised with catchphrases such as "24-hour surveillance" and "cameras are in operation" among notices accompanying them. Yet, despite these notices, some public space users are unaware of surveillance cameras in places they frequent. This point was explained by one participant who emphasized the lack of signage as the reason for the unawareness of public surveillance cameras. She explained:

> *I might say no regarding the notice of CCTV cameras because most cameras are difficult for a layperson to detect unless there is signage. That is when I can determine that this is a CCTV camera because most of them have no inscriptions under them, but in some places, you might see that this is a highly monitored area, so whatever you do, you are being monitored. I also feel some of them are hidden, and I do not know the reason for that, but there is more to be done to make them noticeable (A1, April 8, 2024)*

Another participant also shared her experience of not having taken notice of the presence of cameras in public spaces before this research project as she stated:

> *CCTV cameras are not visible and well-advertised. Before this interview, I was not even aware that I was being recorded so much, but after we spoke about this interview* ***(pre-interview/ eligibility selection stage),*** *I started looking out for cameras anytime I used a CCTV camera-protected space. I do not see many signs in public spaces indicating that I am being recorded, which invades my privacy (G3, June 4, 2024).*

In contrast, a male participant had a different opinion about the awareness of CCTV cameras. He noted that the wide use of public surveillance cameras in North America gives him the impression that they are everywhere without looking out for them in public spaces. He explained that:

> *I do not look out for cameras unless I see them. Sometimes, there are signs saying, smile, you are on camera, but that is mostly in private properties or companies and banks. I have that sense of the presence of cameras in downtowns, just as the major cities in North America have. It is a global phenomenon where people are monitored in public spaces, airports, etc. That is a common practice now, so I do not look for cameras, and they do not prompt you either, but I know they are in public and sensitive places where there are valuables, for example, if there are children (H2, June 26, 2024).*

These narratives highlight the role that CCTV camera visibility plays in shaping awareness. While some participants feel that CCTV cameras are pervasive and assume their presence without actively searching for them, others remain largely unaware of cameras in the public spaces they frequent. This unawareness often stems from inadequate signage and publicity around public surveillance cameras, which, according to the interviewees, does not meet their expectations for transparency. In other words, this lack of awareness can be understood as a socially constructed result of insufficient information about surveillance practices affecting the public.

For some participants, the pervasiveness of CCTV cameras in North America and globally reinforces the belief that cameras are everywhere, particularly in corporate and high-security areas, leading them to internalize this as an assumption. These observations are supported by research

from Taylor (2012), Wojcik (2015), Ratcliffe (2006), SCAN & Diesman (2009), and Isnard & Council (2001), which suggests that despite the widespread presence of cameras, many individuals remain unaware of their operation due to insufficient signage. Furthermore, the perception that cameras are omnipresent echoes points raised by Wood et al. (2006) and Andrejevic (2012), who argue that contemporary society has become so accustomed to surveillance that it is ingrained in the collective mindset. As indicated by participants, this extensive network of surveillance cameras aligns with the theory proposed by Deleuze and Guattari, who described surveillance in control societies as resembling rhizomes—constantly expanding and entangled within the fabric of public spaces, reflecting an ever-growing and pervasive system (Galic et al., 2017).

5.2 Perception of CCTV: Acceptance of Close Circuit Television Cameras

Surveillance cameras have achieved global prominence, with various countries relying on them as crime prevention technologies to maintain social order in public spaces. This development has been spearheaded by Western countries, with the United Kingdom's role as one of the countries at the forefront of its implementation in open spaces overtaken by China (Graham et al., 1996; Fussey & Coaffee, 2012; Kroener & Neyland, 2012). CCTV cameras have been used in various public spaces such as schools, banks, shopping malls, etc. (Ratcliffe, 2006). According to the existing literature, socio-political orientation influences the acceptance of surveillance cameras in many countries (Ratcliffe, 2006; Jorgensen, 2023).

In this study, participants confirmed the widespread usage of CCTV in their daily lives. One participant noted the significant global increase in CCTV camera deployment and its evolving impact on society. He compared surveillance cameras to the indispensable nature of cell phones in contemporary societies. This is what he said:

> *The use of CCTV cameras is increasing significantly, not only in Winnipeg but also globally. CCTV cameras record many amazing, brutal, good, and bad things on social media. Some time ago, we did not need cell phones, but now, we cannot live without them, and we are heading towards a society where CCTV cameras are an integral part of our lives (B2, April 21, 2024).*

This participant also spoke about the general acceptance of CCTV cameras: "People have understood the importance and usefulness of CCTV cameras and have accepted that society is moving toward camera surveillance" (B2, April 21, 2024). Similarly, another participant expressed no significant concerns about the ubiquity of CCTV cameras, having grown accustomed to them due to safety issues in her home country: "I find CCTVs normal. So, surveillance cameras do not make a difference to me now, whether in India or Canada, because cameras are all around, especially considering the safety issues in my home country. I am used to it" (B1, April 13, 2024).

However, people's socio-political orientations shape their views on surveillance; those from democratic countries may view CCTV more favourably, whereas citizens from authoritarian states might be wary of its potential misuse. A Chinese graduate student had this to say:

> *Culturally, I do not have a reasonable opinion about CCTV cameras because where I come from, surveillance generally means banning you from doing a lot of stuff and constantly putting you under scrutiny. Coming from China, it has never been a good thing for me. I am neutral towards surveillance cameras in general if these cameras are not used against me or for taking my information for whatever purpose. (H3, July 30, 2024)*

On the contrary, another participant highlighted the normalization of surveillance in the U.S. compared to Canada, where public resistance to being watched is more evident: "I grew up in the United States of America, where CCTV cameras were common and being recorded is normal. In Winnipeg (Canada), people are more upfront and have problems with it" *(G3, June 4, 2024).* Similarly, a participant with African heritage compared the collective nature of African societies to the individualism of Western societies, suggesting this cultural distinction plays a key role in

shaping acceptance of and opinions about surveillance cameras across these regions. He explained it this way:

> *To some extent, my social orientation influences my opinion on surveillance. This all boils down to the differences in cultures. For example, Africa is more about the collective than the individual. As Africans, we do everything together and look out for each other. So, the community's involvement in CCTV installation will not be an issue because the community will take it to heart that it is for their safety. However, when you compare it to the Western world, this place (Winnipeg) is more of an individualistic society, so not everybody will embrace the installation of CCTV cameras in public spaces. (A1, April 8, 2024)*

Like the socio-political climate, the study found that other factors, such as security concerns and cost, significantly influence the deployment and public acceptance of surveillance systems. Larger communities with financial resources tend to have more extensive CCTV networks, while smaller regions may face limitations.

The findings show that CCTV cameras have become more accepted as society moves towards a surveillance state, which can be attributed to the need for security and technological evolution. The pervasiveness of surveillance cameras has seen them used in most social settings compared to their early stages when they were used in official and wealthy settings. The widespread use of surveillance cameras has become a norm that participants are accustomed to as they are socialized to accept it as the new norm of their lives. Surveillance theories highlight surveillance as a tool for governing populations in modern societies. In a surveillance society, this governance permeates both the public and private sectors, influencing consumer behaviour, social interactions, and public conduct (Lyon, 2018). Within a security state, governance is characterized by control and monitoring aimed at maintaining order and preventing potential threats (Lysova, 2022; Deleuze, 1992).

The interview excerpts suggest that individuals' socialization influences how they perceive surveillance cameras. Citizens from a democratic background may be more receptive to them than

people from autocratic states due to the fear that they may be misused. The participants' interpretation of the acceptance of surveillance cameras is equated to the need for public safety. Per participants' interpretation, the need for safety is crucial to the functioning of public spaces considering the aftermath of the 9/11 attacks, where suicide bombings and terrorism have been on the rise; in these circumstances, governments, through law enforcement agencies and surveillance technologies such as CCTV cameras, help monitor suspicious individuals who pose a threat to the public thus eliminating potential attacks. These findings align with those of Weller (2012), Su et al. (2015), Marx (2015), Matczak et al. (2021), Porter (2009), Taylor (2010), Cuevas et al. (2016), Shrivastava (2020), Kurdi (2014), Hulmes and Morgan (2015), Keval and Sasse (2010), and Ratcliffe (2006), who argue that the widespread use of CCTV cameras worldwide is driven by the need for public security, property protection, and the increasingly sophisticated nature of crime. Likewise, participants' views on their social orientation and how it affects their opinion on public surveillance cameras align with those expressed in the literature (Liu, 2023; Feldstein, 2022; Su et al., 2022; Jorgensen, 2023), indicating that a country's socio-political system influences citizens' opinions and acceptance of surveillance cameras.

5.3 Negative Opinions about CCTV Camera Operations

Haggerty and Ericson (2000) have theorized that expanding the surveillant assemblage affects notions of personal freedom and privacy. Although many participants accepted CCTV as normal in modern societies, others shared a more skeptical view based on their socio-political orientations. Those who rejected CCTV cameras did so based on their concerns over misuse and invasion of privacy, especially under authoritarian regimes, associating surveillance with government control and restrictions, as in China. This section discusses these concerns, such as

lack of transparency, distrust, fears about the misuse of their data, privacy concerns and the racial profiling of minorities as the reasons why they are uncomfortable with its uses in public spaces.

5.3.1 Transparency, Trust and Apprehension of CCTV Camera Operations

Transparency and trust are concepts that individuals have expressed concerning surveillance camera operations. These views are borne out of people's apprehension about the wrong usage of their data, which is connected to media reports of images of individuals being used without their consent. Most of the participants expressed their mistrust about CCTV camera operations; this was contained in the statement of a participant who said:

> *CCTV cameras are necessary in some spaces but are overused and can cause public distrust in systems such as governments or businesses. When people feel like they are being watched constantly, they could feel like they are being treated like criminals. When you are not a criminal, or even if you are a criminal, it can feel like you are not a person; you are just an entity that needs to be watched and that cannot be trusted (D2, April 30, 2024).*

The participant emphasizes the importance of transparency and public consent in surveillance practices, arguing that people should be notified when they are being recorded, similar to notifications during a Zoom meeting:

> *There should be transparency with CCTV camera operations because when having a Zoom meeting, there is always that notification of you being recorded. This gives you a sense of autonomy or control. I have heard the use of hidden cameras in many places, which I believe is an invasion of privacy. It is understandable if it is a public space, but that is unacceptable in private spaces. In public spaces, if people are notified of being watched, they can choose how to behave. At least they have that choice, which is okay (G3, June 4, 2024)*

This notification grants individuals a sense of autonomy and control. While acknowledging that public spaces may require surveillance, they stress that providing clear notifications allows people to adjust their behaviour accordingly, giving them a choice.

Most participants expressed concerns about the potential misuse of their data and images, feeling uneasy about government and private surveillance. One participant specifically noted their

apprehension about how data might be exploited due to societal corruption, extending these concerns to businesses and private individuals with cameras on their property:

> *I am apprehensive about the wrong use of my data, not only from government surveillance cameras but also from other establishments, such as business entities and people who have cameras on their properties. My fears are based on the corrupt nature of society. However, it is not something you think about daily because we are now used to it. It works both ways because your data might be wrongly used by those who have access to it, and when something happens to you, you can prove your case with that same image/ footage, but you always get the same risk (F3, May 18, 2024).*

They explained that, while surveillance footage can be beneficial—such as providing evidence to support a personal claim—it still carries a persistent risk of misuse by those with access. This participant observed that, although these concerns are widespread, surveillance has normalized them to the point where people may not actively think about these risks every day.

A mental health worker describes a personal experience of unexpectedly finding her photo online, raising questions about data handling, security, and potential misuse: "Surprisingly, I found my picture somewhere but did not know how it got there. I have no idea how they use all the data they collect on people or how they destroy it because anyone can hack into the system" (F1, May 23, 2024). She worries about a lack of transparency around how data is stored, shared, or destroyed, noting that systems are vulnerable to hacking.

Another participant echoes these concerns, emphasizing that the possibility of hacking or unauthorized access to CCTV data is always present:

> *Honestly, I would be lying if I said I do not have fears about the misuse of my image because, at the back of everybody's mind, you are constantly worried as there is that chance of it being misused because, as I said, if a computer gets hacked, its data is out there which is the same as CCTV camera operations. I mean, anybody who says they do not have concerns about the misuse of their image is not truthful to themselves because it will be at the back of their mind that their data is out there and accessible (G1, May 21, 2024).*

He believes nearly everyone has underlying concerns about privacy and misuse, even if not openly acknowledged. Overall, participants conveyed a sense of unease about surveillance and data security, fearing that their images could be misused without their consent or control.

Technological advancements, especially the advent of artificial intelligence, were another contributory factor that fueled participants' fear of data misuse. A participant stated that “with the advancements in AI and the ability to augment images into other things, there is some concern that a person's image will not be used as they wish” (D1, April 28, 2024). Likewise, another participant expressed fears about facial recognition technology as a medium for tempering people's images: “Facial recognition will be the next big thing here in Canada, and we are all probably aware of what it does and what it's been doing in China and other places. We will reach that point if we are not careful” (E3, May 8, 2024).

Participants’ narratives suggest that despite the importance of surveillance cameras as a crime prevention strategy, most participants have concerns with data protection. From their point of view, constant monitoring gives the impression that they do not have a mind of their own and thus need to be constantly monitored to prevent unforeseen circumstances. In so doing, individuals feel that they do not have the trust of public entities like the government, which has their mandate to protect them. Another aspect of trust has to do with concerns individuals have about the use of their footage or images. They believe their pictures will not be used for the purpose they were taken for and can be misused or commercialized. These fears of the public are partly blamed on the corrupt nature of society, individual differences of people who monitor surveillance cameras and the advancements in artificial intelligence. From the participants' submissions, they indicated there is a risk involved in surveillance camera operations, which might lead to concerns the public has about surveillance and thus called for a transparent surveillance system where they will be

informed about surveillance camera operations. These views of the participants align with the surveillance literature indicating that when the public has concerns about their data, it might lead to distrust in surveillance systems and thus affect its overall acceptance as a crime prevention tool (Fay, 1998: Trudinger et al., 2017; Su et al., 2021: Wester and Giesecke, 2019). Also, participant's views of their constant monitoring align with the works of Foucault (1979), who argues that individuals are made to feel like "docile bodies" that need to be monitored to ensure social conformity.

5.3.2 Privacy Concerns of Surveillance Cameras

Privacy concerns have been a significant debate about the use of CCTV cameras, with opinions divided between whether it infringes on the civil liberties of the public or not (Wojcik, 2015: Taylor, 2010: Yussuf, 2011: Cerezo, 2013). Some of the interviewees thought that CCTV cameras invaded their privacy. One participant explained it this way:

> *There is a privacy issue everywhere, even in a public place, since you cannot fully judge a person by CCTV cameras. If the camera also records voice, an individual's civil liberty is violated. People will often seek your consent before they can take a video or picture of you, but CCTV cameras are capturing all your appearance and behaviour without your permission, which I disagree with because I feel that sometimes it is a violation of privacy, and it is applicable whether we are in public or private space (B2, April 21, 2024).*

Another participant echoes the privacy concerns: "Privacy is essential to any individual, irrespective of whether you are at your private location or in a public space. For example, if I go to the mall to buy food, I do not necessarily want anyone to see what I am buying" (B3, April 24, 2024).

However, other participants disagreed, arguing that there is nothing like privacy in public and that safety should be the goal of public space users. A female resident of downtown said the following: "If you are living in downtown and you are not committing any crime, why would you

object to the presence of CCTV?"(E1, May 06, 2024). Similarly, a male participant who works downtown said the following:

> *I think everybody has a right to feel safe in public spaces. If you have not done anything illegal, then why worry? You know, because the cameras are there for your safety because if they were not there, and you got jumped or beaten up badly. How do you prove it? Well, you could prove it, but will it be enough? How could you help yourself by getting the person who did it if there are no cameras? I mean, it is a double-edged sword for everything (G1, May 21, 2024).*

These excerpts indicate that, while some participants believed that surveillance cameras infringe on their rights, others argued that nothing is private in public spaces. Those against CCTV cameras and how they invade privacy argue that they capture all their details without consent. Though they may be in public spaces, they expect their freedom to be respected without any extra gaze, keeping a close eye on what they do in public. They further argue that there should not be any geographical limitation to privacy and should be exercised regardless of where individuals find themselves. Other participants countered these arguments, stating that there is nothing private in public space and that the word 'public' attests to that fact. They believed that the world is moving from a state where people have control of their privacy to a state where the information of individuals is already in the public domain thanks to social media and other technological means. As such, people should not be worried about public space surveillance cameras.

Theoretically, pro-CCTV perspectives align with the works of Deleuze (2017) and Haggerty and Ericson (2017), who argue that individuals are increasingly monitored through data generated by their online activities. These scholars highlight how algorithms, codes, and technology enable surveillance that prioritizes digital traces over physical observation. In participants' interpretations, CCTV cameras protect society and property and do not infringe on people's civil liberties; thus, they should be seen as a security tool. They opined that those who

have criminal intentions are the ones who are bothered about privacy and surveillance camera operations since it will hamper their activities. From both arguments, it was deduced that despite its importance as a crime intervention tool, there are still concerns about how it monitors the private lives of people without their consent, a notion that is corroborated by Wojcik (2015), Yussuff (2011), Fay (1998), Mollers and Halterlein (2013), Cerezo (2013) and Porter (2009).

5.3.3 Racial Profiling and Discriminatory CCTV Camera Operations

Discrimination and profiling have been constant features of surveillance culture, with minority groups, youth, and people with low socio-economic status the worst affected (Browne, 2012; Norris & Armstrong, 1999; Galic et al., 2017). Participants expressed concerns that surveillance in Winnipeg's public spaces involved three types of discrimination: 1) surveillance and identities, 2) territorial surveillance, and (3) discriminatory practices by monitors of CCTV footage. Most of the participants were in unison about the unjust profiling of individuals. This was explained by a white female participant who said the following:

> *Well, because I am a white woman, I am less watched and probably the least watched person in a store. This is because my whiteness and my femaleness pose me as not a threat to whether I would be stealing or harming other people, which is not necessarily the case. There are obviously violent white women, and often, we are under-criminalized. So, I think I feel less watched because of my demographics. I do not believe that this is right, and I believe that I should be watched equally by everyone else. But I feel like I am not seen as a threat, and I am not seen as someone who will be shoplifting or whatever reason that the CCTV is being used (D2, April 30, 2024).*

This statement was re-echoed by an Indigenous female participant who sees CCTV cameras as a tool for oppression, as she explained: "My social demographic influences my opinion about CCTV cameras because, as an Indigenous female, the CCTV camera as a tool is used as a means of oppression and control, not necessarily as a means of safety for me" (E3, May 8, 2024).

Likewise, another male participant expressed concern about his race being a factor in how operators at the CCTV camera control room perceive him:

> *Race is an essential factor in CCTV camera monitoring because I feel like my racial background as a black African youth affects my safety or the way I perceive the use of CCTV cameras. I think people who have this racial background are targeted by CCTV cameras because there is this theory that people of this background are more likely to commit crimes than other people. As I belong to that category and am a racialized person as well, I feel CCTV cameras are being targeted at me. (B3, April 24, 2024)*

The participants' statements collectively highlight a shared perception that surveillance disproportionately targets individuals based on race and social demographics, often reinforcing harmful stereotypes. The white female participant acknowledges her privilege, recognizing that she is subject to less scrutiny due to her race and gender, which contrasts with the experiences of Indigenous and Black individuals. Indigenous participants describe CCTV not as a tool for safety but as one of control and marginalization, feeling both surveilled and disadvantaged when it comes to accessing the footage if needed for personal safety.

Similarly, the Black male participant emphasizes that CCTV reinforces prejudiced assumptions about crime linked to his race, making him feel unfairly targeted. Together, these perspectives suggest that surveillance technologies can perpetuate systemic biases, often serving as instruments of discrimination rather than providing equal security for all. Participants stated that biases among CCTV operators can influence who is monitored and how footage is used: "I do believe sometimes they target such minorities, but it also depends on who is behind the camera. First, who is reporting against who? Who is checking, or who gets the footage on camera?" (F3, May 18, 2024). When the CCTV control room comprises people from a particular demographic, they are likely to overly monitor people who are not part of their demographic, which leads to questions about the unequal social representation of staff at the various CCTV control rooms. They

pointed out that surveillance is not solely about government oversight, as private companies also monitor people, raising questions about who has access to the footage and how it is interpreted.

The participants highlight that discriminatory practices in CCTV surveillance often stem from biases in how footage is accessed, interpreted, and presented. One participant observes that surveillance footage is selectively used or edited, where only certain parts of a video are shown to support particular narratives:

> *It depends on who is reporting and the individual searching for the proof on camera, the usage of the footage, and the interpretation they give to that footage. You can often see cases where they only get one part of the video but not the other part. It is tricky, so the way those with access to images use information can be an avenue of discrimination (F3, May 18, 2024).*

This selective use of footage allows those with access to the video to shape interpretations, which can lead to discrimination if driven by prejudice. Another participant elaborates on this bias, likening it to watching a movie with preconceived interpretations:

> *If one of those authorities (CCTV monitors) misinterprets what happens on the CCTV, that can influence or reinforce held beliefs. For example, when we watch a movie, we look for the interpretation that resonates with us, and people interpret films and stories differently. When somebody (control room staff/ police) watches the CCTV camera and sees something happening, they already have a sense of the likely outcome. Thus, they look for that idea to confirm their prejudice. That could be a human factor in discriminating against a particular group (E1, May 6, 2024)*

Participants argued that CCTV operators or authorities may approach footage with established beliefs about certain groups, interpreting actions to confirm their biases. This tendency to view footage through a prejudiced lens becomes a form of "confirmation bias," where operators unconsciously reinforce stereotypes while monitoring. Overall, participants suggest that the subjective and potentially biased nature of CCTV monitoring can lead to unfair targeting and discrimination against specific groups, highlighting how surveillance can be shaped by the human element and underlying biases of those in control.

Participants also raised concerns about camera placement, observing that CCTV systems are often concentrated in areas with minority populations, which can perpetuate stereotypes of these communities as unsafe. One participant explained it this way:

> *CCTVs have discriminatory tendencies, especially their location and placement. I know that CCTVs are usually placed in places of high crime because the considerable cost means you cannot roll out CCTV everywhere simultaneously. Inevitably, it stigmatizes people who dwell in areas where there is an increased presence of them, so it could be in an area where there are people of colour, Muslims and Indigenous people. This creates the sense that the area is unsafe, which, unfortunately, is not what CCTV cameras are about, but it gives that sense. It is not only the CCTV that does that; if I drive around downtown, I see more police vehicles there than in other areas. I am supposed to feel safe about their presence, but it also signals that they are there because that place is unsafe, which stigmatizes residents of such locations. I think the over-concentration of CCTV in one area can stigmatize and marginalize people who are predominantly the minority in society (D3, May 1, 2024).*

Similar concerns were expressed by an Indigenous female participant. She said, "Certain parts of the city, like Polo Park and Portage Place, seem more heavily monitored than others. Downtown has a specific demographic that lives there with lower income levels compared to neighbourhoods like St. Vital" (E3, May 8, 2024). She implies that decisions about where to place CCTV and police resources are tied to the demographics and perceived "risk" associated with lower-income, minority communities, which can lead to disproportionate surveillance. The over-concentration of surveillance in lower-income or minority-dense areas not only reinforces public perceptions of these neighbourhoods as unsafe but also marginalizes the residents. This creates a cycle where residents feel both surveilled and stigmatized, which can hinder their sense of belonging and exacerbate social divides based on race and class.

According to participants, the discriminatory practices embedded in surveillance come in three forms, namely racial profiling, territorial surveillance, and prejudiced profiling by monitors of CCTV cameras. This over-concentration of cameras, combined with a higher police presence, was seen as stigmatizing, as it suggests that specific neighbourhoods, particularly those with

people of colour, Muslims, and Indigenous people, are more dangerous. Overall, participants argue that surveillance practices often reflect and reinforce social biases, leading to the marginalization of minority groups.

The current work indicates that individuals' social demographics, particularly race and socio-economic status, significantly influence the level of surveillance they experience. Instead of surveillance being applied uniformly based on objective indicators of risk or threat, it appears to be disproportionately targeted toward certain racial or ethnic groups, driven by societal biases and stereotypes rather than actual safety concerns. This selective monitoring perpetuates unequal treatment, as people of specific racial backgrounds are surveilled more heavily based on prevailing negative perceptions, not on their actual behaviour or threat level. Such practices undermine the principle of equality, as they single out specific communities for heightened scrutiny due to prejudiced assumptions. This approach not only misaligns with the goal of impartial safety measures but also reinforces societal divisions by treating individuals unequally based on demographic factors rather than ensuring fair treatment for all.

The participant's perceptions also indicate a large concentration of cameras in poor neighbourhoods compared to wealthy communities. The notion behind this is the perception of such communities being a crime zone and, thus, the need to monitor their movements to ensure that society is safe. As theorized, participants' views about the discriminatory tendencies of surveillance cameras confirm the earlier works of Foucault (1979), whose explanation of the panopticon as a disciplinary measure sees them used for the "underclass" (Galic et al., 2017: 21) such as prisoners as compared to other members of the society during the time of his writing. Consistent with previous studies elsewhere (Bennett & Gelsthrope, 1996; Norris & Armstrong, 1997 Fay, 1998 Lomell, 2024; Loveday& Gill, 2004; Doherty et al., 2008; Browne, 2012; Lyon et

al., 2012; Sa'di, 2012; O'Connor & Jahan, 2014: Proulx, 2024), inequality, discrimination, and power dynamics are the factors that characterize surveillance practices, as those in privileged positions use surveillance cameras as a tool to maintain their dominance over the disadvantaged.

CHAPTER 6

DETERRENCE, BEHAVIOURAL MODIFICATION AND SENSE OF SAFETY

This chapter examines how close-circuit television cameras (CCTV) deter individuals from engaging in antisocial behaviour, possibly leading to their behaviour modification to suit societal norms. It will also highlight the impact of surveillance cameras on public space users' safety and the community's role.

6.1 Surveillance Cameras, Crime Deterrence and Behavioural Modification

There have been mixed opinions about the effectiveness of CCTV cameras in deterring crime, with behavioural modification and awareness of them at the center of this debate. Research indicates that it is not always the case that surveillance cameras deter potential offenders, as studies have shown that surveillance cameras have some effect on how people behave with awareness of their presence (Willis et al., 2017). In this study, some participants agreed that CCTV surveillance cameras can positively influence behaviour, promoting accountability and discipline. They described instances where CCTV cameras impacted their behaviour. One participant shared this personal experience:

> *Recently, my friend and I hit the back of a Winnipeg Transit bus as we tried to overtake it. The transit bus driver approached my friend's vehicle and instructed us to pull over and share some information with the driver. At that point, my adrenaline was very high, and I heard voices in my head to run away with my friend, but my friend resisted that idea, saying that there were CCTV cameras around and that we could be apprehended if our footage were captured. This incident alone influenced my behaviour because I would have run away since I did not want any issues with Manitoba Public Insurance (MPI) and put my friend in trouble.*

This awareness of surveillance prompted them to act responsibly, deterring them from leaving the scene. Participants also commented on how workplace cameras influence workers' behaviour to ensure productivity, arguing that the presence of CCTV cameras discourages casual behavior,

keeping employees focused on their tasks: “At my workplace, without cameras, most of us would not have been working hard because someone might be tired, and the person would want to sleep. So, CCTV cameras influence my behaviour positively” (A1, April 8, 2024).

As surveillance and governmentality theories (Foucault, 1979; Deleuze, 1992; Haggerty & Ericson, 2000) indicate, participants’ accounts show that the awareness of CCTV cameras makes people self-regulate their conduct. One participant describes an internalized awareness of CCTV, resulting in heightened self-monitoring and “best behaviour” in public spaces despite having no intention to engage in wrongdoing:

> *CCTV influences my behaviour. If I know I am being watched, I am more careful and inclined not to put my hands in my pockets even though I know I am not doing anything wrong. It does not change where I go, but it does change how I act in public spaces. With awareness of CCTV cameras, I try to be on my best behaviour. This does have a psychological impact on me. (D2, April 30, 2024).*

This reaction aligns with the "panopticon effect," where awareness of surveillance influences behaviour even without direct monitoring. The feeling of needing to change how to act in public spaces with CCTV cameras suggests that surveillance instills a sense of external scrutiny that alters individual behaviour, even in benign contexts. This psychological impact underlines how surveillance systems can shape social behaviours beyond merely deterring criminal acts. Participants who shared their experiences of how surveillance cameras affect their behaviour noted how awareness of cameras, fear of shame, social conformity and the need to avoid confrontation with law enforcement agencies push them to act per societal norms. Participants interpret the camera as an unseen individual who keeps an eye on them and constantly reminds them to act appropriately. In achieving this, they self-police their attitude by maintaining self-discipline, which leads to a psychological impact on their behaviour as subconsciously, they change their behaviour with an awareness of CCTV cameras

Participants' accounts offered a detailed examination of how CCTV cameras can provide general deterrence but may not be effective against determined criminality. Several participants agree that CCTV serves as a deterrent, particularly for minor or impulsive crimes, by creating an environment where people are less likely to engage in antisocial behaviour when aware of being observed. A non-governmental organization administrator had this to say:

> *I do not have the data, but it helps as a deterrent because, from human behaviour and human psychology, what we do when we are being watched is entirely different from what we do when we are not monitored. Also, police data have revealed that roads that have speed cameras have fewer road violations, so we can extrapolate from that if people know that there is a CCTV monitoring them, it would deter some people, but not necessarily all because criminals who are also intent on crime can be prepared to sidetrack or evade the system but in general, it does help to moderate human conduct or misbehaviour when they know they're being watched (D3, May 1, 2024).*

One participant likened a "You are on camera" sign on a dashcam to CCTV deterrence, emphasizing that awareness alone can discourage opportunistic offenses:

> *They are relatively effective in discouraging criminal activities, but not 100%. For example, I have a dashcam on my car, and when I leave my car on a downtown street, I put a label on my car that says you are on 360 parking cameras. My camera is not on, but I like to put the sign over there because it is not 100%, but it deters potential offenders. If anyone comes and wants to break my window, they will be dissuaded by the presence of cameras. This is the same with CCTV because the awareness of it may drive criminals away. I think that kind of sense of deterrence is there (B2, April 21, 2024).*

Thus, CCTV cameras may help in discouraging antisocial behaviour. However, the deterrent effect is seen as partial, primarily influencing behaviour in situations where individuals are susceptible to social norms and deterrence cues.

For more calculated or emotionally driven crimes, such as those committed under intoxication, CCTV is perceived as ineffective, as offenders either overlook or deliberately evade

surveillance. For example, one participant argued that the lack of emotional control of potential offenders may not lead to the deterrence of crime:

> *Most criminals, especially those who are high on drugs or alcohol, sometimes do not judge the camera at all. A friend of mine's car was smashed, and we could see that guy coming and hitting the car, but that guy was drunk and did not even care if there was a camera or not. So, in that sense, it is not fully effective, but it works as a deterrent to stop the crime, not the major crimes, because those who engage in such crimes have a pre-plan to avoid detection by making it blurry or using blind spots. CCTV does not stop major crimes but more minor crimes like stealing or vandalism (B2, April 21, 2024).*

Multiple participants felt that the role of emotional and psychological states, especially in intoxicated or high offenders, emerges as a critical factor that reduces CCTV's effectiveness. Participants argue that those in compromised mental states may not be rational enough to respond to deterrence signals like CCTV cameras. Drunk or drug-affected individuals often lack the impulse control needed to avoid criminal actions, and therefore, cameras have little influence over them. The point that "enjoying being stupid" due to drug effects exemplifies how altered states impact judgment and disregard for consequences, including the awareness of surveillance.

While some opportunistic crimes and antisocial behaviours can be deterred, participants' accounts emphasized the limitations of surveillance cameras in preventing calculated or determined criminality, illustrating how criminals innovate and adapt. A study participant said the following:

> *Criminals become more innovative with their actions. I do not think CCTV drives away criminals because a convenience shop gets robbed daily despite cameras; in such instances, criminals' first thought is to evade the system as they conceal their identity to prevent any image capture. There is no logic in what goes into their thinking in such situations because they know there are cameras but will still go ahead and steal (G3, June 4, 2024).*

Another participant explained it this way:

> *CCTV cameras do not deter crime. For example, if the faces are covered up, people will still commit the crime, especially if they are on drugs because, when you are high on*

> *drugs, you just enjoy being stupid and do not have control over your senses. They will try anything, especially if they know they can get away with it (G1, May 21, 2024)*

They expressed doubts about CCTV's impact on deterring determined or premeditated criminals. Criminals who plan their actions often prepare strategies to evade detection by exploiting blind spots, disguising their appearance, or choosing high-risk behaviors under the influence of drugs or alcohol. One participant cited a convenience store repeatedly targeted despite CCTV coverage, pointing out that criminals in such scenarios prioritize their immediate goals over the risk of identification. This suggests that, while CCTV may curb minor offenses, it holds limited efficacy in stopping serious or premeditated crimes, where offenders are often indifferent to the risk of surveillance.

Overall, participants' perspectives are mixed, with some affirming CCTV's partial deterrent effect while others dismiss it, emphasizing criminal adaptability and emotional factors that render surveillance ineffective. Criminals who are under the influence of substances may not be discouraged from engaging criminals because they do not have control over their emotions and do not assess the risk involved in committing crimes. Criminals bent on committing acts will devise means such as covering their faces and using blind spots to continue their illicit acts of crime. In other words, the perceptions of downtown public space users suggest that CCTV's deterrent power is context-dependent and subject to individual psychology, situational factors, and the offender's intent and mental state. While surveillance may encourage better public conduct and prevent some opportunistic crimes, its effectiveness against serious or premeditated offenses remains limited due to the adaptability and occasional irrationality of offenders. These findings are consistent with the literature highlighting the limited effectiveness of surveillance cameras in preventing crime, especially those involving determined criminals and those on drugs (Khoudour et al., 2001;

Firmino & Trevisan, 2021; Levesley, 2005; Klauser, 2007; Brookman & Jones, 2002: Taylor, 2012; Loveday & Gill, 2004; Willis et al., 2017; Welsh & Farrington, 2003).

6.2 CCTV Cameras and Sense of Safety

Do individuals' awareness of CCTV cameras ensure their sense of safety? Study participants express skepticism about the effectiveness of CCTV surveillance in enhancing personal safety, particularly in critical, violent situations. Their comments reveal a shared concern: while cameras may help in recording incidents for later review, they offer no real-time protection or prevention of violent crimes. One participant explained it this way:

> *The thing is that, as I mentioned, let us say that if a person is stabbing me, I am probably going to be dead. So, there is no point in feeling safe, even with ten cameras. Basically, it depends on how severe the incident is, and I think that if it is a minor incident, of course, you know, I will be able to make a police report, and they will be able to watch the video, but if a stabbing incident so severe that the person died in the process, then I do not think I would feel safe. There is no point in surveillance cameras making me feel safe when it cannot stop crime from happening (C3, April 26, 2024)*

Likewise, another participant explained surveillance camera systems' inability to stop crimes on the spot:

> *It does not stop crime; the problem is that criminals do not care. I have seen people do shady stuff in the presence of cameras without any intervention, so I feel like it is not for safety because it is baffling when you see certain happenings, like fights and whatnot without any police intervention. Suppose somebody is sitting behind that monitor and watching they should be able to call the police or security but, most often, it just keeps on going until the situation resolves itself without interference or until somebody calls 911. But yeah, it does not make me feel safe (F1, May 14, 2024).*

This perspective raises important questions about the limitations of CCTV and its impact on public perception of safety.

Surveillance is seen as a passive tool rather than an active deterrent to enhance public safety. The primary concern participants express is that CCTV cameras are reactive tools, capturing incidents rather than actively intervening or preventing them. For example, one

participant points out that if a stabbing were to occur, the presence of cameras would not prevent harm, especially in life-threatening situations. This underlines the idea that CCTV does not offer immediate physical protection and may not alleviate the fear of violent crime. Participants argue that the camera can only serve as a witness, lacking the immediacy to prevent the incident, which limits its role in fostering a sense of security.

Participants further highlight that while CCTV cameras might assist in post-incident investigation—identifying perpetrators and reviewing evidence—it does little to change their perception of safety while navigating public spaces. Even if CCTV footage might help identify an assailant after the fact, it does not stop a crime from happening in the first place. This lack of a "preventative" effect undermines the assurance people might feel from the presence of surveillance. It suggests that the existence of CCTV cameras in public spaces may not significantly impact personal security perceptions. While cameras may monitor and record, they typically do not facilitate direct, real-time intervention, such as alerting security or police to ongoing disturbances. Participants expressed frustration with seeing "shady stuff" or fights unfold without timely intervention, reinforcing the idea that CCTV systems alone are inadequate for immediate crime prevention and do not necessarily lead to timely protective responses.

The excerpts indicate that users of Winnipeg's downtown public spaces associate their sense of safety with a rapid response from law enforcement rather than the presence of surveillance cameras. Participants expressed that surveillance cameras do not enhance their safety because, in the event of a crime, cameras cannot intervene, leaving them vulnerable to harm. Their concerns centered on the frequency of crime in open areas and the lack of immediate police action to address these incidents. For participants, genuine safety requires prompt intervention rather than passive observation from cameras that cannot actively address threats. This perception reflects frustrations

with what they see as ineffective monitoring and response to incidents captured by surveillance systems. Their views are consistent with findings from earlier studies (Klauser, 2007; Gill & Loveday, 2003; Yusuff, 2011; Brands et al., 2016), highlighting the limited impact of surveillance in public spaces without corresponding active interventions.

6.3 Community and Sense of Safety

The large concentration of people at a particular location has been proven to increase people's sense of safety and security. Trust and belongingness are associated with this factor of safety as it is indicated that if a group of people trust and have a sense of belonging, they are likely to offer help to community members if they are in trouble (Berger, 2024: Turner, 2020). In this study, participants highlighted the critical role of community bonding and proactive human presence in enhancing public safety, contrasting it with the reactive nature of traditional surveillance methods like CCTV and even police interventions. They view community bonding as a crucial mechanism of ensuring security in downtown public spaces: "I feel safer downtown with people around and a sense of community" said a male participant (E2, May 7, 2024). A female graduate study participant also explained it this way:

> *When people bond together, we show up for one another. So that means that when people feel connected to other people, they will want to help other people. I have often seen civilians, instead of security cameras, security guards, and police, come to the rescue of people who are getting mugged" (D2, April 30, 2024).*

The above opinion was re-echoed by another public space user, who emphasized the concept of being each other's keeper as one of the reasons why a vibrant community makes her safe. She said, "When I was growing up, our neighbours used to look after us. So, if we were playing outside the neighbourhood, one of them would be watching" (F1, May 14, 2024). She added if a random stranger was in their neighbourhood, their neighbours would question that individual.

Participants feel safer in downtown areas that have a strong community presence, such as those near a dog park or a gym, where people come together for positive activities:

> *I feel safer downtown with people around and a sense of community. There is a dog park and gym around my downtown residence, which attracts people to these spaces. There are usually good reasons why people visit these places. There is a sense that people around this area are safe. If there is a dangerous person who has criminal intentions, I have people who will protect me as opposed to Main Street, where there's a lot of homelessness and a lot of drug abuse and, sometimes, violent crimes. So, people and a sense of community make me feel safe. (E2, May 7, 2024)*

They believe that being surrounded by others who can provide protection enhances their sense of security. In contrast, they perceive areas like Main Street as being associated with higher rates of homelessness, drug use, and violent crime. For them, the presence of people and a sense of community are essential factors in feeling safe.

The participants underscored that people are more likely to intervene or assist others when they feel a sense of connection or solidarity. This "showing up" for one another builds a layer of safety that is both proactive and rooted in mutual trust, contrasting with the passive observation of surveillance cameras, which only record events but do not directly aid those in danger. By prioritizing community bonds, individuals in public spaces may feel more protected through the collective willingness of others to step in and offer help. Their observations suggest that a sense of community and the presence of approachable, non-police personnel—such as community patrols—are more effective in fostering a feeling of safety and immediate support in public spaces.

Additionally, participants preferred community patrols in downtown areas over surveillance cameras, highlighting that these patrols fulfill several essential roles. They do not merely patrol but also engage with the community, particularly by offering resources and assistance to vulnerable populations like the unhoused. One participant put it this way:

> *Community patrols make me feel safe in public spaces. For example, the Downtown Community Safety Partnership (DCSP), which I think is doing great work, walking around the communities. Again, it does not necessarily stop the occurrence of crimes, but it might reduce it. They are reaching out to unhoused people, giving them resources and food when they are having a tough time. I think in situations like that where there is someone to call, who is not the police, who is not reactive but someone who will walk you to your car is better than surveillance cameras (D2, April 30, 2024).*

This proactive approach to community engagement contributes to a safer environment by building relationships and providing visible support, which can deter crime and create a stronger sense of shared responsibility. Community patrols such as the Downtown Community Safety Project and the Bear Clan were also touted as one of the human factors in making people safe because of their practical and unbiased approach towards the disadvantaged who may be victims of crime downtown. The patrols' supportive role contrasts with the traditional policing model, which often emphasizes deterrence and enforcement rather than relational support.

In summary, the participants advocate for a safety model that combines community connection, proactive human presence, and accessible support, positioning it as a more effective alternative to surveillance and traditional policing in public spaces. Their perspective highlights the psychological and practical benefits of community-centred safety measures, suggesting that fostering social bonds and visible, supportive patrols can lead to a greater collective sense of safety and well-being. Similarly, previous studies (e.g., Berger, 2024; Totikidis et al., 2005; Jajoriyah & Singh, 2023) show that a sense of community and belonging enhances safety, as informal social control built on strong bonds, trust, and a willingness to intervene plays a key role in regulating neighbourhood safety and security.

CHAPTER 7

CONCLUSIONS

This final chapter summarizes the study and presents policy implications. It also discusses the limitations and provides recommendations for future research.

7.1 Research Summary

Over the years, crime has remained a significant concern in Winnipeg (Statistics Canada, 2024), with downtown at the center of most crime incidents (Comack & Silver, 2008). This situation has led to the rollout of safety strategies to curb the insecurity situation in the heart of Winnipeg. One such safety measure has been the implementation of close-circuit television cameras, which have generated a lot of opinions on their use in public spaces. The study aimed to investigate the perspectives of the public on surveillance cameras and their impact on their sense of safety and behaviour. The thesis focused on the following central question: Do the individuals' perceptions of CCTV shape their behaviour and sense of safety? The study drew on surveillance and governmentality theories and data from in-depth semi-structured interviews to address this question. There are several key takeaways from the study.

First, the widespread use of CCTV cameras has been so evident that Winnipeggers are now accustomed to them and see them as part of their daily lives. They are aware that the cameras are everywhere and go about their activities without being concerned by their presence. The study findings indicate that public space users accept the operations of surveillance cameras due to their potential in ensuring their safety, leading to their acceptance. The acceptance of public surveillance cameras can be linked to the social orientation of individuals as people from more liberal societies are receptive to its existence compared to those from autocratic backgrounds who may be less comfortable towards its operations.

Secondly, the study findings show that some individuals had negative perceptions about open-space surveillance cameras. Distrust, data apprehensions, privacy, discrimination, and racial profiling were some of the reasons that fuelled their negative perceptions of surveillance cameras. From the research, it was evident that Winnipeg's downtown public space users did not trust public space surveillance due to the constant monitoring they are subjected to, the lack of knowledge on how surveillance systems operate and data management.

Third, there were mixed opinions on CCTV cameras and how they infringe on the civil liberties of open space users. A section of the research participants argued that there is nothing private when you are in public places and that security should be the utmost concern of downtown patrons and not their individual privacy interests since the advent of technology and social media has made it easier to access people's information. In their arguments, people should be more concerned about safety, not surveillance cameras. This point was refuted by opponents of surveillance cameras, who believe they invade the civil liberties of people who access surveillance camera-operated areas because of a lack of consent. Some public space users believe that in safeguarding their safety, their personal lives should be respected and not subjected to invasion, all in the name of surveillance.

In addition, discrimination and racial profiling of individuals were one of the reasons for the negative opinions about public CCTV cameras. According to participants' views, public surveillance cameras target minorities due to society's negative perception of such groups. CCTV camera stakeholders from a position of power may place surveillance cameras in poor neighbourhoods and target inhabitants of such spaces due to the lack of trust and the perception of them as dangerous to society, thus the constant surveillance of their activities. In this sense, an

individual is monitored not based on his potential to commit a crime but on their social background and the prejudiced opinion of others.

There were also mixed opinions on deterrence, behavioural modification and safety. The research noted that CCTV cameras remind people to act appropriately in open spaces with an awareness of their presence, as individuals may modify their behaviour to avoid confrontation with law enforcement agencies. Individuals would have acted differently without them, leading to social conformity. However, regarding criminality, CCTV cameras were perceived to have minimal effect on crime as criminals come up with means such as covering their faces and using blind spots to evade detection. Other criminals who cannot assess their target areas may move their criminal intentions to less surveilled places, thus leading to crime displacement.

Regarding surveillance cameras and safety, users of downtown Winnipeg were not entirely convinced about the impact of surveillance cameras on their safety. Safety is seen as surveillance cameras' ability to stop crime. Safety should involve the real-time intervention of CCTV cameras in crime occurrence. This shows that CCTV cameras cannot work alone unless aided by human factors such as constant monitoring and swift response of security personnel to crime sites. The role of human factors in ensuring the safety of downtown patrons has gained popularity among individuals who do not subscribe to technology as a crime prevention strategy. In the wake of surveillance cameras' weakness in solving ongoing crime, the public sees the human factor as an avenue for ensuring their safety. A vibrant community with a sense of belongingness and quality individuals were seen as factors that make people safe downtown and not surveillance cameras because of the proactive nature of people reacting to crime and not the reactionary aspect of surveillance cameras. The importance of community watchdog groups such as the Bear Clan and

the Downtown Community Safety Partnership (DCSP) were also praised for their impact on the Safety of Winnipeg's downtown due to their hands-on approach to ensuring the safety of all.

7.2 Implications

This study, grounded in surveillance and governmentality theories, has theoretical, security, and safety implications. Theoretically, the observation that some public space users alter their behaviour in the presence of surveillance cameras substantiates Foucault's panopticon concept as the perceived presence of an unseen observer encourages self-regulation. The study suggests that the awareness of CCTV's presence acts as a self-regulatory mechanism, prompting individuals to conform to expected public behaviour, with direct implications for security and safety strategies.

However, the study also indicates that not all people modify their behaviour in response to surveillance, particularly those under the influence of substances such as drugs and alcohol as well as individuals with intent to commit crimes. This finding challenges Foucault's (1979) idea of a panopticon, suggesting that surveillance does not universally lead to self-discipline. The study also supports Deluxe and Guttari's description of contemporary society's surveillance as resembling rhizomes, where surveillance is carried out from different sources, making it difficult to trace the source (Galic et al., 2017). This idea is linked to how society has become accustomed to surveillance cameras; public space users do not actively go out looking for their presence in public spaces.

For participants, CCTV cameras alone cannot be the sole means to combat crime. Instead, they should be integrated with other crime prevention strategies and aids, such as police patrols, community watchdog groups, and improved lighting in areas with high crime rates. In addition to using CCTV cameras, police patrols can collaborate with community informants who can provide

information/intelligence on criminal activities since offenders often live in the communities they target. With such local intelligence, the police can consistently monitor high-risk areas to help prevent crimes. Thus, while CCTV cameras play a crucial role in surveillance, they should be part of a broader, multifaceted approach to crime reduction rather than the sole mechanism for ensuring public safety.

7.3 Study's Limitations and Recommendations for Future Research

As researchers, we are responsible for disclosing the comprehensive limitations of our reported work to the academic community (Ross & Ziadi, 2019). Limitations inherent in any study pertain to potential issues that often lie beyond the researcher's control and are fundamentally associated with the chosen research design, constraints of statistical models, funding limitations, or other pertinent variables. Within this framework, a limitation constitutes an "imposed" constraint that effectively transcends the boundaries of researchable inquiry (Theofanidis & Fountouki, 2018).

Like every academic investigation, this study had limitations, such as funding constraints, sampling and participant recruitment. The participants' demographics revealed that the study relied on the views of educated and working-class informants, failing to consider the unemployed and uneducated. Therefore, future research should include the homeless, marginalized, and unemployed to ascertain their perspectives on the relationship between public surveillance cameras and their influence on safety and behaviour. Additionally, since the study focused on the opinions of downtown public space users on CCTV cameras and their impact on their safety and behaviour, it failed to capture the views of public surveillance stakeholders, such as public space managers, shop owners, law enforcement agencies, CCTV camera operators/watchers, and policymakers, who could have contributed a different opinion. Therefore, it is recommended that future research

investigate the input of these stakeholders in public surveillance and how it affects the safety of public spaces in Winnipeg. The research was a qualitative study with a sample of twenty-five participants who shared their opinions about public space surveillance in Winnipeg's downtown area. This small sample size makes generalizing the findings to other contexts challenging. Hence, a quantitative study with a large sample size that captures other public spaces in Winnipeg is recommended for future research.

References

Adey, P. (2012). Borders, identification and surveillance: New regimes of border control. In *Routledge handbook of surveillance studies* (pp. 193-200). Routledge.

Ali et al., (2023, Oct 17). Downtown Vancouver London Drugs Locations Could Close Over Safety. Daily Hive https://dailyhive.com/vancouver/london-drugs-downtown-crime

Andrejevic, M. (2012). Ubiquitous surveillance. In *Routledge handbook of surveillance studies* (pp. 91-98). Routledge.

Ardabili, B. R., Pazho, A. D., Noghre, G. A., Katariya, V., Hull, G., Reid, S., & Tabkhi, H. (2024). Exploring Public's perception of safety and video surveillance technology: A survey approach. *Technology in Society*, *78*, 102641.

Armitage, R. (2002). To CCTV or not to CCTV? A review of current research into the effectiveness of CCTV systems in reducing crime. *Nacro Briefing Note*

Armitage, R., Smyth, G., & Pease, K. (1999). Burnley CCTV evaluation. *Surveillance of public space: CCTV, street lighting and crime prevention*, *10*, 225-50.

Armstrong, G., & Norris, C. (2020). *The maximum surveillance society: The rise of CCTV*. Routledge.

Ashby, M. P. (2017). The value of CCTV surveillance cameras as an investigative tool: An empirical analysis. *European Journal on Criminal Policy and Research*, *23*(3), 441-459.

Atkinson, P., & Delamont, S. (2007). Rescuing narrative from qualitative research. In Bamberg, M.G.W. (Ed), Narrative, State of the Art. John Benjamin's Publishing Company (pp.195–204).

Attride-Stirling, J. (2001). Thematic networks: An analytic tool for qualitative research. Qualitative Research, 1(3), 385-405

Ball, K. (2022). Surveillance in the workplace: Past, present, and future. *Surveillance and Society*.

Ball, K. (2010). Workplace surveillance: An overview. *Labor History*, *51*(1), 87-106.

Ball, K. (2005). Categorizing the workers: Electronic surveillance and social ordering in the call center. In *Surveillance as Social Sorting* (pp. 215-239). Routledge.

Barnhardt and Maclean (2023, December 13). Former High School Football Star Killed in Winnipeg's Millenium library. CBC News.

https://www.cbc.ca/news/canada/manitoba/millennium-library-homicide-stabbing-death-charges-1.6684107

Barr, R., & Pease, K. (1990). Crime placement, displacement, and deflection. *Crime and justice*, *12*, 277-318.

Barrett, D., & Twycross, A. (2018). Data collection in qualitative research. *Evidence-based nursing*, *21*(3), 63-64.

Beach, D. (2005). From fieldwork to theory and representation in ethnography. In Troman, G., Jeffrey, B., and Walford, G. (Eds.), Methodological Issues and Practices in Ethnography - Studies in Educational Ethnography, Vol. 11 (pp.1–17). Emerald Group Publishing

Beck, U. (1992). *Risk society: Towards a new modernity* (Vol. 17). sage.

Beck, A., & Willis, A. (1999). Context-specific measures of CCTV effectiveness in the retail sector. *Surveillance of public space: CCTV, street lighting and crime prevention, crime prevention studies series*, *10*, 251-269.

Bennett, T., & Gelsthorpe, L. (1996). Public attitudes towards CCTV in public places. *Studies on Crime and Crime Prevention*, *5*(1), 72-90.

Bentham, J. (2020). *The panopticon writings*. Verso Books.

Bergen, R. (2023, May 30). Violent Crime Rate at Its Highest Since 2009, Winnipeg Police Data Suggests. CBC https://www.cbc.ca/news/canada/manitoba/winnipeg-police-service-2022-statistics-violent-crimes-1.6859167

Berger, E. (2024, April 12). The Power of Communities in Crime Prevention: Insights from Baltimore https://www.crimeandconsequences.blog/?p=10231

Boothby, L. (2023, July 14). Edmonton Agencies Coordinate for Transit and Downtown Safety. Edmonton Journal https://edmontonjournal.com/news/local-news/edmonton-agencies-coordinate-for-transit-and-downtown-safety

Božovič, M. (1995). " An utterly dark spot": the fiction of God in Bentham's Panopticon. *Qui Parle*, 83-108.

Brands, J., Schwanen, T., & Van Aalst, I. (2016). What are you looking at? Visitors' perspectives on CCTV in the night-time economy. *European urban and regional studies*, *23*(1), 23-39.

Björklund, F. (2021). Trust and surveillance: An odd couple or a perfect pair? In *Trust and Transparency in an Age of Surveillance* (pp. 183-200). Routledge.

Brookman, F., & Jones, H. (2022). Capturing killers: the construction of CCTV evidence during homicide investigations. *Policing and Society*, *32*(2), 125-144.

Browne, S. (2012). Race and surveillance. In *Routledge handbook of surveillance studies* (pp. 72-79). Routledge.

Buschle, C., Reiter, H., & Bethmann, A. (2022). The qualitative pretest interview for questionnaire development: Outline of programme and practice. *Quality & Quantity*, *56*(2), 823-842.

Carmona, M. (2010). Contemporary public space, part two: Classification. *Journal of urban design*, *15*(2), 157-173

Carr, R. (2016). Surveillance politics and local government: A national survey of federal funding for CCTV in Australia. *Security Journal*, *29*(4), 683-709.

Carr, R. A. (2016). Political economy and the Australian government's CCTV programme: An exploration of state-sponsored street cameras and the cultivation of consent and business in local communities. *Surveillance & Society*, *14*(1), 90-112.

CBC News (April 26, 2015) Winnipeg police release photos of person of interest in homicides targeting homeless. CBC. https://www.cbc.ca/news/canada/manitoba/winnipeg-police-release-photos-of-person-of-interest-in-homicides-targeting-homeless-1.3049315

CBC (April 27, 2015) APTN security camera captures brutal downtown Winnipeg attack. CBC. https://www.cbc.ca/news/canada/manitoba/aptn-security-camera-captures-brutal-downtown-winnipeg-attack-1.3051218

Ceccato, V. (2012). The urban fabric of crime and fear. In *The urban fabric of crime and fear* (pp. 1-33). Dordrecht: Springer Netherlands.

Ceccato, V. (2020). The architecture of crime and fear of crime: Research evidence on lighting, CCTV and CPTED features 1. In *Crime and fear in public places* (pp. 38-72). Routledge.

Ceccato, V., & Assiago, J. (2020). 23 Responding to crime and fear in public places. *Crime and Fear in Public Places*, 433.

Ceyhan, A. (2012). Surveillance as biopower. In *Routledge handbook of surveillance studies* (pp. 38-45). Routledge.

Cerezo, A. (2013). CCTV and crime displacement: A quasi-experimental evaluation. *European Journal of Criminology*, *10*(2), 222-236.

Chen, D. (2023, July 05). Windsor Police Launch Two-Day boost In Downtown Presence. Windsor star https://windsorstar.com/news/local-news/windsor-police-launch-two-day-downtown-presence-boost

Coffey, C., & Atkinson, P. (1996). Concepts and coding. Chapter 2, pp.26–53 in Coffey, A., and Atkinson, P., Making Sense of Qualitative Data: Complimentary research strategies. Thousand Oaks, CA: Sage.

Cohen, L. E., & Felson, M. (2010). Social change and crime rate trends: A routine activity approach (1979). In *Classics in environmental criminology* (pp. 203-232). Routledge.

Cozens, P. M., Saville, G., & Hillier, D. (2005). Crime prevention through environmental design (CPTED): a review and modern bibliography. *Property management*, *23*(5), 328-356.

Cuevas, Q. D. P., Corachea, J. C. P., Escabel, E. B., & Bautista, M. L. A. (2016). Effectiveness of CCTV cameras installation in crime prevention. *College of Criminology Research Journal*, *7*, 35-48.

Dandurand, Y. (2022). Police Relationships with Visible Minorities-A Review of the Impact of the 20-Year Effort by Police in British Columbia and Canada to Improve Visible Minorities' Assessments of.

David, B. (2015). What is ethics in research & why is it important?

Deleuze, G. (2017). Postscript on the Societies of Control. In *Surveillance, crime and social control* (pp. 35-39). Routledge.

Ditton, J. (1998). 12 Public support for town centre CCTV schemes: myth or reality? *Surveillance, Closed Circuit Television, and Social Control*, 221.

Doherty, J., Busch-Geertsema, V., Karpuskiene, V., Korhonen, J., O'Sullivan, E., Sahlin, I., ... & Wygnanska, J. (2008). Homelessness and exclusion: regulating public space in European cities. *Surveillance & Society, 5*(3).

Dowling, C., Morgan, A., Gannoni, A., & Jorna, P. (2019). How do police use CCTV footage in criminal investigations? *Trends and issues in crime and criminal justice*, (575), 1-15.

Doyle, A., & Walby, K. (2013). Selling Surveillance: The introduction of cameras in Ottawa taxis. In *Eyes Everywhere* (pp. 185-201). Routledge.

Doyle, A., Lippert, R., & Lyon, D. (Eds.). (2013). *Eyes everywhere: The global growth of camera surveillance*. Routledge.

Duggan, E. (2023, May 16). Downtown Vancouver Retailers Optimistic in Rebound but Call For More Security, Improved Lighting Amid Challenges. Retail Insider https://retail-insider.com/retail-insider/2023/05/downtown-vancouver-retailers-optimistic-in-rebound-but-call-for-more-security-improved-lighting-amid-challenges/

Eakin, J.M., & Gladstone, B. (2020)." Value-adding" analysis: doing more with qualitative data. International Journal of Qualitative Methods, 19, 1-13.

Eakin, J.M., & Gladstone, B. (2020)."“Value-adding"” analysis: doing more with qualitative data. International Journal of Qualitative Methods, 19, 1-13.

Eck, J. E. (1993, September). The threat of crime displacement. In *Criminal justice abstracts* (Vol. 25, No. 3, pp. 527-546).

Ely, M., Vinz, R., Downing, M., & Anzul, M. (1997). Working in interpretive modes. Chapter 5 (pp.223-73) In Ely, M. et al., On Writing Qualitative Research: Living by Words. Philadelphia, PA: Falmer Press

Falangon, R. C. (2022). Utilization of CCTV Cameras in Bontoc, Mountain Province. *Journal of Positive School Psychology*, *6*(3), 6062-6074.

Fay, S. J. (1998). Tough on crime, tough on civil liberties: some negative aspects of Britain's wholesale adoption of CCTV surveillance during the 1990s. *International Review of Law, Computers & Technology*, *12*(2), 315-347.

Feldstein, S. (2021). Surveillance in the illiberal state. In *Routledge Handbook of Illiberalism* (pp. 351-364). Routledge.

Firmino, R., & Trevisan, E. (2012). Eyes of glass: Watching the watchers in the monitoring of public places in Curitiba, Brazil. *Surveillance & Society*, *10*(1), 28-41.

Flyvbjerg, B. (2006). Five misunderstandings about case-study research. Qualitative Inquiry, 12(2), 219-245

Foucault, M. (1979). Discipline and Punish: The Birth of the Prison. New York: Vintage.

Foucault, M. (1991). The Foucault effect: studies in governmentality. *Harvester Wheatsheaf*.

Foucault, M. (2006). Psychiatric power: lectures at the Collège de France 1973–1974 (Ed. J. Lagrange). New York: Palgrave Macmillan.

Foucault, M. (2002). *Power: essential works of Foucault 1954–1984*, Vol. 3 (Ed. J.D. Faubion). London: Penguin Books.

Foucault, M. (2019). Panopticism (1977). In *Crime and Media* (pp. 493-505). Routledge.

Fox, L. (2023, Jun 24). As residents worry about safety, city moves to revitalize Ottawa's ByWard Market. National Post https://nationalpost.com/pmn/news-pmn/canada-news-pmn/as-residents-worry-about-safety-city-moves-to-revitalize-ottawas-byward-market

Fussey, P., & Coaffee, J. (2012). Urban spaces of surveillance. In *Routledge handbook of surveillance studies* (pp. 201-208). Routledge.

Galič, M., Timan, T., & Koops, B. J. (2017). Bentham, Deleuze and beyond: An overview of surveillance theories from the panopticon to participation. *Philosophy & Technology*, *30*, 9-37.

Garcia-Ramon, M. D., Ortiz, A., & Prats, M. (2004). Urban planning, gender and the use of public space in a peripheral neighbourhood of Barcelona. *Cities*, *21*(3), 215-223.

Gehl, J., & Matan, A. (2009). Two perspectives on public spaces.

Gerell, M. (2021). CCTV in deprived neighbourhoods–a short-time follow-up of effects on crime and crime clearance. *Nordic journal of criminology*, *22*(2), 221-239.

Gerrard, G., & Constabulary, C. (2007). CCTV and major incident investigation: Professionalising the police approach. *The journal of homicide and major incident investigation*, *3*(2), 7-20.

Gerring, J. (2004). What is a case study, and what is it good for? *American Political Science Review*, *98*(2), 341-354.

Gill, M., & Turbin, V. (1998). CCTV and shop theft: towards a realistic evaluation. *Surveillance, closed circuit television and social control. Aldershot: Ashgate*, 189-206.

Gill, M., Spriggs, A., Little, R., & Collins, K. (2006). What Do Murderers Think About the Effectiveness of CCTV? *Journal of security education*, *2*(1), 11-17.

Gill, P., Stewart, K., Treasure, E., & Chadwick, B. (2008). Methods of data collection in qualitative research: interviews and focus groups. *British dental journal*, *204*(6), 291-295

Glaser, B. (2002). Conceptualization: On theory and theorizing using grounded theory. International Journal of Qualitative Methods, 1 (2). Article 3.

Goold, B. J. (2002). Privacy rights and public spaces: CCTV and the problem of the "unobservable observer." *Criminal Justice Ethics*, *21*(1), 21-27.

Graham, S., Brooks, J., & Heery, D. (1996). Towns on the television: Closed circuit TV in British towns and cities. *Local Government Studies*, *22*(3), 1-27.

Greenslade, B. (2018, July 12). 'Hot Spot for Crime'; Will Tearing Down the Portage Place Bus Shelter Make a Difference? Global News. https://globalnews.ca/news/4327483/hot-spot-for-crime-will-tearing-down-the-portage-place-bus-shelter-make-a-difference/

Gunter, L. (2023, Aug 31). Public Safety Key to Revitalizing Edmonton's Downtown. Edmonton Sun.https://edmontonsun.com/opinion/columnists/gunter-public-safety-key-to-revitalizing-edmontons-downtown

Haggerty, K. D. (2006). Tear down the walls: on demolishing the panopticon. *Theorizing surveillance*, 37-59.

Haggerty, K. D., & Ericson, R. V. (2017). The surveillant assemblage. *Surveillance, crime and social control*, 61-78.

Haggerty, K. D., & Ericson, R.V. (2000). The surveillant assemblage. *British Journal of Sociology, 51(4), 605-22*.

Hesseling, R. (1994). Displacement: A review of the empirical literature. *Crime prevention studies*, *3*(1), 97-230.

Hier, S. P. (2011). *Panoptic dreams: Streetscape video surveillance in Canada*. UBC Press.

Higginbottom, G. M. A. (2004). Sampling issues in qualitative research. *Nurse Researcher (through 2013)*, *12*(1), 7.

Hox, J. J., & Boeije, H. R. (2005). Data collection, primary versus secondary.

Hulme, S., Morgan, A., & Brown, R. (2015). CCTV use by local government: Findings from a national survey.

Iienstitu (2023, July 15). The Hawthorne Effect and the Impact of Surveillance Consciousness on Productivity. Linkedin https://www.linkedin.com/pulse/hawthorne-effect-impact-surveillance-consciousness-productivity/#:~:text=Key%20Findings%20from%20the%20Experiments&text=One%20of%20the%20most%20significant,in%20turn%20boosted%20their%20performance.

Introna, L. D. (2000). Workplace surveillance, privacy and distributive justice. *Acm Sigcas Computers and Society*, *30*(4), 33-39.

Isnard, A., & Council, T. C. (2001, August). Can surveillance cameras be successful in preventing crime and controlling anti-social behaviours. In *The Character, Impact and Prevention of Crime in Regional Australia Conference* (pp. 1-3).

Jacelon, C. S., & O'Dell, K. K. (2005). Analyzing qualitative data. *Urologic Nursing*, *25*(3), 217-220.

Jajoriya, S., & Singh, P. (2023). Natural Surveillance and Natural Access Control: Implementation strategies for enhancing Safety in Indian Neighborhoods. *Qeios*

Jackson, J. (2004). Experience and expression: Social and cultural significance in the fear of crime. *British journal of criminology*, *44*(6), 946-966.

James, T. (2023, Aug 04). As Downtown Safety Concerns Grow in Saskatoon, So Do Calls for Supports and Change. Saskatoon Star https://thestarphoenix.com/news/local-news/downtown-crime

Javadi, M., & Zarea, K. (2016). Understanding thematic analysis and its pitfall. *Journal of client care*, *1*(1), 33-39.

Jenkins, R. (2012). Identity, surveillance and modernity: Sorting out who's who. In *Routledge handbook of surveillance studies* (pp. 159-166). Routledge.

Jili, B. (2020). The Spread of Surveillance Technology in Africa Stirs Security Concerns. *Africa Centre for Strategic Studies*.

Jili, B. (2022). Africa: Regulate surveillance technologies and personal data. *Nature*, *607*(7919), 445-448.

Jørgensen, R. F. (2023). It all depends on context: Danes' attitudes towards surveillance.

Jung, Y., & Wheeler, A. P. (2023). The effect of public surveillance cameras on crime clearance rates. *Journal of Experimental Criminology*, *19*(1), 143-164.

Kamberelis, G., & Dimitriadis, G. (2013). *Focus groups: From structured interviews to collective conversations*. Routledge

Kielmann, K. (2012). Introduction to qualitative research methodology: a training manual.

Keval, H., & Sasse, M. A. (2010). "Not the usual suspects": A study of factors reducing the effectiveness of CCTV. *Security Journal*, *23*, 134-154.

Khoudour, L., Hindmarsh, J., Aubeif, D., Velastin, S., & Heath, C. (2001). Enhancing security management in public transport using automatic incident detection. *WIT Transactions on The Built Environment*, *52*.

Kitchin, R., Coletta, C., & McArdle, G. (2020). Governmentality and urban control. In *The Routledge Companion to Smart Cities* (pp. 109-122). London, UK: Routledge.

Klauser, F. R. (2007). Difficulties in revitalizing public space by CCTV: Street prostitution surveillance in the Swiss city of Olten. *European Urban and Regional Studies*, *14*(4), 337-348.

Knutt, C. (2023, Oct 12). Local Restaurant Owner Voices Safety Concerns Following Downtown Assaults. Discover Moose Jaw https://www.discovermoosejaw.com/articles/local-restaurant-owner-voices-safety-concerns-following-downtown-assaults

Knutt, C. (2023, May 11). Moose Jaw Police Service and Square One Host Conversation Focusing on Downtown Safety. https://www.discovermoosejaw.com/articles/moose-jaw-police-service-and-square-one-host-conversation-focusing-on-downtown-safety

Kochel, T. R., & Nouri, S. (2021). Drivers of perceived safety: do they differ in contexts where violence and police saturation feel 'normal'?. *Journal of crime and justice*, *44*(5), 515-534

Kroener, I., & Neyland, D. (2012). New technologies, security and surveillance. In *Routledge handbook of surveillance studies* (pp. 141-148). Routledge.

Kula, S. (2015). The Effectiveness of CCTV in Public Places: Fear of Crime and Perceived Safety of Citizens. *Bartin University Journal of Faculty of Economics & Administrative Sciences/Bartın Üniversitesi İktisadi ve İdari Bilimler Fakültesi Dergisi*, *6*(12).

Kurdi, H. A. (2014). Review of closed-circuit television (CCTV) techniques for vehicle traffic management. *International Journal of Computer Science & Information Technology (IJCSIT)*, *6*(2), 199-206.

Lapan, S. D., Quartaroli, M. T., & Riemer, F. J. (Eds.). (2011). *Qualitative research: An introduction to methods and designs*(Vol. 37). John Wiley & Sons.

Lee, D. (2022). *Public Space in Transition: Co-production and Co-management of Privately Owned Public Space in Seoul and Berlin* (p. 202). transcript Verlag.

Lefebre, C. (2023, July 6). Province Spending $10 Million to Improve Safety In Winnipeg Downtown. CTV News https://www.ctvnews.ca/winnipeg/article/province-spending-10-million-to-improve-safety-in-winnipegs-downtown/

Lehnert, K., Craft, J., Singh, N., & Park, Y. H. (2016). The human experience of ethics: A review of a decade of qualitative ethical decision-making research. *Business ethics: A European Review*, *25*(4), 498-537.

Lemke, T. (2015). *Foucault, governmentality, and critique*. Routledge.

Levenson, E. (2021, April 5). Here's What Happened to George Floyd From Every Perspective and Angle. CNN https://www.cnn.com/2021/04/05/us/george-floyd-video-angle/index.html

Levesley, T., Martin, A., & Britain, G. (2005). *Police Attitudes to and Use of CCTV*. London: Home Office.

Liedka, R. V., Meehan, A. J., & Lauer, T. W. (2019). CCTV and campus crime: Challenging a technological "fix." *Criminal Justice Policy Review*, *30*(2), 316-338.

Light, J. (2023). *Perceptions of Police and Safety: A Qualitative Analysis of Youth and Adult Perceptions of Police and Safety in High-Crime and High Concentrated Disadvantaged Communities* (Doctoral dissertation, Michigan State University)

Lim, W. S. (2014). Public space today. In *Public Space in Urban Asia* (pp. 20-25).

Lippert, R. (2007). Open-street CCTV Canadian style.

Lippert, R. (2012). 'Clean and safe'passage: Business Improvement Districts, urban security modes, and knowledge brokers. *European urban and regional studies*, *19*(2), 167-180.

Liu, Z. (2023). How Technology Changes Authoritarian State Surveillance: Evidence from China.

Lo, T. Y., Wolff, K. T., Liu, Y. H., & Tsai, H. E. (2023). Community policing, social capital, and residents' feelings of safety in Taiwan. *Police Practice and Research*, *24*(1), 90-108.

Lock, A. (2010). *Social constructionism: Sources and stirrings in theory and practice*. Cambridge University Press

Lomell, H. M. (2004). Targeting the unwanted: Video surveillance and categorical exclusion in Oslo, Norway. *Surveillance & Society*, *2*(2/3).

Loveday, K., & Gill, M. (2004). The impact of monitored CCTV in a retail environment: What CCTV operators do and why. *Crime Prevention and Community Safety*, *6*, 43-55.

Lupton, D. (2006). Sociology and risk. *Beyond the risk society: Critical reflections on risk and human security*, 11-24.

Lyon, D. (2001). Surveillance Society: Monitoring Everyday Life. Open University Press.

Lyon, D. (2006). The search for surveillance theories. *Theorizing surveillance*, 3-20.

Lyon, D., Haggerty, K. D., & Ball, K. (2012). Introducing surveillance studies. In *Routledge handbook of surveillance studies* (pp. 1-11). Routledge

Lyon, D. (2007). Surveillance, security and social sorting: emerging research priorities. *International criminal justice review*, *17*(3), 161-170.

Lyon, D. (2018). *The Culture of Surveillance: Watching as a Way of Life*. Polity Press.

Lysova, T. (2022). Video surveillance and public space: Surveillance society vs. security state. *What People Leave Behind*, 221.

Madsen, O.J. (2014). Governmentality. In: Teo, T. (eds) Encyclopedia of Critical Psychology. Springer, New York, NY. https://doi.org/10.1007/978-1-4614-5583-7_126

Manitoba Government. (2023, July 2023). Manitoba Government Making Downtown Winnipeg Streets Safer with Significant Investement. Manitoba https://news.gov.mb.ca/news/index.html?item=59993#:~:text="Included%20in%20the%20record%20investment,at%20creating%20a%20safer%20environment."

Marcinowicz, L., Konstantynowicz, J., & Godlewski, C. (2010). Patients' perceptions of GP non-verbal communication: a qualitative study. *British Journal of General Practice*, *60*(571), 83-87.

Marshall, M. N. (1996). Sampling for qualitative research. *Family practice*, *13*(6), 522-526.

Marx, G. T. (2015). Surveillance studies. *International encyclopedia of the social & behavioral sciences*, *23*(2), 733-741.

Matczak, P., Wójtowicz, A., Dąbrowski, A., Leitner, M., & Sypion-Dutkowska, N. (2021). Effectiveness of CCTV systems as a crime preventive tool: evidence from eight Polish cities. *International Journal of Comparative and Applied Criminal Justice*, 1-20.

Maxicus (N.a). How Security Cameras Improve Quality Control or Operational Efficiency In Manufacturing Plants? https://maxicus.com/how-security-cameras-improve-quality-control-manufacturingplants/#:~:text=Security%20camera%20monitoring%20allows%20supervisors,arrivals%20and%20dispatches%20are%20conducted.

McCahill, M. & Norris, C. (2002). Working Paper No. 3: CCTV in Britain. Hull: Centre for Criminology and Criminal Justice, School of Comparative and Applied Social Sciences

Mehta, V. (2022). *Public Space: notes on why it matters, what we should know, and how to realize its potential*. Taylor & Francis.

Merriam, S. B., & Tisdell, E. J. (2015). *Qualitative research: A guide to design and implementation*. John Wiley & Sons.

Miller, J. A., & Miller, R. (1987). Jeremy Bentham's panoptic device. *October*, *41*, 3-29.

Minnaar, A. (2013). The growth and further proliferation of camera surveillance in South Africa. In *Eyes Everywhere* (pp. 100-121). Routledge.

Mitchell, D. (1996). Introduction: Public space and the city. *Urban Geography*, *17*(2), 127-131.

Modjeski, M. (2023, June 1). Larger Issues at Play in Winnipeg's Rising Crime Tide; Experts. CityNews.https://winnipeg.citynews.ca/2023/06/01/larger-issues-at-play-in-winnipegs-rising-crime-tide-experts/

Moeckli, D. (2016). *Exclusion from public space: a comparative constitutional analysis* (Vol. 129). Cambridge University Press.

Möllers, N., & Hälterlein, J. (2013). Privacy issues in public discourse: The case of "smart" CCTV in Germany. *Innovation: The European Journal of Social Science Research*, *26*(1-2), 57-70.

Monahan, T. (2011). Surveillance as cultural practice. *The Sociological Quarterly*, *52*(4), 495-508.

Morgan, A., & Dowling, C. (2019). Does CCTV help police solve Crime? *Trends and Issues in Crime and Criminal Justice [electronic resource]*, (576), 1-16.

Morse, J.M. (1994).''Emerging from the dat'': the cognitive processes of analysis in qualitative Inquiry. Pp.23-43 in Morse, J. (Ed.), Critical Issues in Qualitative Research Methods. Thousand Oaks, CA: Sage.

Murphy, K. D., & O'Driscoll, S. (2021). Introduction: Public Space/Contested Space. In *Public Space/Contested Space* (pp. 1-15). Routledge.

Mwita, K. (2022). Factors influencing data saturation in qualitative studies. *International Journal of Research in Business and Social Science (2147-4478)*, *11*(4), 414-420.

Neal, Z. P. (2010). Locating public space. *Common ground*, 1-10.

Newell, B. C., Timan, T., & Koops, B. J. (Eds.). (2018). *Surveillance, Privacy and Public Space*. Routledge.

Norris, C., & Armstrong, G. (1997). The unforgiving eye: CCTV surveillance in public space. *Hull, University of Hull*.

Norris, C., & Armstrong, G. (2019). Working Rules and the Social Construction of Suspicion (1999). In *Crime and Media* (pp. 522-538). Routledge.

Norris, C., & Armstrong, G. (1999). CCTV and the rise of mass surveillance society. *Crime unlimited? Questions for the 21st century*, 76-98.

Norris, C., McCahill, M., & Wood, D. (2004). The growth of CCTV: a global perspective on the international diffusion of video surveillance in publicly accessible space. *Surveillance & Society*, *2*(2/3).

O'Connor, A. J., & Jahan, F. (2014). Under surveillance and overwrought: American Muslims' emotional and behavioral responses to government surveillance. *Journal of Muslim Mental Health*, *8*(1).

Olatunde, T. (2023, July 30). Winnipeg Sees Largest Jump in Crime Severity Index: Stat Can Data. CityNews. https://winnipeg.citynews.ca/2023/07/30/winnipeg-crime-severity-index/

Orb, A., Eisenhauer, L., & Wynaden, D. (2001). Ethics in qualitative research. *Journal of Nursing Scholarship*, *33*(1), 93-96.

Orum, A. M., & Neal, Z. (2009). *Common ground?: Readings and reflections on public space*. Routledge.

Park, H. H., Oh, G. S., & Paek, S. Y. (2012). Measuring the crime displacement and diffusion of benefit effects of open-street CCTV in South Korea. *International Journal of Law, Crime and Justice*, *40*(3), 179-191.

Pearce, F., & Tombs, S. (1998). Foucault, governmentality, marxism. *Social & Legal Studies*, *7*(4), 567-575.

Petty, N. J., Thomson, O. P., & Stew, G. (2012). Ready for a paradigm shift? Part 2: Introducing qualitative research methodologies and methods. *Manual therapy*, *17*(5), 378-384.

Pillow, W. (2003). Confession, catharsis, or cure? Rethinking the uses of reflexivity as Methodological power in qualitative research. International Journal of Qualitative Studies in Education, 16(2), 175-196

Piza, E. L., Caplan, J. M., & Kennedy, L. W. (2014). Analyzing the influence of micro-level factors on CCTV camera effect. *Journal of Quantitative Criminology*, *30*, 237-264.

Piza, E. L., Caplan, J. M., & Kennedy, L. W. (2014). Is the punishment more certain? An analysis of CCTV detections and enforcement. *Justice Quarterly*, *31*(6), 1015-1043.

Polkinghorne, D. E. (2005). Language and meaning: Data collection in qualitative research. *Journal of counselling psychology*, *52*(2), 137.

Porter, G. (2009). CCTV images as evidence. *Australian Journal of Forensic Sciences*, *41*(1), 11-25.

Potts, K., & Brown, L. (2005). Becoming an anti-oppressive researcher. Pp.255–286 in Brown, L., and Strega, S. (Eds.), Research as Resistance. Toronto, ON: Canadian Scholars Press

Poyser, S. (2004). Does the effectiveness of CCTV as a crime prevention strategy outweigh the threat to civil Liberties? *The Police Journal*, *77*(2), 120-134.

Prentice, A. (2023, November 5). Winnipeg Police Launch Homicide Investigation After Double Shooting on Portage Ave. Global News. https://globalnews.ca/news/10072026/winnipeg-police-launch-homicide-investigation-after-double-shooting-on-portage-ave/

Proulx, C. (2014). Colonizing surveillance: Canada constructs an Indigenous terror threat. *Anthropologica*, 83-100.

Ramachandran, R., & Ritchie, K. (2023). What makes people feel safe? Public perceptions of street-based safety.

Ratcliffe, J. (2006). *Video surveillance of public places*. Washington, DC: US Department of Justice, Office of Community Oriented Policing Services.

Rehren, F. (2022). Public Space and the Feeling of (Un) Safety: Between the need for Improvement and Social Appropriation of Urban Competence (Master's thesis, Hannover: Institut für Umweltplanung)

Reynoldson, T. (2023, July 14). Downtown Business Struggle with Increase in Crime. Regina-Leaderpost.https://leaderpost.com/news/local-news/downtown-businesses-struggle-with-increase-in-crime

Reppetto, T. A. (1976). Crime prevention and the displacement phenomenon. *Crime & delinquency*, *22*(2), 166-177.

Rezvani, M., & Sadra, Y. (2017). Sociological explanation of fear of crime in public spaces case study Mashhad. *arXiv preprint arXiv:1709.08300*

Robin, L., Peterson, B. E., & Lawrence, D. S. (2021). How do close-circuit television cameras impact crimes and clearances? An evaluation of the Milwaukee police department's public surveillance system. *Police practice and research*, *22*(2), 1171-1190.

Ross, P. T., & Bibler Zaidi, N. L. (2019). Limited by our limitations. *Perspectives on medical education*, *8*, 261-264.

Rule, J. B. (2012). "Needs" for surveillance and the movement to protect privacy. In *Routledge handbook of surveillance studies* (pp. 64-71). Routledge.

Ruppert, E. (2012). Seeing population: census and surveillance by numbers. In *Routledge Handbook of Surveillance Studies* (pp. 209-216). Routledge.

Sabogal, A. (2021). *Urban Ecology: A Case Study of Lima City, Perú*. Springer Nature.

Sachdeva, Saahil. (2019, June 19). How Video Analytics as Driving Workplace Productivity in Manufacturing. Linkedin https://www.linkedin.com/pulse/how-video-analytics-driving-workplace-productivity-saahil-sachdeva/

Sa'di, A. H. (2012). Colonialism and surveillance. In *Routledge handbook of surveillance studies* (pp. 151-158). Routledge.

Saunders, S. M. (2020). Surveilling Modern Surveillance: An Examination of the Impacts of Surveillance on Marginalized Identities and Police Behaviour.

Sayin, E., Krishna, A., Ardelet, C., Decré, G. B., & Goudey, A. (2015). "Sound and safe": The effect of ambient sound on the perceived safety of public spaces. *International Journal of Research in Marketing*, *32*(4), 343-353.

Scace, M. (2023, November 15). Alberta Sheriffs Had Little Impact on Downtown Disorder, Say Business Group, CPS Report. Calgary Herald https://calgaryherald.com/news/downtown-calgary-alberta-sheriffs-pilot-project-public-safety

Schwandt, T. A. (1994). Constructivist, interpretivist approaches to human inquiry. *Handbook of qualitative research/Sage*.

Seawright, J., & Gerring, J. (2008). Case selection techniques in case study research: A menu of qualitative and quantitative options. *Political Research Quarterly*, *61*(2), 294-308.

Sedky, M. H., Moniri, M., & Chibelushi, C. C. (2005, September). Classification of smart video surveillance systems for commercial applications. In *IEEE Conference on Advanced Video and Signal Based Surveillance, 2005.* (pp. 638-643). IEEE.

Seers, K. (2012). Qualitative data analysis. *Evidence-based nursing*, *15*(1), 2-2.

Selkirk, M. (2020). Visible minority status and confidence in the police. *The Sociological Imagination: Undergraduate Journal*, *6*(1).

Sewell, G. (2012). Organization, employees and surveillance. In *Routledge handbook of surveillance studies* (pp. 303-312). Routledge.

Short, E., & Ditton, J. (2017). Seen and now heard: Talking to the targets of open street CCTV. In *Surveillance, Crime and Social Control* (pp. 121-145). Routledge.

Shrivastava, P. (2020). CCTV and Invasion to Privacy in the GCC. *Ct. Uncourt*, *7*, 38.

Simon, J. (2020). Governing through crime. In *Crime, Inequality and the State* (pp. 589-595). Routledge.

Sivarajasingam, V., Shepherd, J. P., & Matthews, K. (2003). Effect of urban closed-circuit television on assault injury and violence detection. *Injury Prevention*, *9*(4), 312-316.

Smith, E. (2013). The piecemeal development of camera surveillance in Canada. In *Eyes Everywhere* (pp. 122-135). Routledge.

Smith, G. J. (2012). Surveillance work (ers). In *Routledge handbook of surveillance studies* (pp. 107-115). Routledge.

Socha, R., & Kogut, B. (2020). Urban video surveillance as a tool to improve security in public spaces. *Sustainability*, *12*(15), 6210

Statistics Canada (2024). Table 35-10-0181-01 Incident-based crime statistics, by detailed violations, police services in Manitoba

DOI: https://doi.org/10.25318/3510018101-eng

Stutzer, A., & Zehnder, M. (2013). Is camera surveillance an effective measure of counterterrorism? *Defence and Peace Economics*, *24*(1), 1-14.

Su, Z., Xu, X., & Cao, X. (2021). What explains popular support for government surveillance in China. *Journal of Information Technology & Politics*, *30*, 1098-124.

Surveillance Camera Awareness Network (SCAN), & Deisman, W. (2009). *A Report on Camera Surveillance in Canada: Part One*. SCAN.

Tandogan, O., & Ilhan, B. S. (2016). Fear of crime in public spaces: From the view of women living in cities. *Procedia engineering*, *161*, 2011-2018.

Taylor, A. (2023, Oct 23). Campbell River Approves Nearly Half a Million A Year for Downtown Safety. Campbell River Authority https://www.campbellrivermirror.com/local-news/campbell-river-approves-nearly-half-a-million-a-year-for-downtown-safety-6518286

Taylor, E. (2010). I spy with my little eye: the use of CCTV in schools and the impact on privacy. *The Sociological Review*, *58*(3), 381-405.

Taylor, E. (2012). Awareness, understanding and experiences of CCTV amongst teachers and pupils in three UK schools. *Video Surveillance: Practices and Policies in Europe*, *18*, 1

Taylor, S. (1997). Critical policy analysis: exploring contexts, texts and consequences. Discourse: Studies in the Cultural Politics of Education, 18(1), 23-35.

Theofanidis, D., & Fountouki, A. (2018). Limitations and delimitations in the research process. *Perioperative Nursing-Quarterly scientific, online official journal of GORNA*, *7*(3 September-December 2018), 155-163.

Thompson, S. (2023, July 5). Community Group Process Downtown Cameras to Thwart Winnipeg Crime. GlobalNews. https://globalnews.ca/news/8968144/downtown-winnipeg-security-cameras/

Thompson, S. (2023, July 6). Manitoba Announces $10 Million in Safety Measures for Downtown Winnipeg. GlobalNews https://globalnews.ca/news/9814555/winnipeg-manitoba-downtown-safety/

Tongco, M. D. C. (2007). Purposive sampling as a tool for informant selection.

Tonnelat, S. (2010). The sociology of urban public spaces. *Territorial evolution and planning solution: experiences from China and France*, 84-92.

Totikidis, V., Armstrong, A., & Francis, R. (2005). Local safety committees and the community governance of crime prevention and community safety.

Tracy, S.J. (2010). Qualitative quality: eight" big ten" criteria for excellent qualitative research. Qualitative Inquiry, 16(10), 837-851

Trimek, J. (2016). Public confidence in CCTV and fear of crime in Bangkok, Thailand. *International journal of criminal justice sciences*, *11*(1).

Trüdinger, E. M., & Steckermeier, L. C. (2017). Trusting and controlling? Political trust, information and acceptance of surveillance policies: The case of Germany. *Government Information Quarterly*, *34*(3), 421-433.

Turner, L. (2020, September 2020). Engaging Community to Prevent Crime and End Police Violence.Wilder. https://www.wilder.org/articles/engaging-community-prevent-crime-and-end-police-violence

Van de Veer, E., De Lange, M. A., Van Der Haar, E., & Karremans, J. C. (2012). Feelings of safety: ironic consequences of police patrolling. *Journal of Applied Social Psychology*, *42*(12), 3114-3125.

Vonn, M., & Boyle, P. (2013). Video Surveillance in Vancouver: Legacies of the Games. In *Eyes Everywhere* (pp. 174-184). Routledge.

Walby, K. (2005). Open-street camera surveillance and governance in Canada. *Canadian Journal of Criminology and Criminal Justice*, *47*(4), 655-684.

Walby, K. (2006). Little England? The rise of open-street closed-circuit television surveillance in Canada. *Surveillance & Society*, *4*(1/2).

Waples, S., Gill, M., & Fisher, P. (2009). Does CCTV displace crime? *Criminology & Criminal Justice*, *9*(2), 207-224.

Watson, C. (2006). Unreliable narrators? ’Inconsistency'' (and some inconstancy) in interviews. Qualitative Research, 6(3), 367-384.

Weisburd, D., Wyckoff, L. A., Ready, J., Eck, J. E., Hinkle, J. C., & Gajewski, F. (2006). Does crime just move around the corner? A controlled study of spatial displacement and diffusion of crime control benefits. *Criminology*, *44*(3), 549-592.

Weller, T. (2012). The information state: An historical perspective on surveillance. In *Routledge handbook of surveillance studies* (pp. 57-63). Routledge.

Welsh, B. C., & Farrington, D. P. (2003). Effects of closed-circuit television on crime. *The ANNALS of the American Academy of Political and Social Science*, *587*(1), 110-135.

Welsh, B. C., & Farrington, D. P. (2008). Effects of Closed-Circuit Television Surveillance on Crime. *Campbell Systematic Reviews*, *4*(1), 1-73. https://doi.org/10.4073/csr.2008.17

Welsh, B. C., & Farrington, D. P. (2009). Public area CCTV and crime prevention: an updated systematic review and meta-analysis. *Justice Quarterly*, *26*(4), 716-745.

Wester, M., & Giesecke, J. (2019). Accepting surveillance–an increased sense of security after terror strikes?. *Safety Science*, *120*, 383-387.

Williams, C. A. (2003). Police Surveillance and the Emergence of CCTV in the 1960s. *Crime Prevention and Community Safety*, *5*, 27-37.

Willis, M., Taylor, E., & Lee, M. (2017). Police detainee perspectives on CCTV. *Trends and Issues in Crime and Criminal Justice [electronic resource]*, (538), 1-14.

Wilson, D., & Sutton, A. (2003). *Open-street CCTV in Australia* (Vol. 271, pp. 1-6). Canberra: Australian Institute of Criminology.

Wilson, D., Rose, J., & Colvin, E. (2010). Marginalised young people, surveillance and public space: a research report.

Winnipeg Police Service. (n.a). Closed Circuit Television Cameras. WPS. https://www.winnipeg.ca/police/crime-prevention/closed-circuit-television-cameras

Wójcik, D. (2015). Between security and freedom: a social perspective of CCTV. *Internetowy Przegląd Prawniczy TBSP UJ*, (3 (20).

Wood, D. M. (2013). Cameras in context: A comparison of the place of video surveillance in Japan and Brazil. In *Eyes Everywhere* (pp. 83-99). Routledge.

Wood, D. M., Ball, K., Lyon, D., Norris, C., & Raab, C. (2006). A report on the surveillance society. *Surveillance Studies Network, UK*, 1-98.

Woodhams, S. (2020). China, Africa, and the private surveillance industry. *Geo. J. Int'l Aff.*, *21*, 158

Yusuff, A. O. A. (2011). Legal Issues and Challenges in the Use of Security (CCTV) Cameras in Public Places: Lessons from Canada. *Sri Lanka J. Int'l L.*, *23*, 33.

Zamawe F. C. (2015). The Implication of Using NVivo Software in Qualitative Data Analysis: Evidence-Based Reflections. *Malawi medical journal: the journal of Medical Association of Malawi*, *27*(1), 13–15. https://doi.org/10.4314/mmj.v27i1.4

Zhang, X., & He, Y. (2020). What makes public space public? The chaos of public space definitions and a new epistemological approach. *Administration & Society*, *52*(5), 749-770.

Zhao, J. S., Schneider, M., & Thurman, Q. (2002). The effect of police presence on public fear reduction and satisfaction: A review of the literature. *The justice professional*, *15*(3), 273-299.

Zuboff, S. (2019, January). Surveillance capitalism and the challenge of collective action. In New labor forum (Vol. 28, No. 1, pp. 10-29). Sage CA: Los Angeles, CA: SAGE Publications.

Zuev, D., & Blatchford, G. (2020). Methodologies of visual sociology. In Zuev, D., and Blatchford, G. Visual Sociology: Practices and politics in contested spaces. (pp.23–51) Springer.

APPENDIX A: PARTICIPANT INTERVIEW GUIDE

Does Individual's Perception of CCTV Cameras in Public Spaces Influence Their Behaviour and Sense of Safety? The Case of Winnipeg.

Interview date_____ Venue_____

Socio-Demographic Information

Age: ○ 18-24 ○ 25-34 ○ 35-44 ○ 45-54 ○ 55-64 ○ 65-74 ○ 75 and over
- Sex: ○ Male ○ Female ○ Non-binary Prefer not to say…….

Education: ○High school certificate ○ College ○ Diploma ○ Bachelor's degree ○ Master's degree ○ Doctorate
Religious group: ○ Christian ○ Muslim ○Other (please specify_____)
Marital Status: _____
Occupation (if applicable): _____
Years/Months spent in Winnipeg ……
How often do you use Downtown ……

1. **General Perceptions of CCTV in Public Spaces**
   What are your general thoughts on CCTV cameras in public spaces?
   - *Do cultural or societal norms influence your opinion on using CCTV cameras in public spaces? Please elaborate.*
   - *What level of transparency and oversight do you think should be in place regarding using CCTV cameras in public spaces?*
   - *Do you believe authorities have the right to monitor or surveil the public? Why or why not?*

2. **Impact of CCTV on Public Security**
   Do you think CCTV cameras affect the overall security in public spaces? Why or why not?
   - *How effective do you believe CCTV cameras are in preventing or solving crimes in public spaces?*
   - *Are the surveillance cameras in your area well signposted or indicated to the public?*
   - *Are there any negative impacts on overall security that you associate with using CCTV cameras in public spaces? If so, what are they?*
   - *Should CCTV cameras be used alongside other crime prevention strategies? Why or why not?*

3. **Influence of CCTV on Personal Behaviour and Privacy**
   Can you describe occasions when CCTV cameras influenced your behaviour in public spaces?

- *Does the presence of CCTV cameras influence your actions/behaviours in public spaces? Why or why not?*
- *Does your awareness of CCTV cameras affect your privacy in public spaces? Please elaborate*

4. Safety and Surveillance in Winnipeg

- *How does the presence of CCTV cameras in public spaces in Winnipeg affect your sense of safety? Do you feel more protected or less protected, or does it have another impact? Please explain.*
- *How do you feel when you are aware that CCTV cameras are monitoring a public area you are in? Can you please elaborate?*

5. CCTV and Marginalization of Minority Groups.

- *Do you think the presence of CCTV cameras contributes to the feelings of marginalization among certain groups? Please explain.*
- *Are there specific communities or demographics that are inappropriately affected by CCTV surveillance? If so, why?*
- *Do you think the implementation of CCTV systems can reinforce existing power dynamics and inequalities? If so, how?*

6. Additional Thoughts

- *Is there anything else you would like to add that we have not covered?*

APPENDIX B: PARTICIPANT CONSENT FORM

FACULTY OF GRADUATE STUDIES

Department of Sociology
318 Isbister Building
183 Dafoe Road
University of Manitoba
Winnipeg, Manitoba Canada
R3T 2N2 T: 204 474 9260
F: 204 261 1216
Sociology@umanitoba.ca

You are invited to participate in academic research titled: ***Does Individuals' Perception of CCTV Cameras in Public Spaces Influence Their Behavior and Sense of Safety? The Case of Winnipeg.***

This consent form, a copy of which will be left with you for your records and reference, is only part of the process of informed consent. It should give you the basic idea of what the research is about and what your participation will involve. If you would like more details about something mentioned here or information not included here, you should feel free to ask. Please take the time to read this carefully and to understand any accompanying information.

Researcher: Mr. Graham Baffour Adumata, Graduate Student, Department of Sociology and Criminology, University of Manitoba (Canada), adumatab@myumanitoba.ca |204 *** ****

Advisor: Dr. Joseph Yaw Asomah, Assistant Professor, Department of Sociology and Criminology, University of Manitoba (Canada), joseph.asomah@umanitoba.ca |204 *** ****

Purpose(s) and Objective(s) of the Research:
This study aims to investigate the influence of individuals' perception of CCTV cameras in public spaces on their behavior and sense of safety. A study of this nature can add to the Canadian literature on surveillance and safety in public spaces.

Procedures:

- Each interview will be conducted at a place that is convenient and safe for you or remotely via UM Zoom.
- The interviews (in-person or UM Zoom) will be digitally audio recorded, pending participant's consent. A passcode-protected audio-recording device will be used.

  Do you consent to audio recording? (1) Yes___ (2) No ___

If you answered "No," do you agree that the researcher should take field notes from this interview? (1) Yes___ (2) NO___

If your answer to both questions is "No," you will be excluded from this study.

- A number code will be assigned randomly as pseudonyms for all participants except those who waive their anonymity in the confidentiality section of this consent form.
- The interviews will be transcribed using otter.ai and analyzed by the principal investigator using qualitative thematic content analysis and manual coding.
- Your commitment to the study involves participation in one in-person or online (via UM Zoom) interview with the researcher, which will last about one hour. In-person interviews will be conducted at a place that is convenient and safe for you.
- For UM Zoom interviews, University of Manitoba (Canada) guidelines on virtual research involving participants will be observed. For example, you are encouraged to:
  (a) Use a nickname or initials instead of your full name.
  (b) Keep your camera off, if you wish.
  (c) Join the meeting in a private location where you will not be disturbed or overheard.
  For more information about these guidelines, please see:
  https://umanitoba.ca/research/sites/research/files/2022-10/Virtual%20Platforms%20Guidelines-%20September%202022.pdf
- Please feel free to ask any questions regarding the procedures and goals of the study or your role in the study.

Review of Data

- You will have the opportunity to add, alter, and delete information from your interview recording as appropriate. The UM OneDrive link to interview transcripts will be emailed/texted to you via a means of communication provided by you two months after the interview. You will have four weeks to review your transcripts and provide your feedback to **Mr. Graham Adumata** using any of the contact information in this consent letter. If the researcher does not hear from you after four weeks, it will be assumed that you are OK with your interview transcripts.
- If you would like to review your interview transcripts, please provide your email address or mobile number below:

  _____

- However, you have the option to waive the transcript review through the following statement:

  I would like to review the transcripts of this interview: (1) Yes (2) No

- If your answer is "Yes," you will be given a transcript release form on which you will provide your consent for the researcher's use of the amended transcript following your review.

Potential Risks:

- There is a minimal risk that your discussions about surveillance and privacy issues may cause you to experience some psychological distress or discomfort. You may feel upset, experience anger, confusion, or sadness when participating in the study.
- You may end your involvement in the research project at any time if you feel uncomfortable sharing details about your experiences regarding the research topic or may choose not to answer any interview questions you feel uncomfortable discussing.
- Conducting interviews in public may pose a small risk to confidentiality. Participants and the researcher should agree on a safe place where confidentiality is not likely to be threatened.

Potential Benefits:

- The research aims to enrich academic and policy debates about improving safety in public spaces with surveillance cameras as a crime prevention technique based on the lessons from your experiences and perspectives. As a participant, it is intended to offer you an opportunity to contribute to surveillance and crime prevention discussions within the Canadian context.

Compensation:

- You will receive an honorarium valued at 20 dollars (20 CAD) in the form of a gift card of your choice. Should you withdraw from the research during the interview, you will still receive the honorarium of 20 dollars (20 CAD) also in the form of a gift card.

Confidentiality:

- All data collected through this research project is confidential. You will not be asked to provide your name or any identifiable details about you in the interview. If you do mention identifiable details, they will be omitted from the interview transcript to safeguard confidentiality.
- The data from this research project will be published and presented at conferences. However, your identity will be kept confidential. Although we will report direct quotations from the interview, you will be given a pseudonym (e.g. G101, G112) and all identifying information (such as where and what you work, the neighborhood where you live, your party affiliation, and specific activities you are involved in) will be removed from our report.
- However, you have the option to waive anonymity through the question below.
  If you waive your anonymity, it means you agree that data from you be presented in research reports using your real name instead of pseudonyms for those who do not waive their anonymity.
- Would you like to waive your anonymity?
  Yes_____. No_____.

Storage of Data:

- Only the principal investigator and the thesis will have access to the original data of the study.

- All recorded data will be securely stored in the office of the principal investigator. Electronic files will be password protected and hard copies will be kept in a locked filing cabinet in the researcher's office. Materials will be stored at the University for five years after the work is published or otherwise presented. In September 2029, electronic data will be destroyed by file deletion, and hard copies will be destroyed by shredding.
- All data sets and paper documents, including consent forms, field notes will be scanned and recordings, will be uploaded to a secure University of Manitoba electronic data storage site (i.e., the researcher's UM OneDrive), and paper documents will be destroyed.

Right to Withdraw:

- Your participation is voluntary, and you can answer only those questions that you are comfortable with. You may withdraw from the research project for any reason, at any time without explanation or penalty of any sort. For example, during the interview, you can withdraw by telling the researcher/interviewer that you do not want to continue with the interview.
- Choosing to participate in this study or failing to do so will have no effect on your position (for example, employment, legal rights, and access to services) or how you will be treated.
- Should you wish to withdraw, the digital recording and/or written transcription of your interview will be destroyed, along with any e-mail correspondence between you and the research team.
- Your right to withdraw data from the study will apply until results have been disseminated or published. After this point, it may not be possible to withdraw your data.
- If you decide to withdraw after the interview, you can call or email Mr Graham Adumata (using any of the contact details above), preferably before September 2024.

Follow up:

- The UM OneDrive link to the study summary will be emailed, texted, or mailed by September 30, 2024. Would you like to receive feedback on this study?
  Yes____ No_____
- If yes, what is your email address, mobile number, or postal address?
  _____

- **Your signature on this form indicates that you have understood to your satisfaction the information regarding participation in the research project and agree to participate as a subject. In no way does this waive your legal rights nor release the researchers, sponsors, or involved institutions from their legal and professional responsibilities. You are free to withdraw from the study at any time, and /or refrain from answering any questions you prefer to omit, without prejudice or consequence. Your continued participation should be as informed as your initial consent, so you should feel free to ask for clarification or new information throughout your participation.**

The University of Manitoba may look at your research records to see that the research is being done in a safe and proper way. This research has been approved by the Research Ethics Board at the University of Manitoba, Fort Garry campus. If you have any concerns or complaints about this project, you may contact any of the above-named persons or the Human Ethics Officer at 204-474-7122 or HumanEthics@umanitoba.ca. A copy of this consent form has been given to you to keep for your records and reference.

Consent

Option 1 - SIGNED CONSENT

Your signature below indicates that you have read and understand the description provided; I have had an opportunity to ask questions and my/our questions have been answered. I consent to participate in the research project. A copy of this Consent Form has been given to me for my records.

_____	_____	_____
Name of Participant	*Signature*	*Date*

_____	_____
Researcher's Signature	*Date*

A copy of this consent will be left with you, and the researcher will take a copy.

Option 2 - ORAL CONSENT

Oral Consent: If consent has been obtained orally, this should be recorded. For example, the Consent Form dated and signed by the researcher(s) indicating that "I read and explained this Consent Form to the participant before receiving the participant's consent, and the participant had knowledge of its contents and appeared to understand it." In addition, oral consent obtained over the phone or in-person will be audiotaped before interviews.

_____	_____	_____
Name of Participant	*Researcher's Signature*	*Date*

☐ Oral consent was given over the phone.

☐ Oral consent was given before in-person interview