

## Research Article

# Psychological Explanations for Surveillance Technologies in Crime Prevention

Juliana Kubik<sup>1\*</sup>

Received: 5 February 2024 / Accepted: 2 August 2024

© The Author(s), 2024

## Abstract

The growth of surveillance technology in relation to crime prevention raises questions about the effectiveness of such tools in altering behaviour. The purpose of this essay is to examine surveillance technology through psychological theories such as social-identity theory and shame culture. The examples of Closed Circuit Television (CCTV), remote workplace monitoring, and police body-worn cameras will be analysed through the lens of psychology to explain where surveillance technology may succeed or fail to prevent crime and suggest that social psychology plays an important role in determining the success of surveillance technology.

**Keywords** crime prevention • psychology • shame culture • social identity theory • surveillance • surveillance technology

## I. Introduction

Crime prevention is complicated. Surveillance technology serves several roles in relation to crime and response, specifically through observation, documentation, and prevention.<sup>2</sup> The prevention aspect is vital, with parties at multiple levels – government,

---

<sup>1</sup> Julianna Kubik is a human rights and global security professional with degrees in International Studies, Psychology, and Global Crime, Justice, and Security. She currently works as a Projects Officer at Beyond Borders Scotland, leading initiatives such as the 1325 Women in Conflict Fellowship and contributing to international law and surveillance technology publications.

<sup>2</sup> Rudschies, Catharina. "Power in the Modern 'Surveillance Society': From Theory to Methodology," 276.

law enforcement, corporate, etc – working to try to identify ways to limit criminal conduct. It is a modern panopticon, testing the idea that if we are being watched, we are more likely to abide by societal norms.<sup>3</sup> However, little is known about the extent to which such tools have an impact. This essay will focus on this idea, asking what the relationship is between psychology and surveillance technology in preventing criminal acts. It will use the concepts of social identity and shame culture to argue that surveillance technology serves to alter behaviour by forcing conformity to social norms. The first section will explain social identity theory and shame culture before discussing the growth in surveillance technology in the second section. The third and final section will look at how the two combine and consider three examples – closed circuit television (CCTV), remote workplace monitoring, and police body-worn cameras – that showcase how surveillance technology alters behaviour. The essay concludes with a summary of the evidence provided, addressing the central argument on the influence that surveillance has on social identity and behaviour.

## **II. Psychology and Social Behaviour**

The first aspect of exploring the relationship between psychology and surveillance technology is understanding the theories behind behavioural decisions. This paper will approach the relationship by looking at social identity and shame culture. Social identity is part of the self-concept – one's image of oneself – 'that is derived from memberships in social groups or categories.'<sup>4</sup> A major aspect of any individual's identity is their relationship with groups – age, gender, job, favourite television show, etc. – they perceive themselves to be a part of. These groups are the 'in-group' and the groups that an individual does not recognise themselves as a part of or does not wish to identify

---

<sup>3</sup> See Rudchies 276-277 or Lyon, David. *Electronic Eye: The Rise of Surveillance Society*, 58.

<sup>4</sup> "APA Dictionary of Psychology," "APA Dictionary of Psychology," Social Identity (American Psychological Association, n.d.); "APA Dictionary of Psychology," Self-Concept.

with are the 'out-group.'<sup>5</sup> People are then influenced by these groups, emphasising the role of group membership and 'belonging' in shaping behaviour.<sup>6</sup>

Individuals will compare themselves with others, particularly with those in similar groups, and adjust their behaviour to follow the respective norms. Adherence is based on the level at which the group and their behaviour align with the individual's overall social identity.<sup>7</sup> When an individual can balance the norms successfully through adjusting actions and behaviours, they feel better about their self-concept. However, when they fail, they may experience negative emotions or become exiled into the out-group.<sup>8</sup> It is important to note that the group dynamics posed in social identity theory are not reflective of overarching uniformity but rather of a level of depersonalization, allowing individuals to meet standards of acceptable behaviour in their respective groups while also maintaining their own singular goals and desires.<sup>9</sup>

Social identity extends into cultural standards, including the idea of shame. 'Shame culture' refers to any society that maintains a 'strong desire to preserve honour and avoid shame.'<sup>10</sup> This idea presents an extension of social identity, in which the culture is the group, presenting a set of behavioural requirements for individuals to meet the 'honourable' standard and feel like true members of society. Authority – like in social identity – shapes behaviour and is one of the primary influences in developing a shame culture. The dominant authority – such as government or religious leaders – determines the expectations that need to be met, causing individuals to act in a way to avoid being

---

<sup>5</sup> Stets, Jan E., and Peter J. Burke. "Identity Theory and Social Identity Theory," 224, 225.

<sup>6</sup> "APA Dictionary of Psychology," Social Identity Theory; Mirbabaie, Milad, Stefan Stieglitz, Felix Brünker, Lennart Hofeditz, Björn Ross, and Nicholas R. J. Frick. "Understanding Collaboration with Virtual Assistants—The Role of Social Identity and the Extended Self," 22-24.

<sup>7</sup> See about Social Comparison Theory in Goldstein, Noah J., Robert B. Cialdini, and Vladas Griskevicius. "A Room with a Viewpoint: Using Social Norms to Motivate Environmental Conservation in Hotels," 475; Stets and Burke 225.

<sup>8</sup> Mirbabaie et al, 24.

<sup>9</sup> Stets and Burke 227-228, 233.

<sup>10</sup> See Gilligan, James. "Shame, Guilt, and Violence," 1151 and Flanagan, Owen. *How to Do Things with Emotions: The Morality of Anger and Shame Across Cultures*, 209; "APA Dictionary of Psychology," Shame Culture.

met with negative responses – such as disappointment or anger – and remain in the in-group.<sup>11</sup>

Cultures that utilise shame tend to manipulate individual emotions and situational decisions into a tool that can ‘teach and protect values,’ particularly those related to the group as a whole.<sup>12</sup> The expectations provided lead to the development of an understanding of cues that trigger internalised feelings of shame and, likewise, diminish the probability of actions that are viewed as detrimental to the community.<sup>13</sup> If the connection between the culture and one’s social identity is strong enough, the feelings of shame may become internalised and no longer require an audience. However, the impact on behaviour is still largely dependent on a person’s feelings of being seen and judged by their group.<sup>14</sup>

### III. Development of Surveillance Technology

While methods such as interpersonal relationships, laws, and other individuals were for a long time important in the development of cultural norms and social expectations, surveillance technology – and its use in ‘dataveillance’ – has since grown in prominence<sup>15</sup> Over the past few decades, technologies such as body-cameras, security cameras, and radio-frequency identification (RFID) chips have become ingrained into society.<sup>16</sup> The growth in individual surveillance tools has also coincided with the appearance of technologically-savvy ‘smart cities’ – the theory and practice of

---

<sup>11</sup> Benedict, Ruth. “Continuities and Discontinuities in Cultural Conditioning,” 162-163; Flanagan, 141, 146-147; Milgram, Stanley. “Obedience to Authority: An Experimental View,” 8, 11, 68.

<sup>12</sup> Cosmides, Leda, and John Tooby. “Evolutionary Psychology and the Emotions.”; Flanagan, 194, 202, 210.

<sup>13</sup> Flanagan, 134-136; Cosmides and Tooby; See also Creighton, Millie R. “Revisiting Shame and Guilt Cultures: A Forty-Year Pilgrimage,” 287.

<sup>14</sup> Flanagan, 199.

<sup>15</sup> Lyon, 41,47-48; Clarke, Roger. “Information Technology and Dataveillance,” 499. See also Clarke’s definition of ‘dataveillance’ as ‘the systematic monitoring of people’s actions or communication through the application of information technology,’ 499.

<sup>16</sup> Sheldon, Barrie. “Camera Surveillance Within the UK: Enhancing Public Safety or a Social Threat?” 193; See Leman-Langlois, Stéphane. *Technocrime: Technology, Crime and Social Control*, 17.

optimising urban life and business efficiency through internet connectivity, dispersed sensors, and big data.’<sup>17</sup>

In its basic form, surveillance technology attempts to disrupt the basic elements of crime, providing a new ‘guardian’ to limit opportunities for crime and encourage individuals to meet new expectations to fulfil their social identity.<sup>18</sup> However, the question remains of how exactly this is done and whether it successfully alters behaviours on a social level. It is also important to note that surveillance technologies maintain questionable ethical standards, with protection laws not always matching the implementation of surveillance systems. There is a lack of data considering the impact of restrictions on the use of surveillance technology and its related efficacy, but the role that the law remains vital to consider in how such technologies are utilised in crime response and deterrence. For example, San Francisco implemented a facial recognition ban in 2019, meaning that law enforcement and governmental agencies – despite reportedly not actively using them at the time – will not be able to implement facial recognition technology in their operations going forward.<sup>19</sup>

#### **IV. Connecting the Technological to the Psychological**

It would not be fair to consider social identity and shame culture in relation to surveillance technology without first addressing how the concepts connect to general situational crime prevention (SCP). Emotional cues shape an individual’s behavioural decisions in an almost algorithmic structure.<sup>20</sup> As the purpose of SCP is to prevent the occurrence of crime by removing situational opportunities, an individual’s psychological processes may affect whether the preventative measures are successful. If the measure

---

<sup>17</sup> Pat O’Malley and Gavin JD Smith, “‘Smart’ Crime Prevention? Digitization and Racialized Crime Control in a Smart City,” 40-41. See also, Bokhari, Syed Asad Abbas, and Myeong Seunghwan. 2024. "How Do Institutional and Technological Innovations Influence the Smart City Governance? Focused on Stakeholder Satisfaction and Crime Rate" 1-4.

<sup>18</sup> Felson, M., & Boba, R. “Chemistry for crime” 28; Doyle, Aaron., Randy K. Lippert, and David Lyon. *Eyes Everywhere: The Global Growth of Camera Surveillance*, 67.

<sup>19</sup> Barber, Gregory. “San Francisco bans agency use of Facial Recognition Tech.”

<sup>20</sup> Recall Cosmides and Tooby.

is able to make it so that the cost of the act is less than the benefit, the person will be more likely to choose not to act.<sup>21</sup>

Likewise, if the individual is a member of a shame culture, they may view any risk of violating cultural norms through acts such as theft as unfavourable. An example of this is the usage of community watch programs. These programs use community members to surveil themselves, promoting a micro-culture of shame and removing opportunities for crime not only through decreasing the availability of vulnerable targets but also through forcing those who live in the community to limit their own acts in favour of the preferred behaviours.<sup>22</sup> Once extended to digital surveillance, the norm becomes a digital panopticon.

Jeremy Bentham's panopticon presents the idea that if a person is under the impression that they may be under surveillance at any given time, they are forced to alter their behaviour in a manner deemed positive by the surveilling group.<sup>23</sup> In its structure, the panopticon mirrors the expectations set in place through social identity, however, the question remains if such concepts effectively reinforce norms and alter behaviour. One way that surveillance may effectively influence behaviour is if it, as discussed in the previous section, takes the place of a 'guardian.' Rather than merely serve as a crime-tracking tool, surveillance technology may increase the risk and reduce the anonymity involved in an act.<sup>24</sup> When a person is aware of being watched they will, theoretically, alter their behaviour to avoid being identified as going against the norms established in their social identity. Actual observation, however, is not a requirement. As displayed with the theory around the panopticon, what matters is that the person *believes* they are being watched. Similarly, research has shown that behaviour disruption works best when the surveillance is known.<sup>25</sup> A person who does not know

---

<sup>21</sup> Heal, Kevin, and Gloria Laycock. *Situational Crime Prevention: from Theory into Practice*, 43-44, 47-48.

<sup>22</sup> Heal and Laycock, 105.

<sup>23</sup> Lyon, 58, 62-63.

<sup>24</sup> See Cornish, Derek B., and Ronald V. Clarke. *Opportunities, Precipitators and Criminal Decisions: A Reply to Wortley's Critique of Situational Crime Prevention*, 90; see also Heal and Laycock 44, 47-48.

<sup>25</sup> Shearing, Clifford D., and Philip C. Stenning. "From the Panopticon to Disney World: the development of discipline," 507; see also Rudschies 284.

whether their behaviours are being observed is less affected than someone who believes they are being watched. Someone who knows they are being watched will be the most affected

In addition to the panopticon and SCP, another model that influences our understanding of how surveillance may impact behaviour is the General Aggression Model (GAM). The GAM suggests that violent actions – and potentially any non-socially acceptable action – are influenced by a cycle involving three parts – ‘(1) person and situation inputs, (2) present internal states, and (3) outcomes of appraisal and decision-making processes.’<sup>26</sup> An additional implication is made that interventions should be made to address individual inappropriate processes.<sup>27</sup>

Applying this model, the conduct of a person may be shaped in the situational aspect by the technology watching them, impacting their cognitive processes and changing their decision-making processes away from impulsive actions to thoughtful actions. For example, if a person were to consider stealing from a grocery store. In that case, the presence of a security camera may cause them to feel shame for considering a violation of the anti-theft social norms and result in them making the thoughtful decision to not steal over the impulse action of stealing.

These models demonstrate that surveillance disrupts behaviour decisions and promotes conformity to social rules. These rules go on to impact an individual's social identity and create or strengthen a shame culture. In groups where shame and conformity are already present, the use of surveillance technology may work better, as those in the group already have a social identity that is reliant on the performance of acceptable actions. However, more individualist-based cultures and groups may not have a receptive response – recall that obedience is impacted by the level of authority the dominant figure is given.<sup>28</sup> An example of these may be viewed in the differences

---

<sup>26</sup> DeWall, C. Nathan, Craig A Anderson, and Brad J Bushman. “The General Aggression Model: Theoretical Extensions to Violence,” 244-246.

<sup>27</sup> Dewall et al, 251.

<sup>28</sup> Milgram, 11, 68; also see Benedict, 163.

between American and Japanese cultures, where the individual and community have different levels of import.<sup>29</sup> The difference in action may also impact the response – for example, car theft versus violent assault.<sup>30</sup> For a deeper understanding, the next few paragraphs will discuss the ‘surveillance capacity’ of three different technologies and the impacts they may have on individual behaviour.<sup>31</sup>

#### **IV.A. Closed-Circuit Television (CCTV)**

Law enforcement, private companies, and individuals use CCTV systems to monitor and prevent crime or to provide evidence.<sup>32</sup> To understand how CCTV may impact individual behaviour, the SCP approach provides a helpful model.<sup>33</sup> The impact of surveillance in increasing risk and decreasing anonymity in the SCP model has also been connected to greater reporting of crimes by the public and record keeping by law enforcement.<sup>34</sup> violating a clearly established group norm.

When you consider this model, research into the impact of CCTV surveillance is easier to understand. CCTV systems work best in deterring crime in enclosed and well-lit areas and in cases of incidents where social pressure may appear – namely drug dealing and auto theft.<sup>35</sup> A study conducted by Brandon Welsh and David Farrington found that the presence of CCTV correlates with moderate decreases in crime rates.<sup>36</sup> Crimes where an individual may be less impacted by how others view them are less likely to have their relationship with their sense of social identity affected by the

---

<sup>29</sup> Creighton, 296; Flanagan, 209.

<sup>30</sup> Sheldon, 199.

<sup>31</sup> ‘The concept of ‘surveillance capacity’, first suggested by James Rule, is intended as a means of measuring the effectiveness of surveillance systems.’ Lyon, 51.

<sup>32</sup> Sheldon, 193-194, 199, 201; See also O’Malley and Smith, 40-41; Lemman-Langlois, 17.

<sup>33</sup> O’Malley & Smith, 41, 45; See also Welsh, Brandon C., and David P. Farrington. “Surveillance for Crime Prevention in Public Space: Results and Policy Choices in Britain and America.” 500.

<sup>34</sup> Welsh, Brandon C., and David P. Farrington. “Effects of Closed-Circuit Television Surveillance on Crime,” 4, 14.

<sup>35</sup> Lemman-Langlois 27-28, 37-38; Sheldon, 199; Welsh and Farrington, “Surveillance for Crime Prevention in Public Space: Results and Policy Choices in Britain and America.” 501, 514.

<sup>36</sup> Welsh and Farrington. “Effects of Closed-Circuit Television Surveillance on Crime,” 4, 13.



presence of CCTV.<sup>37</sup> Specifically, non-violent crimes are the most impacted, with Welsh and Farrington's study finding that the presence of CCTV only had an effect in three of the 23 evaluated locals while the example of non-violent vehicle theft saw an impact in nearly half of the cases.<sup>38</sup>

They may acknowledge, however, in situations of violent crime, the increased risk and decreased anonymity may do little to create a sense they are failing to meet the expectations set forth by their social identity. CCTV cameras are also useful in enforcing social notions that normalise certain behaviours while discouraging others.<sup>39</sup> In these cases, CCTV serves to reinforce existing notions of a shame culture yet does not create a shame culture itself.

#### **IV.B. Remote Workplace Monitoring**

Another prominent example of contemporary surveillance is that of remote workplace monitoring. Remote workplace monitoring itself, while not geared towards crime prevention, is designed to monitor and discourage certain behaviours and therefore its examination can be used in relation to crime prevention. While in use for many years, remote workplace monitoring systems gained popularity during the COVID-19 lockdown.<sup>40</sup> The primary element of this type of surveillance is that of the panopticon. As workers believe their performance is being consistently reviewed, it is believed that it will encourage them to work harder and prevent any sort of non-favourable actions, such as clocking out early, taking long lunch breaks, or 'slacking off.'<sup>41</sup> However, the central parts of the panopticon concept are those of self-regulation and authority.<sup>42</sup>

---

<sup>37</sup> Rudschies, 280; Sheldon, 199.

<sup>38</sup> Welsh and Farrington. "Effects of Closed-Circuit Television Surveillance on Crime." 17.

<sup>39</sup> Doyle et al., 249-250.

<sup>40</sup> Antonio Aloisi and Valerio De Stefano, "Essential Jobs, Remote Work and Digital Surveillance: Addressing the COVID-19 Pandemic Panopticon," 295-296.

<sup>41</sup> Aloisi and De Stefano, 298; Coldiron, Roxanna. "Employer Surveillance of Remote Workers and Impacts on Privacy and Cybersecurity in the Workplace," 1-3.

<sup>42</sup> Shearing and Stenning, 500, 504; Aloisi and De Stefano, 299.

While an employee may self-regulate, they may not do so in a way that falls within the norms of their company – for example, by utilising a ‘jiggle mouse.’<sup>43</sup> This is because employment – particularly remote employment – may not be part of a person’s social identity. While an important aspect of day-to-day life, other relationships and groups prove more influential in social identity.<sup>44</sup> If an individual does not see their job as a vital part of their social identity or their place in the company as a major ‘group,’ meeting all the norms set forth does not provide any major benefit to the person’s ego.<sup>45</sup> As a result, they do not feel the same level of pressure to maintain their status in the group. Likewise, if the boss or company setting the expectations does not garner enough dominance within the group, the employees involved will not be as inclined to perform to the set standard.<sup>46</sup> In short, the example of remote workplace monitoring shows that surveillance only works to the extent to which the individual values and views their relationship with the related in-group. This idea can be applied to crime prevention as while surveillance is applied to deter certain behaviours, if the behaviour and related situation does not meet the level required for one to view the action and groups involved as important, the technology may not have the intended effect.

#### **IV.C. Police Body-Worn Cameras (BWC)**

The third example of surveillance technology is that of BWCs utilised by law enforcement. Most cameras track an officer's body movements and record interactions they have with the public. BWCs additionally play a role in efforts to promote trust and transparency between law enforcement and communities. BWCs have additionally served as a tool for law enforcement agencies and local governments to attempt to rebuild the relationship between police officers and the community as well as promote police accountability, as is the case with the American states of Ohio and New Hampshire.<sup>47</sup> A report by the United States Bureau of Justice Statistics (BJS) stated that studies in cities such as Boston, Rialto, and Phoenix saw greater reductions in

---

<sup>43</sup> Aloisi and De Stefano, 299-300; Coldiron, 13.

<sup>44</sup> Mirbabaie et al, 21-24.

<sup>45</sup> Aloisi and De Stefano, 300.

<sup>46</sup> Milgram, 8; Coldiron, 13.

<sup>47</sup> Marlow, Chad, and Gary Daniels. “Ohio Bucks a Bad Trend with New Police Body Camera Law: ACLU.”

complaints and use-of-force reports against police officers who wore BWCs compared to those who did not. It was also shared that BWCs show a promising correlation to decreases in civilian fatalities.<sup>48</sup>

The GAM is useful in looking at how BWCs impact behaviour. The use of BWCs falls under the GAM's environmental modifiers that impact the individual's processing of a situation. With the knowledge that their actions are being tracked, the police officer's internal state would be affected, altering the decision-making process and promoting a more thoughtful outcome in the encounter.<sup>49</sup> However, the actual impact is only based on the extent to which the police officer's social identity includes those they are interacting with. A police officer may view their social identity as including fellow officers but not members of the public – a view stemming from notions that police serve as dominant authorities in communities.<sup>50</sup> If they view themselves as superior to or outside of the group they are tasked with protecting, the officer may not experience any psychological pressure to alter their behaviour. Likewise, as communities grow increasingly mistrustful of the police, the impacts of a growing shame culture will only be seen if the officer holds enough of their social identity to include that community as to cause them to be capable of feeling ashamed and therefore conforming.

This idea has appeared in studies that have found that 'officer buy-in' is vital to the effectiveness of BWCs.<sup>51</sup> Likewise, studies that have found changes in civilian fatalities or use of force complaints report that the changes are additionally reliant on law enforcement's investment in BWCs and related technologies such as software and data storage.<sup>52</sup> In cases where law enforcement officers view themselves as a part of the communities they protect, BWCs have proven effective at decreasing cases of excessive force or injury.<sup>53</sup>

---

<sup>48</sup> National Institute of Justice, "Research on Body-Worn Cameras and Law Enforcement."

<sup>49</sup> DeWall et al., 245-246.

<sup>50</sup> Wood, Jennifer D., and Elizabeth R. Groff. "Reimagining Guardians and Guardianship with the Advent of Body Worn Cameras," 61, 70.

<sup>51</sup> Wood and Groff, 70-71.

<sup>52</sup> National Institute of Justice.

<sup>53</sup> Wood and Groff, 64-65, 70.

Surveillance technology only works when it effectively impacts social expectations. Since the outcome of successfully fulfilling the expectations established by the groups held as valuable in a person's social identity is positive, there needs to be a sense of expectation that the person will benefit. These benefits are largely connected to the individual's social identity and whether or not their actions will strengthen or simply maintain their identity and place in their 'in-groups.' If the action – such as theft – and being more likely to be recognised or perceived as committing the action is detrimental to this part of social identity, it becomes a less favourable choice. For this reason, surveillance technology does not effectively stop every type of unfavourable action. In situations like those described above, a person needs to identify themselves as part of the group and feel enough connection to the group to cause any shame or concern that would force them to alter their actions.

## **V. Conclusions**

When considering the relationship that psychological theories such as social identity and shame culture have to surveillance technologies, it becomes clear that there is a strong correlation. As society attempts to alter behaviour and force conformity, such tools work alongside psychological processes to produce the desired outcomes. While some technologies may force an individual to feel embarrassment or shame, resulting in changed actions, the impact is only as strong as the technology's ability to tap into that person's sense of social identity, as seen with the changes in non-violent crime when CCTV is present compared to the lack thereof for violent crime.

To consider the behavioural impacts any surveillance technology may have on the deterrence of crime without addressing the relationship to social identity will result in the ineffectual disbursement of technology. Further research should be undertaken to consider specifically how different cultural approaches to social identity – i.e. individualism versus collectivism – correlate to the successes of these technologies. Psychology proves important in understanding surveillance technology, meaning that it

is vital that concepts such as social identity theory and shame culture continue to be discussed as they provide an explanation to when and how surveillance technologies will affect behaviour.

## Bibliography

- Aloisi, Antonio and Valerio De Stefano. "Essential Jobs, Remote Work and Digital Surveillance: Addressing the COVID-19 Pandemic Panopticon," *International Labour Review* 161, no. 2 (2022): 289–314, <https://doi.org/10.1111/ilr.12219>.
- "APA Dictionary of Psychology." Self-Concept. American Psychological Association, n.d. <https://dictionary.apa.org/self-concept>.
- "APA Dictionary of Psychology." Shame Culture. American Psychological Association, n.d. <https://dictionary.apa.org/shame-culture>.
- "APA Dictionary of Psychology." Social Identity. American Psychological Association, n.d. <https://dictionary.apa.org/social-identity>.
- "APA Dictionary of Psychology." Social Identity Theory. American Psychological Association, n.d. <https://dictionary.apa.org/social-identity-theory>.
- Barber, Gregory. 'San Francisco bans agency use of Facial Recognition Tech,' May 14, 2019. <https://www.wired.com/story/san-francisco-bans-use-facial-recognition-tech/>.
- Benedict, Ruth. "Continuities and Discontinuities in Cultural Conditioning." *Psychiatry (Washington, D.C.)* 1, no. 2 (1938): 161–167.
- Bokhari, Syed Asad Abbas, and Myeong Seunghwan. 2024. "How Do Institutional and Technological Innovations Influence the Smart City Governance? Focused on Stakeholder Satisfaction and Crime Rate" *Sustainability* 16, no. 10: 4246. <https://doi.org/10.3390/su16104246>
- Clarke, Roger. "Information Technology and Dataveillance." *Communications of the ACM* 31.5 (1988): 498-512.
- Coldiron, Roxanna. "Employer Surveillance of Remote Workers and Impacts on Privacy and Cybersecurity in the Workplace". ProQuest Dissertations Publishing, 2022.
- Cornish, Derek B., and Ronald V. Clarke. *Opportunities, Precipitators and Criminal Decisions: A Reply to Wortley's Critique of Situational Crime Prevention*. New York: Criminal Justice Press, 2003.

- Cosmides, Leda, and John Tooby. "Evolutionary Psychology and the Emotions." Handbook of Emotions, 2<sup>nd</sup> Edition (2000).  
<https://www.cep.ucsb.edu/emotion.html>.
- Creighton, Millie R. "Revisiting Shame and Guilt Cultures: A Forty-Year Pilgrimage." Ethos (Berkeley, Calif.) 18, no. 3 (1990): 279–307.
- DeWall, C. Nathan, Craig A Anderson, and Brad J Bushman. "The General Aggression Model: Theoretical Extensions to Violence." Psychology of violence 1, no. 3 (2011): 245–258.
- Doyle, Aaron, Randy K. Lippert, and David Lyon. Eyes Everywhere: The Global Growth of Camera Surveillance / Edited by Aaron Doyle, Randy Lippert, and David Lyon. Abingdon, Oxon; Routledge, 2012.
- Felson, Marcus, and Rachel Boba. (2010). "Chemistry for crime" in Crime and Everyday Life. SAGE Publications, Inc., <https://doi.org/10.4135/9781483349299>
- Flanagan, Owen. How to Do Things with Emotions: The Morality of Anger and Shame Across Cultures / Owen Flanagan. Princeton, NJ: Princeton University Press, 2022.
- Gilligan, James. "Shame, Guilt, and Violence." Social Research 70, no. 4 (2003): 1149–80. <http://www.jstor.org/stable/40971965>.
- Goldstein, Noah J., Robert B. Cialdini, and Vladas Griskevicius. "A Room with a Viewpoint: Using Social Norms to Motivate Environmental Conservation in Hotels." The Journal of consumer research 35, no. 3 (2008): 472–482.
- Heal, Kevin, and Gloria Laycock. Situational Crime Prevention: from Theory into Practice / Edited by Kevin Heal and Gloria Laycock. Edited by Kevin Heal and Gloria Laycock. London: H.M.S.O., 1986.
- Leman-Langlois, Stéphane. Technocrime: Technology, Crime and Social Control / Edited by Stéphane Leman-Langlois. Cullompton, Devon: Willan, 2008.
- Lyon, David. Electronic Eye: The Rise of Surveillance Society. Minneapolis: University of Minnesota Press, 1994.
- Marlow, Chad, and Gary Daniels. "Ohio Bucks a Bad Trend with New Police Body Camera Law: ACLU." American Civil Liberties Union, February 27, 2023.

<https://www.aclu.org/news/privacy-technology/ohio-bucks-bad-trend-new-police-body-camera-law>.

- Milgram, Stanley. *Obedience to Authority: An Experimental View* / Stanley Milgram: Foreword Philip Zimbardo. New edition. London: Pinter & Martin, 2010.
- Miranda, Diana. "Body-Worn Cameras 'on the Move': Exploring the Contextual, Technical and Ethical Challenges in Policing Practice." *Policing & society* 32, no. 1 (2022): 18–34.
- Mirbabaie, Milad, Stefan Stieglitz, Felix Brünker, Lennart Hofeditz, Björn Ross, and Nicholas R. J. Frick. "Understanding Collaboration with Virtual Assistants—The Role of Social Identity and the Extended Self" (2021).
- National Institute of Justice, "Research on Body-Worn Cameras and Law Enforcement." National Institute of Justice, January 7, 2022.
- O'Malley, Pat and Gavin JD Smith. "'Smart' Crime Prevention? Digitization and Racialized Crime Control in a Smart City," *Theoretical Criminology* 26, no. 1 (February 1, 2022): 40–56, <https://doi.org/10.1177/1362480620972703>.
- Rudschies, Catharina. "Power in the Modern 'Surveillance Society': From Theory to Methodology." In *Information Polity* 27 no. 2 (2022): 275-289.
- Shearing, Clifford D., and Philip C. Stenning. "From the Panopticon to Disney World: the development of discipline." In *Criminological Perspectives*. 3<sup>rd</sup> ed. / Edited by Eugene McLaughlin & John Muncie. London: SAGE, 2013. 499-509.
- Sheldon, Barrie. "Camera Surveillance Within the UK: Enhancing Public Safety or a Social Threat?" *International review of law, computers & technology* 25, no. 3 (2011): 193–203.
- Stets, Jan E., and Peter J. Burke. "Identity Theory and Social Identity Theory." *Social psychology quarterly* 63, no. 3 (2000): 224–237.
- Welsh, Brandon C., and David P. Farrington. "Effects of Closed Circuit Television Surveillance on Crime." *Campbell Systematic Reviews*, 4 (2008): 1-73. <https://doi.org/10.4073/csr.2008.17>
- Welsh, Brandon C., and David P. Farrington. "Surveillance for Crime Prevention in Public Space: Results and Policy Choices in Britain and America." *Criminology & public policy* 3, no. 3 (2004): 497–526.



Wood, Jennifer D., and Elizabeth R. Groff. "Reimagining Guardians and Guardianship with the Advent of Body Worn Cameras." *Criminal justice review* (Atlanta, Ga.) 44, no. 1 (2019): 60–75.