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Intervene to be Seen: The Power of a Camera in Attenuating the Bystander Effect

Marco van Bommel^{1,2}, Jan-Willem van Prooijen^{1,2},
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Abstract

Security cameras became such a part of everyday life that their presence may escape from our conscious attention. The present research examines the impact of cameras on intervening in crime, a situation in which the classic bystander effect has been uncovered. In our experimental set up, participants witnessed how another participant (a confederate) stole money, in the presence of either two or no other bystanders. Moreover, we used a security camera to make people feel watched. We expected to replicate the bystander effect without security camera's presence and an attenuation of the bystander effect with a security camera present. As expected, the findings revealed that without a camera, participants were less likely to stop our confederate from stealing money when other bystanders were present. However, when there was a camera present this effect was attenuated: The camera increased intervention when people are otherwise least likely to help—when other bystanders are present.

Keywords

altruism, group processes, helping/prosocial behavior, bystander intervention, reputation, cameras

Closed circuit TV surveillance (CCTV) cameras are immensely popular tools to prevent crime. Although there are no specific numbers for the prevalence of CCTV cameras, estimates range from 1.9 million (Gerrard & Thomson, 2011) to 4.3 million (McCahill & Norris, 2002) in the United Kingdom alone. An average person may be “caught on video” up to 70 times a day. The main purpose of increasing the number of cameras in public places is to create a safer society: Their presence should discourage “would-be criminals” to commit their crime, as people who committed a crime can be identified by checking the recordings (Gill & Spriggs, 2005; Mazerolle, Hurley, & Chamlin, 2002). In the present article, we advance and empirically test the possibility that there may be another, unforeseen, effect of security cameras. The noticeable presence of cameras may change the (prosocial) behavior of people who could potentially help to prevent a crime by intervening.

Our specific interest in security cameras pertains to how it relates to another important factor that influences whether a person decides to intervene or not, namely, the presence of bystanders (Fischer et al., 2011). Decades of research has shown that across many different situations, people are less likely to intervene when others are around (Latané & Nida, 1981). However, researchers have recently sought to uncover potential moderators of this “bystander effect” (e.g., Levine & Crowther, 2008; Van Bommel, van Prooijen, Elffers, Van Lange, 2012). In this study, we reason that the presence of a security camera may be such a moderator. More specifically, we propose that security cameras increase intervention in the presence of others.

Bystander Effect and Public Self-Awareness

The significance of the bystander effect is indicated by the vast number of studies that revealed group size decreases helping behavior (for an overview, see Fischer et al., 2011; Latané & Nida, 1981). Many studies—in the field and in the lab—have shown that the bystander effect occurs in very different settings and applies to various types of helping behaviors. Indeed, the number of bystanders decreased intervention toward crime (e.g., Latané & Elman, 1970) and helping a person who had an accident, such as falling (Solomon, Solomon, & Stone, 1978) or choking on a donut (Tice & Baumeister, 1985). And also in more common situations, the bystander effect has been examined: When someone is asked to donate to charity (Garcia, Weaver, Darley, & Spence, 2009), or when people are asked to share knowledge with each other (Voelpel, Eckhoff, & Forster, 2008), the presence of others diminishes prosocial behavior. The bystander effect was also found at the macrolevel, as

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strangers are helped more in rural than in urban areas (Stebly, 1987). In short, the bystander effect has proven to be a robust phenomenon across different situations.

Perhaps the most common explanation for why the bystander effect occurs is diffusion of responsibility (Garcia, Weaver, Moskowitz, & Darley, 2002; Weesie, 1993). This means that when people experience the misfortune of others while being in the presence of bystanders, they feel less responsible to help the person in need, because they diffuse this responsibility across the other bystanders. This could lead to less strongly experienced negative emotions such as guilt or shame, when a person decides to not intervene. Related to this notion, one could analyze the bystander effect in terms of (implicit) appraisals of costs and benefits (Dovidio, Piliavin, Gaertner, Schroeder, & Clark, 1991). For example, the costs of nonintervention could be the experience of negative emotional states like guilt and shame, and the rewards of nonintervention could be to save precious resources such as time and money. At the same time, the costs of an actual intervention can be quite severe, especially when it comes to intervening into crime. On the other hand, the benefits of intervention can make it very worthwhile to act. For instance, people who intervene may feel good about themselves.

In these cost-benefit analyses of the bystander effect, there has been relatively little attention to an important psychological motive: As shown in various other lines of research, people care very strongly about obtaining a *positive* reputation (Roberts, 1998; Van Vugt & Hardy, 2010) and typically like to be seen as responsible, helpful, and competent citizens (see also Chekroun & Brauer, 2002). One possible reason for this desire is that such a positive public image may be associated with several valuable outcomes. For example, people who display costly helping behavior often gain status in a group and are more frequently chosen as a cooperation partner (Hardy & Van Vugt, 2006).

Certainly, the most efficient way to obtain a good reputation by helping is when other bystanders are around to witness it. One important reason is that reputational gains are greater to the extent that observers—other bystanders—can notice the helpful act. Moreover, one might suggest that reputational gains are also enhanced to the extent that the act is more “heroic” and when the bystanders have access to information that is linked to the good intentions of the helper (so that they cannot readily discount the noble motives underlying it).

A second reason is that the presence of others may under certain specific conditions energize reputation concerns. The presence of others can sometimes serve as a reminder of our reputation (Haley & Fessler, 2005), in that it may induce an awareness that others may view and evaluate your actions (or lack of action). One could think that a bystander should therefore always intervene much more in the presence of others than when he or she is alone. However, it is important to note that the presence of others does not always induce reputation concern by itself. Generally, it has been outlined that reputation concern can be sparked by cues that trigger accountability. Such accountability cues are small signals that help people to

become aware that their behavior may influence how others perceive them (Prentice-Dunn & Rogers, 1982). However, there is evidence to suggest that such cues may even be processed and induce reputation concern independent of explicit reasoning or awareness (Haley & Fessler, 2005). The most commonly used and validated example of an accountability cue is a camera (e.g., Davies, 2005; Govern & Marsh, 2001; Yao & Flanagin, 2006). As a result, it stands to reason that *security* cameras may have similar effects on public self-awareness and may consequentially remind people that intervening could have positive effects on their reputation.

Although the presence of others does not always trigger reputation concerns, recent research suggests that reputation cues (which are highly related to accountability cues) by themselves may also not guarantee a person to become aware that their behavior influences how others think about them. For instance, one study revealed that displaying stylized pictures of eyes makes people contribute more to an honesty box used to collect money for drinks (Bateson, Nettle, & Roberts, 2006). However, Raihani and Bshary (2012) suggest that these cues may not work to increase prosocial behavior in complete anonymity, and perhaps there should be others around to witness the behavior before the cue has an effect (Fehr & Schneider, 2010). In short, the complex interplay of the presence of bystanders and the presence of accountability or reputation cues (such as a security camera) may cause people to behave more prosocially in the presence of a security camera, especially when there are people who can witness the behavior.

There is indeed some preliminary evidence in support for this line of reasoning. A recent study by Van Bommel et al. (2012, Study 2) examined the role of public self-awareness by examining the presence of a webcam on tendencies to provide support, often social-emotional support, for their problems, issues, or doubts. Specifically, people could provide emotional support to another person on a forum, in the (virtual) presence of no one or of 30 people. For example, to send a supporting response to somebody who shared some bad news (e.g., breakup, health issues). When there was no webcam, participants were more likely to provide emotional support when there were no other people on the forum than when there were many. But when their public self-awareness was enhanced, participants were more likely to provide emotional support when many others were on the forum. These findings are in line with the notion that the presence of a webcam might raise reputational concerns and public self-awareness and so may motivate people to provide support—and may attenuate the bystander effect at least for relatively mundane forms of providing social support. The key question, in our view, is whether the presence of an actual camera (not a webcam) in a realistic face-to-face situation (not a social media environment) may also motivate helping, more specifically, whether it will motivate helping in a real emergency situation in which immediate, risky action is called for (not action that can be a product of careful deliberation and that involves little risk). Indeed, we do not know whether a camera may make a real difference in an

emergency setting such as the well-known case of Kitty Genovese, which inspired classic research on the bystander effect.

The Present Study

In this study, we will investigate the influence of a real security camera in a more classic setting to study the bystander effect, namely a crime situation (e.g., Latané & Darley, 1970; Schwartz & Gottlieb, 1976). In our experimental setup, participants witnessed how another participant (actually a confederate) stole money, in the presence of either two or no other bystanders. Moreover, we used a security camera to make people feel watched. The combination of the setting and manipulation should provide a relatively naturalistic way of studying both the bystander effect and the influence of a security camera on nonperpetrators such as bystanders or passersby.

Studying the bystander effect in the presence of a security camera (instead of, for instance, a web camera) has important practical and theoretical implications. Because of the increasing presence of security cameras (e.g., Gerrard & Thomson, 2011)—especially in areas where norm violations such as stealing are particularly likely to happen—we may not pay much attention to them (Mazerolle et al., 2002). At the same time, people are much attuned to cues that indicate reputational consequences of behavior, even when they are out of conscious awareness (Bateson et al., 2006). However, it is not clear whether such cues still influence behavior in the presence of actual bystanders (Powell, Roberts, & Nettle, 2012). Moreover, a security camera is not only pointed at the target participant but also at the other bystanders, the thief, and even the target or victim of the crime. This may cause a security camera to have a very different effect on public self-awareness, as it raises the visibility of the entire situation, including everyone's actions (or the lack thereof), not just those of one individual. Indeed, potentially it could lead to a similar process like diffusion of responsibility, but now the feeling of *visibility* may be diffused across the other bystanders.

To fully understand how cameras influence the bystander effect, it is imperative that we also study bystander behavior in crime situations. Research suggests that there may be important (psychological) differences between providing social support to a person in emotional need on a forum, or concrete forms of helping such as assisting a person to pick up papers (Van Rompay, Vonk, & Fransen, 2009), and actual heroic intervention (or “civil courage”; see, Greitemeyer, Fischer, Kastenmüller, & Frey, 2006) that many people may associate with classic research on the bystander effect. A case in point is a recent study about intervention during crime, which shows that when a criminal situation becomes very threatening, the classical bystander effect may even dissipate, indicating that it is important to research the effect on different levels of severity (Fischer & Greitemeyer, 2013, but see also Dovidio et al., 1991, and Fischer et al., 2001.)

An important feature of criminal situations such as a theft is that the costs of intervention are potentially very high, as confronting the thief could lead to being attacked. One may

therefore anticipate that intervention rates in general would be very low, especially when diffusion of responsibility takes place. However, because of this high cost, intervention may have very strong implications for one's reputation: People who do decide to intervene will be seen as true heroes by the other bystanders. But because people feel less personally accountable in groups, they have to be reminded of this possibility by an accountability cue such as a camera.

In short, to test the effects of (security) cameras on bystander intervention, we designed a study in which we manipulate bystander and security camera presence. In line with decades of research, we expect that without the security camera, bystanders have a negative influence on intervention rates. However, we reasoned that in the presence of a security camera, this effect will be attenuated—and possibly reversed—due to an increased intervention rate in the presence of others, as helping to obtain a positive reputation is most efficient when there is an “audience.”

Method

Participants and Design

Eighty participants¹ (57 female, 23 male) were recruited to participate in our lab study, for €2 (roughly \$2.50 in American currency) or course credits. By means of block randomization,² they were assigned to one condition of our 2 (bystanders: none vs. two) \times 2 (camera: absent vs. present) between-factorial design.

Procedure and Materials

Upon arrival, the participants were welcomed and instructed in the welcoming area of the lab. They were asked to fill out a questionnaire in the adjacent cubicles and were instructed to, upon finishing, come to the desk of the experimenter in the welcoming area to sign a sheet for payment. In the camera condition, we hung a small security camera overseeing this welcoming area. We tried to make the camera visible by positioning it so that it would immediately be in line of sight when entering the room and by having the experimenter face the direction of the camera when explaining the study details. Furthermore, we hung posters throughout the floor which stated there was camera surveillance in some of the rooms. Research shows that this makes the effect of security cameras more pronounced and is a commonly used way to make security cameras more effective (Mazerolle et al., 2002).

While participants were filling out the (nonrelated) questionnaire, the experimenter announced he had to go to the bathroom and would be back in a few minutes. In the bystander condition, two confederates pretended to be fellow participants. They would finish their questionnaire before the actual participant and thus would be waiting for the experimenter to come back. In each condition, one confederate, namely, the one with the role of the thief, was also waiting in a cubicle. The thief ostensibly finished his questionnaire a few moments after the participant. While the participant was waiting, the thief

walked toward the desk of the experimenter where he grabbed a handful of money (about 50–60 Euro's each try) and then walked out of the room.

After little more than a minute, or when the participant intervened, the experimenter returned to the lab, and briefly explained that the theft was part of the study and was performed by an actor. We did this to ensure that during a follow-up questionnaire, every participant—not only the ones who intervened—knew that the situation was a mock up. We then asked the participant to fill out a follow-up questionnaire about their experiences during the theft. This questionnaire contained 2 items about public self-awareness, (*I felt like my behavior could be evaluated*; *I felt watched*, $r(78) = .79$, $p < .001$), and 1 item about feelings of responsibility (*I felt responsible to intervene*). Participants could indicate agreement with each item on a 10-point Likert-type scale (1 = *completely disagree*, 10 = *completely agree*). Additionally, we asked whether they saw a camera or not. At completion of this short questionnaire, participants were thoroughly debriefed, paid, and thanked for their participation.

Results

Intervention

We used binary logistic regression to test the hypothesized interaction between bystander presence (coded 0 for *absent*, 1 for *present*) and camera presence (0 = *absent*, 1 = *present*) on intervention behavior. We coded intervention behavior on a binary scale; people who intervened during the crime got a score of 1, whereas people who did not intervene were scored 0. Relevant to our primary hypothesis, the analysis showed a significant interaction effect, Wald's $\chi^2(1, N = 80) = 5.56$, $p = .02$ (see Table 1). As expected, further analyses revealed that without a camera, bystander presence decreases intervention (an intervention percentage of 15% with bystanders, vs. 45% without bystanders), $\chi^2(1, N = 40) = 4.29$, $p = .04$, which replicates the bystander effect. However, in the condition with a camera this effect is nonsignificant and even suggests a trend toward a reversal (45% versus 25%), $\chi^2(1, N = 40) = 1.76$, $p = .19$. Moreover, as hypothesized, this finding was primarily due to an increase in intervention rates in the bystander present conditions (15% without camera versus 45% with a camera), $\chi^2(1, N = 40) = 4.29$, $p = .04$, not in the bystander absent condition (45% vs. 25%), $\chi^2(1, N = 40) = 1.76$, $p = .19$ (see Figure 1).³ Thus, the findings provide good support for the hypothesis: The presence of a camera significantly attenuates the bystander effect, in that the bystander effect was replicated under no camera conditions but not under camera conditions.

Additional Analyses

Seeing the Camera. As expected—because security cameras are such common objects—we found that fewer than half (45%) of the participants explicitly reported to have seen the camera. The presence of bystanders did not influence how often people

Table 1. Confidence Intervals and Model Information for the Binary Logistical Regression Model.

	B (SE)	95% CI for Exp b		
		Lower	Exp b	Upper
Included				
Constant	-.20 (.45)		.82	
Camera presence (1)	-1.53 (.77)*	.05	.216	.977
Bystander presence (1)	-.89 (.69)	.11	.41	1.56
Camera (1) × Bystander (1)	2.43 (1.03)*	1.51	11.38	85.84

Note: CI = confidence interval; SE = standard error. Model $\chi^2 = 6.44$, $p = .09$. $R^2 = .08$ (Cox and Snell), .11 (Nagelkerke).

* $p < .05$.

reported to have seen the camera, $\chi^2(1, N = 40) = 1.62$, $p = .20$.

Many cues from the environment are not explicitly perceived but still may have an influence on people's behavior or feelings (e.g., Bateson et al., 2006; Dijksterhuis, Smith, van Baaren, & Wigboldus, 2005). We therefore expected that although slightly more than half of the participants did not explicitly report noticing the camera, it may still influence their behavior, that is, the bystander effect could still be attenuated. Indeed, further analysis, with only the participants from the camera condition who did not explicitly report seeing it, again revealed the hypothesized interaction between the presence of bystanders and the presence of a camera (marginally) for people who did not explicitly saw the camera, Wald's $\chi^2(1, N = 62) = 3.44$, $p = .06$.

Public Self-Awareness. We explored whether public self-awareness could give some additional insight into what drives the attenuated bystander effect. A 2 (no bystanders vs. two bystanders) × 2 (no camera vs. camera) analysis of variance revealed that participants in the camera condition reported higher levels of public self-awareness ($M = 5.31$, standard deviation [SD] = 2.99) than participants in the no camera condition ($M = 3.93$, $SD = 2.51$), $F(1,76) = 5.37$, $p = .02$. Moreover, the analysis revealed an (unexpected) interaction effect between bystander presence and camera presence, $F(1,76) = 7.03$, $p = .01$. Simple slopes revealed that the main effect of camera presence on public self-awareness is only observed in the no bystander condition (no camera: $M = 3.13$, $SD = 1.95$, vs. camera: $M = 6.10$, $SD = 2.76$), $F(1, 76) = 12.34$, $p = .001$, but not when there were two bystanders (no camera: $M = 4.73$, $SD = 2.79$, vs. camera $M = 4.53$, $SD = 3.08$), not significant. Although the precise meaning of this interaction awaits future research, one possible interpretation is that participants may, after the theft, retroactively reason that the presence of others makes them less visible on camera.

We reasoned that perhaps public self-awareness would mediate the effect of camera and bystander presence on intervention. As reported, the interaction between camera and bystander presence predicted both intervention (Step 1) and public self-awareness (Step 2), which makes it possible to

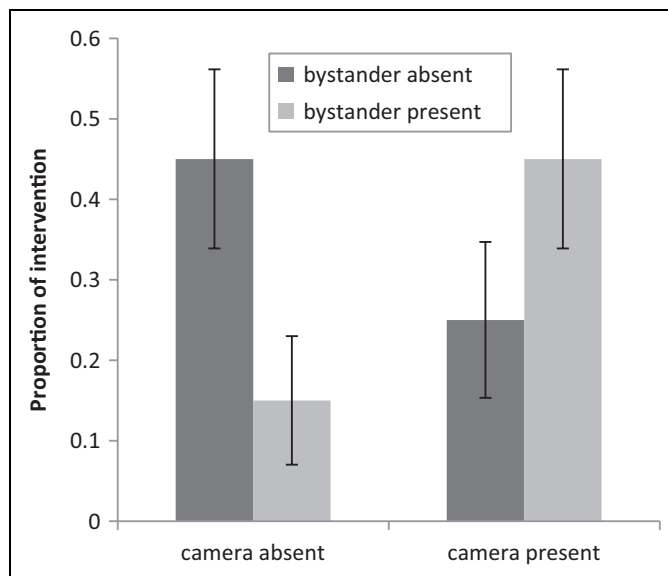


Figure 1. Proportion of intervention per condition. The error bars depict one standard error for each proportion.

perform a mediation analysis (Baron & Kenny, 1986). However, binary logistic regression shows that public self-awareness does not significantly relate to intervention, Wald's $\chi^2(1, N = 80) = .04, p = .85$, and that the interaction remains significant, Wald's $\chi^2(1, N = 80) = 5.33, p = .02$. This suggests that the change in intervention rates may be caused by a less explicit reputation concern.

General Discussion

As expected, the results show that security cameras can indeed increase actual intervention in an emergency situation in the presence of other bystanders. Even in a classic bystander setting with high risks of intervention, the presence of a security camera attenuated the classic bystander effect that has been observed in numerous studies in the lab and in the field (see Fischer et al., 2011; Levine & Crowther, 2008). The experimental setting we created has some features that are essential to the understanding of bystander intervention. First of all, the scene closely mirrors a situation that may occur in everyday life, but most importantly, this setting allowed us to study the bystander effect where intervention occurs in a face-to-face situation, in which time (even a second) matters and in which intervening is potentially quite risky (but signals courage). We reason that during precisely such a situation, people are able to display the types of costly or risky behaviors that may benefit the reputation of an individual in a very efficient manner (e.g., Barclay, 2004; Barclay & Willer, 2007; Hardy & Van Vugt, 2006).

We found that public self-awareness was higher in both the bystander conditions than in the alone no camera condition, which indicates that the number of bystanders was not big enough to create a feeling of being able to hide in the "crowd." This also clarifies why we only found a main effect of camera

presence on public self-awareness in the alone conditions. It suggests that cameras, merely by their own presence (i.e. without bystanders), can induce feelings of public self-awareness. However, as to be expected from the notion that reputation is an ultimate motivation for the heroic behavior, this feeling only caused a positive behavioral change when there was an audience to impress.

We should briefly note strengths and limitations of the present research. Clearly, it is not easy to measure public self-awareness, in that explicitly asking about it could lead to an increase in self-awareness, because thinking about the questions implies thinking about the self (Silvia & Gendolla, 2001). Moreover, there was some tentative evidence suggesting that for our explicit measure, it was necessary for people to explicitly see the camera.⁴ Together, these findings may hint at some complementary benefits of implicit measures for measuring public self-awareness or closely related concepts (e.g., see Eichstaedt & Silvia, 2003). We should also note that, although we think public self-awareness is important to understanding the present findings, we also think that is not the only relevant process. Indeed, for reputation concerns to exist, explicit public self-awareness is not the only prerequisite: Reputation concern is deeply rooted in human psychology and may therefore require little explicit awareness to influence prosocial behavior (Haley & Fessler, 2005).

This study shows that not only criminal behavior can be affected by the presence of a security camera (Caplan, Kennedy, & Petrossian, 2011) but also the behavior of passersby. Although security cameras are found almost everywhere, there are very few studies that investigate their influence on non-criminals, let alone how their presence interacts with what is repeatedly found to be one of the most essential factors when it comes to intervention, namely, the presence of bystanders (see Fischer et al., 2011). One study looked into the effects of camera surveillance on helping behavior in general and found that security cameras increase helping if people are high in need for approval (Van Rompay, Vonk, & Fransen, 2009). Thus, even without incorporating a bystander condition, and using an item dropping paradigm, they found similar results revealing that reputation concerns are very important in helping. As research shows that bystanders play such an imperative role in the decision whether to intervene or not, and there are different possible behavioral outcomes for paradigms with normal helping behaviors versus heroic (civil courage) behaviors (Greitemeyer et al., 2006), we propose that the current study contributes to the wealth of knowledge about bystander intervention.

Clearly, the relevance of the present findings should be emphasized, as cameras have become more and more part of everyday life in many societies in the Western world. We suggest the overall utility of cameras, even though they may be sometimes intrusive and violating privacy needs, can be considerable. In light of this discussion, we wish to note that the attenuation, or elimination, of the bystander effect, may have various positive outcomes for enhancing safety in societies. Indeed, bystanders or "informal guardians" have an

important role in preventing crime (e.g., Cohen & Felson, 1979). Perhaps the regulating power of cameras may help reinforce social norms that prescribe intervention as well as helping and civic cooperation (see Balliet & Van Lange, 2013).

Conclusion

Since the classic research by John Darley and Bibb Latané (1968), the bystander effect is often viewed as one of the most universal phenomena in psychological science. Moreover, it has proven to be a genuine challenge to uncover the key moderators that might help explain this effect as well as contribute to scientifically informed policy for reducing crime. The present research therefore helps to illuminate what may attenuate the bystander effect, the presence of cameras. Using a realistic face-to-face situation involving high risk and time pressure, we showed that the presence of bystanders does not necessarily imply inaction (or failure to intervene), as the classic bystander effect suggests. In particular, the present findings revealed that the camera is able to increase intervention when people are otherwise least likely to help—when other bystanders are present. As such, the present research contributes to an important theoretical insight: Cameras can trigger action in people in a situation where intervention can be seen as quite heroic. And from a societal perspective, cameras may cause a direct reduction in crime (as they might showcase the crime itself) as well as an indirect reduction in crime, in that they showcase the helpers, the people who “intervene to be seen,” especially when other people are around. Sometimes cameras help people to help people.

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Notes

1. The total number was 82; however, 2 participants were excluded from analysis because their behavior was impossible to categorize for the purpose of this study (i.e., helping the thief or committing theft). One participant was assigned to the alone by camera condition. The other was assigned to the alone by no camera condition. We debriefed them but did not give them the follow-up questionnaire.
2. We used block randomization as it was infeasible to remove or install the security camera after each participant was finished.
3. For these analyses, we only looked at actual intervention behavior during the crime; however, some people also reported the crime to the experimenter after it had already happened. As this may yield

some insight into other bystander behaviors that reflect real-life crime situations, such as willingness to become an eyewitness, we decided to rerun the analysis with both intervention behavior and behavior after the crime already occurred. Ordinal regression analysis with bystander presence (coded 0 for *absent*, 1 for *present*), and camera presence (0 = *absent*, 1 = *present*) and their interaction term as predictors for intervention behavior (coded 0 for people who did nothing, coded 1 for people who reported it, and coded 2 for people who actually intervened) yielded similar results: The analysis showed a significant interaction effect, Wald's $\chi^2(1, N = 80) = 6.71, p = .01$. However, further inspection revealed that bystander presence decreases reporting the crime afterward, with or without the presence of a camera (without a camera: a reporting percentage of 10% with bystanders vs. 20% without bystanders, with a camera this was 10% vs. 15%, respectively). This suggests that the processes we assume indeed only materialize for actual intervention during the theft and that reporting after the fact—which by some may even be interpreted as a cowardice form of “tattling or snitching” instead of heroic behavior (see, Tenenbaum, Varjas, Meyers, & Parris, 2011)—is less susceptible to the reputation concerns that are prompted by the security camera.

4. Analysis revealed a positive main effect of camera awareness, $F(2, 79) = 7.07, p < .01$. Contrast analysis revealed that participants who did not explicitly see the camera while one was present scored lower on public self-awareness ($M = 4.11$, standard error $[SD] = 2.53$) than people who did ($M = 6.78, SD = 2.93$), $F(1, 74) = 13.48, p < .001$, but not lower than participants in the condition where there was no camera ($M = 3.93, SD = 2.51$), $F(1, 74) = .17, p = .68$. This suggests that for the explicit measure of public self-awareness, it was necessary to explicitly perceive it. There was also a marginal interaction between camera awareness and bystander presence, $F(2, 74) = 2.78, p = .08$, which showed that the effect of camera awareness on public self-awareness is only significant in the no bystander condition, $F(2, 74) = 8.83, p < .001$, but not in the bystander condition, $F(2, 74) = 1.92, p = .15$. This indicates that the influence of the presence of a security camera on self-awareness may be too subtle to be explicitly experienced, especially in the presence of the (much less subtle) others.

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