Intra-group Regulation of Violence: Bystanders and the (De)-escalation of Violence

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Authors Note

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Abstract

Theories of violence have traditionally predicted that bystanders are less likely to intervene when in the presence of others than when alone. We re-examine this prediction using data from 42 episodes of public violence in "night-time economy" spaces in the United Kingdom, as captured on CCTV cameras. The behaviors of protagonists and bystanders were coded as either escalating or de-escalating acts, and the resulting interaction sequences were examined using state-transition diagrams. Analyses revealed that bystanders play a key role in shaping the trajectory of violence. They contributed more de-escalating than escalating behaviors; and their de-escalating behavior became more rather than less prevalent with more bystanders. This appeared to result from two dynamics: i) bystander interventions usually begin with a de-escalating act towards the target rather than the instigator; and ii) the third bystander act in the sequence was most likely to determine the trajectory of the violence. We conclude with some speculations about the intra-group regulation of violence, and highlight bystanders as an important resource for developing violence reduction initiatives.

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The brutal rape and murder of Kitty Genovese has become a "signal crime" (Innes, 2004) in the history of social psychology. In response to press reports of the murder, Latané and Darley (1968; 1970) went into the laboratory and designed a series of experimental analogues of the Genovese case. These inventive and carefully choreographed experiments led to the discovery of The 'bystander effect', which suggests that bystanders are less likely to intervene in the presence of others than when alone is one of the most robust and reproduced findings in social psychology (Latané & Nida 1982; Penner, Dovidio, Piliavin, & Schroeder, 2005). However, despite this accumulated evidence, the "bystander effect" is often criticized for its lack of utility in terms of assisting our efforts to alleviate violence. As Latané and Nida's (1982) review concludes, "to our knowledge, the research has not contributed to the development of practical strategies for increasing bystander intervention…none of us has been able to mobilize the increasing store of social psychological understanding accumulated over the last decade to ensure that future Kitty Genoveses will receive help" (p. 322).

Unpacking the Bystander Effect

This failure to translate robust theory into effective practice can be traced to three interrelated factors. First, although the original experiments were designed to be analogues of the Genovese murder, two of the most important features—the violence and the gendered nature of the attack—were stripped away (Cherry, 1995). The experiments conducted since Genovese have focused on the presence or absence of others in a variety of non-violent emergencies, leaving a gap in our understanding of bystander intervention in violent episodes. Second, development of the bystander research tradition coincided with an anxiety over, and re-evaluation of, the methodological practices of social psychology. Concerns over both the ethics of deception and the appropriate treatment of research participants meant that it became more difficult to expose people to simulated violence (cf. Miller, 1986, on the impact of the Milgram experiments). This

shift in the empirical landscape meant that there was even less chance that bystander intervention in violence could be explored in ways which attempted to create ecological validity. Third, and perhaps least recognized, the Genovese murder was characterized by a unique form of violence. The fact that the murder happened on the street made the death a public rather than a private spectacle. However, most of the subsequent research has tended to take place in private rather than in public settings. The social relations and obligations that pertain among strangers in public places are, by virtue of their "public-ness", factors that cannot be re-created in a laboratory setting.

While it is clear that violence and social relations in public settings has been neglected in the bystander literature, it is important to acknowledge that there have been real, practical constraints to gathering the data that would allow for robust analysis. In this paper, we use recent developments in closed circuit camera systems (CCTV) technologies as a means to overcome these difficulties and collect the necessary data. Over the last two decades, CCTV facilities have been established in almost all major towns and cities in the UK (Davies, 1996). It is estimated that there are now as many as 4.2 million CCTV cameras in the UK, which equates to approximately one camera for every fourteen people (McCahill & Norris, 2003). Critically, this introduction of CCTV is associated with the rise of the "night-time economy", a term that describes the attempts at urban regeneration through the creation of entertainment spaces based around alcohol (Bianchini, 1995). There are now thousands of bars that offer extended- or 24-hour service, which in turn has produced an explosion of violence in the evenings and at weekends (Finney, 2004). Thus, the bulk of the CCTV contribution is to deal with the violence and anti-social behavior that occurs in the night-time economy. This paper will focus on these incidents, engaging in a systematic analysis of the behaviors of bystanders. By doing so, the paper aims to return to the themes raised by the Genovese murder and explore the behavior of bystanders to public, consequential violent episodes.

Bystander Behavior in Violent Episodes

While the overall bystander literature is large, there are only a few existing papers that address questions of bystander intervention in public conflict and violence. Critically, these studies suggest that, where violence is involved, the traditional bystander effect tends not to occur. For example, in a study involving a simulated rape in a parking lot, Harari, Harari, and White (1985) found that people were more likely to intervene in the presence of others than when alone. Similarly, using a simulated late-night assault in a university building, Schwartz and Gottleib (1976) found that participants were more likely to help in the bystander conditions than in the alone conditions. Finally, Fisher, Greitemeyer, Pollozek, and Frey (2006) found that people were as likely to intervene in group conditions as alone conditions when the perpetrator of violence appeared more threatening.

We also know from Eagly and Crowley's (1986) classic meta-analysis that, in general, men are more likely than women to intervene in situations that allow for displays of chivalry and heroism. Conversely, women have been shown to defer responsibility to men in such situations (Solomon, Solomon, & Stone, 1978). However, as Eagly and Crowley point out, this pattern of gender-related intervention is dependent on particular effects in the local context. For example, while Shotland and Heinhold (1985) suggest that men are more likely than women to intervene in serious emergencies, Fisher et al.'s (2002) more recent finding shows no gender or group size effects in intervention when the emergency involves violence. Rather, women were found to be as likely as men to intervene when faced with a male perpetrator who has behaved in a threatening way, and they continued to do so even when the perpetrator was presented as intimidating and aggressive.

Taken together these studies allow us to draw some unique hypotheses about the role of bystanders in violent (as opposed to non-violent) episodes. It suggests that in the context of violence, the traditional inhibition of intervention as a result of the presence of others may not be

as apparent. Indeed, it even suggests that an increase rather than decrease in group size can facilitate helping behavior. Finally, violent emergencies may also lead to differences in the usual patterns of gender related helping. There is some evidence that women may be as likely to intervene as men in particular forms of violence. Given these related threads of work, we predict that:

H1: Bystanders will intervene in incidents of night-time economy violence.

H2: This intervention will not decrease with an increase in the number of bystanders.

H3: Female bystanders will involve themselves in violence as much as male bystanders.

Bystanders and Implicit "Rules of Disorder"

In addition to the social psychological literature, there are a number of other literatures that provide insights into the behavior of those who might be witnesses to public violence. For example, there is a well established literature on school violence (Eisenbraun, 2007), which pays particular attention to the role of bystanders (Stueve et al., 2006). Over the last few years this literature has moved away from accounts of bullying in terms of the personal characteristics of the bully and the victim, and towards an analysis of the central role of peer and adult bystanders in creating the "architecture" that sustains the bullying relationship (Twemlow, Fonagy, & Sacco, 2004). Researchers suggest that, in order to understand the nature of bullying and to design successful intervention strategies to prevent it, it is necessary to understand the role of the bystander.

At the same time there is a small literature inspired by both anthropology (Riches, 1986) and ethogenics (Harre & Secord, 1972) that points to the implicit social rules which govern public violence. For example, in his study of fighting amongst the violent inhabitants of Tory island, Fox (1978) shows how public violence, which at first seems ubiquitous and out of control, is in fact organized by a series of implicit rules and rituals that are understood by all those who are participants and bystanders. Fox points to the importance of the presence of others

as an audience for the fight, and highlights a repertoire of violent acts that appear to be legitimate in the conflicts. In a similar fashion, Marsh, Rosser and Harré's (1978) study of football fan violence reveals some "rules of disorder", which are understood by rival "hooligans" and serve to shape the form and the limits of acceptable violence. For Marsh et al., football fan violence is not random or formless, but it is something constrained by the roles and the rules that are inhabited by supporters themselves. This is echoed in more recent work in a Social Identity tradition, which shows that violence in a collective setting is shaped by the constraints of group identity and the normative regulation of group members (Tajfel, 1978).

Taken together, this literature suggests that public violence needs to be understood as something more that the product of the dispositions of the antagonists. Specifically, understanding the genesis, maintenance and perseverance of public violence requires the recognition of the key role played by bystanders as an incident unfolds over time. Most importantly, the evidence suggests that bystanders potentially regulate violence by how (and whether) they intervene to shape the trajectory of the violence. To investigate this possible regulation, it is necessary to examine the pattern of behaviors among bystanders and between bystanders and the perpetrators over time. The relationships among behaviors in the interaction sequences will help reveal the impact of bystanders' behavior on night-time violence incidents.

> *RQ1:* To identify regularities in the patterns of interaction between protagonists and bystanders in violent episodes, in particular uncovering how bystanders seek or otherwise to regulate the violence of the protagonists.

Method

Data

Data were closed circuit television (CCTV) clips of incidents recorded in public drinking spaces in two towns in Northwest England. CCTV clips were obtained by permission of the town councils, whose CCTV operators recorded incidents in which there were fights or incidents that had the potential to lead to fights. Recordings commenced at the point at which the CCTV operators noticed that there was potential for violence (e.g., when they noticed aggressive gesturing or behavior) and ended after the police had arrived or when the incident had come to an end (e.g., participants had stopped fighting or moved away from camera view). Data were collected between January 2006 and February 2007.

In this paper we use 42 CCTV clips whose duration ranged from 1 to 8 minutes and whose content conformed to two criteria: i) the clips contained at least 20 behaviors so that they could be meaningfully incorporated into a sequential analysis, and; ii) the clips included at least two bystanders, which allowed us to determine whether or not bystanders work together to shape the trajectory of violence. Of the 42 clips, 6 contained two bystanders (14.3%), 4 contained three bystanders (9.5%), 7 involved four bystanders (16.7%), three contained 8 bystanders (7.1%) , two contained 9 and two contained 10 bystanders (4.8%), and one contained 12 bystanders (2.4%)(M = 5.4, SD = 2.5). All clips contained scenes of fights between two people, typically males (N = 41)[1].

Coding of the CCTV Clips

We coded the CCTV clips in several stages, which are described in the following sections

Identifying actors. The first phase of the coding involved the identification of the roles played by individuals within each clip. While the focus of the research is to track the behaviors of bystanders, their actions are presumably influenced by the behaviors of all individuals

[1] Due to the sparse number of female incidents, clips involving male and female incidents are analyzed together.

involved in the fights. As might be expected, the arguments and fights we examined invariably included a main aggressor (referred to here as the "instigator") and a recipient of aggression (referred to here as the "target"). Therefore, our coding frame recorded the escalating and de-escalating behaviors of the instigator, target, and bystanders who made deliberate attempts to intervene in the incident.

A second important feature of this aspect of coding related to the recipient of an individual's behavior. The orientation of bystander actions was deemed to be important with respect to exploring group-level regulation of violence and thus we recorded the recipient of behaviors (instigator, target or bystander). For example, while bystander actions were often in response to escalating actions by the instigator, the bystander could use escalating and de-escalating behaviors directed towards not only to the instigator but also the target and other bystanders (e.g., supporting instigator by aggressing to the target or attempting to stop other bystanders getting involved).

Coding behaviors. The second phase of the coding involved identifying and classifying the behaviors of the individuals. We coded each behavior as one of two categories, either escalating or de-escalating behavior. Escalating behaviors included hits, slaps, punches, pushes, shoves or kicks, as well as unique behaviors, such as dragging the target across the ground by their hair or clothing. We also included non-physically aggressive behaviors as escalating, which included hand gestures, invading space and removing/adjusting clothing in preparation to fight (e.g., removal of shirt or rolling up sleeves in preparation to fight). The de-escalating actions, ascertained from preliminary viewings of the CCTV data, included blocking the path of a person, physical contact, and other less frequent behaviors such as helping the person put on their shirt which had been removed for the purpose of a fight. Blocking referred to instances where a bystander inserted him or herself between two people without making physical contact. Physical contact involved holding a person back or pulling them away from another person. Behaviors by

the same individual to the same recipient were treated as separate only when there was a gap of at least two seconds between instances of contact. For cases in which a bystander appeared to perform two behaviors simultaneously (e.g., blocking an instigator while making physical contact) we coded the intended behavior (in the case given here, making physical contact) rather than the behavior that may have occurred as a consequence of the intended behavior (e.g., blocking behavior).

Coding reliability. Coding reliability was assessed by having a PhD student code 20% of the clips included in the analysis. Specifically, the second coder worked with the second author for a period of three months. During this time, the coder received instructions on the coding scheme and how to use the video playback software. They undertook several rounds of practice coding using clips that were not used in the assessment of reliability. On completion of the training, the coder engaged in an assessment of reliability that involved two phases. The first checks involved identifying the instigator, target, and active bystanders (together with the gender of each bystander), so the coders were clear about which key participants to code in the main behavioral analysis. Agreement between coders exceeded 90% for all aspects of this first phase of coding.

The second coding check was concerned with the coding of instigator, target, and active bystander behaviors. The reliability assessment for the instigator's actions was based on the accurate matching between behavioral codes and the proximity (defined by time) in which the coders recorded the behaviors. The mappings between behaviors recorded by each coder were to fall within a one-second window. It was essential that the timing was accurate because the sequence analysis is based on the sequencing and nearness of events. Thus, agreement was established when the coders rated the same behavior (aggressive physical, aggressive non-physical and de-escalating) within a one-second time window. The coding also took into account the recipient of the bystander actions, and to be classed as an agreement the coders were required

to identify the correct recipient in addition to accurately recording the escalating or de-escalating nature of the behavior. Thus, disagreements occurred when either: i) one of the coders failed to record an action, ii) there was a discrepancy between the codes assigned to a particular action or iii) there was a mapping between action codes, but the there was over a one-second time lapse between the recording of the actions. Agreement between the coders, based on the total number of agreements, was 82% for the instigators behavior coding. Agreement between the coders for bystander behavior was 85%. Disagreements between coders in both phases were solved through discussion.

Behavioral sequences. To address our research question relating to the patterning of behaviors, we constructed a sequence of behavioral codes for each incident. For simplicity, these sequences retained the temporal order of the behaviors but not their exact timing (i.e., we used event sequences). To capture the contribution of different bystanders when their behaviors occurred after one another, we invoked a second "Other Bystander" identity code. Specifically, when a second bystander acted after an initial bystander's behavior, we identified this behavior as being acted by an "Other Bystander" to differentiate it from the original "Bystanders" behavior. When multiple bystanders acted in a sequence, we would continue to use the "Other Bystander" identity code to differentiate them from the original intervener.

Results

Frequency of Escalating and De-escalating Behaviors (Hypothesis 1)

Table 1 gives the frequency of occurrence of escalating and de-escalating behaviors as a function of the actor and recipient involved in the incident. In an effort to capture the extent to which each type of incident is characterized by escalation or de-escalation, the last column in Table 1 presents the ratio between escalating and de-escalating behaviors. The ratio equals the number of escalating behaviors that occurred across the incidents divided by the number of de-escalating behavior that occurred. A ratio above 1.00 indicates that more escalating than de-

escalating behaviors characterizes the actor-recipient exchange. In contrast, a ratio below 1.00 indicates that de-escalation dominates the exchange.

A number of interesting observations may be made on the basis of Table 1. First, the idea that bystanders do not intervene in violent emergencies is false. Rather, in support of H1, the data suggests bystanders play a very active role in the incidents, engaging in escalation (287 behaviors compared to the instigator's 287) but more frequently de-escalation orientated interventions (1152 behaviors compared to 31). Second, while bystander intervention is most likely to be an attempt to de-escalate rather than escalate conflict (1152 compared to 287), the patterns of behavior are shaped by the kinds of relationship. Thus bystander behavior towards the target is more evenly balanced between escalation and de-escalation (ratios of .27 and .81) compared to their behavior towards the instigator or other bystanders, which is heavily biased towards de-escalation (ratio M = .18). The difference in emphasis here is something in the order of a 3-fold magnitude (i.e., bystanders are approximately 3 times more likely to use escalation against targets than they are against the instigator or bystander).

Group Size and Bystander Interventions (Hypothesis 2)

To determine whether or not group size has an impact on the degree of escalating or de-escalating behavior within the incident, we fitted linear and quadratic curves to scatter-plots of group size plotted against: i) number of escalating acts; ii) number of de-escalating acts; and iii) escalating minus de-escalating acts. Note that, in effect, the third measure controls for incident length, since a positive correlations between escalating acts and group size, and de-escalating acts and group size, but no correlation between the third measure (i.e., escalatory - de-escalatory) and group size, would suggest that the observed positive correlations are merely a function of number of acts (i.e., incident length).

Results suggest a positive relationship between group size and the number of escalating and de-escalating behaviors, but a negative relationship between group size and the relative

amount of escalating and de-escalating (i.e., the third difference measure). Specifically, in relation to the number of escalating behaviors, we found that the linear curve fitted the scatter-plot of escalating behaviors and groups size with r =. 230, which was only slightly improved by the quadratic curve fitting r = .231. However, these curves provided only a weak modeling of the data and thus no strong support for the idea that escalation increases with increasing group size, $F(1,40) = 2.23$, *ns*, and $F(2,39) = 1.10$, *ns*, respectively. In relation to the number of de-escalating behaviors, the linear curve fitted the scatter-plot of de-escalating behaviors and group size with r = .461, which was only slightly improved by the quadratic curve r = .464. Both of these models provided significant fits to the data, $F(1,40) = 10.81$, $p < .01$, and $F(2,39) = 5.35$, $p < .01$, respectively. Finally in relation to the third difference measure, the linear curve fitted the measure with r = -.315, and this was improved marginally by the quadratic curve, which fitted with r = -.320. However, an analysis of residuals suggested that the quadratic curve was not capturing a substantive aspect of the data beyond the linear model. This conclusion was consistent with the significant fit for the linear model, $F(1,40) = 4.40$, $p < .05$, but non-significant fit of the quadratic model, $F(2,39) = 2.22$, *ns.*

These correlations suggest that, as group size increases, the frequency escalating and de-escalating behaviors increases. However, the number of de-escalating behavior increases at a faster rate; a ratio of approximately 1 escalatory act to every 1.3 de-escalatory acts. Thus, since the difference between the quadratic curve fit and the linear curve fit for the difference measure was not significant, an increase in group size seems to lead on average to more behaviors overall, and more de-escalation relative to escalation, regardless of group size.

Female Involvement in Violence (Hypothesis 3)

Table 2 presents the mean frequency of escalating and de-escalating behaviors as a function of recipient and actor gender. As can be seen in Table 2, female bystanders play a significant role in the violent episodes by contributing both escalating and de-escalating acts that

are primarily directed at the instigator and other bystanders. This pattern, and the general pattern of female behavior, is very similar to the pattern observed for male behavior. To test the prediction that female behavior in violent episodes would be similar to that of men, we submitted the frequency of escalating and de-escalating acts per bystander for each case to a 2 (Gender: Male vs. Female) x 2 (Valence: Escalating vs. De-escalating) mixed ANOVA with Valence as the within-subjects factor. We found a main effect of Gender with men contributing more acts on average than women, $F(1, 82) = 6.04$, $p < .05$, $\eta^2 = .07$, a main effect of Valence with males and females contributing more de-escalating than escalating acts, $F(1,82) = 8.50$, $p < .01$, $\eta^2 = .10$, but no significant interaction between Gender and Valence, $F(1, 82) < 1$, *ns*. The absence of an interaction effect is critical because it suggests that, in contrast to what might be expected from the traditional perspective on female intervention, there is no difference in the type of intervention (i.e., escalating or de-escalating) made by males and females in night-time violence.

Exploring the Trajectory of Violence (Research Question 1)

To derive a better understanding of the patterns of bystander intervention in the incidents, we examined the behavioral sequences derived from the CCTV footage using state-transition diagrams. These diagrams are based on the assumption that the underlying organization of an interaction will be most readily appreciated by examining the pattern of contingencies among behaviors. State-transition diagrams represent these contingencies schematically as arrows connecting "nodes" of behaviors. Specifically, in our analysis, each of the behaviors listed in Table 1 were represented on the diagram using a rectangular node. An arrow was then drawn between two nodes when the behaviors associated with the nodes were found to occur next to one another in the sequences. The direction of the arrow corresponded to the temporal order in which the behaviors occurred. For example, if bystander de-escalation occurred immediately after instigator escalation in the sequences, then we placed an arrow from the node representing instigator escalation to the node representing bystander de-escalation.

To capture the significance of the transitions among behaviors, we examined the extent to which a particular contingency occurred more or less frequently than might be expected by chance. This was achieved in two stages. First, we computed the transitional probability of each contingency by dividing the frequency of occurrence of a particular *a* then *b* contingency with the frequency of occurrence of *a* followed by any behavior. When the standardized transitional probability was between .10 and .15 we used a dashed line, when between .15 and .20 we used a solid line, when between .20 and .25 we used a double-line, and when the probability was above .25 we used a triple-line.

Second, we converted the conditional probabilities into *z*-scores to identify those transitions that occurred significantly more often than might be expected by chance. Specifically, standardized probabilities were calculated for each of the conditional probabilities beginning with the same initiating behavior (i.e., behavior *a* followed by any behavior). This enabled us to identify those behaviors that were significantly more likely to occur after each of the behaviors, and therefore develop a picture of the likely sequence of events in a night-time violent interaction. In the state-transition diagrams that follow, a standardized conditional probability above 1.96 ($p < .05$) and above 2.56 ($p < .01$) are identified with one and two stars ("*"), respectively. This type of approach has been used successfully in previous research to examine the patterns of behavior in various social activities including marital conflict (Gottman, 1979), traffic violations (Clarke, Forsyth, & Wright, 1998, 1999), violent episodes between individuals (Beale, Cox, Clarke, Lawrence, & Leather, 1998), and terrorist life histories (Jacques & Taylor, 2007).

Figure 1 shows a state transition diagram that summarizes the most predictable sequence of behaviors that occur after an instigator shows aggression towards the Target. We use this behavior as the basis for the diagram because it serves to initiate episodes of night-time violence, and in all our cases it was the precursor to behavior by the bystanders. For most behaviors, the

most frequent subsequent behavior is a repeat of the same behavior. For example, as can be seen in Figure 1, the most frequent behavior to occur after the instigator acts aggressively towards the Target is a second instance of the instigator being aggressive. While such repetition of behavior may result in part from our fine-grain coding of the interactions, it is interesting to note how pervasive this repetition is across different behaviors. This degree of repetition or maintenance is evidence in other areas where the interaction is characterized by a threatening, high-stakes context (Taylor, 2002; Taylor & Donald, 2007).

Figure 1 suggests that, when we explore alternate acts to aggression from the instigator, there are two major sequences, both of which involve some form of intervention by a bystander. The first, most frequent invention involves bystander intervention as a de-escalating act towards the instigator of the aggression. The second sequence begins with a bystander making a de-escalating act towards the target. Thus, both events involve active bystander intervention and both involve de-escalation. We consider each of these two sequences of intervention in the following sections.

Intervention directed at the instigator. Figure 1 shows a state transition diagram of the sequence of behaviors that follow instigator escalating behavior towards the target. The most frequently occurring sequence begins with a bystander attempting to de-escalate the aggression of the instigator. As can be seen from Figure 1, this is followed by one of three patterns of interaction. One pattern is that the instigator behaves aggressively towards the target again (but not the bystander). This is usually followed by a second bystander making a de-escalating act towards the instigator, which reflects a concerted intervention by more than one bystander towards the instigator. A second pattern involves another bystander using a de-escalating behavior towards the bystander. This might be to prevent a new cycle of aggression emerging between the instigator and the bystander. However, it does on a few occasions (probability = .08) lead to further acts of aggression by the instigator who may read this as undermining the

intervention. Finally, the third pattern to emerge involves the second bystander using a de-escalating behavior towards the target. At this point, interactions typically have two bystanders trying to de-escalate both the target and the instigator. This trajectory points to the importance of understanding the role played by bystanders in determining the trajectory of the violence.

Bystander de-escalation towards the target. As can be seen from Figure 1, the second, frequent alternate act after instigator aggression towards the target is a de-escalating act by a bystander towards the target. Subsequent to this, the next behavior in the interaction is typically that of a second bystander who moves towards de-escalating the instigator. Here we have a similar sequence to that in Figure 1, where one bystander engages in de-escalating the instigator and one engages in de-escalating the Target. From this point, it appears one of three types of interaction unfold. One occurring pattern is when the interventions of the bystanders do not succeed and the instigator continues his aggression against the target. A second pattern involves the original intervener, or a third bystander, who reinvigorates his or her efforts to de-escalate the target. The third response to intervention involves a third bystander stepping in and discouraging the bystanders from further intervention. This third intervention can have severe consequences. Specifically, in instances when a bystander does attempt to remove the de-escalating influences of other bystanders, either it has no immediate effect and the bystanders begin their cycle on de-escalation again, or the instigator takes that as a cue to continue his or her aggression.

Discussion

This paper examined the interventions of bystanders in night-time economy violence episodes as captured on CCTV footage. Our analysis suggests that night-time economy violence should not be understood as an interpersonal interaction between two people that is observed passively by bystanders. Rather, far from being observers of such violence, bystanders make a significant contribution to the event. They can act to escalate and to de-escalate the violence, however, they are most likely to contribute de-escalating behaviors rather than escalating behaviors. Analysis also suggests that, contrary to traditional thinking about bystander behavior, female bystanders are as likely to intervene in violence as male bystanders. They contribute de-escalating and escalating acts in much the same was as their male counterparts.

Perhaps our most surprising finding is the relationship between number of bystanders and the occurrence of escalating and de-escalating behaviors. Analysis of the effects of group size on bystander behavior reveals that, contrary to the traditional model, bystanders are no less likely to intervene as group size increases. In fact, in our data, both escalation and de-escalation by bystanders increases as group size increases. This may of course be because there are more people to contribute acts. However, when we examined the ratio of escalation to de-escalation by group size, we found that group size promoted de-escalation over escalation. Increasing group size led to a greater likelihood of bystanders contributing de-escalation rather than escalation to the unfolding incident. The role of bystanders appears to be one of regulating rather than fueling the violence.

Understanding the Bystander Role

To better understand the role of bystanders in shaping the trajectory of behaviors, we examined the transitions among behaviors in the interaction sequences. The two principle sequences of behaviors found in our analysis suggests that bystanders play a critical role in shaping the development of the incident. One of the principal interventions that we identified focused on de-escalating the target. This was typically followed by an alternative bystander trying to de-escalate the instigator. At this "mutual de-escalation" juncture, we found that the third bystander's behavior was critically important. If the third bystander's behavior is one that can be interpreted as undermining efforts at de-escalation, then the violence was typically found to continue or escalate. If the third bystander's behavior was supportive of the de-escalation efforts, then the interaction would continue on a de-escalating trajectory until this norm was broken.

A second principal intervention occurred when a bystander used a de-escalating behavior towards the instigator. This had one of three outcomes. First, the instigator again behaves aggressively towards the target, and this is followed by a second bystander engaging in de-escalation towards the instigator. This can be interpreted as evidence of collective support amongst bystanders attempting de-escalation. Second, a subsequent bystander intervenes with the first bystander, perhaps as a way of ensuring that the conflict does not escalate between instigator and bystander. However, if this can be interpreted as weakening the strength of intervention by bystanders it can lead to more aggressive acts by the instigators towards the target. Third, a second bystander attempts to de-escalate the target. This route looks similar to the first route, but with a mirror image first step.

Implications for Understanding the Regulation of Violence

Clearly the analysis suggests that bystanders are playing a crucial role in determining the trajectory of each episode. This raises the question of the degree to which the bystanders can be seen as similar to those inferred by the term used in the bystander literature. In the social

psychology literature, bystanders are usually assumed to be strangers to each other and to those in need of help. In a similar fashion, the commonly held view about night-time economy violence is that it is usually "stranger-on-stranger" violence and that protagonists are not usually known to each other. While we have no definitive way of knowing what the relationships are between the main instigator, the target or the bystanders, the patterns of bystander behavior suggest that they are not strangers (e.g., many of the bystanders were drinking together prior to the violent episode). To understand both the nature of the violence and the behavior of the bystanders, it is important to analyze these events at a more social or group level.

One example of the need to consider group-level dynamics when examining violent conflict comes from the evidence of informal regulation that emerged in our data. Bystanders are clearly involved in trying to keep things under control. They engage (for the most part) in sustained attempts to prevent the escalation of violence. Moreover, different bystanders appeared to take on different roles in the incident. Bystanders divided up tasks to engage in parallel de-escalation of both the target and the instigator. Finally, we found evidence suggesting the importance of social support. If bystanders are seen to be united (i.e., all acted the same way), then de-escalation was likely to be successful. If there were reasons to assume that there is no consensus about the merits of de-escalation (i.e., one bystander used escalating behavior), then violence was likely to continue or escalate.

If these patterns suggest order and informal regulation of behavior by bystanders, we need to ask why this might be. We also need to know how the patterns of regulation emerge. This is where the sequence analysis is important. The analysis of transitional states points to some of the moments where the informal regulation may break down or be disrupted. Understanding this will be one of the keys in utilizing this kind of social psychological knowledge to devise successful violence regulation strategies.

Advantages and Limitations of the CCTV Data Set

As we have already argued, public space CCTV footage provides a unique opportunity to examine the role played by bystanders in violent emergencies. The primary strength of the data is that it digitally captures naturally occurring behavior in real time. Thus, it provides a high quality record of events that can be retrieved and analyzed at leisure. This allowed us to overstep the usual limitations of methods like contemporaneous note-taking or *in situ* coding. Moreover, it allows such access without the usual ethical and practical constraints of experimental studies of violent conflict situations.

Of course the data also has a number of important limitations. Perhaps most importantly, there are no sound recordings to accompany the action. Thus, we had no access to the meanings participants may be imposing on the action and no clear verbal qualification of the meanings of gestures and acts as they emerge in real time. Interestingly, this limitation also became a source of strength. In the absence of talk, the focus of our analysis had to be on the behaviors of participants. This meant that the justification for theoretical and empirical claims had to be based on an analysis of patterns of observed behavior alone. In that sense, our methodological approach shares something with those interested in the behavior of non-human primates (cf. de Waal, 2006; de Waal, Aureli, & Judge, 2000).

A second limitation is the absence of information about the individuals in the interactions. Data protection legislation meant that we have no information on important factors that identify the individuals in the incidents. Thus, we have no information on factors such as the history or dispositions of the individuals involved; the nature of the current dispute; the relationships between those in the incident (i.e., whether they are known to each other or not); or the history of the relationship between participants. All of these limit the generalizability of our conclusions to conflict situations in general.

A final important limitation to note is the kind of social interaction itself. As the episodes

of violence are all part of the "night-time economy", it is inevitable that most, if not all, of the participants will have consumed alcohol, some to a significant degree. This might lead to the conclusion that the analysis of such data can tell us little about the behavior of bystanders under normal conflict conditions. It could be argued, for example, that the people in the CCTV footage will be significantly dis-inhibited; that their judgment will be impaired, and that their behavior will not be subject to the usual social constraints and controls. However, while it is true that alcohol plays a significant role in the emergence of aggression (Ito, Miller & Pollock 1996), there is no straightforward, causal relationship between alcohol and violence (Graham & Wells, 2003; Homel et al., 1992; Marsh & Fox-Kibby, 1992). The evidence suggests a range of variables which both moderate and mediate the violence. Searching for patterns in the behavior of those involved in interactions in the night-time economy still holds the promise of revealing important insights into the behavior of bystanders in the context of violence.

Conclusion

Most current research on violence, or on attempts to reduce it, begins from the assumption that violence is the outcome of an interaction between instigator and victim. Bystanders are seen at best as an audience for whom violent acts are carried out, or as people unable or unwilling to intervene. Intervention is assumed to be something which must come from the outside. This research suggests that there is already the will to regulate violence by those who may already be known the instigator or the victim. More often than not, male and female bystanders were found to use de-escalating behaviors directed towards both the instigator and target. The impact of their interventions was to regulate the violence in the incident. As such, bystanders appear to offer an important and under-utilized resource that should be enrolled into strategies to tackle this kind of public violence.

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Table 1.

Frequency of Occurrence of Escalatory and De-escalatory Behaviors as a Function of Actor and Recipient.

Actor	Recipient	Frequency of Behavior		Ratio[1]
		Escalation	*De-Escalation*	
instigator	Target	287	31	9.26
Target	instigator	110	26	4.23
	Bystander	17	15	1.13
Bystander	Bystander	29	220	0.13
	instigator	72	323	0.22
	Target	44	163	0.27
Other Bystander	Bystander	38	213	0.18
	instigator	28	139	0.20
	Target	76	94	0.81

[1] Ratio equals the number of escalation behavior divided by the number of de-escalation behavior.

Table 2.

Mean Frequency of Occurrence of Escalating and De-escalating Behaviors as a Function of Gender and Recipient.

		Recipient			
Valence	Gender	*Bystander*	*instigator*	*Target*	Total
De-escalating	Female	3.40 (4.8)	3.90 (4.8)	2.21 (3.0)	9.52 (10.3)
	Male	7.29 (8.5)	7.71 (6.4)	4.64 (4.9)	19.64 (15.0)
Escalating	Female	.71 (1.7)	1.17 (2.3)	2.24 (5.4)	4.12 (7.8)
	Male	1.31 (3.3)	3.81 (4.5)	7.43 (7.7)	12.55 (10.6)

Figure 1. State Transition Diagram for the First Main Trajectory of Bystander Intervention.

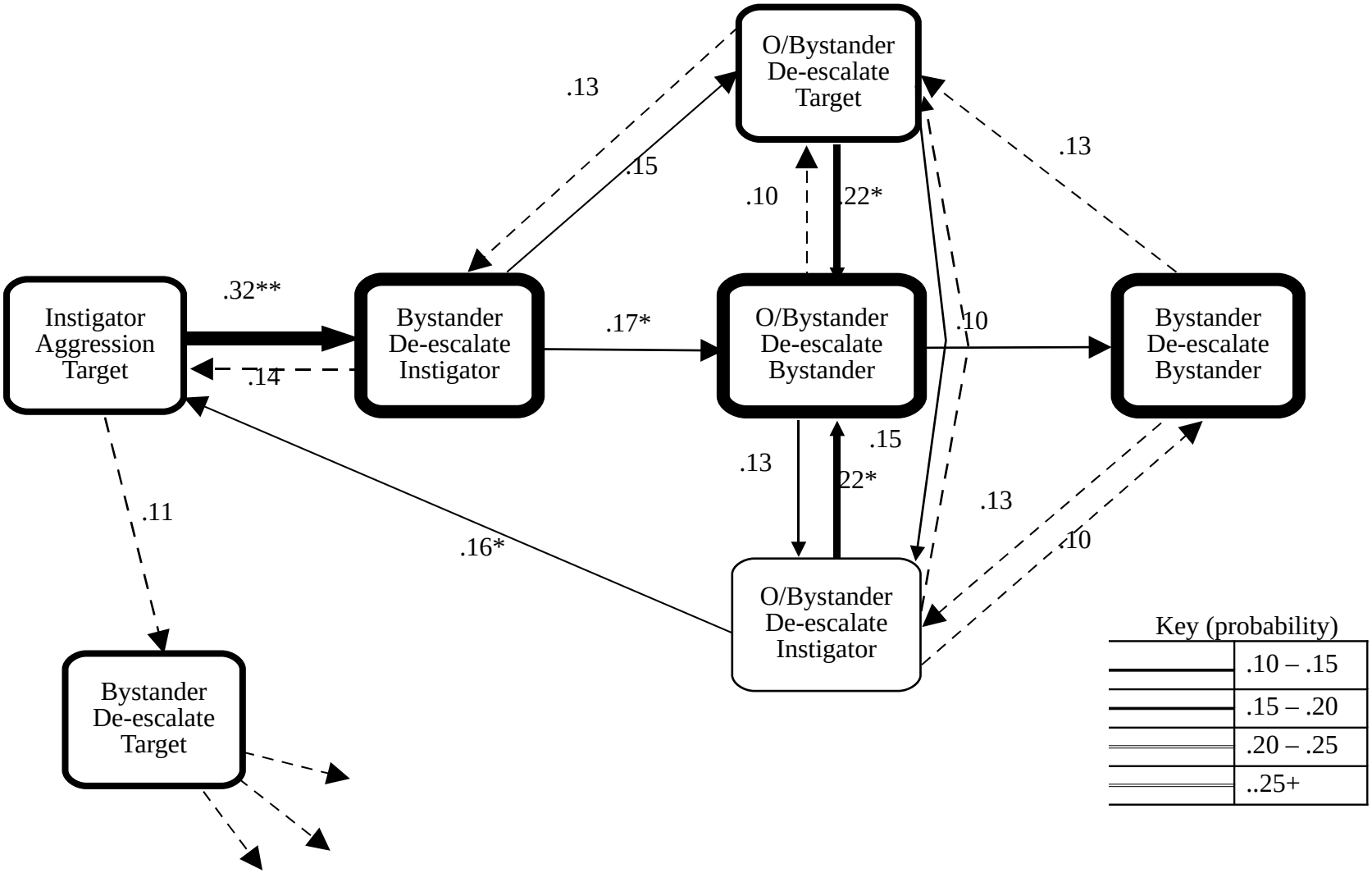

Figure 2. State Transition Diagram for the Second Main Trajectory of Bystander Intervention. Note the Initial instigator Aggression is retained on this Figure.