THE EFFECTS OF COUNTERFACTUAL THINKING ON REACTIONS TO VICTIMIZATION

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Counterfactual thinking (CFT), which involves envisioning alternate outcomes to a past event, has been shown to affect people's perceptions of, and attributions regarding, the causes of that event. Understanding the elements of a crime that may trigger CFT will assist with further elucidating when and why victims report crimes, allowing law enforcement and policymakers to better calibrate the potential for underreporting and use reporting data effectively when shaping crime policies. In an experiment using vignettes, we manipulated characteristics associated with an imagined crime event in order to investigate the effect of those characteristics on crime reporting. A characteristic which past research has shown to trigger CFT (typicality of routine) and another that has been shown to trigger reporting (severity of monetary loss) were manipulated in the vignette. Reactions to victimization (e.g., anger) and reporting behavior were examined. College students read a stimuli paragraph and imagined they had their purse/wallet taken as they walked home. The study manipulated the amount of money stolen (i.e., \$5, \$40, \$75) and typicality of routine (i.e., whether the typical route or atypical route home was taken). Results demonstrated that increased severity and taking an atypical route home both increased the likelihood of reporting a crime to police. In addition, typicality of routine and severity of monetary loss interact to affect victims' anger response to the crime. Finally, in an indication that typicality of routine likely increased CFT, as would be expected based on the literature, participants who read vignettes involving an unusual route being taken were more likely to believe that luck played a role and that they could have prevented the incident. No gender differences were found.

When an individual is victimized, he must make crucial decisions, including the decision whether to report the crime. Crime reporting is important for a number of reasons (e.g., Gideon & Mesch, 2003). From the perspective of the legal system, reporting is important because it helps capture criminals and may deter them from committing future crime. Additionally, when crimes go unreported, police are less accurate in predicting

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where criminals may offend next because they have less precise information on crime patterns. Because police in some jurisdictions expend much effort and money mapping crime patterns (e.g., Anselin, Cohen, Cook, Gorr, & Tita, 2000), it is important that they have the most accurate data available.

Crime reporting is also important because it can affect the victim's well-being; seeking help from others (e.g., police, friends, health professionals) is an integral part of the coping process (Bard & Sangrey, 1986; Frieze, Hymer, & Greenberg, 1987). Crime victims suffer from physical and mental health problems that often last for years and negatively affect both the victim and the victim's family (Campbell & Wasco, 2005; Faravelli, Giugni, Salvatori, & Ricca, 2004; Koss & Figueredo, 2004). Crime victims often feel unsafe, vulnerable, and find it hard to believe that they could be victimized, an effect called an "illusion of invulnerability" (Janoff-Bulman, 1989).

Further, victims frequently experience a sense of inequity or injustice after the victimization (Frieze et al., 1987). If crimes are not reported and criminals remain free, victims may not regain feelings of safety or justice, which could exacerbate the negative effects of victimization. It is also unlikely that victims will receive restitution (e.g., monetary reimbursement or the return of stolen goods) for their losses if the crime is unreported.

For these reasons, it is important to both the legal system and victims to ensure that crimes are reported. In order to determine how best to encourage crime reporting, the factors that can encourage or discourage reporting need to be studied. The current study investigates characteristics associated with a crime event and is based on the literature examining counterfactual thinking (CFT). CFT is "if only" thinking which allows an individual to "undo" an event by imagining alternate outcomes. CFT research demonstrates that this phenomenon often changes the way people react to various situations, such as crimes and accidents. Specifically, CFT increases negative emotions and perceived severity of an incident; as such, CFT is expected to increase anger and encourage crime reporting.

Severity of the crime is also of interest because previous research has indicated that this is a very strong predictor of the decision to report crime (e.g., Greenberg & Beach, 2004). In addition, severity of crime may interact with CFT in that a severe crime may be reported regardless of the presence or absence of CFT, while a low severity crime may only be reported if CFT is present.

In sum, the present research will investigate how CFT and crime severity affect crime reporting, perceptions of the crime (e.g., how much luck was involved) and emotions. Understanding the elements of a crime that encourage crime reporting will allow law enforcement and policymakers to better calibrate the potential for underreporting and use reporting data effectively in shaping crime policies.

COUNTERFACTUAL THINKING

"If only" thinking permeates our daily lives; for example, one might think, "if only I had done something different, I would have avoided this negative outcome (or caused a

positive outcome)" (see, e.g., Miller & McFarland, 1986). The easier it is to finish the "if only" sentence, the greater the accompanying emotions (e.g., regret, sympathy). In imagining that a man is injured in a robbery of a convenience store that he regularly frequents, it is likely that one would feel sympathetic; however, one would probably feel *even more* sympathy if he had been in a store which he rarely visits (e.g., Miller & McFarland, 1986). Presumably, this increase in sympathy occurs because the presence of an abnormal event (i.e., going to the unusual store) makes it easier to complete the "if only" sentence. In other words, it is easier say, "he would have avoided injury if only...." in the scenario where the man went to the store he rarely frequents as compared to the scenario in which he went to his regular store. Such thinking is counterfactual in nature and is an area of research that has been the topic of much study (see e.g., Mandel, Hilton, & Catellani, 2005; Roese, 1997).

The effects of CFT are predicted by *norm theory*, which suggests that the abnormality of an event leads to increased affective reactions because abnormal events are more likely to evoke alternatives (counterfactuals) that could have happened but did not (Kahneman & Miller, 1986). It has also been found that decreased temporal distance increases the perception of an event being abnormal, thus increasing the likelihood of CFT. When a person narrowly misses an outcome (i.e., a "near miss" counterfactual), the event evokes greater emotion than if the person missed the outcome by a greater amount of time (Kahneman & Miller, 1986). In a test of this theory within a crime context, both abnormal events and near-miss counterfactuals were found to elicit greater sympathy for the victim and more severe punishments for the defendants, with the affective reaction of sympathy serving as the mediator for the punishment and severity judgments (Macrae, Milne, & Griffiths, 1993).

CFT also has been found to affect other legal judgments, such as assignments of causality and blame to both victims and offenders of a crime (Branscombe, Owen, Garstka, & Coleman, 1996). Victims are blamed more and offenders are blamed less in instances where victims would not have been harmed "*if only*" they had acted differently. However, if the victims would still have been injured had they acted differently, the offender was attributed the most blame and the victim attributed the least blame (Branscombe et al., 1996).

The effects of CFT on judgments may be due, in part, to the way CFT influences affective reactions such as feelings of regret and perceptions that crimes are preventable and/or unlucky (Anderson, 2003; Turley, Sanna, & Reiter, 1995). For instance, Turley and colleagues (1995) found that participants saw victims as more unlucky and believed that victims would experience more regret and self-blame if they were injured after taking an unusual route home as compared to a usual route home. Additionally, it was found that participants experiencing CFT (i.e., those who read the "unusual route home" scenario) thought the crime was more preventable and proposed longer prison sentences for offenders.

Similar effects are found in civil cases. Miller and McFarland (1986) tested norm theory and CFT and found that participants gave greater monetary compensation in a civil trial to a victim who was injured during a robbery while engaged in an unusual routine as compared to a usual routine. In a second study, participants gave increased monetary

compensation to victims who almost avoided a negative outcome by a very small margin as compared to victims who could have avoided the negative outcome by a wider margin (Miller & McFarland, 1986).

As with criminal cases, it appears that CFT's effects on legal judgments may be mediated by emotional reactions. For example, Macrae (1992) found that the presence of CFT increased feelings of sympathy and victim compensation; specifically, victims who broke their usual routine or took an unusual route were perceived with more sympathy and received higher compensation than those who followed their usual routine or took their usual route. Furthermore, defendants in counterfactual situations were found to be more negligent and received greater fines. Thus, norm theory predicts that an abnormal event will affect perceptions of sympathy, liability judgments, and compensation in civil cases.

While CFT has been found to affect a variety of decisions, one of the areas that has yet to be explored is the victim's decision regarding whether to report a crime to the police; this was noted by Macrae and colleagues (1993). Based on the existing literature, it would be predicted that CFT influences victims' emotional reactions (specifically, anger) and perceptions of crime (e.g., severity). CFT could also lead to greater willingness to report a crime.

INJURY SEVERITY AND EMOTIONAL RESPONSES

A second variable of interest is injury severity. It is possible that CFT may only encourage reporting when a mild injury results. If an injury is severe, a victim may report the crime regardless of whether she is experiencing CFT; however, if the injury is mild, experiencing CFT may encourage the victim to report a crime that would otherwise go unreported.

Research has consistently found that injury severity is a strong predictor of seeking professional help; specifically, seeking help increases as the injury becomes more severe (Greenberg & Beach, 2004; Kuehnle & Sullivan, 2001; Millar, Stermac, & Addison, 2002; Ruback, 1994). Greenberg and Beach (2004) used telephone interviews of property crime victims to examine determinants of reporting decisions. In a telephone interview study of victim reporting, it was found that victims with a higher monetary loss were more likely to report the crime (Greenberg & Beach, 2004). Likewise, Kuehnle and Sullivan (2001) examined self-reports of anti-gay victimizations that were reported to a victim program and found that all serious crimes (i.e., leading to hospitalization or death) were reported. Accordingly, it is expected that greater injury (operationalized as increased monetary loss) will lead to increased reporting in the present study.

Monetary loss is also manipulated to test for interactions with CFT, as it is possible that CFT may not influence reporting at all injury levels. Specifically, CFT may encourage reporting of low-injury crimes (which otherwise might go unreported); however, CFT may not affect reporting of high-injury crimes (which would likely be reported regardless of CFT). As reviewed above, past research suggests that CFT's impact on judgments may arise from its impact on emotions. Victim reporting research has demonstrated that heightened emotional responses to crime, such as anger, lead to increased reporting (Greenberg & Beach, 2004; Greenberg, Wilson, Ruback, & Mills, 1979). A severe injury or loss could lead to increased anger, which increases the chances the victim will report the crime. Thus, the present research will examine whether emotional reactions mediate the decision to report.

OVERVIEW OF EXPERIMENT

The present research examines whether CFT and severity of monetary loss affect anger, perceptions of the crime, and the decision to report the crime. In order to investigate these questions, participants were given a written vignette and were instructed to imagine they were victims of a non-violent theft. It is hypothesized that the presence of CFT and higher severity of monetary loss will lead to increased reporting; however, the main effect for CFT will be qualified by the interaction between the variables. CFT is not expected to encourage reporting in the high monetary loss condition because these participants will be more likely to report regardless of CFT. It is further hypothesized that CFT and severity of monetary loss will affect the anger that participants experience as a result of the crime and that anger will mediate the decision to report. It is also predicted that participants will feel foolish and at fault when CFT is present as compared to absent. Finally, it is expected that CFT will increase beliefs that the crime is serious, involved luck, and could have been prevented.

METHOD

Participants

Participants were 141 college students from three different locations (51 from Nevada, 48 from Kansas, and 42 from New York) who were given course credit for their participation. Eleven participants (8%) were excluded from the analysis because they missed more than one of the six manipulation/comprehension check questions regarding the details of the crime (e.g., how much money was taken), the perpetrator (e.g., gender of the perpetrator), and the circumstances surrounding the crime (e.g., whether the usual or different routine was taken). Seven participants (5%) were eliminated on the basis of foreign nationality. This exclusion was necessary because it is likely that foreign citizens have different attitudes toward the legal system (e.g., because of experiences with systems in their own countries) than U.S. citizens, and that these differences could affect their decisions to report (see e.g., van Dijk, van Kesteren, & Smit, 2007). The final sample consisted of 123 participants, including 41 from Nevada, 45 from Kansas, and 37 from New York. Three locations were chosen to generally represent the eastern U.S., central U.S., and western U.S. No regional differences were found (All Fs < 1.86; ps > .05) for dependent measures considered herein, thus all analyses were collapsed across region. The majority of participants were Caucasian (83.5%) and female (64%). They ranged in age from 17–59

years (M = 21.2, Mdn = 20.0). Twenty-six percent of participants had a household income under \$40,000. Thirty percent were between \$40,000 and \$ 69,000. Forty-four percent had household incomes over \$70,000.

Procedure and Design

After reading informed consent forms, participants read one of six stimuli paragraphs asking them to imagine that, while they were walking home, a thief stole their wallet or purse. This methodology (i.e., vignettes or stimuli paragraphs) is identical to that used in previous studies (e.g., Macrae et al., 1993; Teigen, 1998; Turley et al., 1995) that explored the effects of CFT on judgments. Participants then completed a survey measuring how likely they would be to report the crime, their perceptions of the crime (e.g., severity), and how they felt after the imagined crime (e.g., angry). Participants also answered demographic and manipulation check questions.

The design was a 2 (typicality of routine: usual or unusual) \times 3 (severity of monetary loss: \$5, \$40, \$75) between subjects design. Cells averaged 20.5 participants, ranging from 17 to 24 participants.

Materials

Stimuli Paragraph

Participants read a stimuli paragraph in which facts were manipulated in half the stories to encourage CFT (i.e., an unusual routine). The studies also manipulated severity of monetary losses; participants were asked to imagine they lost a small (\$5), medium (\$40), or large (\$75) amount of money. Pilot testing with college students revealed that most would not report a \$5 loss, most would report a \$75 loss, and about half would report a \$40 loss.

The stimuli paragraph read:

Imagine that you routinely study at the library a few nights a week. One night, you finish studying at about your usual time of 11:00 p.m., and you begin walking home. As you are walking you decide to take {your usual routine}[a different routine] home. Unexpectedly, a man sneaks up on you and grabs your purse/wallet. You are frightened, but not touched. As he is running away, he searches your purse/wallet and then throws it on the ground. You retrieve it and discover that nothing was taken except cash. Unfortunately, {\$5} (\$40) [\$75] was stolen. You look around and there were no witnesses to the incident and you did not get a clear look at the man who stole the purse/wallet.

Questionnaire

Each rating measure used in the questionnaire was a 9-point Likert-type scale unless otherwise noted. The questionnaire asked participants to specify the likelihood that they would report the crime to the police. Feelings of anger regarding the crime were also solicited. Additional questions asked about the participants' perceptions of the crime (e.g., perceived seriousness of the crime; whether it could have been prevented). Finally, demographic information was also collected at the end of the questionnaire packet.

RESULTS AND DISCUSSION

Unless otherwise noted, ANOVAs were conducted with CFT and severity of monetary loss as independent variables. Tukey's HSD was used for post-hoc analyses.

Reporting

It was hypothesized that both typicality of routine and increased severity of monetary loss would lead to greater victim reporting. Analysis revealed the predicted main effect for typicality of routine (F(1, 116) = 6.64, p = .01; SD = 2.78) on the reporting variable such that participants reading about an atypical routine being taken home were significantly more likely to report (M = 5.86) than participants reading about taking a typical routine home (M = 4.63).

Also as expected, there was a significant difference in reporting based on severity of monetary loss (F(2, 116) = 7.8, p = .01). High monetary loss (M = 6.36) was significantly different from low (M = 4.1; p = .001), although it was not different from medium monetary loss (M = 5.26; p = .14). Low and medium monetary loss groups also did not differ (p = .11). Contrary to the hypothesis, there was no significant interaction of typicality of routine and monetary loss on reporting (F(2, 116) = .27, p = .77).

These results indicate that individuals in the "atypical routine" condition were more likely to report being a victim of a crime than were individuals in the control (typical routine) condition. This extends previous research (e.g., Macrae, 1992; Macrae et al., 1993; Miller & McFarland, 1986), which found that typicality of routine affects other judgments (e.g., victim blame).

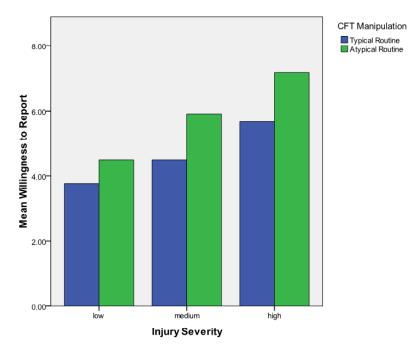


Figure 1: Effects of Typicality of Routine and Severity of Monetary Loss on Crime Reporting

Also consistent with the hypothesis, increased monetary loss resulted in increased likelihood of reporting the crime to police. This supports other research which has found that more serious injuries lead to greater likelihood of reporting (Greenberg & Beach, 2004; Kuehnle & Sullivan, 2001). It was also of interest to determine if typicality of routine, a variable known to affect CFT, had differential effects on reporting depending upon severity of monetary loss. The lack of interaction between the variables indicates that this is not the case; the severity of monetary loss did not change whether an atypical routine home increased reporting.

Emotional Response Variables

Typicality of routine and severity of monetary loss were also expected to affect an emotional response to the crime, specifically: anger about the incident. Severity of monetary loss had a statistically significant effect on participants' feelings of anger (F(2, 116) = 3.37, p = .04; SD = 1.76). Participants in the high monetary loss severity condition reported feeling significantly more angry (M = 7.64) than those in the low monetary loss condition (M = 6.60; p < .05), but did not significantly differ from those in the medium severity of monetary loss condition (M = 7.02; p > .05). The low and medium conditions did not significantly differ (p > .05), but the means were in the expected direction.

Although typicality of routine did not have a significant main effect on feelings of anger (F(1, 116) = 1.16, p = .28), there was a significant interaction between it and severity of monetary loss (F(1, 116) = 4.69, p = .01). For low severity of monetary loss, those in the "typical routine" condition expressed significantly less anger (M = 5.91; p < .05) than those in the "atypical routine" condition (M = 7.44). For medium and high severity of monetary loss conditions, there was no difference based on typicality of routine ($M_{low} = 7.40$ and $M_{high} = 7.57$) and CFT participants ($M_{low} = 6.7$ and $M_{high} = 7.7$).

Results indicate that, as expected, participants in the high monetary loss condition reported significantly greater feelings of anger than did participants in the low monetary loss condition. Although the typicality of one's routine did not affect feelings of anger directly, it did interact with severity of monetary loss. That is, for those in the low monetary loss condition, the fact that an unusual routine was taken home led to higher levels of self-reported anger. This was not the case for high or medium monetary loss participants, however. This provides some evidence that severity of monetary loss and typicality of routine combine to impact an emotional response like anger. It is possible that victims of lowseverity crimes have a low level of anger; thus, the addition of something unusual, which past literature demonstrates increases CFT, increased that low amount of anger. However, victims of more serious crimes may already be quite angry, and variables which increase CFT do not evoke any additional measurable anger. The means found here support this conclusion. Further research on how severity of monetary loss and typicality of routine affect anger responses of victims is needed to clarify the picture.

Finally, anger did not mediate the relationship between typicality of routine and reporting as it did in some previous studies on CFT (e.g., Macrae et al., 1993). In order

for there to be a mediating relationship, there would have to be a relationship between the typicality variable and anger. This relationship was not significant.

Perceptions of the Crime

It was expected that typicality of routine would increase beliefs that the crime could have been prevented, an effect usually demonstrated when participants are engaging in CFT (Turley et al., 1995). As predicted by past CFT research, participants reading about engaging in an atypical routine (i.e., taking an unusual route home) were more likely to feel they could have prevented the incident (M = 5.34) than those in the "typical routine" condition (M = 4.34; F(1,116) = 4.72, p = .04, SD = 2.64). No significant main effect was expected or found for severity of monetary loss, nor was there a significant interaction (Fs< .71, ps > .49). This finding regarding typicality of routine supports the notion that CFT affects perceptions of the crime. Thinking "if only" thoughts should lead to the perception that the crime could have been prevented.

It was hypothesized that participants in the "atypical routine" would be more likely to feel foolish and at fault for the crime than "typical routine" participants. As expected, participants in the "atypical routine" felt more at fault (M = 3.75) than participants in the "typical routine" condition (M = 2.98), although the effect barely missed significance (F(1, 116) = 3.82, p = .05). ANOVA revealed no main effects for injury severity (F(1, 116) = 2.01, p = .13), nor was there an interaction (F(2, 116) = 2.41, p = .094). Apparently, taking an unusual routine made participants blame themselves. There were no main effects or interaction on the measure of how foolish a participant would feel, however.

As a function of the "if only" thoughts that accompany CFT, it was also expected that participants reading about an atypical routine would be more likely to report that luck played a role in the incident than participants in the "typical routine" condition (Turley et al., 1995). This was the case; participants in the "atypical routine" condition were more likely to believe that luck played a role (M = 5.42) compared to those in the "typical routine" condition (M = 4.43; F(1, 116) = 5.04, p = .03; SD = 2.52). No main effect of severity of monetary loss was expected, and none was found (p > .05). ANOVA revealed no interaction between typicality of routine and severity of monetary loss (p > .05). This finding also supports the notion that CFT affects perceptions of crime. "If only" thoughts should promote feelings that luck was involved; results support this notion.

Main effects were expected for both severity of monetary loss and typicality of routine on participants' perceptions of how serious the crime was. There was a significant difference in perceptions of crime seriousness based on severity of monetary loss (F(2, 116) =3.3, p = .04; SD = 1.98). As predicted, participants in the low monetary loss condition rated the crime as significantly less serious (M = 5.2) than participants in the high monetary loss condition (M = 6.42; p = .03). No significant differences were found between the medium (M = 5.6) and high conditions (p = .19), nor were there any differences between the medium and low conditions (p = .66). There was no significant effect for typicality of routine, nor was there an interaction (Fs < 1.14, p > .29).

Variables	F	df	р	M (high)	M (medium)	M (low)
Crime Reporting						
Typicality of Routine	6.64	1, 116	.01	5.86	n/a	4.63
Severity of Monetary Loss	7.8	2, 116	.01	6.36	5.26	4.10
Typicality x Severity			ns			
Anger						
Typicality of Routine	1.16	1, 116	.28	7.24	n/a	6.94
Severity of Monetary Loss	3.37	2, 116	.04	7.64	7.02	6.60
Typicality x Severity						
Typical Route*	4.69	1, 116	.01	6.70abc	7.40abc	5.91b
Atypical Route				7.70abc	7.57abc	7.44c
Preventability of Crime						
Typicality of Routine	4.72	1, 116	.04	5.34	n/a	4.34
Severity of Monetary Loss	.71	2, 116	.49	5.05	5.00	4.23
Typicality x Severity			ns			
Luck						
Typicality of Routine	5.04	1, 116	.03	5.42	n/a	4.43
Severity of Monetary Loss	.25	2,116	.78	5.10	4.84	4.79
Typicality x Severity			ns			
Crime Seriousness						
Typicality of Routine	1.14	1,117	.29	5.55	n/a	5.95
Severity of Monetary Loss	3.30	2, 117	.04	6.42	5.60	5.20
Typicality x Severity		ns				
Self-blame						
Typicality of Routine	3.82	1, 116	.05	3.75	n/a	2.98
Severity of Monetary Loss	2.01	2, 116	.13	2.8	3.56	3.69
Typicality x Severity		ns				

Table 1Effects of Typicality of Routine and Severity of Monetary Loss on Perceptions of Crime,and Crime Reporting

* Means that share a subscript are not statistically different from one another

The severity of monetary loss manipulation influenced perceptions of crime severity, as hypothesized. It is surprising, however, that typicality of routine did not affect perceptions of severity. This contradicts previous research that has indicated that CFT leads to the perception that the crime was more serious (Macrae et al., 1993). This is curious because typicality of routine increased reporting and feelings of self-blame, yet did not affect perceived severity. It is possible that typicality of routine led instead to an emotion such as self-blame (see e.g., Turley et al., 1995) which prompts reporting, but does not affect perceived severity. For instance, a victim thinking "if only" thoughts could blame herself, and reporting the crime (i.e., the socially "correct" thing to do), might relieve the negative emotions that accompany self-blame. This is evidence that self-blame and severity are clearly separate constructs. Further, because all three monetary losses (\$5, \$40, \$75) were quite small (as compared to the losses in previous CFT studies, e.g., Macrae et al., 1993), there may have been a ceiling effect of sorts, such that perceptions of seriousness could only be pushed so high with such small losses. Obviously, this is just conjecture. The current study cannot address this issue, and future research is needed to determine why typicality of routine, a variable known to affect CFT, did not affect perceptions of severity. This study does, however, confirm that typicality of routine affects perceptions of the crime; i.e., the crime was preventable and luck played a role – and these effects are typical of those that are found when participants are engaged in CFT. These are also similar to perceptions of individuals experiencing CFT but who are not playing the role of victim (e.g., Turley et al., 1995).

Individual Differences

Past research has found that demographic characteristics can affect victim reporting; thus, gender and SES were examined (see e.g., Skogan, 1976; Webb & Marshall; 1989). There was no gender difference in reporting or any other dependent variable (All *ts* < 1.41; ps > .16). Differences based on SES were examined for all of the dependent variables: no differences were found (Fs < 1.67, ps > .11).

CONCLUSION

This experiment investigated victim reporting as it is affected by typicality of routine (to operationalize CFT) and severity of monetary loss (to operationalize severity of injury). The main findings indicate that severity of monetary loss and typicality of routine were both related to victim reporting. In addition, in an indication that typicality of routine likely increased CFT as would be expected based on the literature, participants who read vignettes involving an unusual routine being taken were more likely to believe that luck played a role and that they could have prevented the incident. These results support previous literature and advance knowledge about how various factors impact victims and their decisions to report. More specifically, this study expands knowledge about how CFT and injury severity influence victim reporting, as well as what role emotions play in this relationship. This increase in knowledge about victim reporting can allow law enforcement and policymakers to better estimate underreporting and use reporting data more effectively when shaping crime policies.

Though this study furthers understanding about factors which influence victim reporting, there are some limitations. First, this study relies on the use of a vignette simulation design and the self-report of individuals who imagine that they have been victims of a crime. The extent to which the results of this study generalize to actual crime victims is unclear. However, in defense of the design, it is rarely possible to manipulate victimization ethically; thus, experimental victimization research must often rely on simulation studies (e.g., Macrae et al., 1993; Teigen, 1998).

Second, the findings are limited to the particular crime scenario used. Different types of crimes (e.g., physical assault), injuries (e.g., bodily injury), or scenarios (e.g., the criminal used a gun) might lead to different findings. Finally, although half of the partici-

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pants are presented with a scenario that should encourage engaging in CFT (based on prior research), there was no direct measure used to determine if participants actually engaged in CFT. Despite these limitations, this study advances knowledge about victim reporting and the factors that affect it. Specifically, we found that increasing monetary loss increases crime reporting. In addition, individuals experiencing atypicality in their routine also report crimes more. When law enforcement and policymakers consider shaping crime policies on the basis of existing crime statistics, they should consider that "petty" crimes in neighborhoods may be underreported. Future research should concentrate on addressing this study's limitations and further exploring the relationship between CFT and victim reporting.

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