Short-Sighted Confession Decisions: The Role of Uncertain and Delayed Consequences

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Suspects have a propensity to focus on short-term contingencies, giving disproportionate weight to the proximal consequences that are delivered by police during an interrogation, and too little consideration to the distal (and often more severe) consequences that may be levied by the judicial system if they are convicted. In this research, the authors examined whether the perceived uncertainty and temporal distance of distal consequences contribute to this propensity. Using the repetitive question paradigm (Madon et al., 2012), participants (N = 209) were interviewed about 20 prior criminal and unethical behaviors and were required to admit or deny each one. Participants’ denials and admissions were paired with both a proximal consequence and a distal consequence, respectively. Results indicated that the distal consequence had less impact on participants’ admission decisions when it was uncertain and temporally remote. These results provide evidence that the perceived uncertainty and temporal distance of future punishment are key factors that lead suspects to confess to crimes in exchange for short-term gains.

Keywords: confessions, decision making, police interrogation, temporal discounting, uncertainty

In the criminal justice system, a confession is a persuasive form of incriminating evidence (Gudjonsson, 2003; Kassin, 2008; Leo & Drizin, 2010). A confession is so persuasive, in fact, that in many cases convictions have been determined on the basis of confession evidence alone (Conti, 1999; Kassin & Wrightsman, 1985). Indeed, in the words of McCormick (1972), “The introduction of a confession makes the other aspects of a trial in court superfluous” (p. 316). Despite the incriminating power of confessions, they are given by approximately 42% to 55% of interrogated suspects (Kassin & Gudjonsson, 2004). Although most confessions are given by suspects who are truly guilty (Leo, Costanzo, & Shaked-Schroer, 2009), even innocent suspects sometimes confess to crimes. According to the Innocence Project, approximately 25% of innocent suspects who were later exonerated by DNA evidence had falsely incriminated themselves, with approximately 16% of these suspects giving a false confession (Garrett, 2011; Innocence Project, 2014; Kassin & Gudjonsson, 2004).

A core principle that has been implicated in the elicitation of confessions is the tendency for short-term consequences to influence behavior more strongly than long-term consequences (Magram, 1974; Renner, 1964; Tarpy & Sawabini, 1974). Drawing on this literature, theorists have speculated that one reason suspects confess to crimes when interrogated by the police is because they have a propensity to make short-sighted confession decisions (Kassin et al., 2010). In support of this idea, Madon and colleagues found evidence that the well-established phenomenon of temporal discounting is at play when suspects decide whether or not to confess to crimes (Madon, Guyll, Scherr, Greathouse, & Wells, 2012; Madon, Yang, Smalarz, Guyll, & Scherr, 2013). In their research, participants who were interviewed about their prior criminal and unethical behaviors admitted to misconduct as a way to avoid a proximal consequence even though doing so increased their risk of incurring a distal consequence. This finding suggests that suspects may enter the interrogation situation with a propensity to give disproportionate weight to short-term contingencies when deciding whether or not to confess. In the current research, we examined whether the perceived uncertainty and temporal distance of future punishment contribute to this short-sighted propensity. We examined the potential influence of these factors on admission decisions through the lens of expected utility theory (Edwards, 1962; Schoemaker, 1982; von Neumann & Morgenstern, 1944).

Expected Utility Theory

Expected utility theory proposes that when people are faced with multiple courses of action, they will choose the one that is linked to outcomes that yield the greatest expected utility. Conceptually, expected utility is a person’s preference for a particular course of action. Mathematically, it is the sum of the products of each outcome’s probability and utility—that is, expected utility = Σ probability × utility (von Neumann & Morgenstern, 1944). An outcome’s probability is a person’s expectation regarding the likelihood that the outcome will, in fact, occur as a result of choosing a given course of action (Gilboa, Postlewaite, & Schmeidler, 2008). For example, a suspect may expect that choosing to confess makes the outcome of conviction likely. An outcome’s utility is how much a person values the outcome; that is, how much satisfaction, happiness, or “goodness” she or he anticipates experiencing if the outcome occurs (Mongin, 1988; Schoe-
misconduct. This document is copyrighted by the American Psychological Association or one of its allied publishers. However, the proximal consequences that are associated with the decision to deny guilt (e.g., conviction, incarceration, execution) are temporally distant and may, therefore, be perceived as comparably less probable. Thus, one reason that suspects may discount distal consequences when deciding whether or not to confess is because the distal consequences seem less certain than the proximal consequences that are present during the immediate interrogation situation.

Temporal Distance

From the perspective of expected utility theory, a confession decision making beyond its uncertainty is relevant to police interrogation. This is because a suspect’s decision to confess or deny guilt is made within the context of proximal, interrogation-related consequences that always temporally precede those that are associated with conviction. Thus, it is conceivable that suspects may generally discount distal consequences—even those that they perceive as relatively certain—simply because the consequences are temporally remote relative to the consequences that are present during an interrogation.

Uncertainty

One reason that interrogated suspects may discount distal consequences is because of the inherent uncertainty of future events. From the perspective of expected utility theory, a confession decision is not determined by utility alone, but rather by a combination of utility and probability. This is important because if suspects perceive the distal consequences associated with a confession as less probable than the proximal consequences associated with denials, then they might assign less weight to the distal consequences than is warranted. In other words, the expected utility of distal consequences might be discounted because of their perceived uncertainty. A large body of empirical research related to decision making has supported this idea (Keren & Roeoflsma, 1995; Rachlin & Siegel, 1994). On the basis of these findings, many decision-making researchers have converged on the conclusion that uncertainty is the fundamental process underlying temporal discounting: People discount future outcomes because their time delay makes them inherently uncertain (Benzion, Rapoport, & Yagil, 1989; Keren & Roeoflsma, 1995).

Hypotheses and Research Overview

Drawing on the tenets of expected utility theory, we tested whether the influence of a proximal consequence on admissions of guilt increased as a distal consequence became less certain and more temporally remote. We tested these effects using the repetitive question paradigm (Madon et al., 2012). Participants took part in an interview in which they admitted or denied ever having committed 20 criminal and unethical behaviors. Participants took part in an interview in which they admitted or denied ever having committed 20 criminal and unethical behaviors. Participants made their admission decisions in the context of a contingency pairing in which denials were paired with a proximal consequence (answering a set of repetitive questions) and admissions were paired with a distal consequence (meeting with a police officer in the future). In addition, prior to the start of the interview, an experimenter
manipulated the certainty of the distal consequence to be either low (20% certain) or high (100% certain) and the temporal distance of the distal consequence to be either in the distant future (one-month) or the near future (one-week). We predicted that participants would discount the distal consequence to a greater extent when making their admission decisions the less certain and the more temporally remote it became. We also tested whether certainty and temporal distance interacted to influence the admission rate. However, because the relationship between certainty and time delay remains unresolved (Kalenscher & Pennartz, 2008), strong hypotheses regarding the exact form of this interaction were not warranted. Accordingly, we considered the associated analyses to be exploratory in nature.

Method

Participants

Participants (N = 209) were undergraduate students enrolled in introductory psychology courses at Iowa State University. Participants took part in the experiment in exchange for partial fulfillment of a course requirement. The sample was 57% women, and included 190 Caucasians, three Asians, nine African Americans, one Latina/o, five participants who self-described as multiethnic, and one who declined to report ethnicity information. The mean age of participants was 19.3 years (SD = 2.2).

Design

Participants were randomly assigned to a 2 (certainty: low vs. high) × 2 (temporal distance: one-month vs. one-week) between-subj-ects experimental design. All participants were interviewed about 20 criminal and unethical behaviors and were required to admit or deny each one. Participants made their admission decisions in the context of a contingency pairing that involved both a proximal consequence and a distal consequence. The proximal consequence was having to answer a set of 32 repetitive questions. Participants incurred the proximal consequence each and every time they denied a behavior. Participants could avoid the proximal consequence by admitting to a behavior, but doing so increased their risk of incurring the distal consequence of having to meet with a police officer in the future to discuss their interview responses in more detail. An experimenter manipulated the certainty of the distal consequence to be either low or high. In the low certainty condition, the experimenter told participants (n = 108) that the police officer would meet with only one in five students whose interview responses met the criterion for the meeting. In the high certainty condition, the experimenter told participants (n = 101) that the police officer would meet with every student whose interview responses met the criterion for the meeting. Accordingly, participants believed that they had either a 20% (low certainty) or 100% (high certainty) probability of meeting with the police officer in the future if their interview responses met the criterion. To manipulate the temporal distance of the distal consequence, the experimenter told participants that the potential meeting with the police officer would be in one month (n = 101) or in one week (n = 108).

Materials

Interview questions. The interview questions assessed whether or not participants had ever engaged in 20 criminal (e.g., transporting fireworks across state lines) and unethical (e.g., starting or spreading a rumor about someone) behaviors (Table 1; Madon et al., 2013, Experiment 2). Participants were required to respond ‘yes’ (coded as 1) or ‘no’ (coded as 0) to each of these questions. The coded responses were summed to form a new variable that equaled the total number of admissions made by each participant. The 20 interview questions were matched for seriousness and counterbalanced to eliminate potential order effects.

Repetitive question set. A set of 32 repetitive questions constituted the proximal consequence. The first 16 questions assessed participants’ perceptions about how the “average Iowan” would feel when engaged in the criminal or unethical behavior that participants had just denied having ever committed (e.g., “Thinking about the average IOWAN... How resentful do you think the average IOWAN would be while drinking, buying, or trying to buy alcohol before the age of 21?”). The second 16 questions assessed participants’ perceptions about how the “average American” would feel when engaged in that same criminal and unethical behavior (e.g., “Thinking about the average AMERICAN... How...”)

Table 1

Interview Questions Used in the Experiment

<table>
<thead>
<tr>
<th>Question</th>
<th>Code</th>
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<tbody>
<tr>
<td>Have you ever...</td>
<td></td>
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<tr>
<td>1. Drank, bought, or tried to buy alcohol before you were 21?</td>
<td>1</td>
</tr>
<tr>
<td>2. Tried, used or experimented with any illegal drugs such as marijuana, cocaine, crack, LSD, or any other illegal drug?</td>
<td>1</td>
</tr>
<tr>
<td>3. Cheated on an exam, homework, school project, or helped another person cheat?</td>
<td>1</td>
</tr>
<tr>
<td>4. Transported fireworks across state lines?</td>
<td>1</td>
</tr>
<tr>
<td>5. Used something that belonged to somebody else without permission, such as something that belonged to a family member, friend, roommate or acquaintance?</td>
<td>1</td>
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<tr>
<td>6. Hunted or fished without a license?</td>
<td>1</td>
</tr>
<tr>
<td>7. Made a harassing, threatening, or prank phone call or text message?</td>
<td>1</td>
</tr>
<tr>
<td>8. Failed to wear a seat belt?</td>
<td>1</td>
</tr>
<tr>
<td>9. Knowingly kept something of value that you received in error, such as extra change given to you by a cashier or extra merchandise from a store or from an internet purchase?</td>
<td>1</td>
</tr>
<tr>
<td>10. Texted somebody while driving since it became illegal in Iowa?</td>
<td>1</td>
</tr>
<tr>
<td>11. Engaged in criminal mischief such as a senior prank, egging a house or car, or TP-ing a house?</td>
<td>1</td>
</tr>
<tr>
<td>12. Invaded another’s privacy such as by reading another’s diary, text messages or emails without permission?</td>
<td>1</td>
</tr>
<tr>
<td>13. Jumped or cut in line such as at the dining hall, movie theater, or grocery store?</td>
<td>1</td>
</tr>
<tr>
<td>14. Purposefully not returned something that you borrowed like a book, clothing, or money?</td>
<td>1</td>
</tr>
<tr>
<td>15. Driven a vehicle while under the influence of alcohol or any other drug like marijuana, cocaine, LSD, etc.?</td>
<td>1</td>
</tr>
<tr>
<td>16. Ran a red light?</td>
<td>1</td>
</tr>
<tr>
<td>17. Started or spread a rumor about someone?</td>
<td>1</td>
</tr>
<tr>
<td>18. Been publicly intoxicated?</td>
<td>1</td>
</tr>
<tr>
<td>19. Bought or held stolen goods worth $25 or more?</td>
<td>1</td>
</tr>
<tr>
<td>20. Illegally downloaded music, movies, software, or anything else?</td>
<td>1</td>
</tr>
</tbody>
</table>

Note. Participants responded ‘yes’ or ‘no’ to each interview question. The questions were developed by Madon et al. (2012, 2013) and adapted from the illegal behavior checklist (McCoy et al., 2006). The order of the questions was counterbalanced such that half of the participants were interviewed with the questions presented in the above order and the other half were interviewed with the questions presented in the reverse order.
guilty do you think the average AMERICAN would be while drinking, buying, or trying to buy alcohol before the age of 21?""). Participants answered each repetitive question on a 5-point scale with response options 1 (not at all), 2 (a little bit), 3 (moderately), 4 (quite a bit), and 5 (extremely). Participants responded to the repetitive questions on a computer that was programmed with a 4-s delay between each question. Because the repetitive question set required approximately 7 min to complete, the total time required to answer it had the potential to become substantial. For example, a participant whose interview responses required her or him to answer the repetitive question set eight times would have spent nearly an hour on this task over the course of the interview. Because the repetitive questions were unrelated to the hypotheses of this study and were developed simply to create a proximal consequence for each denial, participants’ responses to the repetitive questions were not recorded and are not discussed further. The computer programs used to administer the repetitive questions are available upon request.

**Suspicion check.** To probe for suspicion, participants were asked if they believed that they had been misled in any way during the experiment and, if so, to describe how. We examined these responses to identify participants who were suspicious about the veracity of the meeting with the police officer.

**Contingency pairing check.** To examine participants’ understanding of the contingency pairing, we asked participants when they answered the repetitive questions. Participants responded by selecting one of the following response options: (a) “When I gave a ‘NO’ response,” (b) “When I gave a ‘YES’ response,” and (c) “Sometimes when I gave a ‘NO’ response and sometimes when I gave a ‘YES’ response.”

**Certainty manipulation check.** To assess the perceived certainty of the potential meeting with the police officer, participants completed the statement “I am______% certain that I will have to meet with the police officer.” Responses could range from 0% to 100%.

**Temporal distance manipulation check.** To assess participants’ understanding of the temporal distance of the potential meeting with the police officer, they were asked “When do you think that you will meet with the police officer?” with response options (a) “In one week,” (b) “In one month,” and (c) “Not sure.”

### Interview Room and Cover Story

All participants were interviewed individually in a small room that included a desk, a personal computer, and two chairs—one for the participant and the other for the experimenter. Next to the computer was a pencil vase that held two pencils each engraved with the name of the local police department. In addition, two colored flyers were affixed to the wall directly above the computer monitor. These flyers offered safety tips for crime prevention. One flyer was obtained from the website of the university’s Department of Public Safety and had a university logo printed on it. The other flyer was obtained from the website of the local police department and had a police department emblem printed on it. These props supported the cover story that the experiment was a partnership between professors in the Psychology Department and law enforcement personnel and that it was designed to examine rates of criminal behavior among college students.

**Procedures**

After obtaining informed consent and providing the cover story, the experimenter asked for and recorded each participant’s name, email address, cell phone number, and university student ID number. The experimenter collected this information to maximize the apparent inevitability of being successfully contacted for the future meeting with the police officer if a participant’s interview responses met the criterion. It was especially important for the experimenter to cultivate this perception among participants in the high certainty condition because she or he would soon tell them that all participants whose scores met the criterion would be required to meet with the police officer. Following the collection of this information, the experimenter explained the contingency pairing by reciting the following rehearsed script:

I’m going to ask you some yes/no questions that will assess whether or not you’ve ever engaged in a variety of criminal and unethical behaviors. Every time you answer no to one of these questions, you’ll be asked some additional follow-up questions in order to get some more information. You’ll answer these additional questions on the computer during your session today. On the other hand, if you tend to answer yes to the questions I ask you, then I will sign you up to meet with one of the police officers involved in this research to discuss your answers in more detail. We’re doing this to get more information about people’s illegal behavior.

Immediately after reciting this script, the experimenter manipulated the temporal distance of the potential meeting with the police officer by telling some participants that it would be in one month and telling others that it would be in one week. Correspondingly, to provide a visual representation of the meeting’s temporal distance, the experimenter circled the current date and the anticipated week of the future meeting on a wall calendar that was in participants’ direct line of sight. Next, the experimenter manipulated the certainty of the potential meeting with the police officer. In the low certainty condition, the experimenter told participants that the police officer could only meet with one in five students whose scores met the criterion for the meeting. In the high certainty condition, the experimenter told participants that the police officer would meet with every student whose score met the criterion for the meeting. The experimenter did not specify the number of admissions that would require the meeting.

After the experimental manipulations had been induced, the experimenter interviewed participants individually about their prior criminal and unethical behaviors. Participants answered the set of 32 repetitive questions each and every time they denied a behavior. Though participants could avoid the proximal consequence of the repetitive questions by admitting to a behavior, they believed that doing so increased their risk of the distal consequence of having to meet with the police officer in the future. Following the interview, participants completed self-report questionnaires that assessed demographic information, suspicion, and their understanding on the contingency pairing and experimental manipulations. The experimenter then fully debriefed participants and destroyed their contact information.
Results

Preliminary Analyses

Distribution of the dependent variable. The total number of admissions that participants made in response to the interview questions constituted the dependent variable. A Shapiro-Wilk test (Shapiro & Wilk, 1965) confirmed that the residuals of the dependent variable were normally distributed, $W = 0.99$, $p = .25$.

Suspicion and contingency pairing checks. Examination of participants’ responses to the suspicion question revealed that two participants doubted the veracity of the meeting with the police officer. In addition, six participants did not correctly report the contingency pairing that was associated with their interview responses, one of whom was identified as suspicious as well. We examined the potential influence of these seven participants’ data on the results in the main analyses.

Certainty manipulation check. We performed an independent samples t-test to examine the effectiveness of the certainty manipulation. This test compared participants’ reported certainty of meeting with the police officer across the low and high certainty conditions. Results supported the effectiveness of the manipulation by showing that participants in the high certainty condition were significantly more certain that they would meet with the police officer ($M = 35\%$, $SD = 30\%$) than participants in the low certainty condition ($M = 25\%$, $SD = 21\%$), $t(174.7) = 2.55$, $p = .01$; $d = 0.36$, 95% CI [0.09, 0.63].

Temporal distance manipulation check. We examined participants’ responses to the temporal distance manipulation check item with a cross-tabulation analysis. Results indicated that all participants reported the temporal distance of the distal consequence correctly for their particular condition, thus supporting the effectiveness of the temporal distance manipulation.

Main Analyses

The data were analyzed with a 2 (certainty: low vs. high) $\times$ 2 (temporal distance: one-month vs. one-week) between-subjects factorial ANOVA in which the total number of admissions was the dependent variable. The results did not show a significant interaction between certainty and temporal distance, $F(1, 205) < 0.01$; $p = .97$; $\eta^2 < 0.01$. Therefore, we focused on the main effect of each factor. Figure 1 shows the average number of admissions that participants made in each condition. Results indicated a significant main effect for certainty, $F(1, 205) = 8.53$; $p < .01$; $\eta^2 = 0.04$. A comparison of the marginal means corresponding to the total number of admissions made in each certainty condition indicated that participants in the low certainty condition made significantly more admissions ($M = 11.54$, $SD = 3.47$) than participants in the high certainty condition ($M = 9.99$, $SD = 4.14$); $d = 0.40$; 95% CI [0.13, 0.68]. There was also a significant main effect for temporal distance, $F(1, 205) = 4.50$; $p = .04$; $\eta^2 = 0.02$. A comparison of the marginal means corresponding to the total number of admissions made in each temporal distance condition indicated that participants who were told that the potential meeting with the police officer would be in one month made significantly more admissions ($M = 11.38$, $SD = 3.64$) than did participants who were told that the potential meeting would be in one week ($M = 10.24$, $SD = 4.02$); $d = 0.29$; 95% CI [0.02, 0.57].

![Figure 1](image-url) Values reflect the average number of admissions made during the interview. The number of admissions could range from 0 to 20. The tendency for the proximal consequence to influence the number of admissions more strongly than the distal consequence was greater the less certain and the more temporally remote participants perceived the distal consequence.

Nearly identical results were obtained when the analysis excluded the seven participants who reported being suspicious about the potential meeting with the police officer or who misreported the contingency pairing. In particular, there continued to be no support for an interaction between certainty and temporal distance, $F(1, 198) = 0.02$; $p = .89$; $\eta^2 < 0.01$, whereas the main effects of certainty and temporal distance remained significant, $F$s(1, 198) $\geq$ 4.51; $p$s $\leq$ 0.04; $\eta^2$s $\geq$ 0.02.

These results indicated that the certainty and temporal distance of the distal consequence influenced participants’ tendency to admit guilt as a way to avoid the proximal consequence. Specifically, participants more readily admitted guilt to avoid the proximal consequence when the distal consequence was uncertain versus certain, and when the distal consequence was one month away versus one week away. The data did not support an interaction effect. Instead, the data indicated that the tendency for participants to discount the distal consequence more strongly in the one-month than in the one-week condition did not significantly differ across the low and high certainty conditions. This pattern is consistent with the theoretical position that an event’s temporal distance influences decision-making for reasons other than perceived certainty (Engelmann & Brooks, 2009; Luhmann et al., 2008). However, we warn against reading too much into this nonsignificant effect. Because the experimenter explicitly informed participants about the certainty of the meeting with the police officer, our procedures may have reduced the extent to which participants spontaneously inferred less certainty in the more distal meeting. Indeed, simple effects tests revealed that participants’ perceptions of the meeting’s certainty did not differ significantly across the one-week and one-month conditions in either the low- or high-certainty conditions, $F$s (1, 203) $< 0.01$, $p$s $\geq 0.98$.

Discussion

Prior theory and research relevant to police interrogation indicate that the more proximal a given consequence, the greater its
effect on suspects’ confession decisions (Kassin et al., 2010, Madon et al., 2012, 2013). Accordingly, the short-term contingencies that are associated with the immediate police interrogation situation may unduly influence suspects, an effect that could compel them to confess, possibly falsely, with too little regard for the future consequences that may follow. The findings of the current research provided evidence that this effect is stronger when a distal consequence is perceived as uncertain or far in the future. Using the repetitive question paradigm (Madon et al., 2012), our research demonstrated that a proximal consequence more greatly influenced participants’ admission decisions as the distal consequence became less certain and more temporally remote. These findings suggest that suspects may be willing to risk punishments that they perceive as uncertain, or far in the future, to achieve the short-term gains that a confession can provide.

Uncertainty of Distal Consequences

According to expected utility theory, people’s decisions are based on both the probability and utility of future events (Kahneman & Tversky, 1979; Schoemaker, 1982). That is, people more heavily discount a future event the less certain they perceive it to be. Consistent with this idea, our findings indicated that the distal consequence of having to meet with a police officer exerted less influence on participants’ admission decisions when its probability of occurrence was 20% versus 100%. This finding has important implications for understanding confession decisions within custodial interrogations. It suggests that both innocent and guilty suspects may perceive the consequences that operate within an interrogation (e.g., extended detainment, confrontational questioning, negative emotional reactions) as quite certain because they are, in fact, immediately experienced, whereas they may perceive the future punishments that are associated with a confession (e.g., probation, prison sentence) as relatively uncertain because they are delayed. The upshot may be that suspects discount the less certain, future consequences that they do not experience straightforwardly, and give undue weight to the immediate consequences that operate during an interrogation.

The idea that suspects make short-sighted confession decisions because of the uncertainty of future punishment may help to explain why innocent suspects sometimes confess to crimes. According to the phenomenology of innocence, innocent suspects are of the mindset that the truth of their innocence will protect them from experiencing negative outcomes (Kassin & Gudjonsson, 2004; Kassin & Norwick, 2004). Innocent suspects, for instance, may believe that additional, exculpatory evidence will be subsequently uncovered and prove their innocence, or that the real perpetrator will be identified and arrested. Consider, for example, the case of Jeffrey Deskovic. Deskovic falsely confessed to raping and murdering a high school classmate on the basis of the belief that the DNA evidence obtained at the crime scene would prove his innocence. “I thought it was all going to be O.K. in the end,” he said, not realizing that the jury would be more persuaded by his confession than by the biological evidence (Santos, 2006). Deskovic’s reasoning illustrates how innocent suspects may perceive future punishment as particularly improbable—a misperception that may increase their willingness to confess as a way to escape from an aversive or lengthy interrogation (Kassin, 2005).

Temporal Distance of Distal Consequences

Our findings also showed that participants’ admission decisions were influenced by the temporal distance of the distal consequence. Meeting with a police officer exerted less impact on participants’ admission decisions when it was expected to occur in one month than in one week. In other words, participants were more willing to risk the same consequence of meeting with the police officer the farther in the future it was expected to occur. This is an important finding because the proximal consequences that are associated with police interrogation operate at the time that suspects make their confession decisions and, therefore, are essentially immediate, whereas the distal consequences that suspects will incur if they are convicted are temporally remote. Accordingly, within the context of a custodial police interrogation, both innocent and guilty suspects may be inclined to discount future punishments when making their confession decisions precisely because that punishment is less proximal than the immediate and aversive consequences with which they must contend during the interrogation. Although the means whereby temporal distance influences decision making have yet to be empirically resolved (Kalenscher & Pennartz, 2008), several potential mechanisms have been hypothesized.

Psychological connectedness. One mechanism that may have contributed to the effect of temporal distance on participants’ admission decisions in our experiment is psychological connectedness. Psychological connectedness is the degree of overlap between one’s present self and one’s future selves in terms of factors such as shared memories, intentions, and beliefs (Parfit, 1984). According to the concept, people feel closer to, and care more about, selves in the near future than selves in the distant future (Bartels & Rips, 2010). The degree to which a person’s present self feels psychologically connected to future selves has implications for decision-making because it can translate into favoritism. That is, one’s present self is believed to make decisions that favor a more highly valued near-future self over a less valued distant-future self (Bartels & Rips, 2010). Thus, one possible explanation for the effect of temporal distance in our experiment is that participants discounted the distal consequence of meeting with the police officer to a greater extent in the one-month than in the one-week condition because they felt more psychologically connected to the self that would experience the meeting in one week than to the self that would experience the meeting in one month. Applying this idea to the police interrogation situation suggests that future punishment may exert less influence on confession decisions than is warranted because it is a less valued distant-future self that will experience that punishment. By the same token, because it is the near-future self that must contend with the proximal consequences that operate within an interrogation, suspects may be inclined to make behavioral choices that favor and protect the near-future self even if it means that a distant-future self might suffer as a result.

Perceived aversiveness. A second mechanism that may have contributed to the temporal distance effect in our experiment is perceived aversiveness. Expected utility theory proposes that a decision is determined by the probability (perceived likelihood of occurrence) and utility (perceived desirability) of possible outcomes (Edwards, 1962; Schoemaker, 1982). If, however, the probability of different possible outcomes is perceived to be the same,
then utility alone determines the decision, a circumstance that may have
inferred greater certainty in the distal consequence across the one-month and one-week conditions. As such, the effect of the meeting’s
temporal distance on admission decisions may have largely been determined on the basis of its perceived utility. The fact that perceived utility of a future event decays as its temporal
distance increases (Berns et al., 2007; Frederick, Loewenstein, & O’Donoghue, 2002) suggests that, in the current research, participants
may have perceived the distal consequence of meeting with the police officer to be less aversive in the one-month than in the one-week condition. If this happened, then it makes sense that participants in the one-month condition were more willing than were participants in the one-week condition to admit to misconduct as a way to reduce how often they experienced the proximal consequence of the repetitive questions; the meeting was simply not as aversive to them. This process may also operate within custodial police interrogations. Suspects may psychologically exaggerate the aversiveness of factors that operate within an interrogation due to their immediacy and psychologically minimize the aversiveness of future punishment for a crime due to its temporal distance, a situation that encourages suspects to confess.

Construal level. A third mechanism that may have contributed to the temporal distance effect in our experiment is construal level. According to construal level theory, people mentally represent objects and events in more abstract terms when they are temporally, spatially, or socially distant (Trope & Liberman, 2003, 2010). In other words, the mental imagery that a distal event evokes is general, and lacks both specificity and concrete details. In the present work, participants who anticipated having to meet with a police officer in one month may have experienced only vague expectations of unpleasantness or discomfort. By contrast, participants who anticipated having to meet with the police officer in one week might have experienced concrete imagery and expectations, such as traveling to the police station, sitting face-to-face with an officer, and having to explain and justify specific illegal acts, such as drinking and driving, or having used cocaine. As a result, participants may have been more willing to risk meeting with the police officer as a way to reduce how often they experienced the proximal consequence of the repetitive questions in the one-month than one-week condition because the meeting appeared less vivid and real the farther in the future they anticipated it. Within a custodial police interrogation, future punishment for a crime is always a distal event. Accordingly, suspects’ psychological experience of it may be less intense, rich, and clear than their immediate experience of the proximal consequences that are present during the interrogation, thereby increasing their vulnerability to interrogation pressures. Suspects may simply be more willing to confess in exchange for terminating an aversive or lengthy interrogation when they envision future punishment in only vague and general ways.

Limitations

There are several limitations of this research that warrant discussion. First, there was a relatively small difference in the amount of time separating the two temporal distance conditions. In one condition, participants expected the potential meeting with the police officer to be in one month, whereas in the other condition they expected it to be in one week. This three-week time difference between the conditions made sense in the context of our sample of college students who were operating on a semester calendar that is only 15 weeks long. However, in the context of an actual police interrogation, suspects make their confession decisions far in advance of when they will experience the long-term ramifications of those decisions. In this respect, therefore, our manipulation of temporal distance was relatively weak, which may explain why the magnitude of the effect corresponding to this factor was relatively small ($d = .29$; Cohen, 1992). Had the time separating the conditions been longer, say one year, then we expect that the effect would have been larger, and might have more closely estimated the effect that likely emerges in actual police interrogation situations.

A second limitation of our research is that we cannot know the extent to which the effects of certainty and temporal distance on admissions applied specifically to true and false responses. Participants who are subjected to the repetitive question paradigm can avoid the proximal consequence by providing true admissions, false admissions, or a combination of both, and the paradigm cannot distinguish among these different responses. Importantly, however, the inability of the paradigm to assess the veracity of participants’ responses does not undermine the conclusions of our research. Indeed, even if all of the additional admissions associated with the low certainty and one-month conditions were true, it is still the case that participants more readily admitted guilt to avoid the proximal consequence when the distal consequence was less certain and more temporally remote.

A third limitation of our research pertains to our sample. We relied exclusively on college students who may be more intelligent and less susceptible to coercion than typical suspects (Gudjonsson, 2003). Therefore, the magnitude of the effects that we observed might systematically differ from those that occur during police interrogation. However, it is important to consider how the current sample might have influenced the observed effects. Because our participants did not constitute a vulnerable population, our results likely provide conservative estimates of the causal effects of a distal consequence’s uncertainty and temporal distance on confession decisions. For example, suspects with psychological or cognitive vulnerabilities as well as minors tend to be impulsive (Owen-Kostelnik, Reppucci, & Meyer, 2006; Redlich & Drizin, 2007). As a result, these suspects may be predisposed to confess to crimes in exchange for short-term gains (Drizin & Leo, 2004), and this predisposition may be especially likely when they perceive punishment for a crime to be an uncertain and temporally remote event. Thus, even though our data suggests that suspects generally discount future punishment for a crime when they perceive it as uncertain or far in the future, some suspects—because of their vulnerabilities—may be especially prone toward discounting future punishment under these conditions. A similar tendency may be present among individuals who are highly suggestible (Gudjonsson, 1991, 2010). According to Gudjonsson and Clark (1986), suspects with high interrogative suggestibility are particularly sensitive to the effects of negative feedback (e.g., repeated questioning). Because many of the proximal consequences facing suspects during an interrogation are negative, it may be that highly suggestible suspects fail to appropriately weigh uncertain, distal consequences when deciding whether or not to confess, thereby increasing the extent to which proximal consequences influence their confession decisions.
Finally, ethical constraints prevented us from creating an experimental situation that was as coercive as an actual custodial interrogation. For example, participants in the current research encountered consequences that were less serious than those encountered by real suspects, and participants were questioned in a physical environment that was probably less intimidating than that of an actual interrogation room. Nevertheless, laboratory procedures and experimental methodology have been profitably used to uncover and investigate the psychological processes that underlie behavior under extreme conditions in the real world (e.g., Johnson & Downing, 1979; Latané, Williams, & Harkins, 1979; Milgram, 1974), including confessions (e.g., Guyl, et al., 2013; Kassin, Goldstein, & Savitsky, 2003; Russano, Meissner, Narchet, & Kassin, 2005), thereby suggesting that our findings have applied relevance.

Conclusions

Suspects have a propensity to make their confession decisions on the basis of short-term contingencies (Madon et al., 2012, 2013). The current research examined two potential causes of this effect. Drawing on the tenets of expected utility theory (Edwards, 1962; Schoemaker, 1982), we hypothesized that suspects are more likely to discount a distal consequence to the extent that they perceive it as uncertain and temporally remote. The results of the current research supported these hypotheses. A distal consequence exerted less influence on participants’ admission decisions the less likely it was to occur and the farther in the future it was scheduled. Although our data could not establish ground truth, there is reason to believe that the effect associated with the uncertainty of distal consequences may be exacerbated among the innocent. Because innocent suspects tend to believe that their innocence will protect them (Kassin, 2005), they may be more inclined than guilty suspects to perceive future punishment as an improbable event. An important step toward protecting the innocent, therefore, is to limit the use of manipulative interrogation tactics that may capitalize on an already-present weakness to believe that future punishment is a risk worth taking.

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Received October 15, 2012
Revision received June 3, 2014
Accepted June 3, 2014