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Overcoming Innocents' Naiveté: Pre-interrogation Decision-making Among Innocent Suspects

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Suspects, especially innocent ones, are highly susceptible to waiving their interrogation rights. This research tested the ability of two strategies to overcome innocent suspects' willingness to waive their rights. One strategy was based on the social influence of scarcity (i.e., not constraining the pre-interrogation time limit). The other strategy focused on disrupting individuals' cognitive fluency during the decision-making process (i.e., violating their induced expectation of offering a waiver). Disrupting innocent individuals' cognitive fluency increased their willingness to invoke their rights and, notably, was not qualified by interactions with any other factors. However, scarcity did not influence individuals' pre-interrogation decision-making. Results also further established the association between innocent individuals' naïve mindset and their willingness to waive their rights – specifically, innocents' willingness to waive their rights increased with the strength of their just world beliefs. The theoretical and applied implications of these findings are discussed. The importance and benefit of reforming pre-interrogation protocols using fair and feasible strategies that would disrupt suspects' cognitive fluency are emphasized. Copyright © 2016 John Wiley & Sons, Ltd.

Interrogation rights are intended to ensure that suspects are advised of their rights to avoid offering self-incriminating statements and to have legal counsel during any potential subsequent custodial interview (e.g., police cautions in Canada, England, and Wales; *Miranda* rights in the United States). Yet most suspects waive their interrogation rights (Leo, 1996a; Schulhofer, 1996). Laboratory and field research have impressively identified various factors that are associated with high waiver rates (e.g., Feld, 2013; Owen-Kostelnik, Reppucci, & Meyer, 2006; Scherr & Madon, 2013; for a review, see Kassin et al., 2010). However, very little research has focused on identifying factors that can overcome suspects' tendencies to waive their rights (for examples of exceptions, see Eastwood & Snook, 2012; Rogers, Fiduccia, Robinson, Steadham, & Drogin, 2013; Snook et al., 2014).

Findings from the basic and applied psychological literatures offer several ways to further the original intent of the procedural safeguards offered via suspects' interrogation rights. For example, police may frame suspects' opportunity to talk and convince interrogators of their innocence as scarce and limited (e.g., Feld, 2006; Leo, 1996a). Providing suspects with sufficient time to make their pre-interrogation decisions should increase suspects'

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willingness to invoke their rights. Additionally, interrogators often use strategies that induce suspects with the expectation that they should offer a waiver and this expectation is then used as a heuristic during the decision-making process (e.g., Domanico, Cicchini, & White, 2012; Levesque, 2006). Informing suspects of their actual choice between waiving or invoking their rights should increase suspects' willingness to invoke their rights because it will disrupt their heuristic processing. Specifically, providing suspects with information that is inconsistent with an implied expectation of a waiver should disrupt their heuristic-driven fluid processing that typically would lead them to offer a waiver. It seems especially prudent to recognize approaches that benefit the pre-interrogation decision-making of suspects who are at risk for waiving their interrogation rights, such as innocents (Kassin & Norwick, 2004; Moore & Gagnier, 2008; Scherr & Franks, 2015). Because offering a waiver predicts an increased risk of confession (Gillard, Rogers, Kelsey, & Robinson, 2014), reducing innocents' tendency to waive their rights has the potential to minimize the likelihood of wrongful convictions and the substantial subsequent individual and societal costs (Conroy & Warden, 2011; Garrett, 2011; Kassin, 2012).

Accordingly, this research examined the extent to which reframing the social influence of scarcity and disrupting individuals' cognitive fluency could overcome the power of innocent suspects' naïve mindset during pre-interrogation decision-making. We begin by discussing pertinent literatures, both social science and legal, and then follow with an overview of the present research.

PRE-INTERROGATION DECISION-MAKING

Myriad situational and individual difference factors influence suspects' decision to waive or invoke their rights. Research examining suspects' pre-interrogation decision-making has identified several factors that affect the risk of offering a waiver, such as youth (Owen-Kostelnik et al., 2006), intelligence (Clare & Gudjonsson, 1991; Everington & Fulero, 1999; Fulero & Everington, 1995; O′Connell, Garmoe, & Goldstein, 2005), mental health status (Cooper & Zapf, 2008), number of arrests (Leo, 1996a; Softley, 1980), suspects' guilt or innocence (Kassin & Norwick, 2004), and manipulative police tactics (Scherr & Franks, 2015; Scherr & Madon, 2013). The latter two risk factors – suspects' guilt status and police tactics – are specifically germane to the current study.

Perhaps one of the most surprising risk factors associated with offering a waiver of interrogation rights is suspects' innocence (Kassin, 2005, Leo, 1996a; Moore & Gagnier, 2008). Laboratory experiments have demonstrated the power of innocence and found that innocent individuals are more willing than guilty ones to waive their rights (Kassin & Norwick, 2004; Scherr & Franks, 2015). This idea is also supported by naturalistic observation of police interrogations (Leo, 1996a) and personal anecdotes of the wrongfully convicted (e.g., Connery, 1996). Although multiple aspects are thought to motivate innocent suspects' willingness to waive their rights, one facet of the phenomenology of innocence, just world beliefs, has been empirically examined (Scherr & Franks, 2015). Individuals who more strongly endorse just world beliefs suppose that people's actions predictably result in fair and appropriate outcomes (e.g., good things happen to good people and bad things happen to bad people; Lerner, 1980). Because these beliefs reliably affect behaviors (see Hafer & Bègue, 2005 for a review), innocent individuals who strongly endorse these beliefs should be guided by the spurious idea that their innocence will protect them in a fair and just world.

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Ultimately, these beliefs should motivate their willingness to waive their rights. Examining this idea, research has demonstrated that innocent individuals who strongly endorse just world beliefs are less influenced by police tactics when making their pre-interrogation decisions than are innocent individuals who weakly endorse these beliefs. Innocent individuals who strongly endorse just world ideologies presumably rely more on their naïve beliefs than on social influences (Scherr & Franks, 2015). Therefore, any approach aimed at decreasing innocent suspects' waiver rates should ideally be able to overcome the influence of some innocent suspects' specious notion that the world is a fair and just place.

Reframing Pre-interrogation Scarcity Ploys

The second relevant factor associated with suspects' propensity to waive their interrogation rights is the range of strategies employed by law enforcement. Although the precise frequency with which police tactics are used is unknown, the use of manipulative tactics to obtain waivers is one of the most robust findings in the literature (for a review, see Kassin et al., 2010). These techniques include offering small luxuries (Simon, 1991), treating the pre-interrogation process as a formality (Feld, 2013a, b; Scherr & Madon, 2013), and approaching the situation as a confidence game, much like a con artist (Leo, 1996a).

Another way in which law enforcement officers obtain a waiver, especially among suspects claiming innocence, is by treating the opportunity to talk as a scarce resource (e.g., Leo, 1996a). This strategy, referred to as "scarcity ploys" in the psychological literature, causes people to put a high value on the ostensibly fleeting opportunity (Cialdini & Griskevicius, 2010). The effects of scarcity have been reliably demonstrated across contexts: consumers in Miami placed more value on certain laundry detergents after they were banned (Mazis, 1975), potential mates become more attractive to unattached bar patrons as closing time approaches (Madey et al., 2010), and supermarkets purchase more import foods when they perceive (or are even led to believe) that there will be a shortage of the import foods (Knishinsky, 1982).

Naturalistic observations have also found that scarcity tactics are used during actual pre-interrogations, especially when suspects claim innocence. Indeed, one researcher observed a pre-interrogation in which "…the suspect immediately denied any wrongdoing… The detective emphasized that it would be important for the suspect to tell the truth, so that he could clear himself if he was not guilty. This would be his only opportunity to tell his side of the story" (Leo, 1996a, p. 272). Based on the basic social science literature and pre-interrogation observations, it seems that changing the framing of the decision-making process from an immediate decision to one without strict time constraints should increase innocent individuals' willingness to invoke their interrogation rights.

Disrupting Pre-interrogation Cognitive Fluency

The social influence strategies used by some interrogators can also undermine suspects' decision-making by affecting their cognitive fluency. Cognitive fluency is the ease with which one's mental processes operate without disruption or interference (Unkelbach, 2006). To the extent that their processing is not interrupted, people will engage in low-effort, fluid processing (e.g., heuristics and intuitions) to form impressions, make

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inferences, and arrive at judgments in which they behave accordingly. For example, events are thought to be more common when individuals can more easily recall examples (Tversky & Kahneman, 1973), consumers make decisions based on heuristics when their processing remains fluid (Alter, Oppenheimer, Epley, & Eyre, 2007), among others. However, when people's cognitive fluency is disrupted, people tend to engage in deeper, more critical processing. Such cognitive disfluency tends to act as an indicator that individuals should figuratively step back and reassess the situation.

One social influence strategy that affects suspects' cognitive fluency is when interrogators induce an expectation that a waiver will be offered (Domanico et al., 2012; Levesque, 2006). For instance, naturalistic research has found that some interrogators trivialize and downplay the purpose of interrogation rights (e.g., Feld, 2013a,b; Leo, 1996a), communicate anticipations that suspects' will waive their rights (e.g., Feld, 2013a,b), and implicitly suggest that offering a waiver is typical (e.g., Domanico et al., 2012; Levesque, 2006). Critically, experimental research has demonstrated that these techniques cause individuals to waive their rights (e.g., Scherr & Franks, 2015; Scherr & Madon, 2013). Such social influence strategies imply that waiving one's rights is normative and, consequently, become a heuristic that suspects use when making their pre-interrogation decision. As such, when suspects are induced with these expectations they rely on this heuristic to make their pre-interrogation decision and behave accordingly – that is, they tend to offer a waiver.

On the other hand, if suspects' heuristic processing during pre-interrogation decision-making is disrupted, it should decrease their inclination to waive their interrogation rights. For example, people engage in the confirmation bias less when they experience disfluency (Hernandez & Preston, 2013), high-school students perform better on exams (Diemand-Yauman, Oppenheimer, & Vaughan, 2011), and consumers make more informed decisions when their cognitive fluency is disrupted (e.g., Alter et al., 2007). Based on these literatures, then, suspects should be more likely to waive their rights when their cognitive fluency associated with the induced expectation *is not* disrupted. However, suspects should be more likely to invoke their rights when their cognitive fluency associated with the induced expectation *is* disrupted.

Research Overview

The present research examined the potential of two factors – reframing the pre-interrogation decision time frame as unlimited instead of immediate and disrupting individuals' cognitive fluency during the decision-making process – to reduce suspects' willingness to waive their rights. Because the aim of this project was to identify ways to improve pre-interrogation decision-making among high-risk individuals, we focused solely on innocents. Exclusively examining guilty or innocent individuals during interrogation research is a frequently employed approach (e.g., Gillard et al., 2014; Perillo & Kassin, 2011; Pimental, Arndorfer, & Malloy, 2015; Scherr & Madon, 2012, 2013; Wright, Wade, & Watson, 2013).

Adapting procedures from Russano, Meissner, Narchet, and Kassin (2005), all participants were wrongfully accused (i.e., all were innocent) of having inappropriately shared answers to a logic problem with a confederate partner. Participants were led to believe that they would have to discuss the incident with the professor in charge of the experiment and were asked to sign a waiver foregoing their right to have a student advocate present during the meeting. To manipulate the scarcity of the time frame

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given to make a decision, participants were told either that they had to make a decision immediately or that they should take as much time as they needed to make their decision. To manipulate cognitive fluency, all participants were first induced with the expectancy that they would simply sign the waiver. Some participants were then given information consistent with the expectancy, while others were given inconsistent information in order to disrupt their cognitive fluency. Participants' decision to sign (i.e., waive) or not sign (i.e., invoke) a rights document was the outcome measure.

METHOD

Participants

Undergraduates (N = 290) from a large US university participated for partial course credit. All participants were native English speakers and at least 18 years of age (M = 19.72, SD = 2.27). The sample included 100 males and 189 females (one participant did not disclose sex). The majority of the sample was White (n = 233; 80%), with much less of the sample identifying as African-American (n = 30; 10%), and other racial minorities (n = 27; 10%). Out of the entire sample, two participants inappropriately shared answers (i.e., their behaviors made them guilty and not innocent) and were removed from sample.

Experimental Design

Participants were randomly assigned to a 2 (scarcity: immediate vs. unlimited) × 2 (cognitive fluency: uninterrupted vs. disrupted) between-subjects experimental design. All participants were falsely accused of sharing answers to a logic problem and told that they would need to meet with the professor conducting the experiment to discuss the consequences of their misconduct. Participants were then presented with a waiver document giving them the option to waive their right to have a student advocate present during the meeting with the professor. Scarcity was manipulated by emphasizing either that a decision needed to be made immediately (immediate conditions) or that participants could take as much time as they needed to make their decision (unlimited conditions). Cognitive fluency was manipulated by giving participants consistent information with the original expectation that they should sign and complete the document (uninterrupted conditions) or by clarifying to participants that it was their choice of whether or not to sign the document (disrupted conditions).

Materials

Arrests

Prior experience with the criminal justice system can influence suspects' willingness to waive their rights (e.g., Leo, 1996a; Softley, 1980). To account for any potential effects these experiences may have had on participants' outcomes, we asked participants to report the number of times they had been arrested. A frequency analysis indicated that

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278 participants (~96%) reported never having been arrested, seven participants (~2.5%) reported having been arrested once, and two participants reported having been arrested twice (~1%). One participant did not disclose number of arrests.

Just World Beliefs

The Just World Scale (Rubin & Peplau, 1975) was administered to assess participants' belief that the world is a fair and predictable place. The scale consists of 20 items with response options ranging from 0 (strongly disagree) to 5 (strongly agree). Items were reverse-scored, as appropriate, and then each participant's responses were averaged to come up with a composite just world belief score. Higher scores indicate a higher degree of just world belief endorsement.

Waiver Form

A single-spaced document, approximately half a page long, informed participants of their rights (referred to as a misconduct policy). Participants were also given a separate form, which was the document participants could sign to waive their rights. This waiver form consisted of a signature line and a one-sentence statement clearly indicating to participants that by signing the form they were waiving their right to have a student advocate as a representative during the meeting with the professor. To bolster the authenticity of both documents, they were printed on résumé paper (i.e., paper woven with a small mixture of cotton). Of the 288 participants, 184 (~64%) waived their right to a student advocate.

Manipulation Check

To verify that participants remembered what they were told about the time frame of their decision, participants responded by indicating one of the following: (a) nothing; (b) that I could take as long as I needed; or (c) that I had to make my decision now.

Suspicion Check

At the end of the experiment, participants responded to open-ended questions asking them what they believed to be under investigation in the experiment. Participants were identified as suspicious if they indicated that the accusation was not believable, if they were suspicious of the confederate, or if they identified the main purpose of the experiment. Participants were also asked to give a confidence rating from 1 (not at all certain – It's a total guess) to 5 (100% certain) for each open-ended question to which they responded. Participants were labeled as suspicious and removed from main analyses if they indicated an accurate suspicion about the accusation, confederate, or purpose of the experiment and also marked 100% certain as their confidence rating.

Procedure

Upon arrival to the experimental session, each participant was introduced to a confederate who acted as a partner for the session. Both the participant and the confederate

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completed consent information and were told that the purpose of the experiment was to examine how cognitive processes influence people's abilities to make decisions individually versus as a team. The participant and confederate then individually completed surveys assessing demographic information and their just world beliefs. Following the completion of these assessments, the pair was left alone for a few minutes to become acquainted before receiving some individual and team logic packets. The experimenter emphasized that the pair should work together to solve the team problems, but that they needed to work independently to solve the individual problems. After the pair finished the logic problems, they completed a filler survey while the experimenter left to ostensibly grade the logic packets. The experimenter returned to the room 3 minutes later, visibly annoyed, and indicated that there was a problem with their answers to one of the individual logic problems. The experimenter explained that the confederate and the participant would be spoken to separately and escorted the confederate out of the room. After 5 minutes, the experimenter returned to the original room and conveyed suspicion to the participant that both members of the pair had the same wrong answer to one of the individual logic problems. The experimenter went on to suggest that the pair had cheated on this individual problem that they were explicitly told not to work on together. Participants were informed that the professor in charge of the study had been notified and that he seemed upset and might consider this a case of cheating. The experimenter further explained that departmental policy required a third party to handle the situation and this person would be arriving shortly.

After the first experimenter left the room, a second experimenter entered and explained that the participant would be given a departmental form to read and then another form to sign and complete. This point was emphasized because it served to induce the expectation that a waiver would be offered. The second experimenter then read the misconduct policy outlining the procedure to be followed in cases of academic dishonesty to the participant, including the meeting with the professor. The participant was also handed the misconduct policy form to read. Once the participant was finished reading the form, the second experimenter presented the participant with the waiver form. At this time, both of the experimental manipulations occurred. In the immediate conditions, participants were told they had to make their decision immediately so that the form could be returned to the department. In the unlimited conditions, participants were told they could take as long as they needed. In the uninterrupted conditions, participants were simply told to complete the form, which is a message that was *consistent* with the original expectation. In the disrupted conditions, participants were explicitly informed that they had a choice of whether or not to sign the form, which is a message that was *inconsistent* with the original expectation. After participants made their decisions to waive their rights (by signing the form) or to invoke their rights (by not signing the form), the second experimenter left the room with the waiver form.

The first experimenter then returned to the room and asked the participant to finish the experiment while waiting for the professor to arrive. The participant was given a packet to complete privately, which included both the manipulation check and the suspicion check items. After completing these assessments, participants were fully debriefed and given a full explanation of the true purpose of the study and the experimental manipulations. Furthermore, the experimenter emphasized that no professor was upset or angry about what had happened. Lastly, experimenters made sure that

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participants understood the true nature and importance of the study, were feeling fine, and answered any remaining questions.

RESULTS

Preliminary Analyses

Suspicion Check

A total of 10 participants provided an accurate suspicion on the open-ended question and also indicated that they were 100% certain. Although the removal of these participants did not change the trends and significant effects observed in the main analysis, we opted to remove these individuals to ensure the integrity of the samples' responses. As a result, all subsequent findings are based on a sample of 278 participants.

Background Factors

A series of preliminary analyses examined the relationship between pre-interrogation waiver decisions and several background predictors. Because none of the background factors were significantly associated with waiver decisions (race, $p = 0.56$; number of arrests, $p = 0.71$; age, $p = 0.33$; or sex, $p = 0.80$), these factors were not included in the main analyses.

Just World Beliefs

Because just world beliefs were measured and not manipulated, we conducted an analysis of variance (ANOVA) to demonstrate that participants had similar levels of just world beliefs across conditions. Indeed, no significant differences emerged between the levels of the scarcity manipulation ($p = 0.70$), the cognitive fluency manipulation ($p = 0.42$), or the interaction term between the scarcity and cognitive fluency manipulations ($p = 0.83$). These results eliminate the concern that just world beliefs and the manipulated factors were confounded. The level of just world belief endorsement for the entire sample indicated that, overall, the sample had a very slight tendency to endorse just world beliefs ($M = 3.54$, SD = 0.40).

Manipulation Check

Results of the manipulation check identified 79 participants who incorrectly stated what they were told during the scarcity manipulation. The results of all of the main analyses in terms of trends and significance did not change whether these participants were included or excluded; in fact, the significant observed effects become stronger. As such, the subsequent main analysis was conducted including the sample of 278 participants.

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Main Analysis

The relationships among waiver decisions and scarcity, cognitive fluency, and just world beliefs were examined using a logistic regression. This analysis estimated coefficient values by using maximum likelihood logistic regressions. Participants' decisions (waive or invoke) were regressed on scarcity (immediate vs. unlimited), cognitive fluency (uninterrupted vs. disrupted), just world belief endorsements (step 1), and all two- (step 2), and three-way interactions (step 3). Results related to just world beliefs are discussed in terms of being strong or weak for ease of interpretation; however, as recommended, the factor was analyzed as a continuous variable (MacCallum, Zhang, Preacher, & Rucker, 2002). The results of the logistic regression analysis are presented in Table 1.

The results indicated a main effect of just world beliefs [β = 0.69, SE = 0.34, p = 0.04, exp.(β) = 1.99 (95% confidence interval, CI: 1.02–3.85)]. Corroborating initial evidence between suspects' mindset and their pre-interrogation decision-making (Scherr & Franks, 2015), this finding further establishes the association between just world belief endorsements and innocent individuals' pre-interrogation decision-making: innocent individuals' willingness to waive their rights increased with the strength of their just world beliefs. There was, however, no main effect of scarcity on participants' waiver decisions. Although we expected that participants would be more willing to waive their rights when told to make their decision immediately compared with being allowed to take their time, no significant effects were observed between these groups [β = −0.10, SE = 0.26, p = 0.69, exp.(β) = 0.90 (95% CI: 0.54–1.50)]. Importantly, though, there was a main effect of cognitive fluency [β = −0.84, SE = 0.26, p = 0.001, exp.(β) = 0.43 (95% CI: 0.26–0.72)]. Participants in the disrupted conditions who were given inconsistent and clarifying information that they had a choice of whether or not to sign were more likely to invoke their rights compared with participants in the uninterrupted conditions who were given consistent information with the original expectation. There was no evidence of any significant two-way (p-values ≥0.09) or three-way (p-values ≥0.42) interactions. Overall, these results suggest that innocent individuals who strongly endorse just world beliefs

Table 1. Main effects and interactions of the logistic regression analysis (N = 278)

Factor	β	SE	Wald	p	Exp(β)	95% CI
Step 1: Main effects, $\chi^2(3) = 15.43$, $p = 0.001$						
Scarcity	−0.10	0.26	0.16	0.69	0.90	0.54–1.50
Cognitive fluency	−0.84	0.26	10.30	0.001	0.43	0.26–0.72
Just world beliefs	0.69	0.34	4.13	0.04	1.99	1.02–3.85
Step 2: Two-way interactions, χ^2 (3) = 3.04, p = 0.39						
Scarcity × cognitive fluency	0.09	0.53	0.03	0.87	1.09	0.39–3.07
Scarcity × just world beliefs	−0.20	0.69	0.09	0.77	0.82	0.21–3.18
Cognitive fluency × just world beliefs	−1.20	0.70	2.91	0.09	0.30	0.08–1.20
Step 3: Three-way interaction, χ^2 (1) = 0.67, p = 0.41						
Scarcity × cognitive fluency × just world beliefs	1.16	1.42	0.67	0.42	3.17	0.20–50.89

Note: Scarcity [1 = immediate (n = 139), 2 = infinite (n = 139)]; cognitive fluency [1 = uninterrupted (n = 140), 2 = disrupted (n = 138)]; outcome variable was probability of waiving (0 = invoked, 1 = waived).

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are more willing to waive their interrogation rights and, notably, that disrupting the perceived expectation to waive one's rights substantially increases the number of innocent individuals who invoke their interrogation rights.

DISCUSSION

Compared with the majority of interrogation rights research, the current study examined potential factors that could benefit innocent individuals' pre-interrogation decision-making. Although eliminating the scarcity pressure sometimes used during pre-interrogations did not influence waiver decisions, disrupting cognitive fluency significantly decreased innocents' willingness to waive their rights. When individuals were given information inconsistent with the expectation of a waiver (an expectation law enforcement often induces in suspects) and were clearly informed that they had a choice of whether or not to waive their rights, they were less likely to waive their rights than were those individuals who were given information consistent with the expectation of offering a waiver. Furthermore, results provided additional support for the notion that innocence precipitates a naïve mindset that increases a willingness to waive one's rights because innocent individuals' likelihood of waiving their rights increased with the strength of their just world beliefs.

Using Disfluency to Bring Clarity

A rich body of literature has demonstrated the impact that disrupting people's cognitive fluency can have on them. When cognitive fluency is disrupted, the tendency to engage in the confirmation bias is reduced (Hernandez & Preston, 2013), high-school students perform better on exams (Diemand-Yauman et al., 2011), individuals are less likely to be tricked into giving intuitive responses (Alter et al., 2007; Song & Schwarz, 2008), and consumers make more informed decisions, rather than ones based on heuristics (Alter et al., 2007). The present study extends this literature by demonstrating the impact that disrupting people's cognitive fluency can have during high-stakes, legal decision-making. During naturalistic pre-interrogations, suspects are frequently induced with an expectation that they should waive their rights, even though such decisions go against suspects' best interests (Domanico et al., 2012; Feld, 2013a,b; Levesque, 2006). Throughout many pre-interrogations, suspects are frequently given consistent reminders of this expectation. In these environments, their cognitive processes remain fluid with the original expectation of offering a waiver. However, if the expectation is violated in some manner (e.g., they are unequivocally told they have a choice), their cognitive processes will be disrupted. Such instances that engender cognitive disfluency are critical because they provide one means of affording suspects the cognitive wherewithal to step back and reassess the decision-making situation. By so doing, the potential for suspects to realize and appreciate the magnitude of the decision increases. Indeed, in the current study, these individuals were significantly less likely to waive their rights compared with individuals whose cognitive fluency was not disrupted.

It is also noteworthy to understand the impact that disrupting cognitive fluency has on innocent individuals' pre-interrogation decision-making. The lack of any two- or three-way interactions involving cognitive fluency indicates the impressive influence

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this factor has on innocent individuals' decision-making because its influence was not constrained by the levels of the other factors (i.e., social influences or just world beliefs). In this way, disrupting the cognitive fluency often operating during naturalistic pre-interrogations can have potentially remarkable benefits for innocents' decision-making.

Implications

The observed effects have several research and applied implications. This research further establishes the deleterious association between innocent suspects' naïve mindset and their pre-interrogation decision-making. Innocent individuals who more strongly endorsed beliefs that the world is a fair place and that good things happen to good people were more likely to waive their rights compared with individuals who endorsed this ideology less strongly. Although this decision-making process makes intuitive sense—innocent people feel they have not done anything wrong, that they are good people and, consequently, nothing bad will happen to them – such decisions can result in problematic outcomes. In these instances, innocent suspects will be questioned by interrogators without legal counsel, thereby increasing the likelihood they will offer false self-incriminating information. As such, demonstrating the association between such a naïve mindset and the decision to waive one's rights during pre-interrogation is an important step in remediating subsequent negative outcomes.

The current research is the first demonstration of the effect that cognitive fluency has on suspects' pre-interrogation decision-making. When the expectation of offering a waiver was violated, innocent individuals were less willing to waive their rights. This finding provides a strong theoretical explanation for one factor that can benefit the pre-interrogation decision-making of innocent suspects. Importantly, this finding also offers a theoretical reason for the impact that making one's rights explicit has on their decision-making. In a self-described practical experiment designed to test the assumptions underlying two U.S. Supreme Court decisions (i.e., *Berghuis v. Thompkins*, 2010; *Florida v. Powell*, 2010), individuals who were explicitly informed of their rights were significantly more likely to invoke their rights compared with those who were not (Gillard et al., 2014). According to the effects observed in this research, when suspects are administered their rights in an explicit fashion and their cognitive fluency is disrupted, they are able to step back and re-evaluate the situation. Hence, one way interrogators could better inform suspects of their rights is by explicitly advising suspects that they have a choice of whether to waive or exercise their interrogation rights. Providing suspects this opportunity reduces the likelihood of waiving their rights. However, when suspects are not given their rights explicitly, but rather implicitly (i.e., in a manner upheld by *Powell*), their cognitive fluency is not disrupted and these individuals are highly likely to waive their rights.

These findings have meaningful implications for policy reform and the administration protocols used during pre-interrogations. These findings suggest that strategies can be adopted to fairly reconcile the differing goals of interrogators and rights advocates. Law enforcement approach pre-interrogations with a guilt presumptive expectation (Kassin, Goldstein, & Savitsky, 2003) and use a variety of means to obtain a waiver of one's rights (e.g., Leo, 1996b). As noted previously, one strategy that researchers and scholars have observed interrogators using to obtain a waiver is to induce suspects with the expectation that they will offer a waiver (Domanico et al., 2012; Feld, 2013a,b; Levesque, 2006). Such

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approaches unfairly, yet powerfully, influence suspects' willingness to waive their rights. Interrogation rights advocates, however, call for compulsory legal representation for suspects (e.g., Gudjonsson, 2003; Kassin et al., 2010; Verhoeven & Stevens, 2012). As demonstrated by the findings of this research and others (e.g., Gillard et al., 2014), an impartial and feasible approach would be to inform suspects that they have a choice of whether to waive or invoke their rights, rather than implying that a waiver will be given or inducing a similar expectation. Taking such an approach is especially important for innocent suspects who, when subjected to manipulative strategies, may be set up to offer false self-incriminating evidence during interrogations that may lead to a subsequent wrongful conviction.

Another way to appreciably advance the realization of suspects' interrogation rights is to combine approaches void of manipulative strategies with warnings shown to improve suspects' understanding of their rights (e.g., Eastwood & Snook, 2012; Rogers, Rogstad, Steadham, & Drogin, 2011; Snook et al., 2014). Taking this two-pronged approach seems particularly valuable because of the robust literatures that have documented individuals' poor comprehension across several countries (e.g., Eastwood, Snook, & Luther, 2014; Fenner, Gudjonsson, & Clare, 2002; Rogers et al., 2013; Scherr, Agauas, & Ashby, 2016) as well as the use of various manipulative tactics during pre-interrogations (Feld, 2013a,b; Leo, 1996a). Creating these beneficial pre-interrogation environments would therefore improve both suspects' ability to understand their rights and pre-interrogation decision-making abilities.

Future Directions and Limitations

Despite the noteworthy effects observed in this research, there are some limitations that future research should address. Although it was predicted that giving individuals sufficient time to make their decision would reduce the rate of waivers, such an effect was not observed. One reason for this could have been the cognitive fluency manipulation. That is, individuals seem to have been acting correspondingly to the expectation (i.e., cognitive fluency) or the violation of the expectation (i.e., cognitive disfluency), regardless of how quickly they were told the decision had to be made. This explanation offers additional evidence of the power that the expectation and cognitive fluency have on suspects' pre-interrogation decision-making. Another possible explanation has to do with the wording used to vary the immediacy of making the decision. Future research should examine other ways to reframe instances in which suspects are given sufficient time to make their decisions. For example, individuals could be informed that they can have all the time they need to make the decision and also that this decision is not permanent or binding for the entirety of the ensuing interrogation. In this way, the decision would appear to be a less scarce opportunity (i.e., it is not an immediate or one-time resource), thereby potentially helping to ameliorate individuals' willingness to waive their rights.

Because of the nature of experimental laboratory research, the employed procedures reflect an upper-bound approach because participants' experiences during this study were not as extreme (e.g., tactics were less coercive) as the experiences of suspects actually accused of a crime. Indeed, police accusations are highly stressful (e.g., Irving, 1980) and the amount of stress that individuals experience influences their understanding of their rights (e.g., Scherr & Madon, 2012) and their pre-interrogation decision-making (e.g., Scherr & Franks, 2015). Additionally, instead of having the opportunity

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to have a lawyer present, participants were presented with the opportunity to have a student advocate present, thereby potentially reducing their perception of the severity of the situation.

The background and characteristics of our sample differed in several ways from a sample of criminal suspects. College students, on average, exhibit a higher level of intellectual functioning compared with criminal suspects (Ceci & Williams, 1997). This difference is important to note because research has demonstrated that lower intellectual ability is a risk factor for offering a waiver of one's rights (Clare & Gudjonsson, 1991; Everington & Fulero, 1999; Fulero & Everington, 1995; O'Connell et al., 2005). College students are also less likely than non-college-educated individuals to have a history of prior arrests (Brame, Bushway, Paternoster, & Turner, 2014), which could influence their decision-making, because previous experience with the legal system increases suspects' willingness to exercise their rights (Leo, 1996a; Softley, 1980). The sample used in this research is also less likely to be characterized by individual difference factors (e.g., suggestibility, age, mental health status) that have been found to influence pre-interrogation outcomes (Cooper & Zapf, 2008; O'Connell et al., 2005; Owen-Kostelnik et al., 2006). Moreover, because participants in the current study were all innocent, the results should not necessarily be assumed to typify guilty suspects. Based on research showing that innocent and guilty suspects differ across a variety of dimensions (e.g., Guyll et al., 2013; Hartwig, Granhag, Stromwall, & Kronkvist, 2006; Kassin, 2005; Narchet, Meissner, & Russano, 2011; Scherr & Franks, 2015), future research should examine if the observed effects influence guilty individuals in a similar fashion. In sum, it will be important to examine whether the effects observed in the present study generalize to a more heterogeneous range of individuals, suspects who come from vulnerable populations, and guilty suspects.

Nonetheless, any differences that may exist between a college student sample and suspects in naturalistic pre-interrogations are likely differences of magnitude rather than effect. Support for this idea comes from both theoretical and empirical research addressing the power of situational and dispositional influences on pre-interrogation outcomes (e.g., Kassin et al., 2010; Leo, 1996a; Scherr & Franks, 2015; Scherr & Madon, 2013). Although our findings are consistent with the extant literature, it is still likely that they represent conservative estimates compared with those that would occur in a naturalistic pre-interrogation setting. The idea that the observed effects are conservative estimates strengthens the call for necessary reforms to ensure that the intent of interrogation rights is realized.

CONCLUSION

Suspects are afforded interrogation rights designed to protect them from offering self-incriminating information and to provide the aid of legal counsel. Most suspects, especially those who are innocent, do not take advantage of these protections and aids and, instead, waive their interrogation rights. In addition to further establishing the relationship between innocent suspects' naïve mindset and their willingness to waive their rights, the current research identified an impactful, yet judicious, factor that can reduce innocent suspects' willingness to waive their rights. By informing individuals that they have a choice of whether or not to waive their rights and violating the induced expectation of offering a waiver, their cognitive processing was disrupted, causing them

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to be less likely to waive their rights. Moving forward, it will be important to identify additional factors that can improve suspects' pre-interrogation decision-making. In this way, policy reforms based on empirically supported evidence can be put forward which have the ability to reduce instances of false confessions and wrongful convictions. The findings of this research, therefore, have important implications for researchers, scholars, policymakers, and the legal system and represent a step in the direction of identifying ways to overcome problematic situational and dispositional factors in addition to identifying these risks.

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