

Knowingly but Naively: The Overpowering Influence of Innocence on Interrogation Rights Decision-Making

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Most suspects waive the guaranteed protections that interrogation rights afford them against police intimidation. One factor thought to motivate suspects' inclination to waive their rights stems from the acquiescence bias whereby suspects mindlessly comply with interrogators' requests. However, research bearing on the phenomenology of innocence has demonstrated the power of innocents' mindset, which could motivate some innocent suspects to waive their rights knowingly (instead of mindlessly complying). To test these ideas, participants ($N = 178$) were (a) rightfully (guilty) or wrongfully (innocent) accused of wrongdoing during an experimental session, (b) administered 1 of 2 forms that by signing either waived or invoked their rights to a student advocate, and (c) given questions to assess their degree of knowing during the decision-making process (i.e., extent to which individuals were cognizant of their decisions). Results demonstrated that unknowing innocent and guilty individuals tended to passively comply, engaging in a pre-interrogation acquiescence bias by signing waive and invoke forms at similar rates. But, as participants became more cognizant of their decisions, they acquiesced at lower rates and their change from acquiescence differed depending on their status. As innocents became more cognizant, they signed the waiver form at higher rates than the invoke form, thereby demonstrating that innocence can motivate some suspects to knowingly forgo their rights. Conversely, as guilty individuals became more cognizant, they signed the invoke form at higher rates than the waiver form. These findings have implications for reforming pre-interrogation protocols, protecting suspects' civil liberties, and preventing innocents from offering false self-incriminating evidence.

Public Significance Statement

Innocent and guilty people uniquely approach the decision to forgo their *Miranda* rights. All people who do not understand the decision process passively comply with interrogators' requests and forgo their rights, but guilty people with better understanding *exercise* their rights regardless of interrogators' requests. Problematically, innocents with better understanding *forgo* their rights regardless of interrogators' requests—suggesting that *Miranda* rights, as currently administered, serve an opposite purpose than originally intended.

Keywords: interrogation rights, acquiescence bias, phenomenology of innocence

During a class presentation, one of the authors discussed the phenomenology of innocence and how innocence is a risk factor for suspects waiving their interrogation rights. Two students not present for the lecture were, consequently, the only students to

remark on a subsequent exam that their best strategy as innocents would be to waive their rights because they had nothing to hide. These anecdotal examples are not uncommon and have been observed empirically (e.g., Kassin & Norwick, 2004) and are evident in many of the stories of the wrongfully convicted (Westervelt & Cook, 2012). The empirical evidence, combined with the numerous instances of wrongful convictions that were catalyzed by innocent people waiving their rights, beg the question: How powerful is innocence? Put another way: Is innocence powerful enough to engender decision-making processes that can motivate suspects to make knowing decisions that go against their best self-interest and overpower potent cognitive heuristics and social influences?

Although suspects are afforded rights before and during custodial interrogations (e.g., *Miranda v. Arizona*, 1966, Canadian

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cautions), the majority of suspects forgo these rights (e.g., [Leo, 1996](#)) with innocents especially likely to offer waivers (e.g., [Kassin & Norwick, 2004](#)). Naturalistic and laboratory research have established a range of situational and dispositional factors that influence suspects' decision to waive or invoke their rights (for a review, see [Smalarz, Scherr, & Kassin, 2016](#)). Yet, much remains unknown about factors that uniquely influence innocent suspects' strong inclination to waive their rights—motivations that likely differ from factors underlying guilty suspects' pre-interrogation decisions. Indeed, innocent and guilty individuals likely exploit distinct decision-making strategies to waive or invoke their interrogation rights based on research indicating that innocent and guilty individuals approach interrogations differently ([Guyl et al., 2013](#); [Kassin & Fong, 1999](#); [Moore & Gagnier, 2008](#)).

Accordingly, the current study attempted to further our understanding of innocent and guilty individuals' pre-interrogation decision-making (i.e., the choice-point during which a suspect initially decides to waive or invoke their interrogation rights). One idea speculated to contribute to the overall high waiver rates is based on the acquiescence bias (a mindless tendency to agree and comply; [McGee, 1967](#)) whereby suspects passively engage in a pre-interrogation acquiescence bias and accede to interrogators' common ploys used to obtain a waiver. Such speculation makes sense given that individuals tend to agree regardless of item content ([Couch & Keniston, 1961](#)) and more often respond with a "yes" rather than a "no" (e.g., [Zuckerman, Knee, Hodgins, & Miyake, 1995](#)). However, innocent individuals approach pre-interrogations naively—a phenomenology of innocence that undermines their decision-making ([Kassin, 2005](#)) and may even be powerful enough to override social influences present during pre-interrogations (e.g., [Scherr & Franks, 2015](#)). Based on acquiescence bias and phenomenology of innocence research, the present research pitted the effects of heuristic biases stemming from social influence pressures against the power of innocence on pre-interrogation decision-making. A discussion of relevant research bearing on the acquiescence bias and suspects' pre-interrogation decision-making is offered next, followed by an overview of the current research.

A Pre-Interrogation Acquiescence Bias

People are faced with myriad requests on a daily basis ranging from online agreements to those from friends, family, and coworkers. Critically thinking about all of the requests one receives on a daily basis would be nearly impossible because of the time and cognitive resource demands. To compensate, people tend to mindlessly agree in most all situations, a process that is referred to as the acquiescence bias ([McGee, 1967](#)). People are especially likely to acquiesce during instances of affirming requests with a "yes" rather than objecting with a "no" ([Blau & Katerberg, 1982](#); [Moum, 1988](#); [Ray, 1983](#)). Some individuals may acquiesce because they want to avoid being disliked by a requester and to protect their self-image ([Couch & Keniston, 1960](#)) and others do so to engage in socially desirable responding rather than cause conflict ([Diers, 1964](#)). Often, people will acquiesce to a request because it is a low effort initial step toward understanding a solicitation ([Gilbert, 1991](#)). Despite the benefits of saving time and cognitive resources by engaging the acquiescence bias when confronted with daily, innocuous requests, there are high-stakes contexts in which mindless compliance could have harmful consequences.

A pre-interrogation context is one such situation in which acquiescing could have detrimental consequences. Based on the research establishing that people acquiesce for a variety of reasons, pre-interrogation contexts are ripe for mindless compliance given the number of powerful social influences that exist in these environments ([Leo, 1996](#)). For example, suspects may acquiesce because they believe offering a waiver is the expected and typical decision ([Feld, 2013a, 2013b](#); [Leo, 1996](#)). Suspects may also mindlessly comply because pre-interrogation contexts feature many symbols of authority and legitimacy ([Gibson, Lodge, & Woodson, 2014](#)). Moreover, the stress associated with accusations of wrongdoing ([Guyl et al., 2013](#); [Irving, 1980](#)) may enhance the effect of these social influences and increase the likelihood that suspects will engage in compliant, heuristic decision-making because of the stress induced cognitive load they are experiencing ([Knowles & Condon, 1999](#)).

Taken together, research evidence indicates that individuals' tendency to acquiesce could be especially pronounced in a pre-interrogation setting, which involve the use of powerful social influence tactics designed to elicit rights waivers from mindlessly compliant suspects (e.g., [Feld, 2013a, 2013b](#); [Leo, 1996](#)). However, research revealing differences between innocent and guilty individuals suggests that suspects may engage the acquiescence bias to varying degrees. Indeed, research has demonstrated the power of the innocent mindset during pre-interrogation and interrogation decision-making ([Kassin, 2014](#); [Kassin et al., 2010](#); [Scherr & Franks, 2015](#)).

The Phenomenology of Innocence

Innocents, unlike guilty suspects, approach interrogations with a naïve mindset in which they believe that they have nothing to hide and the truth will set them free ([Kassin, 2005](#); [Kassin & Fong, 1999](#); [Leo, 1996](#)). This naïve mindset is corroborated by research demonstrating that innocents exhibit lower physiologic reactivity ([Guyl et al., 2013](#)) and self-report less stress ([Scherr & Franks, 2015](#)) upon being accused of wrongdoing. An innocent ideology also behaviorally manifests in their higher likelihood of waiving their rights ([Kassin & Norwick, 2004](#); [Moore & Gagnier, 2008](#)) and their willingness to consistently divulge information to interrogators (whereas guilty individuals' disclosures are dependent on situations in which they perceive that an interrogator is well-informed about relevant evidence; [Hartwig, Granhag, Strömwall, & Kronkvist, 2006](#); [Hartwig, Granhag, Strömwall, & Vrij, 2005](#)).

Although research has demonstrated that innocence, in general, increases suspects' willingness to waive their rights, recent findings suggest that innocents' decision-making may be motivated by unique factors. Specifically, in one study, innocents who reported higher levels of just world belief endorsement were not significantly affected by social influence pressures (presumably because they relied more on their ideologies), but innocents who reported lower levels of just world beliefs were highly likely to comply with social influence pressures ([Scherr & Franks, 2015](#)). Therefore, some innocents' pre-interrogation decisions may be based on an acquiescent tendency to mindlessly comply with interrogators' requests (e.g., "*I signed because the interrogator asked me to*"), whereas other innocents' pre-interrogation decisions may be the result of a knowing decision based on their naïve mindset (e.g., "*I signed because I had nothing to hide*").

The ability of deeply ingrained ideologies, such as innocence, to overpower decision-making processes is not uncommon. For example, one study asked people to solve problems presented in scenarios that required participants to analyze empirical evidence and data frequencies. Although individuals higher in numeracy ability were, in general, the most proficient at solving these problems, people's political ideology—both liberal and conservative—influenced highly numerate people to do worse when scenarios presented empirical evidence that went against their endorsed political leanings. That is, regardless of people's numeracy ability, their ideology overpowered their ability to make cogent, accurate decisions (Kahan, Peters, Dawson, & Slovic, 2013). Furthermore, research suggests that other powerful ideologies, such as religious beliefs, influence individuals' likelihood of perpetuating unsupported ideas (e.g., the 13% of high school biology teachers whose curriculum focuses on some form of creationism rather than evolution; Berkman & Plutzer, 2011).

Based on research establishing the influence that innocence has on individuals' decision-making and susceptibility to social influences, some innocent suspects may make more *mindful* and *intentional* decisions to forgo their interrogation rights. That is, some innocents could make a knowing decision to forgo their interrogation rights based on their naïve belief in the power of their innocence. If such effects are observed, they would suggest that the power of innocence could motivate some innocents to knowingly make decisions to forgo their rights despite the fact that such decisions could have detrimental consequences for the outcome of the interrogation. Some innocents would be making knowing, yet naïve pre-interrogation decisions to talk to interrogators alone, thereby increasing their chances of being confronted with police intimidation.

Research Overview

The current research examined the influences of the acquiescence bias and the power of innocence on individuals' pre-interrogation decisions to waive or invoke their rights. Procedures from Russano and colleagues (2005) cheating paradigm were adapted to test these ideas. During each experimental session, participants were falsely (innocent) or rightfully (guilty) accused of cheating on a logic-problem task and were led to believe that they would have to discuss the cheating incident with the professor in charge of the experiment. Participants were then asked to sign a document that would determine whether they wanted to have a student advocate present during the meeting with the professor. At this point, three subsequent critical events took place. First, some participants were presented with a traditional waiver document (e.g., “. . . by signing here, you waive your rights . . .”) and other participants were presented with an invoke document (e.g., “. . . by signing here, you invoke your rights . . .”). Thus, although only one word was different between the two forms (either waive or invoke), a signature on the document would result in exact opposite outcomes. Second, in order to mirror an approach that is frequently used during naturalistic administrations, *all* participants were confronted with the commonly used social influence tactic whereby suspects are told their interrogation rights are not important and the form is just a formality of the process (Feld, 2013a, 2013b; Leo, 1996). Importantly, laboratory research has corroborated the ability of these tactics to cause an increase in signature rates (e.g.,

Scherr & Madon, 2013). Third, after individuals offered their signature decisions, a series of questions assessed the extent to which participants knowingly made their decisions. Assessing participants' degree of knowing was imperative in order to further determine the degree to which participants were engaging in mindless, compliant decision-making or cognizant, deliberate decision-making. Consequently, a situation was constructed to disentangle mindless versus knowing pre-interrogation decision-making.

Taking this approach provided the ability to test key, yet to be examined questions regarding suspects' pre-interrogation decision-making. Based on the acquiescence bias literature, the *acquiescence hypothesis* predicts that guilty individuals will sign both forms at similar rates and innocent individuals will also sign both forms at similar rates. However, other research suggests that as innocent suspects become increasingly cognizant of their situation, they will be more likely to sign the waiver form than the invoke form (*knowing hypothesis*). If the *knowing hypothesis* is supported it would indicate that the phenomenology of innocence can override powerful cognitive heuristics like the acquiescence bias.

Method

Participants and Experimental Design

Students ($N = 185$) from a large Midwestern university participated for course credit. The sample comprised all native English speakers, was predominantly White (75%), female (70%), and had an average age of 19.32 years ($SD = 2.16$). Six participants either inappropriately cheated in an innocent condition or did not cheat in a guilty condition and were removed leaving a sample of 179 participants.

Participants were randomly assigned to a 2 (status: innocent vs. guilty) \times 2 (rights form: waive vs. invoke) between subjects experimental design. All participants were accused of wrongdoing during the experimental session. But, whereas innocent participants were wrongfully accused, guilty participants were rightfully accused. After being accused of wrongdoing, participants were led to believe that they had to meet with the professor of the experiment after the study was over and were given a form that indicated they had the right to have a student advocate present with them while they met with the professor. Participants were either presented with a *waive* form that indicated a signature would waive their right to have a student advocate with them during the meeting with the professor or they were presented with an *invoke* form that indicated a signature would confirm their right to have a student advocate with them during the meeting with the professor. In order to mirror the social influence tactics commonly used during naturalistic pre-interrogations, all participants were told that the form was not important and was simply a formality (Domanico, Cicchini, & White, 2012; Levesque, 2006). Participants' decisions to sign or not sign the rights form was used as the main dependent measure. All materials and the procedure were approved by the first author's Institutional Review Board.

Materials

Arrests. Suspects' inclinations to waive their rights can be impacted by past experience with the criminal justice system (Leo, 1996; Softley, 1980). To control for this influence, participants were asked

to report the number of times they had previously been arrested. A frequency analysis identified that 167 participants (93%) reported that they had never been arrested, 10 participants (6%) reported that they had been arrested once, and 1 participant (0.6%) reported being arrested at least five times. One participant did not report the number of arrests.

Rights forms. Participants were administered one of two documents that were of identical length (i.e., single-spaced and one half-page long) and informed participants of their rights. The two documents differed in the content of the signature line, located at the bottom of the form. Participants in the waive form conditions were administered a form that clearly indicated that, by signing the document, the participant would be waiving their right to have a student advocate present at the meeting with the professor (a form that mirrors traditional waiver forms in the legal system). Participants in the invoke form conditions were administered a form that clearly indicated that, by signing the document, the participant would be invoking their right to have a student advocate present at the meeting with the professor. Hence, although these forms only differed in one word (waive or invoke), a signature would result in an entirely different outcome. Participants' decisions were recorded as 0 (*did not sign*) or 1 (*signed*) and served as the main outcome. A signature on the waive form indicated a decision to waive one's rights and a lack of signature indicated a decision to not waive one's rights. Similarly, a signature on the invoke form indicated a decision to invoke one's rights and a lack of signature indicated a decision to not invoke one's rights. These documents were printed on resume paper to enhance their authenticity.

Knowing assessment. Although signature rates between the different forms provides an initial metric of individuals' acquiescence, participants' degree of knowingly signing or not signing provides a more nuanced way to tease apart mindless compliance from deliberate decision-making. Participants' ability to know and appreciate their decisions was assessed with four questions. The first question asked participants to define waive or invoke (consistent with the form the participant was given) and their response was scored as a 0 (entirely wrong), 1 (partially correct), or 2 (entirely correct). The second question asked participants to articulate what the rights form they were administered comprised ("You were given a sheet to sign. What did the portion you were given to sign pertain to?"). Participants' responses were coded for whether they mentioned that the sheet informed them of their right to a student advocate and also whether they mentioned that their decision related to waiving or invoking (depending on condition). Based on these criteria, each response was scored as a 0 (entirely wrong), 1 (partially correct; only mentioned one of the two criteria), or 2 (entirely correct; mentioned both criteria). These two assessments were scored by two coders who were blind to condition. The reliability between the two coders was excellent ($ICC_{\text{Question 1}} = .96$; $ICC_{\text{Question 2}} = .98$; Cicchetti, 1994). Any discrepancies between the scorers' coding were resolved via input by the first author. The third question asked participants to identify the form they were given as (a) nothing, (b) a form to waive their rights, or (c) a form to invoke their rights. The fourth question asked participants to recall what they were told about the form: (a) nothing, (b) that it was an important part of the procedure, or (c) that it was a formality and not an important part of the procedure. The two multiple choice questions were scored as 0 if answered incorrectly and as 1 if answered correctly. Participants' responses

across the four knowing assessment questions were summed with the total ranging from 0 to 6 with 6 being indicative of perfect degree of knowing.

Stress assessment. Consistent with prior pre-interrogation research (e.g., Scherr & Franks, 2015; Scherr & Madon, 2012, 2013), participants' experience of stress during the accusation was measured using retrospective self-report data. This measure of stress allows for a cover story consistent with the cheating paradigm to be maintained without unnecessarily arousing suspicion. Further, research using retrospective self-report stress data has been demonstrated as reliable and similar to results obtained via physiologic (e.g., Guyll et al., 2013; Tomaka & Blascovich, 1994) and state anxiety data (e.g., Verkuil, Brosschot, de Beurs, & Thayer, 2009).

To measure participants' experience of stress, they were asked 7 questions. The gist of the questions were similar across all 7, but replaced the italicized word with related words: "How *stressed* were you right before given the rights form?". In addition to *stress*, the other 6 words were *nervous*, *anxious*, *worried*, *concerned*, *tense*, and *scared*. Participants responded using seven-point rating scales where 1 corresponded to low stress levels and 7 corresponded to high stress levels. Participants' responses to the 7 questions were averaged to create one score for each participant. Higher values corresponded to greater stress ($M = 3.35$, $SD = 1.80$).

Suspicion check. Participants were asked to complete open-ended questions pertaining to their beliefs and suspicions about what was being studied during the experiment. Participant responses were coded as suspicious if any of the following was evident from their responses: They had accurate ideas about the main aims of the research, they did not believe the accusation, or they did not believe that the confederate was another participant like themselves. When participants listed their suspicions about the aims of the research, they were also asked to rate how confident they were about each suspicion on a scale from 1 (*Not at all certain*) to 5 (*100% certain*). Participants who shared an accurate suspicion and also indicated that they were 100% certain of the suspicion were labeled as suspicious participants.

Signature decision rationale. Participants were asked why they did or did not sign the rights form they were given. Participants' responses were coded by two members of the research team (blind to conditions) into mutually exclusive categories relating to acquiescence, innocence, guilt, or a good reason (e.g., signing an invoke form to ensure access to the advocate). Any discrepancies between the raters' coding were resolved via input by the first author.

Procedure

Upon arrival to the lab, the participant and confederate, who posed as another participant, were each given a consent form to complete. After the experimenter collected the completed consent forms, the cover story was explained to the pair in which they were told that the aim of the experiment was to examine individual differences associated with individual and team decision-making. The pair was told that throughout the study they would be completing multiple tasks designed to measure their abilities to work independently and with each other. Upon the completion of the demographic questions, the pair was left alone for 3 min to get to

know each other. The experimenter then returned to the room with individual and team logic problem packets. The experimenter emphasized to the pair that they need to work alone on the individual logic problems and to work together on the team logic problems. The experimenter then left the room for the pair to work on the problems.

The status manipulation (guilt or innocence) occurred while the pair was working on the logic problem packets. In the innocent conditions, the participant and confederate worked on the independent logic problem packets alone and did not discuss their answers, thereby following the rules of the experiment. In the guilty conditions, the confederate solicited help from the participant on the last individual problem, thus ensuring that the participant violated the rules of the experiment. Only the confederate was knowledgeable of the status of the participant (i.e., experimenters remained blind to participant status). When all of the logic problems were completed, the experimenter administered a one-page filler survey that the pair was to complete while the experimenter presumably graded each of the logic packets. When the pair informed the experimenter that they had completed the filler survey, the experimenter returned to the room looking irritated, collected the surveys, informed the pair that something needed to be checked on, and then left the room. A minute later, the experimenter returned and informed the pair that there was a problem and that the experimenter needed to talk with each person separately. The confederate was then escorted from the room ostensibly for questioning. After 5 min had passed, the experimenter returned to the participant's room and accused the participant of cheating on the individual logic packet because the pair each had written down the same wrong answer. The participant was also told that the professor has been informed of the incident and was upset about the situation and that the participant was going to have to meet with him after the session to discuss potential disciplinary action. Before exiting the room, the experimenter informed the participant that, in accordance with departmental policy, another individual would assist in handling the incident.

After the experimenter left the room, a student worker from the office (in reality a second experimenter of the research team) entered carrying an official-looking document (i.e., the rights document). The participant was informed that the document listed students' rights in alleged instances of academic integrity violations, but the student worker did not elaborate on any of the specific information presented in the document. The document informed participants that they could choose to have a student advocate present with them during any meetings with the professor. Importantly, the student worker told all participants that the form and process was trivial and not important. Participants were then given either the waive or the invoke rights form.

When participants finished making their decision to sign or not sign the rights form, the original experimenter returned and provided participants with the knowing assessment followed by the stress assessment and the suspicion check. Next, the experimenter asked the participant to provide a rationale for signing (or not signing) the rights form and recorded their answer. The experimenter then debriefed the participant by disclosing the deception that was used in the study and explaining why such procedures are necessary to examine these types of research questions. The experimenter answered any questions the participant had about the research and then thanked and dismissed the participant.

Results

Preliminary Analyses

Demographics. Analyses were conducted to examine whether any of the demographic factors were meaningfully related to the participants' signature decisions. Results indicated that none of the background factors were associated with participants' signature decisions: ethnicity, $p = .87$; number of arrests, $p = .63$; age, $p = .62$; or sex, $p = .72$. Consequently, none of these factors were included in the main analyses.

Knowing assessment. Because the knowing assessment consisted of items that were not manipulated, an analysis was conducted to examine whether participants' performance on the knowing assessment varied as a function of the manipulated factors of status and rights form. Results indicated that neither status ($b = 0.856$, $SE = 0.784$, $p = .276$, 95% CI $[-0.69, 2.40]$) nor rights form ($b = -0.22$, $SE = 0.779$, $p = .776$, 95% CI $[-1.76, 1.31]$) predicted participants' performance on the knowing assessment. The status \times rights form interaction also did not predict participants' performance on the knowing assessment, $b = -.558$, $SE = 0.500$, $p = .266$, 95% CI $[-1.54, 0.43]$. These results establish that participants' performance on the knowing assessment did not differ across the manipulated variables thereby eliminating the concern that these factors were confounded.

Stress assessment. In order to demonstrate that the accusation of wrongdoing was meaningful to participants and that participants' accusation experiences were similar to individuals' experiences during previous research, an analysis examined their stress reactions upon being accused of wrongdoing. Results of an analysis of variance (ANOVA) indicated that innocent participants ($M = 2.99$, $SD = 1.74$) reported lower levels on the stress assessment than guilty participants ($M = 3.67$, $SD = 1.81$), $F(1, 175) = 6.287$, $p = .013$, $\eta_p^2 = .035$. This result is consistent with previous interrogation research using this paradigm (e.g., Guyll et al., 2013; Scherr & Franks, 2015) and indicates that innocent participants were experiencing less stress than guilty participants. Results failed to demonstrate differences between reports of stress when participants were presented with the invoke form ($M = 3.36$, $SD = 1.82$) compared to the waive form ($M = 3.34$, $SD = 1.80$), $F(1, 175) = 0.031$, $p = .86$, $\eta_p^2 = .000$. Furthermore, the interaction between status and rights form did not influence participants' reports of stress, $F(1, 175) = 1.648$, $p = .201$, $\eta_p^2 = .009$.

Suspicion check. Participants' responses to the open-ended suspicion check items and accompanying confidence assessments were examined. Results indicated that four participants expressed accurate suspicions about the true purpose of the research. Three of these participants had already been removed because they failed to comply with the status manipulation. The other participant made comments to the confederate while they were waiting for the experimenter to grade the logic problems about the impending accusation and subsequently inferred the true purpose of the research with 100% confidence. Given these strong suspicions, the participant was removed from the sample leaving a total of 178 participants that were used in the analyses reported next.

Main Analyses

Signature decision. A series of analyses were carried out in order to test the acquiescence hypothesis (i.e., guilty individuals

would acquiesce and sign the forms at similar rates and innocent participants would acquiesce and sign the forms at similar rates) and the knowing hypothesis (i.e., the power of innocence would overpower the acquiescence bias causing some innocents to knowingly sign waiver forms more than invoke forms). The analyses consisted of maximum likelihood logistic regressions. For the first analysis, participants' signature decisions (sign or no sign) were regressed on status (innocent vs. guilty), rights form (waive vs. invoke), participants' degree of knowing (knowing assessment), and all two- and three-way interactions. The results related to the knowing assessments were analyzed in their continuous nature rather than dichotomously (MacCallum, Zhang, Preacher, & Rucker, 2002), but are discussed in terms of knowing or unknowing for ease of understanding and interpretation.

The associated results of the logistic regression analysis are presented in Table 1. Results indicated that neither status nor the rights form significantly influenced signature decisions, but that participants' degree of knowing was associated with signature decisions. The Status \times Rights Form interaction did not significantly influence participants' signature decisions; however, the other two-way interactions influenced participants' signature decisions. Critically though, the significant main effect and two-way interactions were qualified by the Status \times Rights Form \times Knowing three-way interaction on participants' signature decisions.

In order to break down the observed three-way interaction, a follow-up series of maximum likelihood logistic regressions were conducted. The first set of results focuses on unknowing innocent participants comparing their signature decisions between the waive and invoke forms and is followed by the same analysis among unknowing guilty participants. The second set of results focuses on knowing innocent participants comparing their signature decisions between the waive and invoke forms and is followed by the same analysis among knowing guilty participants. Taking this analytic approach allowed a test of both the acquiescence and knowing hypotheses (see Figures 1 and 2). The probability of participants providing a signature is presented along with the other relevant statistics.

Results indicated that unknowing innocent participants' signature decisions did not differ depending on whether they were administered the waive form ($p_{\text{signing}} = .85$) or the invoke form ($p_{\text{signing}} = .80$), $b = 0.424$, $SE = 1.01$, $p = .676$, 95% CI $[-1.56, 2.41]$, $z = 0.418$. Consistent with unknowing innocents, results

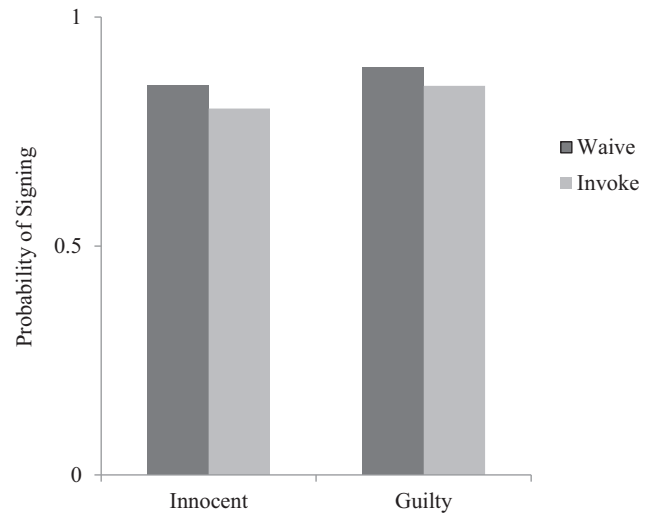


Figure 1. Values reflect the probability of offering a signature among unknowing participants across rights form and status.

indicated that unknowing guilty participants' signature decisions were not different depending on whether they were administered the waive form ($p_{\text{signing}} = .89$) or the invoke form ($p_{\text{signing}} = .85$), $b = -1.108$, $SE = 0.873$, $p = .205$, 95% CI $[-2.82, 0.607]$, $z = -1.27$. These results support the acquiescence hypothesis and suggest that both innocent and guilty participants who were characterized as unknowing tended to sign the rights forms at similar rates and engaged in mindless acquiescence.

However, results identified different and distinct patterns among the signature decisions of knowing participants. Innocents who were characterized as knowing were more likely to sign the waive form ($p_{\text{signing}} = .90$) than the invoke form ($p_{\text{signing}} = .50$), $b = -2.18$, $SE = 0.96$, $p = .022$, 95% CI $[-4.06, -0.30]$, $z = -2.28$. Knowing innocents' tendency to sign the waive form

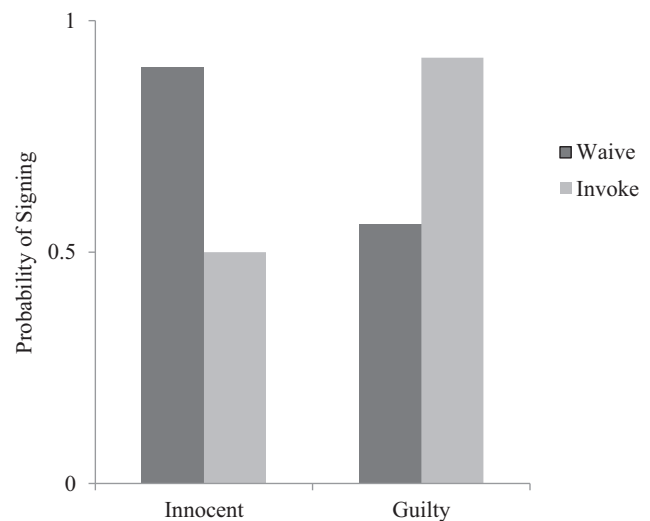


Figure 2. Values reflect the probability of offering a signature among knowing participants across rights form and status.

Table 1
Main Effects and the Interactions of the Logistic Regression Analysis ($N = 178$)

| Predictor | B | SE | 95% CI | p | z |
|---|-------|------|----------------|------|-------|
| Status | -4.30 | 2.91 | [-9.75, 1.68] | .17 | -1.38 |
| Rights Form | -4.97 | 2.65 | [-10.16, .22] | .06 | -1.88 |
| Knowing Assessment (Know) | -3.39 | 1.15 | [-5.64, -1.15] | .003 | -2.96 |
| Status \times Rights Form | 3.02 | 1.76 | [-.42, 6.46] | .09 | 1.72 |
| Status \times Know | 2.08 | .76 | [.59, 3.58] | .006 | 2.73 |
| Rights Form \times Know | 2.32 | .78 | [.80, 3.86] | .003 | 2.98 |
| Status \times Rights Form \times Know | -1.49 | .51 | [-2.49, -.49] | .003 | -2.93 |

Note. Status (1 = guilty [$n = 94$]; 2 = innocent [$n = 84$]). Rights Form (1 = waive [$n = 92$]; 2 = invoke [$n = 84$]). Higher values of the Knowing Assessment indicate a higher degree of knowing. Outcome variable was probability of signing (0 = did not sign; 1 = signed).

coupled with their low probability to sign the invoke form supports the knowing hypothesis and the idea that the power of innocence can motivate the decision-making of some individuals and propels them to make mindful decisions based on their naïve mindset.

The results observed among knowing guilty participants demonstrated a decision-making tendency that deviated from an acquiescence bias, but followed a different pattern compared to the effects observed among knowing innocents. Guilty participants who were characterized as knowing were less likely to sign the waive form ($p_{\text{signing}} = .56$) than the invoke form ($p_{\text{signing}} = .92$), $b = 2.24$, $SE = 0.95$, $p = .018$, 95% CI [0.37, 4.11], $z = 2.35$. The observed effects among guilty participants who were characterized as knowing suggests that these guilty individuals tended to make more mindful decisions that were in their best interest—that is, they were more likely to sign the invoke form than the waive form.

Exploratory Analyses

The results from the signature decision analyses supported both the acquiescence hypothesis (among innocent and guilty who were unknowing) and the knowing hypothesis among knowing innocents. The results also indicated a pattern of decision-making that afforded knowing guilty participants a high likelihood of being aided by legal counsel. Two sets of supplemental, exploratory analyses were conducted in an attempt to add context to the observed decision-making trends.

Stress assessments and the degree of knowing. The first analysis was an ordinary least squares regression that tested whether participants' status and their stress levels were associated with their degree of knowing. The analysis regressed participants' degree of knowing on their status (innocent vs. guilty) and participants' self-reported stress levels (stress assessment).

Participants' reports of stress did not influence their degree of knowing, $b = -0.168$, $SE = 0.23$, $p = .481$, 95% CI [-0.62, 0.28]. Results also failed to demonstrate a significant main effect of status on participants' degree of knowing, $b = -0.236$, $SE = 0.55$, $p = .672$, 95% CI [-1.33, 0.86]. The interaction between status and stress also did not influence participants' degree of knowing, $b = 0.059$, $SE = 0.14$, $p = .689$, 95% CI [-0.23, 0.35]. Consequently, participants' self-reports of stress were not supported as a motivating factor in determining participants' degree of knowing.

Signature decision rationales. We also analyzed participants' rationales for their signature decisions to explore some possible reasons for our findings that could guide future research. Acquiescent responses were the most frequently cited explanations among unknowing innocent participants and reflected ideas such as "Was there an option not to sign it? Well I signed it because she said I should," "I signed [the] form because she told me it wasn't important," and "I have always been told to follow authority and to always follow the rules. Felt like I had to cause he was there and I didn't want to cause more problems." Unknowing innocent participants cited acquiescence more often than their knowing innocent counterparts, although this difference did not reach significance in our sample, two-tailed Fisher's exact test, $p = .126$. Conversely, innocent related responses were the most frequently cited explanations among knowing innocent participants and reflected ideas such as "I do not need an advocate because I am innocent," "[I] Signed because I knew I didn't cheat, and did not feel the need to have someone represent me," and

"Because I didn't do anything wrong and I could easily convince whomever[of] that." Knowing innocent participants cited innocent related responses more often than their unknowing innocent counterparts, although this difference did not reach significance in our sample, two-tailed Fisher's exact test, $p = .095$.

Although these analyses lacked power to detect differences in innocent participants' rationales (i.e., some innocents' responses were unintelligible and others did not respond), these trends offer a preliminary glimpse into innocents' motivations. Whereas unknowing innocents may be more motivated by the acquiescence bias, knowing innocents may be more motivated by their naïve mindset.

The same analyses were conducted to explore guilty participants' rationales. Unknowing guilty participants cited acquiescence most often and significantly more often than their knowing guilty counterparts, two-tailed Fisher's exact test, $p < .001$. Yet, a different pattern of responses was observed among knowing guilty participants. Valid responses were the most frequently cited explanations among knowing guilty participants and reflected ideas such as "It said waive and I didn't want to waive my rights," "[I] Signed so I would be able to have an advocate during the proceedings," and "I didn't [sign the waiver] because my dad would kill me and it's in my best interest to have an advocate." Knowing guilty participants cited valid responses more often than their unknowing guilty counterparts, two-tailed Fisher's exact test, $p = .002$. These responses also offer a preliminary glimpse into the motivations of guilty individuals. Knowing guilty participants gave explanations based on mindful and sound rationales. On the other hand, unknowing guilty participants, much like unknowing innocents, gave explanations consistent with acquiescence bias.

Discussion

Suspects are afforded a pre-interrogation opportunity to initially decide whether to waive or invoke interrogation rights that are designed to protect them from police intimidation. This research tested the extent to which individuals' pre-interrogation decisions to waive or exercise these rights were motivated by the acquiescence bias and by the power of innocence. Results indicated that innocent and guilty participants who were less cognizant of their situation engaged in mindless decision-making and signed the rights forms at similar rates. That is, these individuals tended to passively acquiesce during the mock pre-interrogation. But, innocents who were more cognizant of their situation engaged in decision-making consistent with their naïve mindset. Specifically, innocents typified by a high degree of knowing had a high probability of signing the waive form and a lower probability of signing the invoke form. Guilty individuals who were more cognizant of their situation also avoided the tendency to acquiesce but had a high probability of signing the invoke form and a lower probability of signing the waive form. The observed effects extend interrogation decision-making research and have valuable implications for policy aimed at suspects' civil liberties, especially protecting innocent suspects from police intimidation.

A Pre-Interrogation Acquiescence Bias

Results offered support for the acquiescence hypothesis and indicated that both innocent and guilty individuals who were not

especially cognizant of their situation tended to mindlessly comply with the experimenter's requests. These results are the first to extend the acquiescence bias to a pre-interrogation setting and identify the tendency of some individuals to mindlessly comply with social pressures such as authority figures and suggestive requests that are often present in a pre-interrogation context. In so doing, these results support speculation that suspects' mindless pre-interrogation acquiescence is one contributing factor to the high *Miranda* waiver rates in the US (Leo, 1996; Rogers, 2008). These observed effects substantiate the idea that many suspects do not think their interrogation rights are important, often take such rights for granted, and do not fully appreciate the consequences of forgoing their rights (e.g., Rogers, Hazelwood, Sewell, Shuman, & Blackwood, 2008). In sum, unknowing suspects, both innocent and guilty, may frequently be engaging in a pre-interrogation acquiescence bias that sets them on trajectories to talk to interrogators without the benefit of legal counsel.

The Power of Innocence

The fact that some innocent individuals made decisions that deviated from an acquiescence bias and went entirely against their best self-interest is noteworthy and demonstrates the impressive power of innocence. Although several studies have demonstrated the influence of innocence on suspects' decision-making (Kassin, 2005; see Kassin et al., 2010 and Smalarz et al., 2016, for reviews), these results advance this body of research and, notably, establish that innocence can be so powerful for some suspects that it can override cognitive heuristics and social influences during interrogation decision-making. Indeed, some innocent individuals knowingly, but naively, made decisions to forgo their rights—choices that, in these situations, were the opposite of what would be expected had these innocents' decision-making been motivated by the acquiescence bias (i.e., *not* signing the invoke forms).

Existing research and speculation may help to understand why some innocent individuals knowingly made decisions that went entirely against their self-interest. Two factors, just world beliefs and the illusion of transparency, have been speculated to motivate the phenomenology of innocence. People who strongly endorse just world beliefs assume the world is a fair place and people get what they deserve (Lerner, 1980). Hence, innocent suspects who strongly endorse just world ideologies (and suppose that good things will happen to them because they have not done anything wrong) may strongly rely on these beliefs and could reduce the impact of social influences (Scherr & Franks, 2015). In this way, innocent individuals who were highly knowing could have relied on their just world ideologies instead of mindlessly complying with the social influences of the experiment.

Another mechanism that may help to understand some innocents' decision-making is the illusion of transparency (i.e., people's tendency to overestimate how apparent their internal states are to others; Gilovich, Savitsky, & Medvec, 1998). Research has demonstrated that innocent individuals believe that their innocence is more apparent relative to how obvious guilty individuals believe their status is to interrogators (Kassin & Fong, 1999). Thus, innocent individuals who were highly knowing may have been heavily guided by illusions of transparency. If so, they would have been motivated to make knowing, but pernicious, decisions to forgo their rights because they believed that their innocence was

readily apparent to interrogators and any subsequent questioning would be harmless and could be advantageous. Interestingly, the decision-making illustrated by knowing innocents was not demonstrated among knowing guilty individuals—in fact, an exact opposite pattern of decision-making tendencies was displayed by knowing guilty individuals.

A Lacking Safeguard

Guilty individuals who were cognizant of their situation were likely to make mindful decisions that were in their best self-interest. Although this finding was not hypothesized, the idea is consistent with existing interrogation research. Based on the ideas that innocents are more willing to talk (Kassin & Norwick, 2004) and guilty individuals behave more like liars, guilty individuals are more likely to refrain from offering information (Strömwall, Hartwig, & Granhag, 2006) and tend to disclose information to the extent that they believe interrogators have evidence against them (Hartwig, Granhag, Strömwall, & Vrij, 2005). Hence, whereas knowing innocents are vulnerable to a naïve mindset that produces decisions counter to their self-interest, knowing guilty individuals make decisions aimed at benefiting their interrogation fate.

Pre-interrogation rights are designed to be safeguards against police intimidation and protect against false confessions (see Gross & Possley, 2016 June 12; Smalarz et al., 2016 as *Miranda* rights relate to these protections). The effects observed in this study suggest that pre-interrogation rights, such as *Miranda* rights, are not effectively fulfilling their intended function. Indeed, most all innocents will waive their rights—decisions that are sometimes characterized as mindless acquiescing and other times as knowing (i.e., they understand their decisions) but not intelligent (i.e., they do *not* appreciate the consequences of their decisions). On the other hand, although unknowing guilty suspects may sometimes acquiesce to interrogators' requests for a waiver, other guilty suspects will knowingly exercise their rights to remain silent and talk with an attorney (i.e., some guilty individuals are making highly knowing and intelligent pre-interrogation decisions). Because interrogators have a difficult time distinguishing between guilty and innocent suspects (Ekman, O'Sullivan, & Frank, 1999; Garrido, Masip, & Herrero, 2004), innocents' tendency to waive their rights sets them on trajectories to not be aided by legal counsel and be exposed to police intimidation during the interrogation. Overall then, the observed effects paint a rather bleak picture and suggest that the pre-interrogation process is one that increases the likelihood that innocents will talk to interrogators while decreasing the likelihood that some guilty suspects will talk to interrogators.

Practical Implications

Naturally, the question arises concerning what can be done to improve the safeguards interrogation rights are supposed to offer all suspects. It may seem that one potential way to decrease suspects' tendency to forgo their rights would simply be to reform the administration process to consist of one in which suspects have to actively invoke their rights rather than actively waive their rights. However, although conceptually appealing, the practical significance of such a change to reduce suspects' tendency to forgo their rights is constrained. Despite the fact that unknowing partic-

ipants' pre-interrogation decision-making probabilities offer some support for this idea, such reform would continue to disadvantage the critical group of knowing innocent participants because these innocents were highly likely to forgo their rights even when they had to actively invoke their rights. Thus, other alternatives seem better suited to address the issue of how to reduce suspects', especially innocents', propensity to forgo their rights.

One feasible and fair recommendation is to remove all manipulative and coercive strategies from the pre-interrogation process. Naturalistic evidence has identified that interrogators use a variety of social influence pressures to secure a waiver ranging from offering luxuries to the suspect (Simon, 1991), to framing the request as an anticipation that a waiver is typical and expected (Domanico et al., 2012; Levesque, 2006), through treating the process as a formality and a confidence game (Leo, 1996). The results of the current study suggest that eliminating the use of manipulative strategies would directly benefit unknowing suspects because they will not be confronted with a manipulative request to forgo their rights—tactics that would capitalize on their compliance. Further, it seems likely that removing manipulative tactics would also benefit knowing innocents because confronting them with tactics that trivialize the importance of their rights reinforces their specious notion that talking with an interrogator will be beneficial (i.e., it gives these innocents the impression that their decision to forgo their rights is an intelligent one). Indeed, experimental research has demonstrated that waiver rates among innocents drop substantially when manipulative strategies are not present during the pre-interrogation process (e.g., Scherr & Madon, 2013; Scherr, Alberts, Franks, & Hawkins, 2016). Therefore, eliminating the use of manipulative ploys during the pre-interrogation process may help improve the effectiveness of interrogation rights.

A second reasonable approach is to explicitly inform all suspects of their option to waive or invoke their rights. Problematically, some recent Supreme Court decisions (i.e., *Berghuis v. Thompkins*, 2010; *Florida v. Powell*, 2010) have upheld the idea that interrogators can implicitly inform suspects of their rights in such a way that suspects are not told about their option to exercise their rights. When interrogation rights are administered implicitly, individuals are more likely to waive their rights and later confess (Gillard, Rogers, Kelsey, & Robinson, 2014). The observed effects of the current study indicate that explicitly informing unknowing suspects may afford them an awareness of the alternative possibility of exercising their rights rather than constraining them to a mindless decision to forgo their rights that is the result of leading and suggestive requests. Moreover, explicitly informing knowing innocents could offer similar benefits as those offered by eliminating manipulative tactics. Specifically, implicit administrations may reinforce knowing innocents' inclination to forgo their rights, but explicitly informing them of their rights introduces a means to facilitate the decision-making necessary to overcome their tendency to talk with interrogators. Encouragingly, the potential promise of explicitly informing suspects of their options has been empirically demonstrated—innocents tendency to waive their rights drops dramatically when explicitly made aware of both options (Scherr et al., 2016).

Limitations and Future Directions

This research improves our understanding of pre-interrogation decision-making, but future research should continue to examine

behavioral differences exhibited by innocent and guilty suspects during interrogations and overcome some limitations. First, due to ethical constraints, we relied exclusively on a homogenous college sample who was not confronted with nearly the same experience as suspects who are targeted for naturalistic interrogations. As a result, the magnitude of our effects may be different than those observed using a nonstudent sample during an actual pre-interrogation. For example, because the situation participants encountered did not comprise equal degrees of manipulation and coercion that actual suspects would encounter, the effects observed among some individuals could be conservative compared to effects occurring in a naturalistic setting (e.g., knowing innocents could rely even more heavily on their naïve beliefs during actual pre-interrogations). Conversely, as suspects experience more stress and coercion during naturalistic interrogations, all suspects—guilty and innocent, knowing and unknowing—may become more likely to mindlessly acquiesce to the authoritative requests from interrogators.

Although the observed effects indicated that the degree to which individuals are cognizant of their situation was associated with their pre-interrogation decisions, their degree of knowing was assessed after participants offered their decisions to sign or not sign. Thus, it would be beneficial for future research to examine the influence that individuals' degree of knowing has on their pre-interrogation decision-making by manipulating knowingness. Such manipulations could consist of varying the cognitive load that participants' experience. In doing so, findings from these experimental manipulations would allow stronger inferential conclusions to be drawn from any observed effects.

Conclusion

Although some innocent and guilty individuals acquiesce to pre-interrogation social influences, some do not. Guilty individuals who knowingly made decisions did so in a personally advantageous fashion and tended to exercise their interrogation rights. Problematically though, innocents who knowingly made their decisions tended to forgo their rights illustrating that some innocents knowingly, but naively, make decisions that increase the likelihood they will be confronted with police intimidation. Interrogation rights, then, seem to largely be serving an opposite function than their original intent. Reforming the approaches and dynamics in which interrogation rights are administered is necessary in order to guarantee that all suspects are afforded their civil liberties, especially innocents.

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