Mobilization and Resistance in Response to Interrogation Threat

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This research tested whether the perception of threat during a police interrogation mobilizes suspects to cope with interrogation demands and bolsters their resistance to self-incrimination pressures. Experimental procedures led university undergraduates (N = 296) to engage in misconduct or not, thereby making them guilty or innocent. An experimenter then accused all participants of misconduct in either a threatening or nonthreatening way. High threat produced a broad pattern of mobilization entailing physiologic, cognitive, and behavioral components. Specifically, in comparison to the low threat accusation, the high threat accusation produced greater cardiovascular reactions, increased attentional bias and memory for accusation-relevant information, and strengthened resistance to self-incrimination. Furthermore, with the exception of physiologic reactions, these effects were similar for both guilty and innocent participants. Consistent with the phenomenology of innocence wherein the innocent perceive less threat from interrogation than do the guilty, the innocent evidenced smaller cardiovascular responses to high threat than did the guilty. Results suggest that the more threat that suspects experience, the more they will be mobilized to cope with interrogation demands and resist interpersonal pressure to self-incriminate, at least initially.

Public Significance Statement
Our research demonstrates that the stress that arises from the threat of an interrogation can broadly activate suspects by increasing their physiologic activity, making them more attentive, improving their memory, and motivating them to defend their innocence. These effects could help suspects manage the demands of an interrogation, at least during the early phases of police questioning.

Keywords: interrogation, stress, attention, memory, confession

Supplemental materials: http://dx.doi.org/10.1037/lhb0000337.supp

Coercive and guilt-presumptive approaches to police interrogation aim to erode suspects’ resistance to interrogative influence through a process of questioning that involves deceptive and manipulative tactics. The psychological literature has long recognized the potential for this process to create miscarriages of justice, and this recognition has spurred scholars to identify those aspects

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This research was supported, in part, by Grant 1155162 from the Law and Social Sciences division of the National Science Foundation. Some of the data in this article were presented at annual meetings of the American Psychology-Law Society in San Diego, California in March 2015 and in Atlanta, Georgia in March 2016.

The data are available at osf.io/pg9ea

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of police interrogation that impair suspects’ reasoning abilities, such as fatigue, emotional distress, and reduced self-regulatory resources. By contrast, relatively little attention has been paid to how suspects respond in the initial phases of interrogation. The research that does exist suggests that suspects rarely yield to interrogation pressures right away, but instead have the fortitude to initially resist interrogation pressures in the service of their long-term goals (Kelly, Miller, & Redlich, 2016; Madon et al., 2017). In the present work we investigate this early resistance from the perspective of a stress and coping framework. Drawing on key themes in the stress and coping literature, we hypothesized that threat experienced early in an interrogation triggers an automatic and situationally induced stress reaction that mobilizes suspects, producing the counterintuitive effects of improving their cognitive performance and reducing their risk to self-incriminate by increasing their resistance to interpersonal pressure.

**Interrogation Stress Effects**

Stress is a psychological state in which people perceive their circumstances as threatening and likely to tax or exceed their abilities to cope (Lazarus & Folkman, 1984). Although the experience of stress is often considered negative, it is more appropriately understood as an adaptive reaction that signals the presence of threat and supports the mobilization of coping responses. The fact that police interrogation is a high-stakes situation that suspects are typically ill-equipped to handle points to the utility of investigating suspects’ responses to interrogation pressures from a stress and coping perspective.

Stress can have a variety of influences on suspects during an interrogation. For example, protracted stress resulting from a lengthy interrogation may produce *interrogation-related self-regulatory decline*, a psychological state associated with fatigue and the depletion of self-regulatory resources that can render suspects suggestible and compliant (Davis & Leo, 2012; Drizin & Leo, 2004). The effects of interrogation-related self-regulatory decline are consistent with observed changes in suspects’ behavior over the course of extended questioning (Madon, Yang, Smalarz, Guyll, & Scherr, 2013; Madon et al., 2017), the heightened physiologic activity associated with resisting confession (Gyll et al., 2013; Normile & Scherr, 2018), and the fact that documented false confessions are associated with very long interrogations, lasting 16 hours on average (Drizin & Leo, 2004).

However, suspects feel stress throughout an interrogation, and so the influences of stress are not limited to those associated with protracted questioning or the collapse of self-regulatory resources. Data suggest that most interrogations are not unreasonably long (Leo, 1996), and thus stress-induced self-regulatory collapse is not likely to dominate most suspects’ responses in the course of a typical interrogation. Likewise, during the early portion of any interrogation the effects of stress are not likely to be characterized by significant self-regulatory decline because sufficient time has not yet passed for a suspect to become depleted. In addition, interrogations are dynamic events that require suspects to respond to a variety of challenges and threats. Accordingly, the acute effects of stress could be to temporarily bolster suspects’ ability to respond to prevailing situational demands of the interrogation. For these reasons it is important to consider the potential effects of stress more comprehensively, such as by investigating how suspects respond to threat in the early phases of interrogation.

There are both theoretical and empirical grounds to hypothesize that interrogation threat has the potential to mobilize suspects and temporarily increase their ability to resist interpersonal pressure. Psychological theory holds that stress helps people cope with acute threats by means of a multifaceted mobilization response that entails physiologic, cognitive, affective, and behavioral effects (Ursin & Eriksen, 2004). Several recent findings provide preliminary empirical support for the idea that a similar process may occur in the context of police interrogations. In a study of actual interrogations that averaged 90 minutes in length, suspects exhibited resistance following confrontational and accusatory tactics, a pattern that persisted throughout the entire interrogation period (Kelly et al., 2016). Similarly, participants in laboratory experiments have shown increased physiologic activity in response to accusation (Gyll et al., 2013) and decreased compliance among participants who were accused compared to those who were not accused (Madon et al., 2017). Additional laboratory research found that accused participants who were pressured to confess while being confronted with a false evidence ploy subsequently exhibited elevated systolic blood pressure compared to those for whom the misconduct was trivialized (Normile & Scherr, 2018).

**Stress Effects on Cognition**

The findings reviewed above provide initial support for the hypothesis that interrogation threat triggers a mobilization response that enables suspects to better manage interrogation pressures. However, the mobilization effects reported in the literature have not been as broad as would be expected. Stress theories suggest that mobilization should be broad based, affecting not just physiology and behavioral compliance, but also cognitive processing via increased attention or greater depth of processing. The effects of stress on cognitive outcomes are well-documented in the basic psychological literature. For example, perceiving threat can improve cognitive control (van Steenbergen, Band, & Hommel, 2011), and stress leads individuals to attend more to cues that are central to the visual field than to cues that are peripheral to it (Chajut & Algom, 2003; Easterbrook, 1959). Anxiety more greatly enhances memory for strongly related constructs than for weakly related constructs (Derryberry & Tucker, 1994). Anxiety also increases attention to threat-relevant information, including avenues of escape (Watts, McKenna, Sharrock, & Trezise, 1986). Theorists explain these effects in evolutionary terms. When faced with a threat, it is adaptive for organisms to focus acutely on the threat, identify avenues of escape, and avoid being distracted by threat-irrelevant information (Derryberry & Tucker, 1994).

However, it is not clear that such cognitive effects of stress generalize to the unique context of police interrogation. The supportive research just reviewed may be characterized as having low ecological validity, in that stress was not induced by interrogation-like procedures, but by encountering threatening words (Watts et al., 1986), images (van Steenbergen et al., 2011), or attempting to solve mathematical problems (Chajut & Algom, 2003). The effects of stress on cognitive processing may operate differently within an interrogation because of the implications the situation holds for suspects’ long-term outcomes. In addition, the one interrogation-
related study that tested whether accusation-induced mobilization affected cognitive performance obtained null results. Madon et al. (2017) manipulated the extent to which participants were mobilized by accusing some but not others of having cheated on a laboratory task. Although accused participants showed increased physiological reactivity and decreased compliance compared to participants who were not accused, the groups did not differ in their ability to recall the content of a story that had been recited to them as part of the study’s procedures.

This nonsignificant memory effect seems to suggest that the threat of police interrogation may have circumscribed effects on suspects, limited to physiology and behavioral compliance, and not extending to cognition. However, such an interpretation is theoretically inconsistent with the conceptualization of stress as an adaptive reaction to threat, which presumes a global, multifaceted mobilization response (Ursin & Eriksen, 2004). Furthermore, the method employed by Madon et al. (2017) may have contributed to the nonsignificant memory effect by failing to link the memory task to the accusation of misconduct. Specifically, Madon et al. (2017) measured participants’ memory for a fictional vignette that had no relevance to the accusation. Accordingly, accused participants may not have perceived the memory task as important or relevant to their predicament. Research has established that the facilitative effect of stress on cognitive performance occurs for focal tasks, not peripheral tasks (Easterbrook, 1959; Staal, 2004). Therefore, it is plausible that interrogation stress may affect suspects’ cognitive performance, leading them to allocate more attentional resources to, and have better memory for, accusation-relevant information, but not for information that is irrelevant to their situation.

Phenomenology of Innocence

Guilt status also has the potential to affect outcomes influenced by mobilization. For example, innocent suspects believe that the truth of their innocence will protect them from harm. This mindset, termed the phenomenology of innocence, leads the innocent to make choices that increase their chances of conviction, such as waiving their Miranda rights and agreeing to risky eyewitness procedures (Kassin, 2005). These effects are consistent with the interpretation that the innocent perceive police interrogation as less threatening and are, therefore, less mobilized to take self-protective actions. Consistent with this interpretation, previous research confirms that an accusation of wrongdoing produces smaller physiologic reactions in the innocent than the guilty (Guyl et al., 2013; Madon et al., 2017; Normile & Scherr, 2018). Therefore, in addition to these physiologic effects, one might expect the facilitative effects of interrogation stress on cognitive performance to be weaker among the innocent than the guilty.

Overview of the Current Research

This research tested whether the experience of high interrogation threat mobilizes suspects, as indicated by elevating their physiologic activity, facilitating their cognitive processing of accusation-relevant information, and increasing their resistance to self-incrimination. Because prior research has established that innocent suspects are less threatened by police interrogation than guilty suspects (Guyl et al., 2013; Kassin, 2005; Madon et al., 2017; Normile & Scherr, 2018), the experiment also examined whether guilt status moderated these predicted effects. Using a modified version of the cheating paradigm (Russano, Meissner, Narchet, & Kassin, 2005), procedures either induced participants to engage in misconduct or not, after which an experimenter accused all participants of breaking the rules of the experiment. To differentially threaten participants, the experimenter portrayed the misconduct as either a minor violation while reassuring the participant about its trivial nature, or as a serious offense while emphasizing its gravity, during which time participants’ physiologic activity was recorded. Participants then received two documents: one relevant and the other irrelevant to the accusation of misconduct. The amount of time that participants attended to the documents and their memory for each document’s content were assessed. The experimenter next subjected all participants to incrementally increasing pressure to sign a statement admitting guilt in order to assess their resistance to interrogation pressures to self-incriminate.

Method

Participants

A total of 337 undergraduates enrolled in psychology courses at Iowa State University participated in the research as one means of partially satisfying a course requirement. We excluded data from 41 participants for the following reasons: twenty-five refused to engage in misconduct, nine were suspicious, four had their data compromised by procedural errors, and three had their sessions terminated due to becoming emotionally upset when accused of misconduct. The final sample of 296 participants included 168 women (57%) and averaged 19.4 years of age. Based on self-reported ethnicity, the sample included seven Asian/Asian Americans, 13 Black/African Americans, nine Latina/Latino/Hispanic Americans, four multiracial individuals, 256 White/European Americans, and seven individuals who indicated that none of the proffered responses well-described their ethnicity. All participants were native English speakers.

Design

We randomly assigned participants to one of four conditions in a 2 (guilt status: innocent vs. guilty) × 2 (interrogation threat: low vs. high) between-subjects experimental design. To manipulate guilt, an experimenter paired each participant with a confederate and instructed the part to solve four logic problems, two independently and two jointly. In the guilty conditions, the confederate persuaded the participant to share answers on an individual problem, thus making the participant guilty of misconduct. In the innocent conditions, the confederate and participant followed the experimenter’s instructions correctly, thereby making the participant innocent of misconduct. Afterward, the experimenter, who was kept blind to the guilt status manipulation, accused the participant of sharing answers on one of the individual logic problems. The experimenter manipulated the degree of threat perceived by the participant by presenting the misconduct as being comparatively minor or serious.
Measures

Attentional bias. We used two documents to assess participants’ attentional bias to accusation-relevant information, one that was relevant to the accusation and another that was irrelevant to the accusation. The accusation-relevant document presented a fabricated description of the university’s policy on academic dishonesty, including eight disciplinary actions that could be imposed (e.g., compensate the university for personnel time and materials expended, pay a fine of $1,000, prohibited from attending any other regent university in the state). The accusation-irrelevant document presented information about censorship, including the definition of five different types of censorship and the use of selective censorship in classroom textbooks. We subsequently refer to these documents as the academic dishonesty policy and censorship article. Participants had a total of 5 min to view both documents, which were placed back-to-back in a transparent sleeve so that only one document could be viewed at a time.

A hidden video camera recorded each participant during the document viewing period, and two judges who were blind to experimental conditions subsequently evaluated these recordings. The judges independently evaluated how long each participant viewed each document. To facilitate the correct identification of which document a participant was viewing, we printed the documents on papers of differing colors. When the judges’ independent evaluations differed by 5 s or less across the entire 5 min period, we averaged their evaluations and used these averages in the analyses of attention. In 144 instances the judges’ independent evaluations differed by more than 5 s. In these cases a third blind judge reevaluated the video recording to resolve the discrepancy. Two study authors then independently confirmed the third judge’s evaluation. In these cases, we used the third judge’s confirmed evaluation as the measure of attention. We quantified attentional bias to accusation-relevant information as the proportion of the total time that participants viewed the academic dishonesty policy.

Memory. We used two recognition tests to assess participants’ memory for the accusation-relevant academic dishonesty policy and accusation-irrelevant censorship article. Both recognition tests included 16 statements, eight of which matched statements from the respective document, and eight of which did not. For example, the recognition test that assessed participants’ memory for the academic dishonesty policy presented eight disciplinary actions that had been included in the policy and eight disciplinary actions that had not been included in the policy. We quantified memory for each document using the d’ score of signal detection theory, which is based on the proportions of statements correctly and incorrectly marked as having been previously presented (Macmillan & Kaplan, 1985). We applied the Hautus (1995) correction to address proportions equal to 0 and 1, which would otherwise yield infinite values.

Confession. An experimenter pressured participants to confess by signing a self-incriminating handwritten confession statement that read, “I admit to breaking the rules of the experiment and sharing answers with my partner.” The experimenter incrementally increased pressure on the participant to sign by delivering three prompts which, in order, were: (a) “I’m going to write out the statement that my professor needs you to sign,” at which point the experimenter placed the statement in front of the participant to sign; (b) “Like I said, I really need to get the situation documented. The university requires that we have a record of what happened”; and (c) “Look, situations like this require documentation. My professor said that he needs you to sign this. It’s just how it is. You need to sign the statement.” If at any point during the delivery of the prompts the participant signed the statement, then the experimenter delivered no subsequent prompts. We scored participants’ confession behavior dichotomously, assigning a score of 0 if the participant did not sign the confession statement, and a score of 1 if the participant did sign the confession statement.

American College Test (ACT). We accounted for the expected association between intelligence and memory by using participants’ self-reported composite ACT scores. The ACT correlates strongly with IQ, supporting its use as a proxy for intelligence (Koenig, Frey, & Determan, 2008). Although there is no reason to suspect that participants’ self-reported ACT scores and actual ACT performance would not be highly correlated, one cannot be certain that self-reported scores perfectly match actual test performance.

Physiologic measures. We assessed participants’ cardiovascular activity at baseline prior to the accusation and again after they were aware they were being accused of misconduct, hereafter referred to as pre- and postaccusation. The pre- and postaccusation phase assessments each lasted 5 min and included three measures of systolic blood pressure, diastolic blood pressure (SBP, DBP; mmHg), and heart rate (HR; beats per minute, bpm). Readers are referred to Gyll et al. (2013) for specific details about the physiologic instrumentation, signal acquisition, and data processing procedures for these variables.

Perceived threat. To assess the perceived threat associated with the alleged misconduct, the experimenter verbally asked participants to use a 6-point scale in response to three questions: (a) “I’m wondering how serious you think it was that you shared answers with your partner?” (1 = not at all serious; 6 = very serious), (b) “I’m wondering how upset you think my professor is about the whole thing?” (1 = not at all upset; 6 = very upset), and (c) “If my professor decides to pursue the issue further, how much trouble do you expect you’ll be in?” (1 = in no trouble at all; 6 = in a lot of trouble). For each item, greater scores corresponded to greater perceived threat. We averaged responses to these three questions to assess perceived threat (Cronbach’s alpha = .67).

Procedures

We ran participants individually in experimental procedures approved by the Institutional Review Board at Iowa State University. After obtaining informed consent, the experimenter paired the participant with a confederate who posed as the participant’s partner during the study. To justify the physiologic measures and reduce suspicion, the experimenter described the study as an examination of stress on physiologic activity that would be investigated by having participants solve logic problems of varying difficulty. Following the cover story, the pair moved to separate rooms at which point the participant privately reported demographic information and ACT scores while the confederate randomly determined the guilt condition to which the participant would be assigned.

Upon being reunited, the pair engaged in a 3-min get-acquainted exercise (Russano et al., 2005) that enabled the confederate to build rapport with the participant so as to increase the likelihood
that participants in the guilty condition would comply with the confederate’s later request to share answers. Afterward, a rigged procedure identified the participant as the individual whose physiologic activity would be assessed, at which point the confederate exited the room, and the experimenter applied electrodes to the participant’s torso and a blood pressure cuff to the participant’s nondominant arm. An unseen technician in an adjacent room remotely acquired physiologic measures while the participant relaxed alone during the 5-min preaccusation phase.

**Guilt manipulation.** After acquiring the preaccusation physiologic measures the experimenter and confederate returned to the participant, and the experimenter explained the logic problem task, making it clear that the pair should work individually on problems designated as individual problems and collaboratively on problems designated as team problems. In the innocent condition, the confederate adhered to the stated rules of the experiment and did not request or obtain help from the participant on any individual problem. In the guilty condition, the confederate broke the stated rules of the experiment by requesting and obtaining help from the participant on one of the problems they had been instructed to solve individually. At the end of the logic problem task, the experimenter collected the pair’s logic problem packets, distributed a filler survey, and exited the room for the supposed purpose of scoring the logic problem solutions.

**Interrogation threat manipulation.** Upon returning, the experimenter stated that a problem had arisen with the logic problem task, at which point the experimenter escorted the confederate out of the room, ostensibly for questioning. The experimenter returned to the participant 3 min later and recited one of two memorized scripts. A technician who was in an adjacent room remotely began to collect postaccusation physiologic measures after the point in the script at which the participant was aware of being accused.

Although both scripts included language that accused the participant of sharing answers on one of the individual logic problems, the two interrogation scripts varied the seriousness of the alleged misconduct in order to manipulate the threat perceived by the participant. In the low threat conditions, the experimenter was pleasant and used a friendly tone to explain that sharing answers was “pretty minor” and “not a big deal.” The experimenter also reassured the participant that even though the professor in charge of the study had not been notified about the incident, he “was not angry or annoyed about what happened” and, furthermore, that he “even laughed about it saying it wasn’t like you guys cheated or anything and that it wasn’t a big deal.” In the high threat conditions the experimenter was displeased and used a stern tone to explain that sharing answers was “pretty serious” and a “major problem” that “may have compromised the integrity of the study.” The experimenter further indicated that the professor had been notified about the incident, that he was “angry and annoyed that this happened” and that he was going to “consider it a case of cheating.” The experimenter next told all participants that because the study was federally funded, the university required the participant to read a regulatory notice in order to protect the university and the lab from liability. The experimenter then exited the room under the guise of having to obtain the regulatory notice from the professor’s graduate student.

**Attention.** Upon returning, the experimenter explained that the next task in the experiment involved reading the censorship article (which presented the accusation-irrelevant information), but to save time the professor wanted the participant to also read the regulatory notice, which was the fabricated academic dishonesty policy (which presented the accusation-relevant information). The experimenter handed the participant a transparent document sleeve, turning it over to show the participant that it held both documents placed back-to-back. Participants were left alone to read the documents for 5 min, during which time they were surreptitiously video recorded.

**Memory.** After 5 min elapsed, the experimenter collected the document sleeve, and administered the memory task involving the recognition test for statements from each document. The experimenter described the memory task as an “administrative thing you’ll need to do . . . to make sure that you understood the two documents.”

**Confession pressure.** After collecting the memory test materials the experimenter then pressured the participant to sign the self-incriminating confession statement, prompting the participant up to three times to do so, if necessary.

**Manipulation check and debriefing.** After assessing the participant’s perception of threat regarding the alleged misconduct for the purpose of checking the effectiveness of the interrogation threat manipulation, the experimenter conducted a funnel debriefing to probe for suspicion. The participant then received detailed information about the experimental procedures, hypotheses, and need for deception prior to being excused.

**Results**

**Manipulation Check**

The interrogation threat manipulation effectively varied the amount of threat perceived by participants. The results of a 2 (interrogation threat) × 2 (guilt status) analysis of variance indicated that participants in the high interrogation threat conditions perceived more threat associated with the alleged misconduct (Mean = 3.90) than did participants in the low interrogation threat conditions (Mean = 3.06, F(1, 290) = 29.69, p < .001, d = 0.64, 95% CI [0.40, 0.87]). Guilt status did not significantly influence participants’ perceived threat (Mean = 3.51 vs. Mean = 3.45, F(1, 290) = 0.17, p = .684, d = 0.05, 95% CI [-.18, .28]), nor did the experimental manipulations interact to predict their perceived threat (F(1, 290) = 0.14, p = .704, η² = .00, 95% CI [.00, .02]).

**Bivariate Relationships and Descriptive Data**

Table 1 provides bivariate correlations and descriptive statistics for the experimental manipulations and primary variables of the study.

**Physiologic Mobilization**

Being accused resulted in general physiologic mobilization as shown by three significant paired-samples t tests that compared average preaccusation levels to average postaccusation levels for SBP (Mpre = 115.7 mmHg, Mpost = 122.9 mmHg, t(294) = 16.81, p < .001, d = 0.58, 95% CI [0.51, 0.66]), DBP (Mpre = 73.9 mmHg, Mpost = 77.6 mmHg, t(294) = 16.65, p < .001, d = 0.61, 95% CI [0.53, 0.70]), and HR (Mpre = 73.5 bpm, Mpost = 81.6 bpm, t(294) = 11.18, p < .001, d = 0.61, 95% CI [0.50, 0.74]).
Table 1

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<th>Variable</th>
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<td>.13*</td>
<td>−.03</td>
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<td>.17**</td>
<td>.20***</td>
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<td>.06</td>
<td>.03</td>
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<td>.10</td>
<td>.06</td>
<td>.08</td>
<td>.04</td>
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<td>−.15**</td>
<td>.02</td>
<td>−.04</td>
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<td>9. Heart rate</td>
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Note. N = 296.

*a Effect coded experimental manipulation of interrogation threat (low threat = −1, high threat = +1). *b Effect coded experimental manipulation of guilt status (innocent = −1, guilty = +1). *c Proportion of time attending to accusation relevant information. *d Memory variables quantified as d’ scores. *e Confession dichotomously coded (did not confess = 0, confessed = 1). *f Blood pressure change from pre- to postaccusation in mmHg. *g Heart rate change from pre- to postaccusation in beats per minute. *p < .05. **p < .01. ***p < .001.

That is, for the sample as a whole, being accused increased cardiovascular activity.

Table 2 presents descriptive data for the cardiovascular responses to the experimental manipulations. To test the effects of the experimental factors on physiologic activity, we controlled for average preaccusation levels in a 2 (interrogation threat) × 2 (guilt status) analysis of covariance, in which the change from average preaccusation level to average postaccusation level served as the dependent variable, with a separate analysis performed for SBP, DBP, and HR. As the results presented in Table 3 indicate, high interrogation threat caused greater increases in physiologic activity than did low interrogation threat for SBP, DBP, and HR, supporting the idea that greater threat triggers greater mobilization.

Although increases in physiologic activity associated with the main effect of the guilt-status manipulation did not achieve statistical significance for any of the cardiovascular outcomes, guilt status did significantly moderate the effect of interrogation threat for SBP, DBP, and HR. Whereas simple main effects testing revealed no significant effects of interrogation threat among the innocent (SBP, M_high = 6.6 mmHg, M_low = 6.7 mmHg, F(1, 290) = 0.00, p = .982, d = 0.00, 95% CI [0.00, 0.00]; DBP, M_high = 3.7 mmHg, M_low = 3.3 mmHg, F(1, 290) = 0.49, p = .487, d = 0.11, 95% CI [−0.20, 0.42]; HR, M_high = 7.9 bpm, M_low = 7.4 bpm, F(1, 290) = 0.08, p = .773, d = 0.04, 95% CI [−0.26, 0.35]), interrogation threat did produce greater increases among the guilty for SBP (M_high = 11.0 mmHg, M_low = 5.5 mmHg, F(1, 290) = 18.36, p < .001, d = 0.75, 95% CI [0.40, 1.10]), DBP (M_high = 5.2 mmHg, M_low = 2.8 mmHg, F(1, 290) = 14.78, p < .001, d = 0.67, 95% CI [0.33, 1.02]), and HR (M_high = 13.8 bpm, M_low = 4.2 bpm, F(1, 290) = 23.24, p < .001, d = 0.84, 95% CI [0.49, 1.19]). These findings are consistent with the findings of previous research (Guyll et al., 2013; Madon et al., 2017; Normile & Scherr, 2018) and support the phenomenology of innocence (Kassin, 2005) by demonstrating that the innocent reacted with smaller physiologic responses than did the guilty when encountering a threatening situation.

Table 3

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<tr>
<th>Effect</th>
<th>b</th>
<th>F(1, 290)</th>
<th>p</th>
<th>ES</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>Increase in SBP from pre- to postaccusation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>SBP pre</td>
<td>−0.03</td>
<td>1.54</td>
<td>.215</td>
<td>.01a</td>
<td>[0.00, 0.03]</td>
</tr>
<tr>
<td>T</td>
<td>5.42</td>
<td>10.12</td>
<td>.002</td>
<td>.37b</td>
<td>[0.14, 0.60]</td>
</tr>
<tr>
<td>G</td>
<td>4.32</td>
<td>3.50</td>
<td>.062</td>
<td>.22b</td>
<td>[−0.01, 0.45]</td>
</tr>
<tr>
<td>T × G</td>
<td>5.44</td>
<td>10.30</td>
<td>.001</td>
<td>.033</td>
<td>[0.01, 0.08]</td>
</tr>
<tr>
<td>Increase in DBP from pre- to postaccusation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>DBP pre</td>
<td>−0.13</td>
<td>12.60</td>
<td>&lt;.001</td>
<td>.04a</td>
<td>[0.01, 0.09]</td>
</tr>
<tr>
<td>T</td>
<td>2.47</td>
<td>11.09</td>
<td>.001</td>
<td>.39b</td>
<td>[0.16, 0.62]</td>
</tr>
<tr>
<td>G</td>
<td>1.51</td>
<td>1.23</td>
<td>.258</td>
<td>.13b</td>
<td>[−0.10, 0.36]</td>
</tr>
<tr>
<td>T × G</td>
<td>2.07</td>
<td>5.77</td>
<td>.017</td>
<td>.02a</td>
<td>[0.00, 0.06]</td>
</tr>
<tr>
<td>Increase in HR from pre- to postaccusation</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>HR pre</td>
<td>−0.31</td>
<td>31.38</td>
<td>&lt;.001</td>
<td>.10a</td>
<td>[0.04, 0.17]</td>
</tr>
<tr>
<td>T</td>
<td>9.61</td>
<td>14.40</td>
<td>&lt;.001</td>
<td>.44a</td>
<td>[0.21, 0.67]</td>
</tr>
<tr>
<td>G</td>
<td>5.90</td>
<td>1.02</td>
<td>.314</td>
<td>.12b</td>
<td>[−0.11, 0.35]</td>
</tr>
<tr>
<td>T × G</td>
<td>9.09</td>
<td>11.59</td>
<td>.001</td>
<td>.04a</td>
<td>[0.01, 0.09]</td>
</tr>
</tbody>
</table>

Note. SBP = systolic blood pressure; DBP = diastolic blood pressure; HR = heart rate. SBP_pre, DBP_pre, and HR_pre are average preaccusation values. ES = effect size estimate; CI = confidence interval; T = threat (high vs. low); G = guilt status (guilty vs. innocent).

*a n. **n. a Cohen’s d.
Attention and Memory Biases

We used Mplus (Version 7.2; Muthén & Muthén, 2012) to analyze the path model depicted in Figure 1 to evaluate the effects of the experimental manipulations on the three cognitive performance outcomes of (a) attentional bias for the accusation-relevant academic dishonesty policy, (b) memory for the accusation-relevant academic dishonesty policy, and (c) memory for the accusation-irrelevant censorship article. Because the experimental factors of interrogation threat and guilt status were effect coded using the value −1 for the factor levels of low threat and innocent and the value +1 for the factor levels of high threat and guilty, the analysis yields true main effect tests with the interaction term included in the model. The direction of effects represented by the arrows in Figure 1 are consistent with temporal order and, therefore, indicate the causal potential of the experimental manipulations to influence attentional bias via direct effects, and to influence the memory outcomes via both direct and indirect effects. Though not shown in Figure 1, participants’ ACT scores were mean centered and included as a predictor of all three outcomes in order to account for variance associated with preexisting individual differences with respect to intelligence (e.g., Madon et al., 2017). We assigned mean values for 29 participants who did not provide ACT data. To address the asymmetry of regression estimates’ standard errors that characterize results from analyses that include indirect effects, we used bias-corrected bootstrapping procedures which provide typical significance levels (i.e., $p \leq .05$, $p \leq .01$), but preclude the calculation of precise $p$ values (Preacher & Hayes, 2008). Table 4 presents the outcome variables’ descriptive statistics for each experimental condition and Table 5 provides comprehensive results of the path analysis. We describe the results most pertinent to the research hypotheses in the following sections and organize results in the text by the outcome variables to which they pertain, identifying specific effects by their corresponding paths as depicted in Figure 1 and listed in Table 5.

### Attentional bias
For the experimental manipulations of interrogation threat and guilt status and their interaction, only the main effect of interrogation threat influenced how much participants attended to the accusation-relevant information presented in the academic dishonesty policy. Specifically, participants subjected to high threat devoted a significantly greater proportion of their time attending to the academic dishonesty policy ($M = .53$) than did participants subjected to low threat ($M = .49$; path $a$, $p < .05$).

### Table 4

**Attention, Memory, and Confession Outcomes by Experimental Condition**

<table>
<thead>
<tr>
<th>Experimental condition</th>
<th>Attentional bias $a$ $M (SD)$</th>
<th>Relevant memory $b$ $M (SD)$</th>
<th>Irrelevant memory $b$ $M (SD)$</th>
<th>Confessed (%)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Low threat, innocent</td>
<td>.49 (.13)</td>
<td>1.32 (0.90)</td>
<td>0.34 (0.64)</td>
<td>55</td>
</tr>
<tr>
<td>Low threat, guilty</td>
<td>.49 (.12)</td>
<td>1.42 (0.96)</td>
<td>0.36 (0.58)</td>
<td>96</td>
</tr>
<tr>
<td>High threat, innocent</td>
<td>.52 (.14)</td>
<td>1.54 (0.90)</td>
<td>0.28 (0.67)</td>
<td>41</td>
</tr>
<tr>
<td>High threat, guilty</td>
<td>.54 (.14)</td>
<td>1.64 (0.71)</td>
<td>0.33 (0.76)</td>
<td>88</td>
</tr>
</tbody>
</table>

$a$ Proportion of time attending to accusation relevant information.  
$b$ Memory variables quantified as $d'$ scores.
Table 5

Effects of Threat and Guilt Status on Attentional Bias and Memory Outcomes

<table>
<thead>
<tr>
<th>Path</th>
<th>Effect</th>
<th>b</th>
<th>p</th>
<th>ES</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>a</td>
<td>T</td>
<td>0.02</td>
<td>&lt;.05</td>
<td>0.28^c</td>
<td>[0.05, 0.51]</td>
</tr>
<tr>
<td>b</td>
<td>G</td>
<td>0.01</td>
<td>ns</td>
<td>0.07</td>
<td>[-0.16, 0.30]</td>
</tr>
<tr>
<td>c</td>
<td>T × G</td>
<td>0.01</td>
<td>ns</td>
<td>0.00^d</td>
<td>[0.00, 0.03]</td>
</tr>
<tr>
<td>f + a × d</td>
<td>T</td>
<td>0.11</td>
<td>&lt;.05</td>
<td>0.26^c</td>
<td>[0.03, 0.49]</td>
</tr>
<tr>
<td>g + b × d</td>
<td>G</td>
<td>0.06</td>
<td>ns</td>
<td>0.14^c</td>
<td>[-0.09, 0.37]</td>
</tr>
<tr>
<td>h + e × d</td>
<td>T × G</td>
<td>-0.01</td>
<td>ns</td>
<td>0.00^d</td>
<td>[0.00, 0.01]</td>
</tr>
<tr>
<td>i + a × e</td>
<td>T</td>
<td>-0.02</td>
<td>ns</td>
<td>0.07</td>
<td>[-0.30, 0.16]</td>
</tr>
<tr>
<td>j + b × e</td>
<td>G</td>
<td>0.02</td>
<td>ns</td>
<td>0.07</td>
<td>[-0.16, 0.30]</td>
</tr>
<tr>
<td>k + c × e</td>
<td>T × G</td>
<td>-0.01</td>
<td>ns</td>
<td>0.00^d</td>
<td>[0.00, 0.00]</td>
</tr>
<tr>
<td>Direct effects of experimental manipulations on ...</td>
<td>... Accusation-relevant memory</td>
<td>0.09</td>
<td>&lt;.05</td>
<td>0.22^c</td>
<td>[-0.01, 0.45]</td>
</tr>
<tr>
<td>Direct effects of experimental manipulations on ...</td>
<td>... Accusation-relevant memory</td>
<td>0.05</td>
<td>&lt;.05</td>
<td>0.13^c</td>
<td>[-0.10, 0.36]</td>
</tr>
<tr>
<td>Direct effects of experimental manipulations on ...</td>
<td>... Accusation-relevant memory</td>
<td>-0.02</td>
<td>ns</td>
<td>0.00^d</td>
<td>[0.00, 0.02]</td>
</tr>
<tr>
<td>Direct effects of attentional bias on ...</td>
<td>... Accusation-relevant memory</td>
<td>0.91</td>
<td>&lt;.01</td>
<td>0.02^d</td>
<td>[0.00, 0.06]</td>
</tr>
<tr>
<td>Direct effects of attentional bias on ...</td>
<td>... Accusation-relevant memory</td>
<td>-0.01</td>
<td>ns</td>
<td>0.04^d</td>
<td>[-0.26, 0.19]</td>
</tr>
<tr>
<td>Indirect effects of experimental manipulations on ...</td>
<td>... Accusation-relevant memory</td>
<td>0.02</td>
<td>&lt;.05</td>
<td>0.19^c</td>
<td>[-0.04, 0.41]</td>
</tr>
<tr>
<td>Indirect effects of experimental manipulations on ...</td>
<td>... Accusation-relevant memory</td>
<td>0.00</td>
<td>ns</td>
<td>0.07</td>
<td>[-0.16, 0.30]</td>
</tr>
<tr>
<td>Indirect effects of experimental manipulations on ...</td>
<td>... Accusation-relevant memory</td>
<td>0.01</td>
<td>ns</td>
<td>0.00^d</td>
<td>[0.00, 0.03]</td>
</tr>
</tbody>
</table>

Note. ES = effect size estimate; CI = confidence interval; ns = not statistically significant; T = threat (high vs. low); G = guilt status (guilty vs. innocent).

^a Paths correspond to those depicted in Figure 1. ^b Effects tested using bias-corrected bootstrapping procedures which preclude calculation of exact p values. Accordingly, *ns* represents *p > .05. ^c Cohen's *d*. ^d *q*. ^e These paths not depicted in Figure 1.

.05). This finding supports the hypothesis that the stress produced by a threatening interrogation can mobilize suspects to engage in cognitive behaviors designed to manage the demands of the situation. In the current study, participants managed the situation by devoting more attention to the accusation-relevant information presented in the academic dishonesty policy than to the accusation-relevant information presented in the censorship article.

**Memory for accusation-relevant information.** There was a significant total main effect of interrogation threat on memory for the accusation-relevant information contained in the academic dishonesty policy, with participants in the high threat conditions having better memory (*M = 1.59*) than participants in the low threat conditions (*M = 1.37*; path a × d + f, *p < .05*). This result supports the hypothesis that stress-induced mobilization can improve cognitive performance. The results were further consistent with the interpretation that interrogation threat affected memory for the accusation-relevant academic dishonesty policy through its more proximal effect on attentional bias to that document, as indicated by the significance of the corresponding indirect effect (path a × d, *p < .05*).

The direct effect of attentional bias on memory for the accusation-relevant academic dishonesty policy indicated a significant positive relationship between the two outcomes (path d, *p < .01*). This result reflects the unsurprising finding that the more one attends to information, the better that information will be remembered, and is consistent with the significant indirect effect of interrogation threat on memory for the academic dishonesty policy just reported. Correspondingly, the more participants attended to the accusation-relevant academic dishonesty policy, the worse their memory for the accusation-relevant information contained in the censorship document (path e, *p < .05*).

Finally, interrogation threat also evidenced a significant direct effect on accusation-relevant memory for the academic dishonesty policy, with high threat producing better memory for the policy than low threat (path f, *p < .05*). This effect was unique of interrogation threat’s indirect effect via attentional bias to the accusation-relevant information of the academic dishonesty policy. Overall, therefore, the greater mobilization associated with high versus low threat seems to have improved memory not only by affecting participants’ behavioral choice to attend more to
MOBILIZATION AND RESISTANCE

accusation-relevant information, but also by improving memory performance directly.

Neither the main effect of guilt status nor its interaction with interrogation threat evidenced any total, direct, or indirect effects on either memory outcome (ps > .10).

Confession

We conducted a logistic regression analysis to test the main and interactive effects of the effect-coded experimental manipulations on confession, for which effect sizes are reported in terms of odds ratios. Table 4 presents descriptive data for the confession outcome by experimental condition, and Table 6 provides results of the logistic regression analysis. Supplemental material (available online) provides results of an analysis for which the number of prompts prior to confession is treated as the dependent variable.

As indicated in Table 6, guilty participants confessed at a higher rate (92.3%) than did innocent participants (48.4%), a finding that is consistent with prior research (e.g., Russano et al., 2005). Interrogation threat also influenced confession. Participants subjected to high threat confessed at a lower rate (62.6%) than did participants subjected to low threat (73.4%). The interaction of guilt status and interrogation threat did not significantly predict confession.

An additional analysis conducted in MPlus (Version 7.2; Muthén & Muthén, 2012) explored whether there was any support for the hypothesis that any main or interactive effects of guilt status and interrogation threat on confession were mediated by attentional bias to or memory for the accusation-relevant academic dishonesty policy. Results provided no support for this hypothesis, in that none of the indirect effects of the experimental manipulations through either attentional bias or memory on confession attained significance (ps > .10).

Discussion

This research yielded three chief findings supporting the idea that threat experienced in the early stages of police interrogation can activate a multifaceted mobilization response that facilitates suspects’ ability to cope with interrogation demands and initially strengthens their resistance to self-incrimination pressures. First, participants exhibited acute physiologic reactivity in response to an accusation of misconduct, and the degree to which they did so was greater when the accusation was characterized by high versus low threat. Second, the results suggested that threat can improve suspects’ cognitive performance during the early phases of questioning. Participants subjected to the high threat accusation devoted more attention to, and had better memory for, the accusation-relevant information of the academic dishonesty policy than did participants subjected to the low threat accusation. Further, results were consistent with the interpretation that threat not only influenced memory through a proximal effect on attention, but that threat also influenced memory directly. The unique relationship between threat and memory suggests that greater mobilization directly facilitated information processing by causing participants to subject the information to greater meaning analysis, or to otherwise process it more deeply, cognitive activities that improve memory (Craik & Tulving, 1975). Third, the findings showed that experiencing high threat can increase suspects’ resistance to interrogation pressures to self-incriminate. Compared to participants in the low threat conditions, participants in the high threat conditions were less likely to confess. Overall, these findings suggest that interrogation approaches that are experienced as highly threatening can activate an acute stress response in suspects that mobilizes their resources and potentiates their ability to cope with interrogation demands, at least initially.

Mobilization and Resistance

This study found that being subjected to high threat by emphasizing the seriousness of an alleged offense increased participants’ physiologic activity, improved their cognitive performance for processing accusation-relevant information, and made them more resistant to self-incrimination. Accordingly, the present research broadens theoretical understanding of suspects’ responses to police interrogation. Existing theory has concentrated on aspects of police interrogation that weaken suspects’ resistance to interrogation pressures over the course of extended questioning, thus highlighting the important effects associated with self-regulatory decline, such as fatigue and hopelessness (Davis & Leo, 2012; Gadjojsson, 2003; Kassin et al., 2010), and consistent with the relationship between resisting confession and elevated physiologic activity (Gnyll et al., 2013; Normile & Scherr, 2018). However, our results provided experimental evidence suggesting that the stress that characterizes being accused of a serious crime can trigger an automatic and situationally induced stress reaction in suspects that can have the counterintuitive effect of enabling them to better manage interrogation pressures, at least in the short term. Results of the current study also provide the first evidence that accusation-related mobilization can affect cognitive behaviors and performance, a finding that is consistent with general stress theory and more basic psychological research of stress responses.

The current findings further indicate that suspects strategically employ mobilization’s effects to address the demands of the interrogation situation, as shown by the specificity of the observed effects. Experiencing greater threat led participants to shift attention to the accusation-relevant academic dishonesty policy, and away from the accusation-irrelevant censorship article. Threat also increased participants’ memory for the academic dishonesty policy, but not the censorship article. Thus, the results are consistent with general stress and coping theory, which conceptualizes stress-induced resource mobilization as an adaptive response designed to facilitate coping with a specific threat. This conceptualization further suggests that the failure of previous research to obtain support for accusation-induced mobilization effects on memory

Table 6

<table>
<thead>
<tr>
<th>Effect</th>
<th>b</th>
<th>Wald χ²</th>
<th>p</th>
<th>OR</th>
<th>95% CI</th>
</tr>
</thead>
<tbody>
<tr>
<td>T</td>
<td>-0.41</td>
<td>4.38</td>
<td>.036</td>
<td>0.66a</td>
<td>[0.45, 0.97]</td>
</tr>
<tr>
<td>G</td>
<td>1.33</td>
<td>45.75</td>
<td>&lt;.001</td>
<td>3.77a</td>
<td>[2.57, 5.54]</td>
</tr>
<tr>
<td>T × G</td>
<td>-0.13</td>
<td>-0.44</td>
<td>.508</td>
<td>0.88b</td>
<td>[0.60, 1.29]</td>
</tr>
</tbody>
</table>

Note. OR = odds ratio; CI = confidence interval; T = threat (high vs. low); G = guilt status (guilty vs. innocent).
a OR = exp(2b), representing difference between factor levels effect coded at -1 and +1.
b OR = exp(4b), representing ratio of ORs of the constituent simple main effects.
outcomes was likely due to the fact that the information participants were asked to recall was irrelevant to the accusation they faced (Madon et al., 2017).

The effect of threat to decrease the likelihood of confession is consistent with observations of actual interrogations in which confrontational tactics led to greater resistance among suspects (Kelly et al., 2016). This finding also confirms and extends previously reported results linking accusation to mobilization and decreased compliance. Specifically, Madon et al. (2017) found that those who had been accused of wrongdoing were less compliant with interpersonal pressure to change their answers in recalling a story. However, because that work had manipulated threat by accusing some participants but not others, confessions could not be sought from nonaccused participants, making it impossible to test for effects on confession-related dependent variables. By contrast, all participants in the current work were accused, and the degree of perceived threat was manipulated by presenting the misconduct as either a minor or serious transgression, thereby enabling the demonstration of threat-induced mobilization effects on participants’ confession decisions.

With respect to the confession decision itself, it should be noted that a suspect’s decision to confess or not can be influenced by more specific effects that operate within the broader stress and coping framework presented here. For example, utility models of confession propose that suspects decide whether or not to confess based on which behavior they expect will maximize their satisfaction with the outcome that follows (Yang, Guyll, & Madon, 2017). It is also conceivable that high threat may harm rapport or induce psychological reactance, thereby reducing compliance and the likelihood of confessing. Conversely, low threat may facilitate rapport and encourage reciprocity, and thereby have the opposite effect.

**Variation of Threat in Real Interrogations**

In an actual interrogation there are several factors that could vary the threat a suspect experiences, including the severity of the crime and whether the suspect is innocent or guilty, as were explored in the current study. Interrogation characteristics such as the interrogator’s demeanor and the tactics employed are also likely to influence threat. Adversarial and confrontational interrogators are likely to increase threat. By contrast, interrogators utilizing an information-gathering approach seek to develop rapport and to engage the suspect in a respectful and professional manner, the effects of which should be to reduce threat, decrease resistance, and increase cooperation (Meissner, Kelly, & Woes tehoff, 2015). With respect to tactics, maximization likely induces high threat by aggressively accusing suspects of a serious crime, highlighting harsh penalties, and characterizing the suspect’s situation as dire. Alternatively, minimization can involve framing the crime as less morally offensive, or suggesting comparatively favorable narratives for why the crime was committed. Thus, similar to the effect of the threat manipulation in the present study, the use of minimization would likely reduce threat by making the crime seem less serious, an expectation that fits with the observation that minimization leads suspects to infer less severe punishment, thereby encouraging false confession (Kassin et al., 2010; Kassin & McNall, 1991). Of course, maximization and minimization can be paired in an interrogation (Madon, More, & Ditchfield, 2019). It would be interesting to investigate whether such a pairing might operate to reduce the threat suspects perceive, perhaps ultimately serving to decrease resistance and facilitate confession.

The experimental manipulation used in this research produced a relative difference in the amount of threat experienced by participants, with greater threat mobilizing participants and decreasing their likelihood of confessing. It is important to recognize that the converse interpretation is equally true, that lower threat demobilized participants and increased their likelihood of confessing. We point this out to emphasize that the effects we observed in the present research are functionally similar to those elicited by minimization tactics. Minimization entails presenting a criminal act in ways that make it seem less serious or less morally objectionable, thereby leading suspects to infer lenient treatment and encouraging them to confess (Kassin & McNall, 1991). Therefore, from a stress and coping perspective minimization may be viewed as operating by reducing perceived threat, demobilizing suspects, and making a confession seem to be a suitable means of coping with the interrogation (e.g., Kassin et al., 2010).

The current data did not indicate that the effect of the threat manipulation on confession differed between the innocent and the guilty. However, it is critical to note that the significant main effect included causing more false confessions to be given by innocent participants under low threat. Thus, while the innocent were not more susceptible than the guilty to the procedures that lowered threat, nor were they more resistant. In addition, the brevity of the current experiment precluded the ability to examine the strength of such effects in the context of a long and coercive interrogation. This is particularly relevant in light of the fact that interrogations that produce false confessions can be extremely long, lasting 16 hours, on average, for serious crimes (Drizin & Leo, 2004). An innocent suspect who is subjected to prolonged interrogation can feel trapped and come to believe that the only means of escaping from the interrogation is to provide a false confession. Under such coercive circumstances the reduced threat and implied leniency associated with minimization may be especially powerful in causing the innocent to falsely confess (Kassin et al., 2010).

This current findings show that interrogation threat leads to mobilization, increased resistance, and decreased compliance. For this reason the use of threatening tactics is likely to be counterproductive in contexts such as intelligence interviews in which the goal is to obtain the most comprehensive and truthful account possible, and potentially procure the interviewee’s cooperation. Thus, our findings resonate with best practice recommendations for information gathering approaches, which advise against coercive methods (Vrij et al., 2017). With respect to criminal interrogations, it is important to emphasize that even though inducing threat might acutely mobilize suspects and bolster their resources for coping with an interrogation, it is by no means assured that the willful behaviors produced by this process will either benefit suspects or serve justice. Indeed, because suspects’ decisions are based on their subjective evaluation of the situation as they understand it in the moment (Yang et al., 2017), suspects’ actions may be the product of faulty reasoning. For example, in the current study, even when participants were mobilized by being accused in a threatening manner of a serious misdeed, 41% of the innocent nonetheless chose to falsely confess, apparently believing this to be their best course of action under the circumstances.
Innocent Versus Guilty Status

The phenomenology of innocence refers to the idea that innocent suspects believe that the fact of their innocence will be sufficient to protect them from negative consequences, and thus they feel less threatened by accusation and interrogation, leading them to make decisions that increase their risk of conviction. The pattern of physiologic responses observed in this research supported this idea, and replicates previous research (Guyll et al., 2013; Normile & Scherr, 2018). Innocent participants exhibited smaller increases in cardiovascular activity in response to being accused than did guilty participants. Additionally, among innocent participants, an accusation presented with high threat as compared to low threat was associated with smaller physiologic increases than it was among guilty participants, indicating less physiologic mobilization among the innocent.

The phenomenology of innocence further suggested the hypothesis that if the innocent do feel less threatened by police interrogation than guilty suspects, they should also attend less to—and have worse memory for—accusation-relevant information. However, our results provided no support for this hypothesis. Innocent and guilty participants did not differ with respect to how much they attended to accusation-relevant information, nor how well they remembered it. Thus, comprehensive consideration of the results pertinent to the phenomenology of innocence suggests some apparent inconsistencies. Within this study the phenomenology of innocence was supported by the physiologic responses, but not by the attention and memory results. This pattern is similar to the findings of Madon et al. (2017), wherein the innocent also evidenced less physiologic responsiveness, but were not more suggestive. As suggested by Madon et al. (2017), such a pattern of effects might occur because the general mobilization that is associated with the threat of interrogation exceeds some threshold that swamps guilt-status differences on information processing outcomes such as attention and memory. Another possibility is suggested by prior research which has found the phenomenology of innocence to be manifested in explicit behaviors such as waiving one’s Miranda rights and consenting to risky eyewitness identification procedures (Kassin, 2005). Accordingly, innocence may be most consequential for its ability to influence suspects’ conscious decision making. Indeed, it has been suggested that the phenomenology of innocence effects on decision making may be due to intentional impression management behaviors, wherein the innocent agree to risky procedures because they do not wish to be misperceived as guilty (Kassin, 2005).

Limitations and Future Directions

The current results should be considered in light of several limitations. Although the paradigm used was successful in creating a psychologically engaging interrogation analogue, it substantially differed from an actual interrogation in a number of ways. Real interrogations place suspects at risk of severe consequences, are conducted by police personnel, take place in forbidding conditions, and entail dynamic social interaction that may include multiple social influence techniques applied in combination. In addition, the study procedures were quite brief, whereas actual interrogations frequently continue for more than an hour, and indeed can be extremely lengthy. Although results showed that high interrogation threat led to physiologic mobilization, facilitated attention and memory, and increased resistance, it is unclear whether this pattern would continue throughout a prolonged interrogation. As suggested by Madon et al. (2017), it is conceivable that the effects of threat-induced mobilization could wane over time, and that mobilization early in an interrogation could serve to more rapidly deplete an individual’s self-regulatory resources, leading to decreased resistance. Similarly, phenomenology of innocence effects could become stronger over the course of a coercive interrogation. Believing that their innocence will ultimately protect them from negative consequences, innocent suspects may become increasingly likely to capitulate and confess after a prolonged period of being unable to convince interrogators of their innocence.

The foregoing limitations indicate the importance of conducting research that explores the effects of interrogation threat and stress while maximizing external validity. Naturalistic research of actual interrogations has proved invaluable in that regard (e.g., Kelly et al., 2016; Leo, 1996), and indeed inspired some of the hypotheses tested in the current study. However, correlational designs do not provide the strongest tests of causality, a shortcoming that highlights the challenge of developing experimental paradigms that maximally simulate actual interrogations while not running afoul of ethical standards pertaining to the treatment of research participants. Experimentalists have successfully mimicked elements of real interrogations, such as an inducement to commit an actual offense (Russano et al., 2005), extended engagement (Madon et al., 2017, Experiment 2), manipulative tactics (e.g., Perillo & Kassin, 2011), concern regarding real legal jeopardy (Vallano, Slapinski, Guyll, & Ditchfield, 2019), and utilizing trained interrogators and harsh tactics (Morgan, Southwick, Steffian, Hazlett, & Loftus, 2013). It remains, however, for experimental work to develop an acceptable paradigm that induces and maintains high threat for a serious offense while subjecting participants to a prolonged interrogation by a trained professional utilizing multiple ploys. Although it is difficult to imagine conducting this type of research in normal populations, it might be permissible if it provided a valuable training experience, such as for military or intelligence service personnel for whom experiencing an actual coercive interrogation is a real possibility (e.g., Morgan et al., 2013).

Conclusion

Stress and coping theory provides a useful framework for understanding suspects’ responses to threat experienced in the early phases of police interrogation. The perception of threat generates a multifaceted mobilization response that can include physiologic, cognitive, emotional, and behavioral effects. These effects can serve to strengthen a suspect’s coping efforts, such as by increasing attention, enhancing memory, and increasing resistance to interpersonal pressure. Accordingly, this process is likely to benefit resistant suspects in the context of interrogations that are not unduly long. However, in lengthy and coercive interrogations, it is conceivable that the experience of continued mobilization, combined with the realization that attempts to cope through resistance are futile, may operate to exhaust and demoralize even initially defiant individuals and ultimately produce a docile and compliant suspect.
References


Received July 16, 2018
Revision received May 28, 2019
Accepted May 29, 2019