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"It's (not) your fault": The influence of blame mitigation versus guilt induction on true and false confessions

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“IT’S (NOT) YOUR FAULT”: THE INFLUENCE OF BLAME MITIGATION VERSUS
GUILT INDUCTION ON TRUE AND FALSE CONFESSIONS

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2016

“IT’S (NOT) YOUR FAULT”: THE INFLUENCE OF BLAME MITIGATION VERSUS
GUILT INDUCTION ON TRUE AND FALSE CONFESSIONS

by

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of ours” (Woolfolk, Doris, & Darley, 2006, p. 299). “He may valiantly attempt to fight the bear, which could generate pride if he scares the bear away. Alternatively, he may run and scream in terror, which could generate shame or guilt because he has failed to live up to his ‘boyfriend as protector’ identity, particularly if he leaves his girlfriend behind to become bear food” (Tracy & Robins, 2004, p. 111). Finally, Knobe (2006) for talking about ‘schmintentionality’ (p. 223).

Abstract

False confessions remain an important problem facing the criminal justice system. Practitioners assert that blame mitigation techniques can minimize suspects' perceptions of responsibility independently from legal consequences. However, blame mitigation techniques increase false confessions in part by minimizing suspects' expectations of punishment. Blame mitigation techniques are also designed to reduce suspects' feelings of guilt, which may inhibit confessions from guilty suspects given that true confessions are related to feelings of guilt and remorse. Thus, it may be more beneficial to induce guilt rather than mitigate blame in the interrogation room. This dissertation (1) tested practitioners' assumption that blame mitigation can influence a suspect's perceptions of his or her responsibility without also affecting expectations of punishment, and (2) assessed whether a guilt induction interrogation technique is a viable alternative to blame mitigation. Participants watched a videotaped interrogation (Experiment 1) or experienced an interrogation about cheating (Experiment 2) that included direct questioning, blame mitigation, or guilt induction techniques. Blame mitigation lowered participants' expectations of punishment, but did not affect participants' perceptions of their responsibility (Experiment 2). Across both experiments, guilt induction failed to induce feelings of guilt, potentially because participants may not have had a strong enough relationship with the interrogator and with the victim. Additionally, no interrogation technique differentially affected confessions, perhaps because the direct questioning and guilt induction techniques were too accusatorial in nature. Future research should seek to refine the guilt induction technique and explore whether guilt induction is a better alternative to blame mitigation.

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Chapter 1: Introduction

False confessions account for approximately 30% of the 325 wrongful convictions identified thus far by The Innocence Project (www.innocenceproject.org). At a minimum, false confessors may suffer financial losses and emotional stress; others, however, may spend decades incarcerated or be executed for crimes they did not commit (Drizin & Leo, 2004; Leo & Ofshe, 1998). Archival analyses have shown that false confessors who went to trial were convicted 73 to 81% of the time (Drizin & Leo, 2004; Leo & Ofshe, 1998) and laboratory experiments have demonstrated that mock jurors tend to convict suspects who confess, often regardless of how the confession was obtained (Kassin & McNall, 1991; Kassin & Sukel, 1997). Given the difficulty interrogators and potential jurors have differentiating true and false confessions (Kassin, Meissner, & Norwick, 2005) and given the persuasiveness of confessions at trial (Drizin & Leo, 2004; Leo & Ofshe, 1998; Kassin & Sukel, 1997), it is important to prevent false confessions from occurring in the first place.

Innocent suspects confess because of a variety of dispositional and situational factors (see Kassin et al., 2010; Meissner, Kelly, & Woestehoff, 2015). Suspects who are younger are more likely to falsely confess (Candel, Merckelbach, Luyen, & Reyskens, 2005; Drizin & Leo, 2004; Garrett, 2015; Goldstein, Condie, Kalbeitzner, Osman, & Geier, 2003; Grisso et al., 2003; Gudjonsson, Sigurdsson, Asgeirsdottir, & Sigfusdottir, 2006; Redlich & Goodman, 2003), perhaps because juveniles are more compliant and may not consider the ramifications of their decisions (Grisso et al., 2003). Intellectual disability is another false confession risk factor (Drizin & Leo, 2004; Garrett, 2015) in part because people with intellectual disabilities are more suggestible (Gudjonsson & Henry, 2003) and more influenced by leading questions and prompts from authority figures (Everington & Fulero, 1999; O'Connell, Garmoe, & Goldstein, 2005).

Innocence itself may also be a false confession risk factor. Innocent suspects tend to waive their rights to silence during an interrogation because they believe they have nothing to hide (Kassin & Norwick, 2004). Additionally, innocent suspects display fewer physiological indicators of stress during an interrogation than do guilty suspects, suggesting that they feel less concerned by the situation (Gyull, Madon, Yang, Lannin, & Scherr, 2013). Innocent suspects also trust that the interrogator will be able to recognize their innocence (Kassin, 2005), and suspects may falsely confess expecting that the evidence will affirm they did not commit the crime (Perillo & Kassin, 2011).

Situational factors such as interrogation length, expectations of guilt, and psychological interrogation techniques also affect false confessions (Kassin et al., 2010; Lassiter & Meissner, 2010). People are more likely to falsely confess during lengthy interrogations (Drizin & Leo, 2004; Garrett, 2015; Malloy, Shulman, & Cauffman, 2014) partly because they weigh immediate benefits such as ending the interrogation more heavily than the long-term costs associated with confessing (Madon, Gyull, Scherr, Greathouse, & Wells, 2012; Madon, Yang, Smalarz, Gyull, & Scherr, 2013). An interrogator's belief that the suspect is guilty can also lead to false confessions (Narchet, Meissner, & Russano, 2011); interrogators with a guilt bias use more guilt-presumptive interrogation techniques, which increases the pressure on the suspect to confess (Hill, Memon, & McGeorge, 2008; Kassin, Goldstein, & Savitsky, 2003; Narchet et al., 2011). Finally, psychological interrogation techniques also predispose innocent suspects to confess. One such technique is claiming to have evidence that does not exist (Inbau Reid, Buckley, & Jayne, 2011). The presentation of false evidence increases false confessions (Kassin & Kiechel, 1996; Nash & Wade, 2009; Perillo & Kassin, 2011; Wright, Wade, & Watson, 2013), even if the evidence is merely implied rather than outright presented (Perillo & Kassin, 2011).

Another such technique is presenting interrogation ‘themes’, which is a quintessential strategy in the Reid Technique method of interrogation (Inbau et al., 2011; Senese, 2005). Interrogation themes are stories presented by the interrogator that seek to minimize the moral seriousness of the crime by excusing or justifying the suspect’s behavior. For example, the interrogator can blame the victim or suggest the crime was accidental (Inbau et al., 2011; Senese, 2005). Psychologists have referred to interrogation themes as ‘minimization’ (Kassin & McNall, 1991); however, *blame mitigation* may be a more appropriate label for interrogation themes, given that such themes parallel blame mitigation strategies (Alicke, 2000; Guglielmo, Monroe, & Malle, 2009; Malle, Guglielmo, & Monroe, 2014). Blame mitigation strategies convey the message that the transgressor is not at fault for what occurred, such as by arguing that the transgressor did not intend, cause, or anticipate the transgression (Alicke, 2000). Blame mitigation strategies can also assert that the transgressor’s behavior was not wrong, the transgressor’s behavior was justified, or the transgression was unpreventable (Malle et al., 2014).

Although blame mitigation techniques increase true confessions (Russano, Meissner, Narchet, & Kassin, 2005), they increase false confessions as well (Horgan, Russano, Meissner, & Evans, 2012; Klaver, Lee, & Rose, 2008; Narchet et al., 2011; Russano et al., 2005). The increase in false confessions may be due to suspects’ perceptions of the potential consequences associated with confessing. Blame mitigation techniques lead people to believe the consequences will be less severe if they confess (Horgan et al., 2012; Kassin & McNall, 1991), and a meta-analysis of laboratory experiments demonstrated that innocent suspects’ decision to confess is motivated in part by their perceptions of consequences (Houston, Meissner, & Evans, 2014).

However, proponents of the Reid Technique maintain that blame mitigation strategies will not cause innocent suspects to perceive a benefit in confessing and will not therein lead

innocent suspects to confess (Inbau et al., 2011). They advise that blame mitigation techniques “should minimize the moral seriousness of the subject’s crime by offering psychological excuses for the crime but not remove legal consequences” (John E. Reid & Associates, Inc., n.d., p. 9) and that “caution must be taken to avoid any indication that the minimization of moral blame will relieve the suspect of criminal responsibility” (Inbau et al., 2011, p. 205). However, research on moral judgments has found that reducing a transgressor’s moral responsibility also reduces punishment (Shultz, Schleifer, & Altman, 1981), suggesting that interrogators cannot minimize a suspect’s moral blame or responsibility without also affecting the suspect’s expectations of his or her punishment upon confessing. However, to the best of my knowledge no research has investigated interrogation practitioners’ claim that it is possible to minimize responsibility, independent of punishment, in an interrogation context. *The first aim of this dissertation was to assess whether blame mitigation techniques can influence a suspect’s perceptions of his or her responsibility without also affecting perceptions of legal responsibility (i.e., expectations of punishment), compared to a direct questioning technique.*

Blame Mitigation

Scholars have hypothesized about the ways one can mitigate blame (Alicke, 2000; Malle et al., 2014). Blame mitigation techniques address factors such as the nature of the transgression, suggesting the act in question was not a transgression at all; whether the transgressor was actually responsible for the transgression; and the transgressor’s reasons for his or her behavior (Alicke, 2000; Malle et al., 2014). These blame mitigation techniques are discussed below with examples of how these techniques could be used in an interrogation.

It should be noted that research on blame mitigation often embeds these blame-mitigating factors within a scenario, rather than having the transgressor or an external observer interpret the

event post-hoc in line with blame mitigation strategies (but see Markman & Tetlock, 2000). For example, participants in Cushman's (2008) research read that a transgressor intentionally or unintentionally burned a welding partner's hand. Participants then judged factors such as how wrong the transgressor's behavior was and how much she should be punished. Other scholars have developed theoretical models to explain the ways in which one can mitigate blame (Alicke, 2000; Malle et al., 2014). To the best of my knowledge, this dissertation is the first to apply research on blame mitigation to an interrogation context. However, interrogators are already using blame mitigation strategies (e.g., Senese, 2005). I believe applying knowledge of blame mitigation research to an interrogation context is beneficial because it allows for a deeper, more theoretically-grounded basis for prediction.

Blame mitigation techniques. *Normalization.* One way transgressors can attempt to mitigate blame is by claiming that nothing bad happened. Transgressors can normalize the transgression by saying their actions did not violate a norm (e.g., by saying everyone behaves that way) or by claiming no transgression occurred (Malle et al., 2014). An interrogator can use *normalization* by suggesting that the crime was not out of the ordinary or that the crime could have been worse (see Table 1). For example, the interrogator may normalize a homicide by claiming video games normalized violent behavior, or normalize a rape by asserting that the behavior is acceptable in different cultures. The interrogator may also claim that many people have behaved similarly or that the interrogator was tempted to commit the crime at some point. Additionally, the interrogator can contrast the suspect's behavior with something more reprehensible; for example, the suspect only killed one person instead of several, the suspect did not steal irreplaceable items, or the duration of a rape was only a few minutes rather than several hours (Senese, 2005). Blame mitigation techniques purportedly parallel a suspects' justification

for the crime (Inbau et al., 2011) and, indeed, this may be the case. Some convicted rapists deny they committed a crime at all, and others attempt to portray their crimes in more a more favorable light by asserting that they never beat or robbed their victims (Scully & Marolla, 1984).

Projection. Another way transgressors can attempt to mitigate blame is by claiming that their actions were unintentional and that they should not have, or could not have, prevented the transgression (Malle et al., 2014). For example, transgressors can say they did not want the outcome to occur and did not believe their actions would produce the outcome (Malle & Knobe, 1997). Transgressors can also claim that they did not have an obligation to prevent the transgression because of the transgressor's role or relationship, or because of the context of the transgression (Malle et al., 2014). Victims are seen as a greater cause of their deaths when they had control over circumstances that could have contributed to their deaths (Alicke, 1992), so it is possible that blaming the victim may shift responsibility for preventing the crime from the transgressor to the victim. Convicted rapists may claim that their victims were responsible for the crime because of the victim's behavior, appearance, or character (Scully & Marolla, 1984). Transgressors can also claim that they did not have the capacity to prevent the transgression (Alicke, 2000; Malle et al., 2014). For example, transgressors may claim a lack of control ("I couldn't help it"; Alicke, 2000, p. 560) or identify cognitive or physical limitations ("I had no idea this would happen" or "I couldn't do anything about it"; Malle et al., 2014, p. 176). Transgressors can also claim they were forced to commit the transgression (Alicke, 2000; Guglielmo et al., 2009). Some rapists blame their behavior on alcohol, drugs, or emotional problems (Scully & Marolla, 1984).

An interrogator can use *projection* by asserting that the crime was unintentional or would not have happened but for extenuating circumstances (see Table 1). The interrogator can claim that the crime was accidental or spur of the moment. The interrogator can also propose that the victim provoked or facilitated the crime. For example, the interrogator can say that a sexual assault victim dressed or behaved provocatively, or a burglary victim left a door unlocked. Additionally, the interrogator can suggest that the suspect could not have prevented the crime because the suspect's judgment was affected by drugs, alcohol, or stress. Finally, the interrogator can assert that the suspect was pressured into committing the crime by a friend or as part of a gang initiation (Senese, 2005).

Rationalization. Transgressors can attempt to mitigate blame by presenting a rationalization for the transgression (Alicke, 2000; Malle et al., 2014). Rationalizations are socially acceptable explanations or justifications for a behavior (Malle et al., 2014). Rationalizations can also include claims that the transgressor's behavior was understandable given the circumstances (Alicke, 2000). Self-defense may be seen as an acceptable justification for harming another (Alicke, 2000; Cohen & Nisbett, 1994; Malle et al., 2014) – unless the victim turns out to be an innocent victim (Alicke & Davis, 1989). An interrogator can use *rationalization* by suggesting an acceptable reason for committing the crime; for example, the suspect committed burglary to support his or her family, or the suspect acted in self-defense (Senese, 2005; see Table 1).

Blameworthiness. Many of these blame mitigation techniques affect perceptions of transgressors' blameworthiness. Observers view intentional actions as more wrong and transgressors as more blameworthy than when transgressors act accidentally (Cushman, 2008; Lagnado & Channon, 2008; Ohtsubo, 2007), even if the transgressors fail to produce the

intended outcome (Cushman & Young, 2011). Blame can even be assigned if transgressors fail to save someone (DeScioli, Bruening, & Kurzban, 2011) or are forced to harm someone (Woolfolk, Doris, & Darley, 2006), as long as it is clear the transgressors wanted the outcome to occur. Portraying the victim negatively also appears to mitigate transgressors' blame (Alicke, Buckingham, Zell, & Davis, 2008; Alicke & Davis, 1989). Blame can also be reduced because of transgressors' mental and physical capacity limitations, such as mental illness (Alicke, 1990; Fincham & Roberts, 1985), severe emotional stress (Alicke, 1990), youth (Fincham & Roberts, 1985), and coercion (Woolfolk et al., 2006). However, blame is not reduced if the transgressors caused their incapacity (e.g., voluntarily became intoxicated; Alicke, 1990; Alicke & Davis, 1990) or wanted to commit the transgression despite the incapacity (Woolfolk et al., 2006). Finally, transgressors who have an acceptable motivation for their behavior are seen as less blameworthy than when their motivations are socially undesirable. For example, people are seen as less blameworthy for being late to visit someone in the hospital when they were helping a car accident victim, compared to when they were buying drugs (Alicke et al., 2008).

Responsibility and punishment. Inbau and colleagues (2011) maintain that blame mitigation techniques will minimize moral blame without influencing legal culpability. Contrary to this assumption, Shultz and colleagues (1981) note that blameworthiness can be synonymous with responsibility and legal culpability; a transgressor must be responsible for an outcome in order to be punished for it (see also Fincham & Roberts, 1985). Given that judgments of blameworthiness, responsibility, and punishment are related, it is possible that blame mitigation techniques will reduce suspects' perceptions of their responsibility for the crime while also lowering their expectations of punishment.

The literature suggests that responsibility and punishment are affected similarly by blame mitigation techniques. Transgressors can mitigate blame via *projection*, claiming the crime was unintentional, unpreventable, or caused by another factor. Transgressors who bring about an unintentional outcome are seen as less responsible (Woolfolk et al., 2006) and given less punishment (Cushman, 2008; Cushman, Dreber, Wang, & Costa, 2009; DeScioli et al., 2011) than when transgressors act intentionally. Transgressors are also thought to deserve less punishment when a potential cause of harm other than the transgressor is present, even if they intended to harm the victim (Cushman, 2008). Furthermore, transgressors are seen as less deserving of punishment when the victim was a criminal rather than an innocent victim (Alicke & Davis, 1989). Additionally, perceptions of punishment can be reduced for incapacities such as youth (Fincham & Roberts, 1985) and other factors that were not under the transgressor's control (Alicke & Davis, 1990; Heath, Stone, Darley, & Grannemann, 2003). Transgressors can also mitigate blame via *rationalization*, claiming they acted for a beneficial reason. Transgressors whose motivations are prosocial or justified are seen as less responsible (Alicke, 1992) and less deserving of punishment (Darley, Klosson, & Zanna, 1978) than when transgressors' motivations are socially undesirable.

Contrary to Inbau and colleagues' (2011) premise, it does appear that blame mitigation interrogation techniques can influence perceptions of blameworthiness, responsibility, and, notably, punishment (Alicke, 1990; Alicke & Davis, 1989, 1990; Cushman, 2008; Darley et al., 1978; Malle et al., 2014; Woolfolk et al., 2006). However, much of the aforementioned research has focused on observer's perceptions of a transgressor; little research has assessed the effects of blame mitigation from the transgressor's perspective (but see Markman & Tetlock, 2000). This dissertation evaluated Inbau and colleagues' (2011) claims by assessing whether blame

mitigation techniques would reduce suspects' perceptions of their responsibility without also affecting expectations of punishment, compared to direct questioning techniques.

Guilt Induction

Although previous research has largely focused on techniques believed to elicit false confessions (e.g., Kassin & Kiechel, 1996), there has been a recent move towards examining techniques that might induce guilty – but not innocent – people to confess (Meissner, Hartwig, & Russano, 2010; Meissner, Russano, & Narchet, 2010); in other words, which techniques lead to more diagnostic outcomes (Russano et al., 2005). Confessions are persuasive evidence at trial (Kassin & Sukel, 1997) and people have difficulty identifying false confessions (Kassin et al., 2005), so it is critical that we develop empirically-based interrogation approaches that produce diagnostic confession evidence. Recent research suggests that *guilt induction* – a direct contrast to that of blame mitigation – may produce more diagnostic interrogation outcomes (e.g., Houston et al., 2014).

Guilt tends to be elicited by a transgressor's negative evaluation of his or her behavior (Lindsay-Hartz, 1984; Miceli, 1992; Miceli & Castelfranchi, 1998; Niedenthal, Tangney, & Gavanski, 1994; Tangney, 1995; Tangney, Stuewig, & Mashek, 2007; Tracy & Robins, 2004). Guilt is also related to remorse and regret (Smith, Webster, Parrott, & Eyre, 2002) and the desire to undo what one did (Lindsay-Hartz, 1984; Niedenthal et al., 1994; Stearns & Parrott, 2012). Blame mitigation techniques advocated by Inbau and colleagues (2011) are believed to be effective because they reduce a suspect's feelings of guilt. Research suggests that blame mitigation strategies do effectively alleviate guilt for the act. For example, participants who wrote about a time when they did not feel guilty about angering someone tended to blame the victim for causing the event (Baumeister, Stillwell, & Heatherton, 1994). Additionally, a

transgressor who attempts to justify an act (e.g., by thinking that everyone has done it) is thought to experience less guilt than a transgressor who knows the act was wrong (Smith et al., 2002). Scholars have also hypothesized that one can reduce feelings of guilt by denying responsibility, denying intentionality, claiming the transgression was unavoidable, claiming the action was not wrong or serious, or blaming the victim (Miceli & Castelfranchi, 1998).

However, reducing feelings of guilt in an interrogation may be counterproductive. Guilt motivates people to attempt to remedy the transgression, such as by confessing or apologizing (Baumeister et al., 1994; Baumeister, Stillwell, & Heatherton, 1995; Howell, Turowski, & Buro, 2012; Lindsay-Hartz, 1984; Stice, 1992). People who felt guilty indicated they confessed and apologized more often than when they did not feel guilty (Baumeister et al., 1995). Additionally, people who are dispositionally prone to feeling guilt said they would be more likely to apologize in a hypothetical scenario (Howell et al., 2012). Guilt also motivates people to change their behavior (Baumesiter et al., 1995), such as by increasing cooperation in economics games (de Hooze, Zeelenberg, & Breugelmans, 2007; Ketelaar & Au, 2003) and increasing compliance with an experimenter's request (Boster et al., 1999).

In an interrogation context, true confessions tend to include more statements of guilt and remorse than do false confessions (Villar, Arciuli, & Paterson, 2014). Similarly, participants in laboratory experiments (Houston et al., 2014) and convicted inmates (Gudjonsson & Petursson, 1991; Redlich, Kulish, & Steadman, 2011; Sigurdsson & Gudjonsson, 1996) reported that their true confessions were motivated in part by feelings of guilt and remorse. False confessions, on the other hand, tend to be motivated by factors such as the perceived consequences of confessing (Houston et al., 2014) or the external pressure to confess (Houston et al., 2014; Perillo & Kassin, 2011; Redlich et al., 2011; Sigurdsson & Gudjonsson, 1996, 2001).

Taken together, these studies suggest that blame mitigation techniques may actually inhibit true confessions by reducing feelings of guilt, and may produce false confessions by manipulating the suspect's perceptions of punishment. In comparison, guilt induction may increase true confessions by activating internal pressures associated with feelings of guilt and responsibility. It is critical to assess the hypotheses offered by practitioners in favor of blame mitigation approaches (Inbau et al., 2011) with that of contrasting empirical data suggesting that guilt induction may be more diagnostic (Houston et al., 2014). *A second aim of this dissertation was to assess whether guilt induction produces more diagnostic interrogation outcomes when compared to blame mitigation, and to evaluate the psychological processes such as feelings of guilt that may mediate the effect of interrogation techniques on true versus false confession likelihood.*

Guilt induction techniques. There is minimal research on methods of inducing feelings of guilt (cf. Sommer & Baumeister, 1997). Researchers typically induce guilt in the laboratory by having participants commit some transgression, such as cheating (Boster et al., 1999), or by having participants write about a time when they felt guilty (de Hooge et al., 2007; Ketelaar & Au, 2003). Similarly, research on guilt induction strategies has relied on participants' descriptions of how they made someone else feel guilty (Vangelisti, Daly, & Rudnick, 1991). Nonetheless, the literature on guilt suggests potential guilt induction techniques that could be applied to an interrogation context (see Table 2).

Emphasize suffering. Guilt is often tied to a recognition of how one's behavior has harmed another (Baumeister et al., 1994; Elison, 2005; Tangney, 1991; Yamagishi, 2014). A focus on the victim's suffering has been referred to as empathy-based guilt (Yamagishi, 2014) and many scholars agree that empathy is an important component of guilt (Baumeister et al.,

1994; Elison, 2005; Miceli, 1992; Miceli & Castelfranchi, 1998; Sommer & Baumeister, 1997; Stearns & Parrott, 2012; Tangney, 1991; Tangney et al., 2007). Elison (2005) suggests that feelings of guilt may actually be feelings of sadness or distress for the victim. Supporting this idea, people who are prone to feeling guilty across situations also tend to be more empathic and have a greater ability to take the perspective of another (Tangney, 1991). Thus, it may be possible to induce guilt by emphasizing how the victim was hurt by the transgressor's actions (Baumeister et al., 1995; Miceli, 1992; Sommer & Baumeister, 1997) via a perspective-taking approach (Batson, Early, & Salvarani, 1997; Skorinko, Laurent, Bountress, Nyein, & Kuckuck, 2014). An interrogator can *emphasize suffering* by asking the suspect to consider the event from the victim's perspective while the interrogator describes how the victim was harmed.

Emphasize responsibility. Taking responsibility is another important facilitator of guilt (Lindsay-Hartz, 1984; Miceli, 1992; Miceli & Castelfranchi, 1998; Stice, 1992). Responsibility is related to the controllability of the outcome (Baumeister et al., 1994); people who feel guilty acknowledge that an outcome would not have occurred had they behaved differently (Lindsay-Hartz, 1984; Niedenthal et al., 1994; Stearns & Parrott, 2012). Similarly, directing people to think about how they could have behaved differently tends to elicit feelings of guilt (Niedenthal et al., 1994). An interrogator can *emphasize responsibility* by highlighting a suspect's causal role in the outcome and by noting that the outcome would not have occurred if the suspect had behaved differently.

Ideal standard. Finally, guilt arises when the transgressor's behavior was morally wrong (Gore & Harvey, 1995; Lindsay-Hartz, 1984; Smith et al., 2002; Yamagishi, 2014) or violated a social norm (Ketelaar & Au, 2003). People who feel guilty believe they should have behaved differently (Lindsay-Hartz, 1984) and that their behavior did not meet an ideal standard

(Lindsay-Hartz, 1984; Tracy & Robins, 2004; Yamagishi, 2014). Similarly, people may try to make someone else feel guilty by pointing out how that person violated a moral or ethical rule, or by stating that that person should have known better than to pursue a desired course of action (Vangelisti et al., 1991). There is some support that this technique induces feelings of guilt – participants who are caught cheating and are told that they should have reported the cheating feel guiltier than participants who do not cheat at all (Boster et al., 1999). An interrogator can use an *ideal standard* by emphasizing that the suspect violated a moral or ethical rule that should have been followed, or suggesting that the suspect’s behavior failed to meet an idealized standard.

Rapport. Feelings of guilt are more likely to occur in close relationships; therefore, guilt induction techniques may not be effective in isolation (Baumeister et al., 1995). In order for guilt induction to be effective, it may be necessary to create a bond between the suspect and the interrogator through rapport-building tactics such as active listening, self-disclosure, finding common ground, and mimicking the source’s behavior (Abbe & Brandon, 2014). Building rapport is also advocated by training manuals (Inbau et al., 2011) and interrogators (Russano, Narchet, Kleinman, & Meissner, 2014). Indeed, interrogators indicate that building rapport is one of the most common techniques they use (Kassin et al., 2007; Redlich, Kelly, & Miller, 2014; Russano et al., 2014).

Psychological Processes Related to Confessions

Guilty and innocent suspects may confess for a variety of reasons (Houston et al., 2014), and interrogation techniques may differentially produce true and false confessions by affecting these psychological processes. While it is important to understand whether certain interrogation techniques produce true and false confessions, it is also important to examine *why* guilty and innocent suspects confess in response to these techniques.

One factor involves *internal pressure* to confess; in other words, feelings of guilt, remorse, and responsibility. Scholars have hypothesized that feelings of guilt are a negative emotional state that can be resolved through confession (Stice, 1992) and, indeed, internal pressure is related to true confessions in both experimental (Houston et al., 2014) and field (Redlich et al., 2011) contexts.

Another factor involves suspects' *expectations of punishment*. Suspects may engage in a cost-benefit analysis when deciding whether to confess or deny responsibility for the crime (see Houston et al., 2014 for a review). Interrogation techniques can manipulate suspects' perceptions of the consequences of confessing (Horgan et al., 2012); some techniques imply promises of leniency, while others imply threats of harsher punishment (Kassin & McNall, 1991). Expectations of punishment are related to true and false confessions (Houston et al., 2014).

External pressure from the interrogator is also an important consideration. Certain interrogation techniques can increase a suspect's perceptions of the external pressure to confess (Narchet et al., 2011). External pressure is in turn related to false confessions (Houston et al., 2014; Redlich et al., 2011). In fact, one category of false confession has been termed 'compliant false confession' to describe suspects who yield to the interrogator (Kassin et al., 2010).

A suspect's *affect* may also influence confessions (e.g., feelings of stress, worry, and anxiety). Suspects may feel anxious when they deny their guilt and they may be motivated to relieve this anxiety by confessing. Therefore, interrogation manuals recommend increasing a suspect's anxiety in order to obtain a confession (cf. Houston et al., 2014). A suspect's affect is related to true confessions (Houston et al., 2014), and interrogation techniques designed to manipulate a suspect's anxiety can increase the amount of information disclosed in an interrogation (Evans et al., 2014).

A suspect's *perception of proof* that the interrogator has can also influence true confessions (Houston et al., 2014; Redlich et al., 2011). A suspect may believe it is pointless to maintain his or her innocence if the interrogator can prove the suspect was involved in the crime (Gudjonsson & Petursson, 1991). However, lies about having evidence that does not exist can produce false confessions as well (Kassin & Kiechel, 1996; Perillo & Kassin, 2011).

Finally, a suspect's perceptions of *rapport* may influence confessions. People disclose more information when they perceive greater rapport in the interrogation (Evans et al., 2014). Additionally, interrogators perceive rapport-building as a highly effective interrogation technique (Redlich et al., 2014; Russano et al., 2014).

Overview

Blame mitigation techniques attempt to reduce moral blame and feelings of guilt (Inbau et al., 2011). These techniques also lessen the perceived consequences associated with confessing (Horgan et al., 2012; Narchet et al., 2011; Russano et al., 2005), which can lead to false confessions (Houston et al., 2014). On the other hand, feelings of guilt can motivate true confessions (Baumeister et al., 1995; Houston et al., 2014), suggesting that guilt induction may present a more diagnostic interrogation approach than blame mitigation. To date, no research has directly evaluated the effects of guilt induction in the interrogation room. Previous research has surveyed participants' feelings of guilt after an interrogation (Houston et al., 2014) or asked participants to write about a time when they felt guilty (stories which were then coded for the presence of a confession; Baumeister et al., 1995).

Across two studies, I compared the effects of blame mitigation and guilt induction to assess how these techniques might affect true and false confessions. I also examined whether the effect of interrogation technique was mediated by the psychological factors examined by

Houston and colleagues (2014): internal pressure to confess, expected punishment, external pressure to confess, affect, and perceptions of proof. I also assessed participants' perceptions of rapport.

In Experiment 1, participants imagined that they were guilty or innocent of aggravated assault. Participants then watched a video of an interrogation from the suspect's point of view. Videotaped stimuli present several advantages over written stimuli. Videotaped stimuli are more realistic and involve participants to a greater extent than do written stimuli (Sleed, Durrheim, Kriel, Solomon, & Baxter, 2002); participants believe that videotaped stimuli are more relevant to real-life situations than are written stimuli (Chan & Schmitt, 1997). Additionally, participants' responses to videotaped stimuli are less affected by reading comprehension (Chan & Schmitt, 1997) and cognitive ability (Lievens & Sackett, 2009) than with written stimuli.

A brief rapport-building section was included in every interrogation (cf. Abbe & Brandon, 2013, 2014). Afterwards, the interrogator used either blame mitigation, guilt induction, or direct questioning interrogation techniques. Following the interrogation, participants answered a variety of questions, including the likelihood they would confess and their perceptions of the interrogation.

Data were collected from students and people recruited via Amazon Mechanical Turk. Mechanical Turk workers are diverse (Buhrmester, Kwang, & Gosling, 2011; Crump, McDonnell, & Gureckis, 2013) and internally motivated to participate in experiments (Buhrmester et al., 2011). Additionally, data from Mechanical Turk is often comparable to laboratory experiments (Buhrmester et al., 2011; Crump et al., 2013), at least when participants are recruited from English-speaking countries (Feitosa, Joseph, & Newman, 2015). Therefore, I restricted IP addresses to the United States.

In Experiment 2, participants took part in a behavioral paradigm developed by Russano and colleagues (2005) and used successfully by other researchers (Horgan et al., 2012; Narchet et al., 2011; Perillo & Kassin, 2011). Participants were guilty or innocent and were induced to cheat (or not) during the experiment. After the interrogator built rapport, participants were interrogated with either blame mitigation, guilt induction, or direct questioning interrogation techniques. Participants' confession decision was the primary dependent variable. I also examined potential mediators such as internal pressure to confess and expectations of punishment (cf. Houston et al., 2014).

The Russano et al. (2005) paradigm has several benefits over other interrogation paradigms (Kassin & Kiechel, 1996; Madon et al., 2012; Nash & Wade, 2009). The paradigms developed by Kassin and Kiechel (1996) and Nash and Wade (2009) were designed to study innocent participants, and the Madon et al. (2012) paradigm cannot establish the ground truth of a confession. Additionally, the Kassin and Kiechel (1996) paradigm involves accusing participants of committing a transgression that could have been committed accidentally and carries few consequences (cf. Russano et al., 2005; but see Horselenberg et al., 2006). The Russano et al. (2005) paradigm, on the other hand, has the ability to study both guilty and innocent participants. Participants are accused of intentionally committing a transgression that carries potentially significant consequences in an academic context, given that participants will be students at a university (cf. Meissner, Russano, et al., 2010).

Hypotheses for both experiments were as follows:

Hypothesis 1: Participants in the blame mitigation condition will view themselves as less responsible and expect less punishment, compared with participants in the direct questioning condition.

Hypothesis 2: Innocent suspects will be more likely to confess in the blame mitigation condition and guilty participants will be more likely to confess in the guilt induction condition, compared to the direct questioning condition.

Hypothesis 3: Blame mitigation techniques will decrease internal pressure to confess and lower expectations of punishment, which will in turn increase false confessions. In contrast, guilt induction will increase internal pressure to confess, which will in turn increase true confessions. Other potential mediators (external pressure to confess, affect, perceptions of proof, and rapport) were also investigated.

Chapter 2: Experiment 1

Method

Participants and design. Data were collected from 478 participants. Two hundred and sixty-one students participated in exchange for course credit. Students were excluded for failing an attention check question ($n = 7$) or for taking longer than 45 min to complete the experiment ($n = 2$). The final student sample was 252. Students were 83.33% Hispanic/Latino, 70.24% female, ages 18 to 48 ($M = 21.11$, $SD = 4.90$).

Two hundred and seventeen people were also recruited via Amazon Mechanical Turk (hereafter “Turkers”) in exchange for \$1. Turkers were excluded for failing an attention check question ($n = 3$) or for taking longer than 45 min to complete the experiment ($n = 3$). The final Turker sample was 211. Turkers were 75.36% White/Caucasian, 50.71% female, ages 18 to 69 ($M = 34.82$, $SD = 12.23$). See Table 3 for complete demographic data.

A 2 (guilt status: guilty v. innocent) x 3 (interrogation technique: blame mitigation, guilt induction, direct questioning) between-participants design was used. The effect of sample (student v. Turker) was also assessed.

Materials and procedure. Participants were randomly assigned to one of six conditions. Participants completed the experiment online. All participants were asked to imagine that they were the main character as they read a scenario regarding an argument and, in some conditions, a physical altercation. Participants then watched a video of an interrogation from the suspect’s point of view. The direct questioning, blame mitigation, and guilt induction interrogations lasted 3 min 1s, 4 min 39s, and 4 min 2s, respectively.

Scenario. Participants were asked to imagine that they were the main character, Gregory Smith (Appendix A). Participants read that Smith confronted his friend, Sam Rodriguez, about

money that Rodriguez owed him. Smith had loaned Rodriguez the money six months previously and Rodriguez had refused to pay him back on several occasions. Before going home, Smith told Rodriguez that he needed to repay the loan the next day. In the guilty condition, Smith returned to confront Rodriguez and stabbed Rodriguez in a fit of anger. In all conditions, Smith was brought to the police station the following day.

Interrogation. Participants watched a video of an interrogation from Smith's point of view (Appendix B). In all conditions, the interrogator built rapport by leaning forward, maintaining a comfortable level of eye contact, remaining friendly, establishing common ground, and disclosing personal information. The interrogator asked the suspect some general personal questions before asking questions about the crime. The interrogator stated that Rodriguez was seriously injured after being stabbed, he was currently in surgery, and the police have been unable to interview him. The interrogator explained that he wanted to talk to Smith about what happened because witnesses saw Smith and Rodriguez arguing a few hours before Rodriguez was found. The interrogator then delivered one of three interrogation scripts, each of which contained three sub-techniques. Smith denied committing the crime after each of the first two sub-techniques.

In the direct questioning condition, the interrogator *requested information*, saying he wanted to get the facts straight and wanted to know whether Smith knew anything about what happened. The interrogator then *emphasized truthfulness*, saying it was important for Smith to tell him the truth. Finally, the interrogator asserted a *belief in guilt*, saying he believed Smith knew something about what happened and he needed to 'own up' to it.

In the blame mitigation condition, the interrogator used *normalization* by suggesting it was the first time Smith had been involved in that kind of situation and that it could have been

worse. The interrogator stated that a lot of people – even the interrogator – have been involved in fights. The interrogator then used *projection* by saying that Smith just wanted to scare Rodriguez, but things got out of hand. The interrogator said it was an accident, that he knew Smith was under a lot of stress about his finances, and that Smith would have acted differently if he had not been so stressed. The interrogator then said what happened was the victim's fault – that Rodriguez provoked Smith and that the incident would not have happened if Rodriguez had paid him back. Finally, the interrogator used *rationalization* by suggesting that the altercation was self-defense and Smith did the only thing he could do in that situation.

In the guilt induction condition, the interrogator *emphasized suffering* by asking Smith to take Rodriguez's perspective as the interrogator described how Rodriguez was harmed. The interrogator then *emphasized responsibility* by saying Smith was responsible for what happened and that if Smith had done something differently, Rodriguez would not have been hurt. Finally, the interrogator highlighted an *ideal standard* by saying Smith should not have attacked Rodriguez and that Smith chose to do the wrong thing.

Each interrogation ended with the interrogator asking Smith if he was going to admit he was responsible for what happened to Rodriguez.

Questionnaire. Participants completed a questionnaire after watching the interrogation (Appendix C). Participants rated the likelihood that they and someone else would confess during the interrogation (between 0 and 100%). Participants also answered several questions on 7-point scales regarding their perceptions of the interrogation (see Tables 4 & 5 for correlations involving innocent and guilty participants, respectively). The first set of questions related to internal pressure to confess: participants' feelings of guilt, regret, and responsibility ($\alpha = .96$). I used a principal component factor analysis to extract a factor score to represent internal pressure

to confess (all loadings $\geq .96$). A single question assessed participants' perceptions of external pressure from the interrogator to confess. Two questions assessed expectations of punishment if the participant confessed, and if the participant refused to confess ($\alpha = .05$). Given the poor reliability, rather than extracting a factor score I used the single item that assessed expectations of punishment upon confessing. The next set of questions related to participants' affect: their feelings of stress, worry, and anxiety ($\alpha = .95$). I extracted a factor score to represent affect (all loadings $\geq .95$). A single question assessed participants' perceptions of the proof the interrogator had that Smith hurt Rodriguez. Finally, several questions assessed perceptions of rapport: how much participants liked the detective, how much the detective respected the participant, how much the detective listened to the participant before asking further questions, how positive the detective's attitude towards the participant was, how much interest the detective had in helping the participant out, how much empathy the detective had towards the participant, and how positive the participant's relationship was with the detective ($\alpha = .89$). I extracted a factor score to represent perceptions of rapport (all loadings $\geq .61$). Finally, participants answered demographics questions.

Results

Sample differences. There was an interaction between guilt status and sample regarding participants' perceptions of their likelihood of confessing, $F(2, 451) = 12.73, p < .001, \eta_p^2 = .03$. Students believed they were more likely to truthfully confess ($M = 61.47\%$, $SD = 35.50\%$) than did Turkers ($M = 47.20\%$, $SD = 38.11\%$), $F(1, 231) = 8.74, p = .003, d = 0.39, 95\% \text{ CI } [-4.30, 5.09]$. However, students believed they were less likely to falsely confess ($M = 3.60\%$, $SD = 11.36\%$) than did Turkers ($M = 8.22\%$, $SD = 21.14\%$), $F(1, 228) = 4.47, p = .036, d = 0.28, 95\% \text{ CI } [-1.84, 2.41]$. All other results involving sample were non-significant, $ps > .065$.

Perceptions of guilt, responsibility, and punishment. I expected that guilt induction would increase participants' feelings of guilt. I conducted a 2 (guilt status: guilty v. innocent) x 3 (interrogation technique: direct questioning, blame mitigation, guilt induction) ANOVA on participants' feelings of guilt. Participants experienced more guilt when they were assigned to the guilty condition ($M = 6.11$, $SD = 1.55$) when compared with the innocent condition ($M = 2.08$, $SD = 1.61$), $F(1, 457) = 745.52$, $p < .001$, $d = 2.55$, 95% CI [2.41, 2.70]. However, participants did not feel differential guilt depending upon whether they were exposed to direct questioning ($M = 4.24$, $SD = 2.57$), blame mitigation ($M = 4.08$, $SD = 2.54$), or guilt induction ($M = 4.00$, $SD = 2.59$) interrogation techniques, $F(2, 457) = 0.47$, $p = .628$, $\eta_p^2 < .01$. The interaction between interrogation technique and guilt status was similarly non-significant, $F(2, 457) = 0.14$, $p = .873$, $\eta_p^2 < .01$ (see Table 6). Finally, the hypothesized comparison between the guilt induction and direct questioning condition was also non-significant, $F(1, 309) = 0.66$, $p = .418$, $d = 0.09$, 95% CI [-0.19, 0.38].

I hypothesized that blame mitigation techniques would reduce perceptions of responsibility and expectations of punishment, compared to direct questioning techniques. I conducted separate 2 x 3 ANOVAs with participants' ratings of responsibility and punishment as the dependent variables (see Table 6). Participants felt more responsible when they were guilty ($M = 6.28$, $SD = 1.40$) than when they were innocent ($M = 2.03$, $SD = 1.58$), $F(1, 457) = 929.48$, $p < .001$, $d = 2.85$, 95% CI [2.72, 2.99]. However, participants' feelings of responsibility did not differ depending upon whether they were interrogated with direct questioning ($M = 4.17$, $SD = 2.63$), blame mitigation ($M = 4.18$, $SD = 2.54$), or guilt induction ($M = 4.16$, $SD = 2.65$) techniques, $F(2, 457) = 0.11$, $p = .899$, $\eta_p^2 < .01$. The interaction was also non-significant, $F(2, 457) = 0.13$, $p = .882$, $\eta_p^2 < .01$, as was the hypothesized comparison between the blame

mitigation and direct questioning conditions, $F(1, 306) = 0.01, p = .953, d = 0.01, 95\% \text{ CI } [-0.28, 0.29]$.

Expectations of punishment upon confessing did not differ based upon whether participants were guilty ($M = 6.21, SD = 1.17$) or innocent ($M = 6.08, SD = 1.52$), $F(1, 457) = 1.02, p = .312, d = 0.09, 95\% \text{ CI } [-0.03, .22]$. Expectations of punishment also did not differ based on whether participants were interrogated with direct questioning ($M = 6.24, SD = 1.31$), blame mitigation ($M = 6.09, SD = 1.32$), or guilt induction ($M = 6.12, SD = 1.44$) techniques, $F(2, 457) = 0.55, p = .576, \eta_p^2 < .01$. The interaction was non-significant, $F(2, 457) = 1.04, p = .355, \eta_p^2 = .01$, as was the hypothesized comparison between the blame mitigation and direct questioning conditions, $F(1, 306) = 1.03, p = .312, d = 0.12, 95\% \text{ CI } [-0.03, 0.26]$.

Confession likelihood. I hypothesized that innocent suspects would be more likely to confess in the blame mitigation condition while guilty participants would be more likely to confess in the guilt induction condition, compared to the direct questioning condition. I conducted a 2 x 3 ANCOVA with participants' confession likelihood (0-100%) as the dependent variable (see Table 7). Given the prior significant effect involving sample, sample was included as a covariate. There was no effect of sample, $F(1, 456) = 3.37, p = .066, d = 0.12, 95\% \text{ CI } [-3.33, 3.57]$. However, participants indicated that they were more likely to confess when they were guilty ($M = 54.91\%, SD = 37.33\%$) than when they innocent ($M = 5.69\%, SD = 16.64\%$), $F(1, 456) = 335.96, p < .001, d = 1.70, 95\% \text{ CI } [-0.93, 4.34]$. Participants did not view their likelihood of confessing as different across the direct questioning ($M = 31.35\%, SD = 39.12$), blame mitigation ($M = 28.69\%, SD = 37.12$), and guilt induction ($M = 31.30\%, SD = 35.97$) conditions, $F(2, 456) = 3.386, p = .676, \eta_p^2 < .01$. The interaction was also non-significant, $F(2, 456) = 1.76, p = .173, \eta_p^2 = .01$.

Predicting true and false confessions. I hypothesized that blame mitigation would increase false confessions by decreasing the internal pressure to confess and by decreasing expectations of punishment. I also hypothesized that guilt induction would increase true confessions by increasing the internal pressure to confess. I conducted a multi-group path analysis to examine how interrogation technique affected confession likelihood, and to examine whether there were differences between guilty and innocent participants. Interrogation techniques were included as predictors and were dummy coded such that the blame mitigation and guilt induction conditions were each compared to the direct questioning condition. Internal pressure, external pressure, expected punishment, affect, perceptions of proof, and rapport were included as mediators and were allowed to correlate with each other. Participants' self-reported likelihood of confessing was included as the outcome variable (see Figure 1 for the full model and Figure 2 for the significant effects). Participants' guilt status was the grouping variable (see Table 8). Model fit was poor, $\chi^2 (2, N = 463) = 135.12, p < .001, \chi^2/df = 67.56, CFI = .86, RMSEA = .38$; thus, potential differences between the guilty and innocent models were investigated in an exploratory manner.

Guilty model. Model fit was poor, $\chi^2 (1, N = 233) = 70.22, p < .001, \chi^2/df = 70.22, CFI = .87, RMSEA = .55$. Blame mitigation and guilt induction techniques did not affect internal pressure, expectations of punishment, external pressure, affect, or proof for guilty participants. Guilt induction techniques also did not influence rapport; however, blame mitigation techniques increased perceived rapport. Blame mitigation and guilt induction techniques did not influence true confessions either directly or indirectly (indirect effects: blame mitigation $\beta = -.01, 95\% CI [-.10, .08], p = .860$; guilt induction $\beta = -.04, 95\% CI [-.12, .05], p = .263$). Additionally, expectations of punishment and rapport did not influence participants' self-reported likelihood of

truthfully confessing. However, participants indicated they would be more likely to truthfully confess when they experienced greater internal pressure to confess (e.g., feelings of guilt), experienced greater external pressure from the detective to confess, thought the detective had more proof the participant committed the crime, and when participants had a more positive affect (i.e., were less worried, stressed, and anxious).

Innocent model. Model fit was poor, $\chi^2 (1, N = 230) = 64.90, p < .001, \chi^2/df = 64.90, CFI = .85, RMSEA = .53$. Blame mitigation and guilt induction techniques did not influence internal pressure, expectations of punishment, external pressure, affect, or proof for innocent participants. As with the guilty participants, guilt induction techniques did not influence rapport but blame mitigation techniques improved rapport. However, both types of interrogation techniques did not affect confessions directly or indirectly (indirect effects: blame mitigation $\beta = .07, 95\% CI [-.02, .18], p = .131$; guilt induction $\beta = -.03, 95\% CI [-.13, .07], p = .556$). Expectations of punishment, external pressure, and rapport did not affect false confession likelihood. However, people indicated they were more likely to falsely confess with greater internal pressure, perceptions of proof, and a more positive affect.

Guilty and innocent model comparisons. The multiple-group comparison indicated there was significant variation in the fit of the paths across the guilty and innocent models, $\Delta\chi^2 (20, N = 463) = 37.46, p = .010$. Pairwise comparisons indicated significant differences between the guilty and innocent models. First, external pressure influenced confessions for guilty, but not innocent, participants, $z = 4.20, p < .001$. Second, affect exerted a greater influence on confessions for guilty participants than innocent participants, $z = 2.04, p = .041$.

Discussion

Interrogation techniques largely failed to influence participants' responses as predicted. Blame mitigation did not decrease participants' perceptions of their responsibility or their expectations of punishment. Blame mitigation techniques did not influence confessions directly, or indirectly through internal pressure and expectations of punishment. Guilt induction similarly did not influence confessions directly, or indirectly through internal pressure.

Nevertheless, the path model did reveal participants' beliefs about the psychological processes that influence true and false confessions. Guilty participants believed that they would be more likely to confess as a function of internal pressure to confess (e.g., feelings of guilt), external pressure to confess, proof the interrogator had they committed the crime, and positive affect (i.e., less stressed, worried, and anxious). Innocent participants believed they were more likely to confess as a result of internal pressure, proof they committed the crime, and positive affect.

The failure to observe an effect of interrogation technique may have been due to a lack of psychological realism in the experimental procedure and stimuli. Prior research suggests that people underestimate the influence of interrogation techniques on their behavior (Horgan et al., 2012). I therefore extended the current research to a behavioral paradigm in which participants are interrogated about whether they cheated on an experimental task (Russano et al., 2005).

Chapter 3: Experiment 2

Method

Participants and design. Data were collected from 285 student participants who were compensated \$10 for their time. Participants were excluded if they were suspicious about the experiment ($n = 10$), if they cheated in the innocent condition ($n = 4$), if they failed to cheat in the guilty condition ($n = 12$), or if the experiment could not be completed (e.g., the interviewer knew the participant, a research assistant did not show up to the session, etc.) ($n = 8$). The final sample size was 251. Participants were 85.53% Hispanic/Latino, 67.66% female, ages 18 to 56 ($M = 21.45$, $SD = 5.67$).

A 2 (guilt status: guilty v. innocent) x 3 (interrogation technique: blame mitigation, guilt induction, direct questioning) between-participants design was used.

Materials and procedure. Participants experienced the behavioral paradigm developed by Russano and colleagues (2005) in which they solved problems with another participant who, unbeknownst to them, was a research confederate pretending to be a participant. Participants were assigned to be innocent or guilty. In the guilty condition, the confederate induced the participant to cheat on one of the problems. In the innocent condition, no cheating occurred. All participants were subsequently interrogated, confronted with an accusation of cheating, and asked to sign a confession statement admitting to sharing answers during the experiment. Two women and three men served as interrogators. All interrogators were trained extensively to ensure adherence to their scripts.

Problem-solving exercise. Participants were told they would be participating in a problem-solving experiment. Participants arrived with another ‘participant’. Participants were told that the experiment examined problem-solving strategies and that the results could be used

to create scholarships to support minority and underprivileged students (Appendix D). After spending a few minutes getting to know their partner, participants were told that they would solve some problems individually and others with their partner (the confederate). Participants were also told that they could earn up to \$10, depending on how they did on the questionnaire, which provided an incentive for the confederate to cheat. All participants earned the full amount regardless of performance on the task.

Participants completed a series of individual and team logic problems (Appendix F). In the guilty condition, the confederate induced the participant to cheat by asking the participant to share his or her answer on one of the individual problems (the “triangle problem”). In the innocent condition, no cheating occurred (Appendix E). After the participant and the confederate finished the problems, they were separated under the guise that the experimenter was grading their answers. After five minutes, the interrogation began.

Interrogation. Interrogators were blind to participants’ guilt or innocence. Interrogators built rapport through nonverbal and verbal behaviors, such as leaning forward, demonstrating active listening, and establishing common ground with the participant (Appendix G). The interrogator then explained that the participant and his or her partner had the same incorrect answer on an individual problem, and the interrogator believed they may have shared information. The interrogator said that he or she called the professor in charge of the research. The professor was annoyed, upset, and might consider the incident a case of cheating. The professor wanted to document what happened by having the participant sign a handwritten piece of paper admitting to sharing answers during the experiment (Appendix H). The interrogator then initiated one of three interrogation scripts. Each script contained three sub-techniques. The interrogator asked the participant to sign the confession statement after each sub-technique. If the

participant did not sign the statement, the interrogator proceeded to the next sub-technique. If the participant refused to sign the statement after the third sub-technique, the interrogation was terminated. Two version of each script were used to control for the order of sub-technique presentation.

In the direct questioning condition, the interrogator *requested information* about what happened, saying he or she wanted to know whether the participant was involved. The interrogator *emphasized truthfulness*, saying it was important for the participant to tell the truth. The interrogator asserted a *belief in guilt*, saying it was unlikely the participants would have gotten the same wrong answer and that the interrogator believed the participant knew something about what happened. In the second version of the script, the sub-technique order was *belief in guilt, emphasized truthfulness, and requested information*.

In the blame mitigation condition, the interrogator used *normalization* by suggesting it was the first time the participant had cheated and that it could have been worse. The interrogator noted that it was only one problem and that lots of people share answers during experiments and even on exams. The interrogator used *projection* by saying that sharing answers was accidental, that the participant's judgment was affected by stress, and that it was the other participant who instigated the cheating. The interrogator used *rationalization*, suggesting that the participant noticed that his or her partner was having a difficult time solving the problem, that the participant looked like someone who cares a lot about other people, and that the participant just wanted to help his or her partner out. In the second version of the script, the sub-technique order was *projection, normalization, and rationalization*.

In the guilt induction condition, the interrogator *emphasized suffering* by reminding the participant that the results of the study could be used to create scholarships to assist

underprivileged and minority students. The interrogator asked the participant to take the perspective of a student who would not be able to attend college without the scholarship. The interrogator *emphasized responsibility* by saying that the participant was responsible for sharing answers and that if the participant had done something differently, it would not have happened. The interrogator highlighted an *ideal standard* by discussing how cheating is wrong and that the participant should not have done it. In the second version of the script, the sub-technique order was *emphasized responsibility*, *ideal standard*, and *emphasized suffering*.

Debriefing and questionnaire. The laboratory manager ensured that participants believed the experiment was genuine before explaining the true nature of the experiment. After being debriefed, participants completed a questionnaire similar to Experiment 1 (Appendix I). Participants answered questions regarding their perceptions of the interrogation: internal pressure to confess ($\alpha = .82$), expected punishment upon confessing, external pressure to confess, affect ($\alpha = .91$), proof the interrogator had that the participant cheated, and rapport ($\alpha = .90$; see Tables 9 & 10 for correlations involving innocent and guilty participants, respectively). Factor scores were extracted to represent concepts assessed with multiple questions (internal pressure loadings $\geq .75$, affect loadings $\geq .91$, rapport loadings $\geq .71$). Participants also rated the likelihood that other guilty and innocent individuals would confess in that situation. Finally, participants answered demographic questions.

Results

Preliminary analyses. I ran several analyses to examine whether interrogator and sub-technique order influenced confessions. Interrogator did not influence the amount of time it took participants to confess, $F(4, 245) = 1.93, p = .106, \eta_p^2 = .03$. However, there was an effect of interrogator on whether participants signed the confession statement, $\chi^2(4, N = 251) = 11.55, p =$

.021, $V = .22$, 95% CI [.12, .32]. One interrogator obtained more confessions (70.42%) than the majority of the other interrogators (40.43% to 51.22%), $ps = .001$ to .042.¹

Sub-technique order did not influence whether participants confessed in any of the interrogation conditions, $ps = .162$ to .792. Sub-technique order also did not influence time to confess (whether participants confessed after the first, second, or third technique), $ps = .075$ to 1.00. However, when the analysis was constrained to whether participants confessed after the first technique, there was an effect of sub-technique order in the guilt induction condition, $\chi^2 (1, N = 85) = 6.88, p = .009, V = .29$, 95% CI [.08, .50]. More people confessed when the first sub-technique was ‘emphasize suffering’ (66.67%) than when the first sub-technique was ‘emphasize responsibility’ (36.21%). However, this effect was only significant for guilty participants, $\chi^2 (1, N = 46) = 4.51, p = .034, V = .31$, 95% CI [.02, .60]. There was no difference in sub-technique order in the guilt induction condition for innocent participants, $\chi^2 (1, N = 39) = 2.36, p = .124, V = .25$, 95% CI [-.06, .56].

Perceptions of guilt, responsibility, and punishment. I expected that participants would feel more guilt when exposed to guilt induction techniques. I conducted a 2 (guilt status: guilty v. innocent) x 3 (interrogation technique: blame mitigation, guilt induction, direct questioning) ANOVA to determine whether interrogation technique influenced participants’ feelings of guilt. People experienced more guilt when they were guilty ($M = 4.37, SD = 1.89$) than when they were innocent ($M = 1.78, SD = 1.43$), $F(1, 245) = 150.66, p < .001, d = 1.55$, 95% CI [1.34, 1.76]. Feelings of guilt did not differ between the direct questioning ($M = 3.16, SD = 2.13$), blame mitigation ($M = 3.14, SD = 2.27$), and guilt induction ($M = 2.97, SD = 1.96$) interrogations, $F(2, 245) = 1.04, p = .354, \eta_p^2 = .01$. The interaction was also non-significant,

¹The results did not differ when this interrogator was excluded from analyses.

$F(2, 245) = 1.23, p = .293, \eta_p^2 = .01$, as was the hypothesized comparison between the guilt induction and direct questioning conditions, $F(1, 160) = 0.35, p = .553, d = 0.09$, 95% CI [-0.22, 0.41] (see Table 11).

I hypothesized that blame mitigation techniques would reduce participants' perceptions of their responsibility and expected punishment, compared to direct questioning techniques. I conducted separate 2 x 3 ANOVAs with responsibility and punishment as the dependent variables (see Table 11). People felt more responsible when they were guilty ($M = 4.27, SD = 1.86$) than when they were innocent ($M = 2.68, SD = 1.99$), $F(1, 244) = 40.46, p < .001, d = 0.82$, 95% CI [0.57, 1.06]. Feelings of responsibility did not differ based upon whether participants were interrogated with direct questioning ($M = 3.49, SD = 2.09$), blame mitigation ($M = 3.34, SD = 2.12$), or guilt induction ($M = 3.61, SD = 2.14$) techniques, $F(2, 244) = 0.17, p = .840, \eta_p^2 < .01$. The interaction was non-significant, $F(2, 244) = 0.24, p = .783, \eta_p^2 < .01$, as was the hypothesized comparison between the blame mitigation and direct questioning conditions was non-significant, $F(1, 163) = 0.22, p = .643, d = 0.07$, 95% CI [-0.39, 0.25].

However, people expected more punishment upon confessed when they were innocent ($M = 4.56, SD = 2.15$) than when they were guilty ($M = 4.06, SD = 2.04$), $F(1, 245) = 4.13, p = .043, d = 0.24$, 95% CI [-0.02, 0.50]. Interrogation technique also influenced expectations of punishment, $F(2, 245) = 3.77, p = .024, \eta_p^2 = .03$. Scheffe post-hoc tests revealed that people expected less punishment upon confessing in the blame mitigation condition ($M = 3.87, SD = 2.13$) than in the direct questioning condition ($M = 4.73, SD = 1.95$), $p = .029, d = 0.43$, 95% CI [0.12, 0.74]. The guilt induction condition ($M = 4.39, SD = 2.13$) did not differ from the direct questioning or blame mitigation conditions, $p = .581, d = 0.17$, 95% CI [-0.15, 0.48], and $p =$

.250, $d = 0.25$, 95% CI [-0.07, 0.56], respectively. The interaction between guilt status and interrogation technique was non-significant, $F(2, 245) = 0.99$, $p = .373$, $\eta_p^2 = .01$.

Confession decisions. I hypothesized that blame mitigation techniques would increase false confessions and guilt induction techniques would increase true confessions, compared to direct questioning techniques. I conducted a hierarchical loglinear analysis with guilt status and interrogation techniques as independent variables and participants' confession decision as the dependent variable. Given the prior effect involving interrogator, interrogator was also included in the analysis. As before, there was an effect of interrogator on confessions, $\chi^2(5, N = 251) = 12.80$, $p = .025$, $V = .23$, 95% CI [.14, .32]. Additionally, people were more likely to confess when they were guilty (81.75%) than when they were innocent (28.80%), $\chi^2(1, N = 251) = 76.01$, $p < .001$, $V = .55$, 95% CI [.43, .67]. However, confessions did not differ based upon whether people were interrogated with direct questioning (53.25%), blame mitigation (52.81%), or guilt induction (60.00%) techniques, $\chi^2(2, N = 251) = 0.66$, $p = .718$, $V = .04$, 95% CI [-.06, .14]. The interaction was also non-significant, $\chi^2(2, N = 251) = 0.60$, $p = .741$, $V = .03$, 95% CI [-.04, .10] (see Table 12).

The effect of interrogation technique on confessions can also be evaluated with a diagnosticity ratio, or the ratio of true-to-false confessions. An interrogation technique that is considered diagnostic is one that maximizes true confessions while minimizing false confessions. The direct questioning (3.18), blame mitigation (2.93), and guilt induction (2.48) interrogations all had poor diagnosticity ratios, indicating that no technique was more effective than another at maximizing true confessions and minimizing false confessions.

I also analyzed the extent to which interrogation technique influenced whether participants confessed after the first, second, or third sub-technique (see Table 13). Participants

confessed more quickly when they were guilty ($M = 1.27$, $SD = 0.85$) than when they were innocent ($M = 1.72$, $SD = 0.82$), $F(1, 132) = 13.80$, $p < .001$, $d = 0.71$, 95% CI [0.60, 0.82]. However, time to confess did not differ between the direct questioning ($M = 1.37$, $SD = 0.70$), blame mitigation ($M = 1.48$, $SD = 0.72$), and guilt induction ($M = 1.31$, $SD = 0.62$) interrogations, $F(2, 132) = 0.85$, $p = .430$, $\eta_p^2 = .01$. The interaction was also non-significant, $F(2, 132) = .86$, $p = .425$, $\eta_p^2 = .01$.

Predicting true and false confessions. I hypothesized that blame mitigation techniques would decrease the internal pressure to confess and expectations of punishment, thereby increasing false confessions. I also hypothesized that guilt induction techniques would increase the internal pressure to confess, thereby increasing true confessions. I conducted a multiple-group path analysis to investigate how perceptions of the interrogation affected participants' confession decisions, and to examine differences between guilty and innocent participants. Interrogation techniques (blame mitigation v. direct questioning; guilt induction v. direct questioning) were included as predictors. Perceptions of the interrogation (internal pressure, expected punishment, external pressure, affect, proof, and rapport) were included as mediators. Confession decision was the outcome variable (see Table 14; see Figure 1 for the full model and Figure 3 for the significant paths). Model fit was poor, $\chi^2 (2, N = 251) = 45.04$, $p < .001$, $\chi^2/df = 22.52$, CFI = .76, RMSEA = .29; differences between the guilty and innocent models were therefore investigated in an exploratory manner.

Guilty model. Model fit was poor, $\chi^2 (1, N = 153) = 22.01$, $p < .001$, $\chi^2/df = 22.01$, CFI = .76, RMSEA = .41. Interrogation techniques did not influence internal pressure, expected punishment, external pressure, or proof. Blame mitigation increased participants' perceptions of rapport, and guilt induction led to a more negative affect (i.e., greater feelings of stress, worry,

and anxiety). Interrogation techniques did not influence confessions directly or indirectly (indirect effects: blame mitigation $\beta = .05$, 95% CI $[-.05, .13]$, $p = .399$; guilt induction $\beta = -.02$, 95% CI $[-.11, .07]$, $p = .518$). Affect, proof, and rapport did not influence true confessions. However, people were more likely to truthfully confess when they had greater internal pressure to confess, perceived greater external pressure to confess, and expected lesser consequences upon confessing.

Innocent model. Model fit was poor, $\chi^2 (1, N = 125) = 23.03$, $p < .001$, $\chi^2/df = 23.03$, CFI = .76, RMSEA = .42. Participants in the blame mitigation condition expected less punishment upon confessing, felt less pressure from the interrogator to confess, and had a more positive affect. Blame mitigation techniques did not influence internal pressure, perceptions of proof, or perceptions of rapport. Blame mitigation also did not directly or indirectly ($\beta = -.06$, 95% CI $[-.19, .05]$, $p = .262$) affect false confessions.

Guilt induction techniques increased perceived external pressure to confess, perceptions of proof, and rapport. Guilt induction techniques did not influence internal pressure, expected punishment, or affect. Guilt induction did not directly influence false confessions; however, guilt induction indirectly led to more false confessions, $\beta = .14$, 95% CI $[.03, .27]$, $p = .019$. Guilt induction increased false confession via increasing external pressure to confess.

Internal pressure, expected punishment, affect, proof, and rapport did not influence false confessions. However, participants were more likely to falsely confess when they perceived greater external pressure from the interrogator to confess.

Guilty and innocent model comparisons. The multiple-group comparison revealed significant differences in fit across models, $\Delta\chi^2 (18, N = 251) = 40.37$, $p = .002$. Pairwise comparisons revealed differences between the guilty and innocent path models. Blame mitigation

improved rapport for guilty participants, but did not influence rapport for innocent participants, $z = 2.01, p = .044$. Guilt induction did not influence affect for innocent participants, but guilt induction techniques did lead to a more negative affect in guilty participants, $z = 2.15, p = .032$. Additionally, guilt induction improved rapport for innocent, but not guilty, participants, $z = 2.43, p = .015$. Finally, the effect of external pressure on confessions was greater for innocent participants than for guilty participants, $z = 2.26, p = .024$.

Discussion

I hypothesized that blame mitigation would decrease perceptions of responsibility and punishment; that blame mitigation would increase false confessions by decreasing internal pressure to confess and expectations of punishment; and that guilt induction would increase true confessions by increasing the internal pressure to confess. Of these hypotheses, only the first was supported, and only partially. Interrogation technique did not affect participants' perceptions of responsibility, but it did influence their expectations of punishment. Participants expected less punishment upon confessing when they were interrogated with blame mitigation techniques, compared to direct questioning techniques.

Interrogation scenario had little effect on participants' confessions, and any observed effects were indirect. Contrary to my hypotheses, guilt induction indirectly increased false confessions by increasing external pressure to confess. With regard to participants' motivations to confess, guilty participants were more likely to confess as a result of greater internal pressure, greater external pressure, and lower expectations of punishment upon confessing. Innocent participants were more likely to confess with greater external pressure to confess.

Chapter 4: General Discussion

Responsibility and Punishment

The first objective of my dissertation was to investigate whether blame mitigation interrogation techniques could influence suspects' perceptions of responsibility without also affecting their expectations of punishment. I hypothesized that blame mitigation techniques would decrease perceptions of responsibility and expectations of punishment, compared to the other interrogation techniques. In Experiment 1, participants' perceptions of their responsibility and expectations of punishment were not affected by interrogation techniques. In Experiment 2, however, an ANOVA showed that blame mitigation techniques decreased participants' expectations of punishment, but did not influence their perceptions of responsibility. Inbau and colleagues (2011) suggested that blame mitigation techniques can minimize a suspect's moral responsibility without affecting their legal responsibility. However, the results in Experiment 2 contradict Inbau and colleagues' (2011) assumptions. Blame mitigation actually produced the opposite effect – reducing suspects' expectations of punishment without affecting their perceptions of their responsibility.

Although blame mitigation did not influence responsibility, its effect on expected punishment is consistent with prior research. Central blame mitigation techniques are suggestions that the transgression was accidental, caused by other factors such as stress or the victim, or motivated by a good reason. Observers believe transgressors are less deserving of punishment when the transgressor acted unintentionally (Cushman, 2008; Cushman et al., 2009; DeScioli et al., 2011), when something other than the transgressor could have caused the transgression (Cushman, 2008), and when the transgressor's motivation is justified (Darley et al., 1978). Similarly, Horgan and colleagues (2012) found that suspects believe the consequences of

confessing will be less severe when the interrogator presents face-saving excuses and minimizes the seriousness of the offense – techniques that were present in the current blame mitigation condition. These types of blame mitigation techniques implicitly convey the message that the suspect will receive less punishment if suspects confess (Kassin & McNall, 1991).

Effect of Blame Mitigation and Guilt Induction on Confessions

The second objective of my dissertation was to compare the diagnosticity of blame mitigation and guilt induction interrogation techniques, and to evaluate the psychological mechanisms that lead to true and false confessions. I hypothesized that blame mitigation techniques would increase false confessions by reducing internal pressure to confess and by lowering expectations of punishment. I also hypothesized that guilt induction techniques would increase true confessions by increasing internal pressure to confess. These hypotheses were not supported in either experiment. Although blame mitigation decreased participants' expectations of punishment in Experiment 2, the path model showed that expectations of punishment were not in turn related to false confessions. Neither blame mitigation nor guilt induction influenced internal pressure to confess (e.g., feelings of guilt). Unexpectedly, the path model in Experiment 2 demonstrated that guilt induction indirectly *increased* false confessions by increasing the perceived external pressure to confess. However, interrogation techniques did not directly affect true or false confessions; true confessions ranged from 81 to 83% and false confessions ranged from 26 to 33% across interrogations in Experiment 2. The true-to-false confession diagnosticity ratios ranged from 2.48 to 3.18, indicating that no interrogation technique was significantly more diagnostic than another (i.e., led to a higher true-to-false confession ratio). The lack of an effect could be due to a failure of the guilt induction technique to induce feelings of guilt, and because of the way that the direct questioning and guilt induction techniques were presented.

The failure to induce feelings of guilt. As in previous research (Houston et al., 2014; Redlich et al., 2011), the path model demonstrated that people were more likely to truthfully confess when there was greater internal pressure to confess. One potential explanation for why the guilt induction technique failed to increase true confessions was because the manipulation failed to induce feelings of guilt. It is possible that the interrogator and the participant did not have a close enough relationship for guilt induction to occur. Feelings of guilt are more likely to occur in close relationships, such as with family members or romantic relationship partners (Baumeister et al., 1994, 1995; Vangelisti et al., 1991). I attempted to develop a close relationship between the interrogator and the participant via rapport-building techniques such as self-disclosure and identifying common ground (cf. Abbe & Brandon, 2014). It is possible that the rapport-building techniques were not strong enough to create a close bond between the interrogator and the participant, given that the rapport-building phase only lasted a few minutes. Further, the rapport-building phase was also followed by an accusation of wrongdoing, which may have nullified any rapport that had been established. In short, guilt induction techniques may be more effective if the bond between the interrogator and the suspect were stronger.

The relationship between the suspect and the victim may also be important. Feelings of guilt are tied to concern for the victim (Baumeister et al., 1994) and perhaps that concern did not exist in the current research. The victim in Experiment 1 was a hypothetical assault victim. Participants may not have felt a relationship with that person, given the artificial nature of the scenario. The victims in Experiment 2 were students who would not be able to attend college without the benefit of scholarships that the researcher was trying to develop – scholarships that would not be created if the data in the experiment were flawed (i.e., because the participant cheated on the task). Participants may not have felt a relationship with these victims because the

scenario may have been perceived as too removed and hypothetical. Although people can experience guilt for disappointing someone (Baumeister et al., 1994), such as the interrogator, guilt induction may be most effective if the suspect and the victim also have a close relationship.

Finally, individual differences may also influence the effectiveness of guilt induction. Guilt induction may only work on people who are dispositionally prone to feel guilt. Dispositional guilt proneness can be assessed with the Test of Self-Conscious Affect, which evaluates participants' propensity to experience guilt, shame, externalization, and detachment across a variety of scenarios (Tangney, Dearing, Wagner, & Gramzow, 2000). Another individual difference that may be important to consider is a suspect's level of extraversion. Introverts are more likely to feel guilt than are extraverts, and introverts are therefore more likely to confess to relieve these feelings of guilt. Extraverts, on the other hand, are more likely to consider the strength of the evidence when deciding whether to confess (see St-Yves & Meissner, 2014). Evidence-focused techniques such as the Strategic Use of Evidence technique (Tekin et al., 2015) and the Scharff technique (Oleszkiewicz, Granhag, & Montecinos, 2014) may be more effective than guilt induction with extraverted suspects.

The presentation of direct questioning and guilt induction. Previous research has demonstrated that false confessions are more likely to occur when the interrogator uses psychologically manipulative techniques (Narchet et al., 2011; Perillo & Kassin, 2011; Russano et al., 2005). Unlike prior research, I found no difference in false confession rates between interrogation scenarios. The reason there were no differences likely lies in the direct questioning condition. The false confession rate in my direct questioning condition was 26%. Previously, false confession rates in control conditions have ranged from 0% (Perillo & Kassin, 2011) to 6% (Russano et al., 2005). In fact, the false confession rate in my direct questioning interrogation

was actually closer to false confession rates in psychologically manipulative interrogations in other studies (e.g., Russano et al., 2005 had 14 to 43% false confessions, depending on the interrogation techniques used).

This higher rate of false confessions is likely due to the specific interrogation techniques. Previously, control conditions contained little more than an accusation of cheating and a request to sign a confession statement (Perillo & Kassin, 2011; Russano et al., 2005). To more closely approximate realistic situations, I used three direct questioning sub-techniques: a request for information, an emphasis on telling the truth, and a stated belief in the suspect's guilt. It is possible that the *belief in guilt* technique in particular was too accusatorial and inflated false confession rates. One of the hallmarks of the accusatorial method of interrogation is its guilt-presumptive nature (cf. Meissner et al., 2014) – the first step of the Reid Technique is to convey the interrogator's certainty that the suspect committed the crime (Inbau et al., 2011). Accusations and confrontation may lead a suspect to believe that denying the transgression is pointless, and so the suspect may capitulate and confess (cf. Kassin et al., 2010). Even though I attempted to de-emphasize the accusatorial nature of the direct questioning techniques, it is possible that participants still interpreted them as accusatorial.

The guilt induction technique had a comparable rate of false confessions to the direct questioning technique, which suggests that it too may have been perceived as accusatorial. Although guilt induction did not directly influence false confessions, the path model in Experiment 2 demonstrated that guilt induction indirectly led to more false confessions by increasing perceived external pressure to confess. It is possible that the way in which the guilt induction techniques were presented influenced external pressure to confess; each sub-technique was premised on the interrogator's belief that the suspect was guilty. It is also possible that the

guilt induction techniques could still protect innocent suspects in the interrogation room if the techniques were presented in a friendlier, less accusatorial manner that does not increase the external pressure to confess. Guilt induction techniques may be less accusatorial if they were adapted to an information-gathering context.

Accusatorial vs. Information-Gathering Methods of Interrogation

One way to de-emphasize the accusatorial nature of an interrogation is to shift the orientation of the interrogation. Other countries have transitioned from an accusatorial method of interrogation to an information-gathering method in part because of the relationship between accusatorial methods and false confessions (Meissner et al., 2015). Accusatorial methods such as blame mitigation are confrontational, psychologically manipulative, guilt-presumptive, and focused on obtaining a confession. Information-gathering methods seek to create an environment in which suspects feel comfortable disclosing information. To create this environment, the interrogator focuses on developing rapport, asking open-ended questions, and listening to what the suspect says. Rather than focusing on a confession, information-gathering methods seek to elicit information (Meissner et al., 2014).

A recent meta-analysis demonstrated that information-gathering approaches lead to more true confessions and fewer false confessions than do accusatorial approaches (Meissner et al., 2014). Additionally, information-gathering techniques have increased information disclosure in field research (Alison, Alison, Noone, Elntib, & Christiansen, 2013; Kelly, Miller, & Redlich, 2016) and in laboratory experiments (Evans et al., 2013, 2014). Conversely, accusatorial methods may even harm information disclosure; confrontational techniques increase suspects' resistance during interrogations (Alison et al., 2013; Kelly et al., 2016), and psychologically manipulative techniques can result in false information (Loney & Cutler, 2016).

Predictors of True and False Confessions

Although interrogation techniques did not affect confessions, path models showed that several psychological processes were related to true and false confessions in Experiment 2. Innocent suspects were more likely to confess with greater external pressure from the interrogator. Guilty suspects were more likely to confess with greater internal and external pressure, and with lower expectations of punishment. These effects are somewhat consistent with prior research, which found that false confessions are the product of external pressure and expected punishment, while true confessions are related to internal pressure, expected punishment, affect, and perceptions of proof (Houston et al., 2014). However, with the exception of external pressure, interrogation technique did not indirectly influence confessions through these psychological processes. Understanding how interrogation techniques contribute to true and false confessions is as important as determining whether these techniques influence confessions. Future research should continue to explore the factors that influence suspects' decisions within an interrogation.

Similarities and Differences between Experiments 1 and 2

Similarities. Experiments 1 and 2 converged on several findings in the path models, primarily the non-significant results involving interrogation technique (see Table 15). However, there were three significant results involving guilty participants that were consistent across experiments: blame mitigation improved rapport, and internal and external pressure increased true confessions. It is not surprising that blame mitigation improved participants' perceptions of rapport. The questions assessing rapport included factors such as empathy, liking, and the positivity of the relationship between the participant and the interrogator. Blame mitigation is thought of as a "soft sell" technique that characterize the interrogative situation and the crime as

less serious than it actually is (Kassin & McNall, 1991). Blame mitigation techniques portray the interrogator as the suspect's ally, and it is understandable that participants in both experiments felt more positively towards the interrogator when the interrogator used blame mitigation techniques.

Differences. There were several notable differences between Experiments 1 and 2. Consistent with Horgan and colleagues' (2012) findings, participants far underestimated their likelihood of confessing. People estimated that they would almost never falsely confess (6% likelihood), which is much lower than the actual rate of false confessions in Experiment 2 (29%). This underestimation aligns with the idea that people disbelieve they would falsely confess unless they were physically tortured (Leo & Liu, 2009). However, participants also underestimated their rate of truthfully confessing (55% in Experiment 1 vs. 82% in Experiment 2). Although participants correctly judged that true confessions would be more likely than false confessions, it appears that participants were not able to accurately gauge their actual behaviors.

The path models showed that participants also diverged with their perceptions of the interrogation (see Table 15). Participants in Experiment 1 believed factors such as internal pressure, affect, and proof would lead to false confessions, when in actuality only external pressure did. Participants in Experiment 1 also failed to realize that interrogation tactics would influence factors such as expected punishment, external pressure, and affect, and failed to realize that expected punishment would be related to true confessions.

The lack of consistency between experiments may be due to the method in which the data were collected. To attempt to increase the realism of the interrogation in Experiment 1, I used an interrogation that was videotaped from the suspect's point of view. However, the crime was still presented as a written vignette and participants were asked to imagine themselves in that

scenario rather than actually committing the crime. It appears that participants were not able to accurately judge how they would respond if they were in the suspect's position, perhaps because participants were not able to fully immerse themselves in the scenario. Research has found that role playing can be equivalent to behavioral paradigms as long as the role playing is highly involving (Geller, 1978). Geller (1978) replicated Milgram's experiment using a role playing paradigm; however, Geller (1978) went to great lengths to increase the realism of the scenario by involving actors and simulating the entire experiment (though participants knew it was fake). Perhaps the reason Experiments 1 and 2 diverged on several key findings is because participants in Experiment 1 were not sufficiently engaged in the task. It is possible that vignettes may lead to findings similar to behavioral paradigms if participants are involved to a greater degree.

Alternatively, it may be the type of 'crime' that contributed to the differences between experiments. Perhaps people indicated that they were less likely to confess in Experiment 1 because the consequences of admitting to aggravated assault are more severe than admitting to cheating during an experiment (Experiment 2). However, this explanation is unlikely to fully account for the differences given that participants in Horgan and colleagues' (2012) research underestimated their confession rates when the vignette and the behavioral paradigm both pertained to cheating.

Conclusions

False confessions remain a pressing problem. Interrogation approaches currently used in the United States increase the likelihood that innocent suspects will confess (Kassin et al., 2010). It is important to develop and validate alternatives to current interrogation techniques. It is not useful for researchers to tell interrogators what they *cannot* do without simultaneously telling them what they *can* do in the interrogation room (Meissner et al., 2010). Future research should

continue to investigate alternatives to accusatorial interrogation methods, such as rapport-based, information-gathering techniques (Meissner et al., 2014).

Guilt induction was ineffective in the current research. However, given the link between feelings of guilt and true confessions (Houston et al., 2014), guilt induction may yet offer a promising alternative to blame mitigation approaches if the technique were situated within a non-accusatorial, rapport-based interview. Future research should modify the guilt induction techniques by strengthening the relationships between the suspect, the interrogator, and the victim, and by reducing the accusatorial nature of the guilt induction techniques.

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Table 1

Blame Mitigation Techniques

Technique	Description	Examples
Normalization	Normalization is where the interrogator attempts to portray the crime in a more favorable light. The interrogator could normalize the crime by saying that many people have committed the crime. The interrogator can also discuss how the crime could have been worse.	<ul style="list-style-type: none"> • Anyone, including the interrogator, would have done the same thing • The suspect only robbed 1 home rather than 10 • The suspect did not use a weapon
Projection	Projection is where the interrogator attempts to displace the blame for the crime. The interrogator can suggest that the crime was accidental and would not have happened had it not been for someone or something that facilitated the crime. The interrogator can project blame by saying the victim provoked the crime. The interrogator can also suggest the suspect could not have prevented the crime due to an incapacity such as intoxication.	<ul style="list-style-type: none"> • The suspect acted spur of the moment or unintentionally • The suspect's judgment was affected by drugs, alcohol, stress, or peer-pressure • The victim enabled the crime because of his or her behavior
Rationalization	Rationalization is where the interrogator offers a justification for why the suspect committed the crime. The interrogator can rationalize the crime by discussing how the suspect's motivation for his or her behavior was acceptable. The interrogator can also suggest that the suspect's behavior was reasonable given the circumstances of the crime.	<ul style="list-style-type: none"> • The suspect stole money to support his or her family • The suspect acted in self-defense • The suspect's intent was to show love and affection, not sexually abuse the victim

Table 2

Guilt Induction Techniques

Technique	Description	Examples
Emphasize suffering	Emphasize suffering is where the interrogator asks the suspect to take the victim's perspective as the interrogator describes how the victim was harmed.	<ul style="list-style-type: none"> Think of how you would feel, bleeding and helpless on the ground. Think of how scared you would be, not knowing if you were going to live or die.
Emphasize responsibility	Emphasize responsibility is where the interrogator discusses how the suspect caused what happened, noting that the suspect could have prevented the outcome and that the suspect's behavior was not constrained by outside forces.	<ul style="list-style-type: none"> If you had done something differently, [the victim] wouldn't have been hurt. You could have prevented what happened, but you didn't. [The victim] was hurt because of what you did.
Ideal standard	Ideal standard is where the interrogator emphasizes that the suspect did not behave as he or she should have, and that the suspect's behavior was wrong.	<ul style="list-style-type: none"> You should not have attacked [the victim]. You should have chosen to do the right thing, but you chose to do the wrong thing. You didn't act like a good person. You didn't act like the kind of person you want to be.

Table 3

Participants' Demographics in Experiment 1

Demographic Information	Students (n)	Turkers (n)
Sex		
Male	29.76% (75)	49.29% (104)
Female	70.24% (177)	50.71% (107)
Mean age	21.11 (<i>SD</i> = 4.90)	34.82 (<i>SD</i> = 12.23)
Race/Ethnicity		
African-American	3.18% (8)	12.32% (26)
Asian	0.79% (2)	6.16% (13)
Hispanic/Latino	83.33% (210)	2.84% (6)
Native American or Aleut	0% (0)	0.47% (1)
Pacific Islander	0.40% (1)	0% (0)
White/Caucasian	9.13% (23)	75.36% (159)
Multiracial	2.78% (7)	2.84% (6)
Other	0.40% (1)	0% (0)
Education		
Less than high school	0% (0)	0.47% (1)
High school or GED	14.29% (36)	9.01% (19)
Some college	65.87% (166)	26.07% (55)
2-year college degree	17.46% (44)	9.01% (19)
4-year college degree	2.38% (6)	41.23% (87)
Professional degree	0% (0)	2.37% (5)
Master's degree	0% (0)	10.43% (22)
Doctoral degree	0% (0)	1.42% (3)

Table 4

Correlations between Psychological Processes for Innocent Participants in Experiment 1

	Internal	External	Punishment	Affect	Proof	Rapport
Internal	--					
External	.47***	--				
Punishment	.02	.08	--			
Affect	.28***	.31***	.13*	--		
Proof	.47***	.40***	-.15*	.20**	--	
Rapport	.27***	.18**	-.26***	-.13*	.23***	--

* $p < .05$ ** $p < .01$ *** $p < .001$

Table 5

Correlations between Psychological Processes for Guilty Participants in Experiment 1

	Internal	External	Punishment	Affect	Proof	Rapport
Internal	--					
External	.57***	--				
Punishment	.21**	.08	--			
Affect	.75***	.69***	.18**	--		
Proof	.26***	.29***	-.10	.26***	--	
Rapport	.03	.16*	-.21**	.04	.27***	--

* $p < .05$ ** $p < .01$ *** $p < .001$

Table 6

Perceptions of Guilt, Responsibility, and Punishment upon Confessing as a Function of Guilt Status and Interrogation Technique in Experiment 1

Guilt status	Interrogation technique	Feelings of guilt (SD)	Responsibility (SD)	Expected punishment (SD)
Guilty	Direct questioning	6.21 (1.43)	6.25 (1.47)	6.18 (1.27)
	Blame mitigation	6.04 (1.62)	6.26 (1.23)	6.22 (1.7)
	Guilt induction	6.07 (1.61)	6.34 (1.50)	6.23 (1.16)
Innocent	Direct questioning	2.16 (1.71)	1.97 (1.57)	6.30 (1.35)
	Blame mitigation	2.12 (1.59)	2.11 (1.65)	5.95 (1.53)
	Guilt induction	1.96 (1.56)	2.01 (1.56)	6.00 (1.67)

Table 7

Confession Likelihood as a Function of Guilt Status and Interrogation Technique in Experiment

1

Interrogation technique	True confession likelihood (<i>SD</i>)	False confession likelihood (<i>SD</i>)
Direct questioning	58.30% (37.19%)	2.99% (10.80%)
Blame mitigation	50.21% (38.81%)	7.17% (18.14%)
Guilt induction	56.04% (35.97%)	6.87% (19.46%)

Table 8

Psychological Processes Predicting True and False Confessions in Experiment 1

	Innocent model			Guilty model		
	β	95% CI	<i>p</i>	β	95% CI	<i>p</i>
Blame mitigation -> internal pressure	.04	-.11, .20	.551	-.03	-.19, .13	.780
Blame mitigation -> expected punishment	-.07	-.22, .06	.331	.01	-.16, .15	.945
Blame mitigation -> external pressure	.10	-.06, .23	.214	.03	-.12, .17	.779
Blame mitigation -> affect	-.05	-.19, .09	.468	.01	-.14, .15	.934
Blame mitigation -> proof	.04	-.10, .21	.497	-.13	-.26, .04	.158
Blame mitigation -> rapport	.27	.12, .41	.003	.19	.04, .33	.027
Blame mitigation -> confession	.00	-.12, .12	.994	-.09	-.22, .05	.228
Guilt induction -> internal pressure	-.01	-.15, .15	.938	-.02	-.17, .14	.857
Guilt induction -> expected punishment	-.05	-.22, .11	.498	.02	-.12, .16	.815
Guilt induction -> external pressure	.04	-.10, .21	.564	-.13	-.28, .03	.101
Guilt induction -> affect	.02	-.13, .15	.765	-.08	-.24, .07	.285
Guilt induction -> proof	-.09	-.21, .05	.234	-.04	-.20, .11	.640
Guilt induction -> rapport	-.03	-.19, .11	.622	-.04	-.18, .13	.694
Guilt induction -> confession	.09	-.01, .21	.110	.07	-.07, .20	.409
Internal pressure -> confession	.40	.25, .53	.005	.21	.01, .38	.042
Expected punishment -> confession	-.05	-.16, .07	.342	-.04	-.16, .10	.558
External pressure -> confession*	.04	-.11, .18	.571	.35	.17, .49	.006
Affect -> confession*	-.12	-.20, -.04	.003	-.23	-.42, -.01	.045
Proof -> confession	.33	.18, .49	.002	.25	.10, .38	.004
Rapport -> confession	.11	-.01, .23	.070	.10	-.05, .23	.161

Note. Asterisks denote significant differences between guilty and innocent participants.

Table 9

Correlations between Psychological Processes for Innocent Participants in Experiment 2

	Internal	External	Punishment	Affect	Proof	Rapport
Internal	--					
External	.31***	--				
Punishment	.05	.43***	--			
Affect	.40***	.54***	.50***	--		
Proof	.23*	.30**	.18*	.22*	--	
Rapport	-.02	.02	.01	.12	.16	--

* $p < .05$ ** $p < .01$ *** $p < .001$

Table 10

Correlations between Psychological Processes for Guilty Participants in Experiment 2

	Internal	External	Punishment	Affect	Proof	Rapport
Internal	--					
External	.24**	--				
Punishment	.31***	.51***	--			
Affect	.59***	.56***	.59***	--		
Proof	.22*	.10	.14	.20*	--	
Rapport	.26**	-.01	.01	.07	.12	--

* $p < .05$ ** $p < .01$ *** $p < .001$

Table 11

Perceptions of Guilt, Responsibility, and Punishment upon Confessing as a Function of Guilt Status and Interrogation Technique in Experiment 2

Guilt status	Interrogation technique	Feelings of guilt (SD)	Responsibility (SD)	Expected punishment (SD)
Guilty	Direct questioning	4.53 (1.87)	4.34 (1.74)	4.47 (1.89)
	Blame mitigation	4.69 (1.91)	4.05 (1.89)	3.81 (2.17)
	Guilt induction	3.96 (1.86)	4.41 (1.94)	3.94 (2.03)
Innocent	Direct questioning	1.82 (1.39)	2.67 (2.08)	4.97 (2.01)
	Blame mitigation	1.75 (1.55)	2.70 (2.14)	3.92 (2.13)
	Guilt induction	1.80 (1.34)	2.67 (1.99)	4.92 (2.15)

Table 12

Confession Decision as a Function of Guilt Status and Interrogation Technique in Experiment 2

Interrogation technique	True confession (<i>n</i>)	False confession (<i>n</i>)	Diagnostic ratio
Direct questioning	81.58% (38)	25.64% (39)	3.18
Blame mitigation	80.95% (42)	27.66% (47)	2.93
Guilt induction	82.61% (46)	33.33% (39)	2.48

Table 13

Percentage of Participants Who Confessed After Each Sub-Technique as a Function of Guilt Status and Interrogation Technique in Experiment 2

Guilt status	Interrogation technique	First sub-technique	Second sub-technique	Third sub-technique	<i>n</i>
Guilty	Direct questioning	87.10%	6.45%	6.45%	31
	Blame mitigation	72.73%	18.18%	9.09%	33
	Guilt induction	81.58%	13.16%	5.26%	38
Innocent	Direct questioning	40.00%	30.00%	30.00%	10
	Blame mitigation	46.15%	30.77%	23.08%	13
	Guilt induction	61.54%	23.08%	15.39%	13

Table 14

Psychological Processes Predicting True and False Confessions in Experiment 2

	Innocent model			Guilty model		
	β	95% CI	p	β	95% CI	p
Blame mitigation -> internal pressure	.02	-.12, .22	.749	.01	-.18, .17	.995
Blame mitigation -> expected punishment	-.21	-.37, -.06	.008	-.08	-.24, .10	.443
Blame mitigation -> external pressure	-.15	-.28, -.01	.032	.02	-.16, .20	.962
Blame mitigation -> affect	-.20	-.35, -.04	.021	.08	-.13, .23	.513
Blame mitigation -> proof	-.11	-.26, .02	.124	.09	-.08, .23	.349
Blame mitigation -> rapport*	-.15	-.29, .02	.077	.16	.01, .30	.047
Blame mitigation -> confession	.04	-.11, .21	.487	-.06	-.24, .10	.427
Guilt induction -> internal pressure	.00	-.15, .16	.985	-.08	-.20, .10	.490
Guilt induction -> expected punishment	.10	-.06, .23	.326	-.05	-.20, .13	.715
Guilt induction -> external pressure	.20	.06, .36	.011	-.04	-.21, .11	.600
Guilt induction -> affect*	.14	-.03, .30	.129	-.19	-.34, -.02	.039
Guilt induction -> proof	.19	.03, .36	.023	-.07	-.22, .08	.420
Guilt induction -> rapport*	.27	.16, .45	.004	-.09	-.26, .06	.260
Guilt induction -> confession	-.07	-.23, .06	.262	.04	-.21, .15	.847
Internal pressure -> confession	.16	-.03, .30	.103	.30	.09, .51	.022
Expected punishment -> confession	-.19	-.42, .02	.076	-.23	-.40, -.05	.015
External pressure -> confession*	.55	.31, .77	.012	.29	.11, .49	.011
Affect -> confession	-.03	-.27, .20	.710	-.10	-.37, .16	.429
Proof -> confession	.03	-.10, .22	.616	.11	-.06, .27	.239
Rapport -> confession	.14	-.05, .27	.163	.13	-.05, .31	.135

Note. Asterisks denote significant differences between guilty and innocent participants.

Table 15

Similarities and Differences between Experiments 1 and 2

	Innocent	Guilty
Blame mitigation -> internal pressure	Not significant	Not significant
Blame mitigation -> expected punishment	X	Not significant
Blame mitigation -> external pressure	X	Not significant
Blame mitigation -> affect	X	Not significant
Blame mitigation -> proof	Not significant	Not significant
Blame mitigation -> rapport	X	Significant
Blame mitigation -> confession	Not significant	Not significant
Guilt induction -> internal pressure	Not significant	Not significant
Guilt induction -> expected punishment	Not significant	Not significant
Guilt induction -> external pressure	X	Not significant
Guilt induction -> affect	Not significant	X
Guilt induction -> proof	X	Not significant
Guilt induction -> rapport	X	Not significant
Guilt induction -> confession	Not significant	Not significant
Internal pressure -> confession	X	Significant
Expected punishment -> confession	Not significant	X
External pressure -> confession	X	Significant
Affect -> confession	X	X
Proof -> confession	X	X
Rapport -> confession	Not significant	Not significant

Note. An X denotes different findings between Experiments 1 and 2.

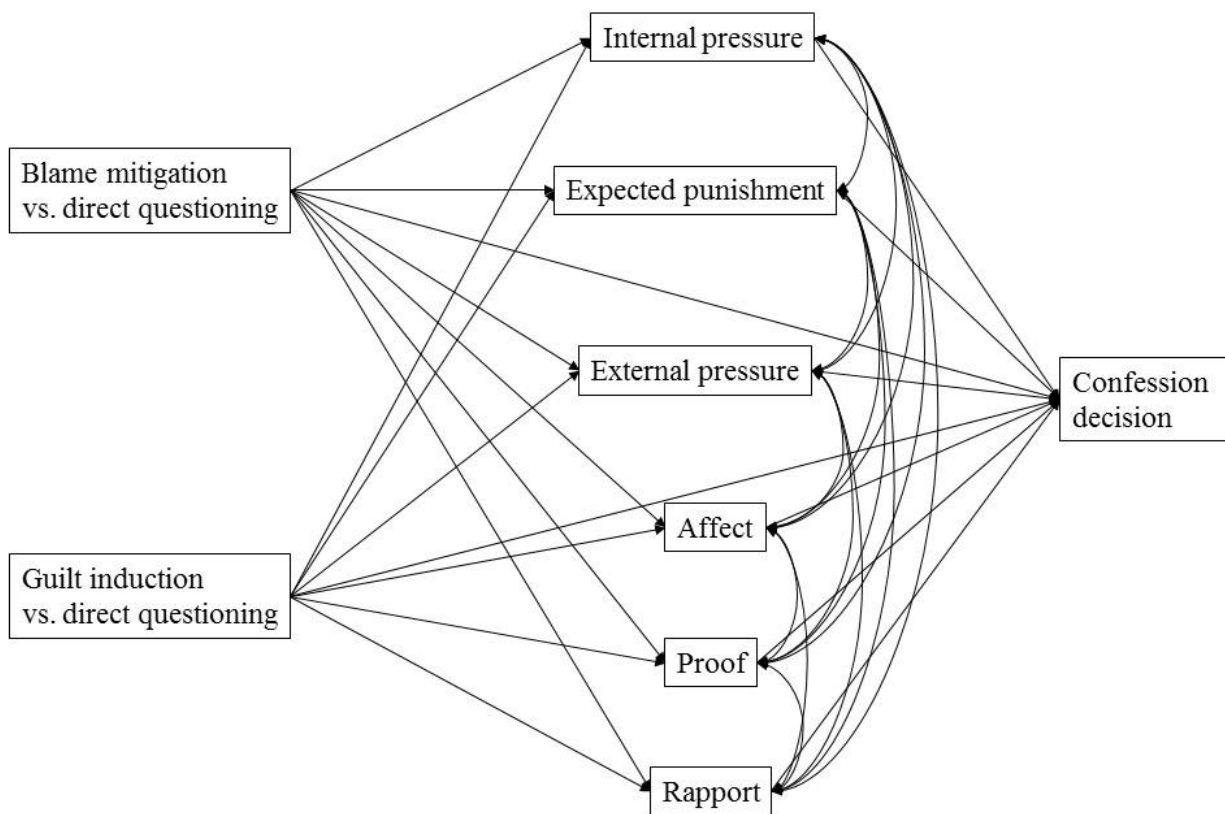


Figure 1. The effect of interrogation scenario and psychological predictors on participants' confession decisions in both experiments.

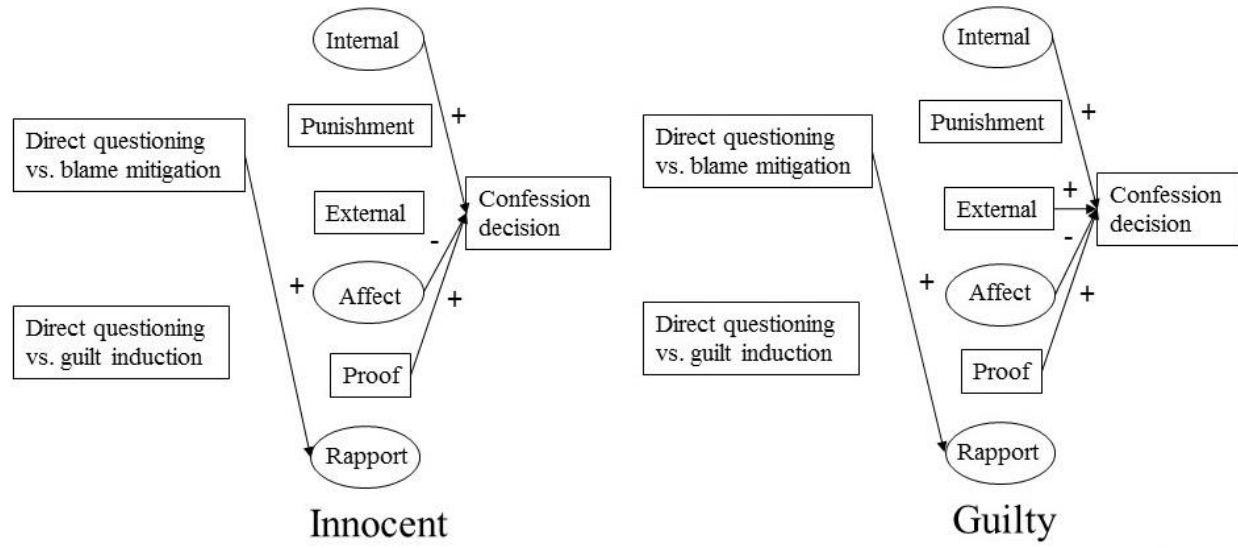


Figure 2. The significant effects in Experiment 1.

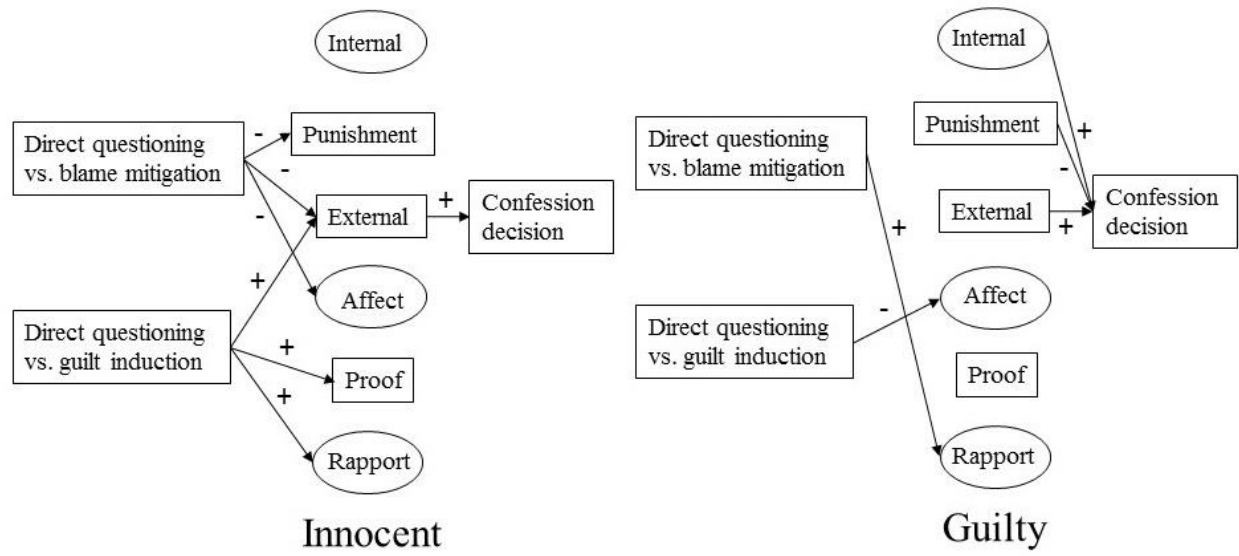


Figure 3. The significant effects in Experiment 2.

Appendix A: Experiment 1 Scenario

You are going to read a scenario. Imagine that you are the main character, Gregory Smith.

You're sitting in your car outside of a bar. You know that your friend, Sam Rodriguez, is inside. You had lent Sam quite a bit of money a few months ago, but he hasn't paid you back, even though you've asked him to several times. You really need the money because you have several bills that need to be paid. You hope that talking to Sam one more time will be enough to get him to pay you back. You sigh, step out of your car, and walk into the bar.

You spot Sam immediately. You walk over to him and sit down.

"Gregory, what are you doing here?" Sam asks.

"You know why I'm here, Sam. I really need that money back," you say.

Sam's face twists into a frown. "Gregory, I've told you before, I don't have the money. Give me a couple weeks and I'll have it for you then."

"You've said that before, Sam! You've told me you're going to get the money 'in a couple weeks' twice in the past three months!"

"I know, Gregory, I know. But this time is different."

"I've fallen for that before, but not this time. I really need the money. I have bills to pay. I lent you that money six months ago. Six months! And I keep asking, but you still haven't paid me back. Well, it's time for you to pay up!" you say.

"I just don't have it, Gregory! I'm being honest with you!"

"Well, you need to get the money by tomorrow, Sam," you say. "You need to pay me back." You get up and storm out of the bar, fuming. You sit in your car for a few minutes, trying to calm down. Then you head home.

GUILTY CONDITION ONLY

You're still angry once you get home. You eat some dinner and try to relax, but you feel anxious about being able to pay your bills. You decide to go talk to Sam one more time about the money, so you get in your car and drive to the bar. It's late, but you know that Sam will still be there.

There are only two cars in the parking lot when you get the bar. Sam's car is one of them. You see him walking to his car from the front door. You get out to talk to him about the money.

You talk with Sam. He refuses to pay you back the money. You can feel the anger in you growing and you grab your pocket knife and stab him. Sam falls to the ground. You look around

and realize that no one saw what happened. You get in your car and drive away, leaving Sam bleeding on the ground.

ALL CONDITIONS

The next morning you hear a knock on your door. You open the door and see a police officer standing in front of you.

“Are you Gregory Smith?” the police officer asks.

“Yes,” you reply.

“We have something that we need to discuss with you,” the police officer says. “Can you come down to the police station?”

“Okay,” you reply.

You arrive at the police station. They bring you into a small room. You sit down in the chair.

“Someone will be with you in just a minute,” they tell you.

Appendix B: Experiment 1 Interrogation Scripts

Rapport: Interviewer in all conditions should develop and maintain rapport. This can be done by leaning forward and maintaining a comfortable level of eye contact. Remain friendly and try to be a likeable person.

Direct Questioning

Good afternoon, my name is Detective [name]. I have a couple of questions for you. Are you comfortable, do you need anything to eat or drink?

Suspect: "No, I'm fine. Thanks though."

So your name is Gregory Smith, is that right?

Suspect: "Yes, that's correct."

Alright just checking. So, Gregory, how long have you lived here?

Suspect: "I've lived here all my life."

Oh, great! I have too, born and raised. What do you like most about this city?

Suspect: "Well the weather is usually pretty nice, but the traffic and construction are just awful."

[laughing] Yeah, that's certainly true. I was almost late to work yesterday because the traffic was so backed up. But the weather is great most of the time, that's for sure. So do you know why you're here today?

Suspect: "No, I'm not sure."

Well I have a few questions for you about something that happened recently to a guy named Sam Rodriguez. Do you know him?

Suspect: "Yeah, I know Sam."

Sam was hurt recently in a fight. He was stabbed and found behind a bar. He was seriously injured and he is currently in surgery, so unfortunately we haven't been able to interview him at this point. It looks like the fight took place in the parking lot after the bar had closed and we haven't been able to find any witnesses who saw what happened to Sam. So I wanted to talk to you to see if you could help us understand what happened.

Suspect: "Why do you think I would know anything?"

Well, we have a witness who saw you and Sam arguing about money two hours before he was found. It sounds like the argument was pretty intense. The witness says that you had given Sam a large loan six months earlier and that Sam had not paid you back, despite your repeated requests for the money. The witness says you told Sam that you needed the money to pay your bills and that it was time for him to pay up.

Suspect: "I mean, Sam and I did talk that night but you're making it sound a lot worse than what it was. I just asked him to pay me back the money he owed me, that's all. Then I left and I haven't seen him since. I don't know what happened to him, honest."

Other detective: "Detective [name], can I speak to you for a minute?"

[To detective] "Yes, of course." [to suspect] "Excuse me for one minute"

[Detective leaves]

[Detective returns]

Gregory, I just received some new information and our investigation is speeding up. We need to get to the bottom of this.

It's my job to get information about what happened, and that's why I'm talking to you today. I just want to get the facts straight and I think you know something. I want to know whether you were involved in this at all or if you know anything about what happened.

Suspect: "I didn't hurt him."

I'd like to take this opportunity to tell you how important it is for you to tell me the truth. I just want to know the truth about what happened. Honestly, I think you know what happened and I'd like you to tell me the truth about it.

Suspect: "Yes, I wanted my money back, but I would never hurt Sam."

Look, I believe you were involved in the incident. You were seen arguing with Sam before he was stabbed. I believe you know something about what happened, and you need to own up to it. Are you going to admit that you are responsible for what happened to Sam?

Blame Mitigation

Good afternoon, my name is Detective [name]. I have a couple of questions for you. Are you comfortable, do you need anything to eat or drink?

Suspect: "No, I'm fine. Thanks though."

So your name is Gregory Smith, is that right?

Suspect: "Yes, that's correct."

Alright just checking. So, Gregory, how long have you lived here?

Suspect: "I've lived here all my life."

Oh, great! I have too, born and raised. What do you like most about this city?

Suspect: "Well the weather is usually pretty nice, but the traffic and construction are just awful."

[laughing] Yeah, that's certainly true. I was almost late to work yesterday because the traffic was so backed up. But the weather is great most of the time, that's for sure. So do you know why you're here today?

Suspect: "No, I'm not sure."

Well I have a few questions for you about something that happened recently to a guy named Sam Rodriguez. Do you know him?

Suspect: "Yeah, I know Sam."

Sam was hurt recently in a fight. He was stabbed and found behind a bar. He was seriously injured and he is currently in surgery, so unfortunately we haven't been able to interview him at this point. It looks like the fight took place in the parking lot after the bar had closed and we haven't been able to find any witnesses who saw what happened to Sam. So I wanted to talk to you to see if you could help us understand what happened.

Suspect: "Why do you think I would know anything?"

Well, we have a witness who saw you and Sam arguing about money two hours before he was found. It sounds like the argument was pretty intense. The witness says that you had given Sam a large loan six months earlier and that Sam had not paid you back, despite your repeated requests for the money. The witness says you told Sam that you needed the money to pay your bills and that it was time for him to pay up.

Suspect: "I mean, Sam and I did talk that night but you're making it sound a lot worse than what it was. I just asked him to pay me back the money he owed me, that's all. Then I left and I haven't seen him since. I don't know what happened to him, honest."

Other detective: "Detective [name], can I speak to you for a minute?"

[To detective] "Yes, of course." [to suspect] "Excuse me for one minute"

[Detective leaves]

[Detective returns]

Gregory, I just received some new information and our investigation is speeding up. We need to get to the bottom of this.

You don't look like the kind of person who does this. The way I see it, this is probably the first time you've been involved in this kind of situation. And besides, only one person was hurt. It could have been much worse. It's not like you go around attacking everyone who looks at you funny. You know, this kind of thing happens all the time. Lots of people get into fights. I talk to at least ten people a week who have been in fights. It's not like this is a rare occurrence. Heck, even I have been in a fight or two! Most people I know have, it's just part of life.

Suspect: "I didn't hurt him."

Here's what I think happened. I don't think you meant to hurt Sam. I'm sure it was just an accident. I know you didn't go over there thinking, 'Hey, I'm going to stab Sam!' No – you went there to ask him for the money he owes you and then things just got out of hand. I know you didn't do this deliberately. It wasn't something you planned, I bet you didn't mean for things to turn out like they did. I bet you just wanted to scare him a little, but then one thing led to another.

I know you were under a lot of stress that night. You had all these bills to pay and you didn't have the money to pay them. I know what that kind of stress can do to a man. Maybe you were worried your electricity would be cut off. Maybe you didn't know where your next meal was coming from. When people are that stressed, they don't think clearly about what they're doing. I know you would have acted differently if you hadn't been so stressed.

In fact, I'm willing to bet what happened was Sam's fault. How long ago did you loan him that money? Six months? That's a long time and he should have paid you back by now. But he didn't. On top of that, I'm sure he probably did something to provoke you. Maybe he laughed at how you can't pay your bills and you got so upset that you lost control because of what he did. If you ask me, he finally got what was coming to him. He brought it on himself and he got what he deserved. None of this would have happened if Sam had just paid you back when you asked.

Suspect: "Yes, I wanted my money back, but I would never hurt Sam"

Look, I know you had a good reason for what you did. I bet it was self-defense. After the bar closed I'm sure you just went to go ask Sam about the money one more time. But then Sam got mad and cornered you. I'm sure you were terrified by that point and you did the only thing you thought you could do in that situation – you fought back. You were probably scared for your life. Are you going to admit that you are responsible for what happened to Sam?

Guilt Induction

Good afternoon, my name is Detective [name]. I have a couple of questions for you. Are you comfortable, do you need anything to eat or drink?

Suspect: "No, I'm fine. Thanks though."

So your name is Gregory Smith, is that right?

Suspect: "Yes, that's correct."

Alright just checking. So, Gregory, how long have you lived here?

Suspect: "I've lived here all my life."

Oh, great! I have too, born and raised. What do you like most about this city?

Suspect: "Well the weather is usually pretty nice, but the traffic and construction are just awful."

[laughing] Yeah, that's certainly true. I was almost late to work yesterday because the traffic was so backed up. But the weather is great most of the time, that's for sure. So do you know why you're here today?

Suspect: "No, I'm not sure."

Well I have a few questions for you about something that happened recently to a guy named Sam Rodriguez. Do you know him?

Suspect: "Yeah, I know Sam."

Sam was hurt recently in a fight. He was stabbed and found behind a bar. He was seriously injured and he is currently in surgery, so unfortunately we haven't been able to interview him at this point. It looks like the fight took place in the parking lot after the bar had closed and we haven't been able to find any witnesses who saw what happened to Sam. So I wanted to talk to you to see if you could help us understand what happened.

Suspect: "Why do you think I would know anything?"

Well, we have a witness who saw you and Sam arguing about money two hours before he was found. It sounds like the argument was pretty intense. The witness says that you had given Sam a large loan six months earlier and that Sam had not paid you back, despite your repeated requests for the money. The witness says you told Sam that you needed the money to pay your bills and that it was time for him to pay up.

Suspect: "I mean, Sam and I did talk that night but you're making it sound a lot worse than what it was. I just asked him to pay me back the money he owed me, that's all. Then I left and I haven't seen him since. I don't know what happened to him, honest."

Other detective: "Detective [name], can I speak to you for a minute?"

[To detective] "Yes, of course." [to suspect] "Excuse me for one minute"

[Detective leaves]

[Detective returns]

Gregory, I just received some new information and our investigation is speeding up. We need to get to the bottom of this.

I want you to think about what happened to Sam. He was hurt pretty badly. I want you to see what happened through Sam's eyes – try to imagine how you would feel if this had happened to you. I want you to imagine that you went to the bar after work just to grab a drink. Think of how it would feel if you got up to leave and, just as you were walking to your car, you were attacked. Think of how it would feel to be stabbed, to feel the knife going into your body. Think of how you would feel, bleeding and helpless on the ground, unable to do anything to protect yourself. Think of how scared you would be, not knowing if you were going to live or die. Imagine how it would feel to go through all of that.

Suspect: "I didn't hurt him."

I think you're responsible for what happened. If you had done something differently that night, Sam wouldn't be sitting in the hospital right now. You could have gone home after talking to him. You could have let him leave, but instead you attacked him. You could have prevented what happened to Sam, but you didn't. You decided to hurt Sam.

Suspect: "Yes, I wanted my money back, but I would never hurt Sam"

You know what you did was wrong. You should not have attacked Sam. You should have just let him go home. I know you want to be a good person. You made a bad decision and you didn't act like a good person that night. You didn't act like the kind of person I know you want to be. Sometimes people are faced with a choice between doing what is right and what is wrong. You were faced with that choice that night. You should have chosen to do the right thing, but you didn't. You chose to do the wrong thing. Now it's time to choose to take responsibility for your actions. Are you going to admit that you are responsible for what happened to Sam?

Appendix C: Experiment 1 Questionnaire

What did Gregory Smith talk to Sam Rodriguez about?

- A. Problems at work
- B. The money Sam owed Gregory
- C. Sam's divorce
- D. A football game

Imagine that you were Gregory Smith and you had just been interviewed by the police.
Remember that you [DID/DID NOT] hurt Sam Rodriguez.

Answer the following questions, thinking about how you would have experienced the interview.

When the detective was questioning you about what happened to Sam...

1. What is the likelihood that you would say you hurt Sam (between 0 and 100%)? _____.

2. How guilty would you feel?

1	2	3	4	5	6	7
Not at all						Extremely

3. How regretful would you feel?

1	2	3	4	5	6	7
Not at all						Extremely

4. How responsible would you feel?

1	2	3	4	5	6	7
Not at all						Extremely

5. How much pressure would you feel to say you hurt Sam?

1	2	3	4	5	6	7
None at all						A lot

6. How much do you think you would be punished if you said you hurt Sam?

1	2	3	4	5	6	7
None at all						A lot

7. How much do you think you would be punished if you DID NOT say you hurt Sam?

1	2	3	4	5	6	7
None at all						A lot

8. Please select 'None at all'.

1	2	3	4	5	6	7
None at all						A lot

9. How stressed would you be?

1	2	3	4	5	6	7
Not at all						Extremely

10. How worried would you be?

1	2	3	4	5	6	7
Not at all						Extremely

11. How anxious would you be?

1	2	3	4	5	6	7
Not at all						Extremely

12. How much proof would you think the detective had that you hurt Sam?

1	2	3	4	5	6	7
None at all						A lot

13. How much would you like the detective?

1	2	3	4	5	6	7
Not at all						A lot

14. How much would the detective respect you?

1	2	3	4	5	6	7
Not at all						A lot

15. How much would you respect the detective?

1	2	3	4	5	6	7
Not at all						A lot

16. How much would the detective listen to what you said before asking you further questions?

1	2	3	4	5	6	7
Not at all						A lot

17. How much of a positive attitude would the detective have towards you?

1	2	3	4	5	6	7
Not at all						A lot

18. How much interest would the detective have in helping you out?

1	2	3	4	5	6	7
Not at all						A lot

19. How much empathy (positive feelings) would you feel the detective has towards you?

1	2	3	4	5	6	7
Not at all						A lot

20. How positive would your relationship be with the detective?

1	2	3	4	5	6	7
Not at all						A lot

21. Please select 'A lot'.

1	2	3	4	5	6	7
Not at all						A lot

Now imagine that you were not Gregory Smith and that the actual Gregory Smith was interviewed by the detective. Remember that Gregory Smith [DID/DID NOT] hurt Sam.

22. What is the likelihood that Gregory Smith would say he hurt Sam (between 0 and 100%)?
_____.

Demographics

Sex: Male Female

Age: _____

Race/Ethnicity: ☐ African-American
☐ Asian
☐ Hispanic/Latino
☐ Native American or Aleut
☐ Pacific Islander
☐ White/Caucasian (Non-Hispanic)
☐ Multiracial
☐ Other

What is the highest level of education you have completed?

1	2	3	4	5	6	7	8
Less than high school	High school or GED	Some college	2-year college degree (Associates)	4-year college degree (BA, BS)	Professional degree (MD, JD)	Master's degree	Doctoral degree

Are you a citizen of the United States? Yes No

Appendix D: Experiment 2 Laboratory Manager Script

Hello, welcome to today's problem solving experiment! First what I'd like you to do is read over and sign this consent form. After you're done with the consent form, we'll get started with the experiment. The task you will be doing today is part of a nation-wide initiative to compare the effectiveness of individual versus team problem-solving. So, at 100 universities we are asking a sample of students to solve a variety of logic problems, sometimes working individually and sometimes working as a team. The performance of each school will be evaluated to see if it meets minimum standards, and to determine what other variables affect performance. For example, are a school's demographic factors or geographic region associated with performance? The results of this experiment could have important implications. For example, the results could be used to support creating scholarships for underprivileged and minority students who otherwise would not be able to attend college.

In the real world people who work together usually know one another, so I'd like the two of you to spend some time getting to know each other. You can talk about whatever you like. It might be best to talk about some basic information first, such as year in school and future career interests. So, go ahead and get to know each other and I'll be back in a few minutes. Don't forget to sign the consent form.

[approximately 5 minutes later]

Alright, so what I'll be having you do is answer some questions individually and some questions together. Here are the team problems for you to share, and here are individual problems for both of you

What I'd like you to do is alternate between solving an individual problem and a team problem. Start out by solving the first individual problem and, once you're both finished, then solve the first team problem together. Continue this alternating pattern until you complete all the problems. Also, it's very important that you work together on the team problems – make sure you actively come up with the solution together. Make sure that you work separately on the individual problems, though – don't discuss those questions with your partner.

To make sure you take the task seriously, you can both earn up to \$10 today! The amount you earn depends on how well you do on the questionnaire. Alright, go ahead and get started. I'll be down the hall in the office. Can you [GESTURE TO CONFEDERATE] come get me when you are finished? I'm not going to check on you so otherwise I won't know when you're done.

Okay, remember – solve the team problems together and the individual problems alone.

Appendix E: Experiment 2 Confederate Script

Beginning of the experiment

Spend a little time getting to know the other participant. Feel free to answer truthfully. Introduce yourself, and then talk to the other participant. You can talk about things such as:

- What year you are in school
- Future career interests
- How you're liking your classes this semester
 - (Remember that you're participating in this study to fulfill a requirement for one of your classes, like Introduction to Psychology)

Make sure you ask the participant whether he or she has heard about the experiment before. Pretend that you don't know anything about the experiment.

Guilty condition

Once you get to the third individual problem (the triangle problem), make it look like you're having difficulty figuring out the answer. Once it is clear that the participant has written down an answer, wait for a few seconds and then turn to the participant and ask for help (e.g., "I'm stuck on this one – what did you get?"). Make sure that the participant gives you his or her answer for the problem. Then, write down the answer the participant gives you.

Innocent condition

Make sure that you and the participant do not share any answers or information on any of the individual problems. Once you get to the third individual problem (the triangle problem), make sure that the other participant writes down his or her answer first. After about five seconds, go ahead and write down your answer.

Appendix F: Experiment 2 Logic Problems

Team Problem #1

Starting with the word “COOL”, change one letter at a time until you have the word “HEAT”. Each change **must result in a proper word**, and you can use any letters in the alphabet. Keeping in mind that you can only change one letter per step, what is the minimum number of steps required to achieve this change? What are the steps?

Answer (Give Steps, i.e., the words): _____

Team Problem #2

Right now Bethany is 12. You can find her older brother's age by switching the digits in Bethany's age. They'll be able to switch the digits in their ages again sometime in the future. How old will Bethany and her brother be when this happens?

How old will Bethany be? _____

How old will Bethany's brother be? _____

Team Problem #3

A man is looking at a portrait and says "Brothers and sisters I have none, but that man's father is my father's son."

Who is the man looking at a portrait of?

Answer: _____

Individual Problem #1

Suppose you are a bus driver. On the first stop you pick up 6 men and 2 women. At the second stop 2 men leave and 1 woman boards the bus. At the third stop 1 man leaves and 2 women enter the bus. At the fourth stop 3 men get on and 3 women get off. At the fifth stop, 2 men get off, 3 men get on, 1 woman gets off, and 2 women get on. How many men are left on the bus, how many women are left on the bus, and what is the bus driver's name?

How many men are left on the bus? _____

How many women are left on the bus? _____

What is the bus driver's name? _____

Individual Problem #2

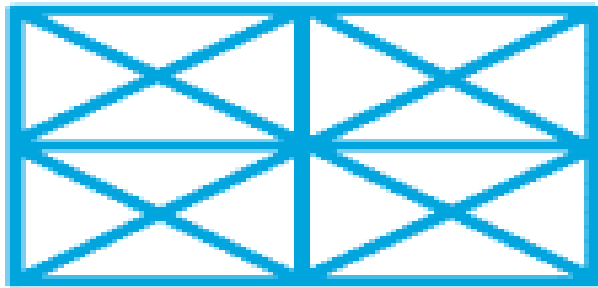
Janet, Barbara, and Elaine are a housewife, lawyer, and physicist, although not necessarily in that order. Janet lives next door to the housewife. Barbara is the physicist's best friend. Elaine once wanted to be a lawyer but decided against it. Janet has seen Barbara within the last two days, but has not seen the physicist.

Janet, Barbara, and Elaine are, in that order, the

- a. Housewife, physicist, lawyer
- b. Physicist, lawyer, housewife
- c. Physicist, housewife, lawyer
- d. Lawyer, housewife, physicist

Answer: _____

Individual Problem #3



How many triangles can you find in the figure above? Look carefully – there are more than 16!

Answer: _____

Appendix G: Experiment 2 Interrogation Scripts

***Rapport:** Interviewer in all conditions should develop and maintain rapport. This can be done by leaning forward and maintaining a comfortable level of eye contact. When the participant speaks, demonstrate active listening by saying things such as “okay” or paraphrasing what the suspect said (“so you’re saying...”). The interviewer can also mirror the participant’s body language (e.g., if the suspect leans forward, the interviewer could also lean forward after a few seconds). Remain friendly and interested in what the participant says; try to be a likeable person.*

Direct Questioning

Hello, my name is [name]. I am the senior researcher who is in charge of this study. I have some things I want to talk to you about. Before we begin, however, I would like to learn a bit about you. What is your name? [wait for reply] And what is your major, [insert participant’s first name]? [wait for reply] That’s cool – that’s my major, too! So did you grow up near here, or are you from somewhere else? [wait for reply] [express liking of the location if you have visited there before; if not, express interest in visiting there or identify a connection to the location] So what do you like best about UTEP so far? [wait for reply]. [agree with everything the participant says. Demonstrate active listening by saying “okay” and “mhm” while the participant is talking. When the participant says something, paraphrase what they say (“So you like ___”) and then talk about how you like that as well.]

So I would like to speak with you about the experiment. I’d like you to hear me out and listen to what I have to say before you explain your side of the story. Can you do that for me?

The lab manager and I looked over the logic problems you two solved. Based on your responses, we became convinced that the two of you did not follow the rules of the experiment. It looks to me like you shared information on at least one of the individual problems because you both had the same wrong answer on the triangle problem. It’s highly unlikely that this would happen by chance. If you did share information, it’s a major problem because it would mean that not only did you break the rules of the experiment, but you may have compromised the integrity of the study, which as you should have been told already is an important nation-wide study.

I wasn’t really sure how to handle this situation so I called my professor to find out what I should do. I explained that the two of you came up with the same wrong answer on the triangle problem. He agreed that it was highly unlikely this would happen by chance. He said that the first thing we need to do is document what happened. He asked me to ask each of you to sign a piece of paper admitting that you shared information on the triangle problem.

Just so you know, I could tell by talking to him that he is pretty annoyed and upset that this is happening. I want to tell you upfront that I’m really not sure how he’s going to handle this situation. I’m not sure how serious he’s going to consider this or who else he might notify about the situation. He might even consider this a case of cheating.

It's my job to get information about what happened, and that's why I'm talking to you today. I just want to get the facts straight and I want to understand what happened here. I need to know whether you were involved in this. Here's the statement that my professor wants you to sign. Are you going to sign it?

If participant signs, proceed to "PARTICIPANT SIGNS".

REFUSAL

I'd like to take this opportunity to tell you how important it is for you to tell me the truth. I just want to know the truth about what happened. Honestly, I think you know what happened and I'd like you to tell me the truth about it. Will you sign this statement?

If participant signs, proceed to "PARTICIPANT SIGNS".

REFUSAL

Look, I need to know what happened. I believe you were involved in the incident. It is highly unlikely that you both would have gotten the same wrong answer on the problem. I believe you know something. Please sign this statement.

If the participant still does not sign the statement, proceed to "final remarks".

PARTICIPANT SIGNS

Okay, why don't you tell me the whole story about what happened?

(Pause for participant to speak)

Okay, thanks. Is there anything else you want to tell me?

FINAL REMARKS

Thank you very much for speaking with me today. I don't want you to worry – based on what you've said, I can tell you that you're not in any trouble at all. Sit tight and I'll be back in a few minutes.

Blame Mitigation

Hello, my name is [name]. I am the senior researcher who is in charge of this study. I have some things I want to talk to you about. Before we begin, however, I would like to learn a bit about you. What is your name? *[wait for reply]* And what is your major, [insert participant's first name]? *[wait for reply]* That's cool – that's my major, too! So did you grow up near here, or are you from somewhere else? *[wait for reply]* *[express liking of the location if you have visited there before; if not, express interest in visiting there or identify a connection to the location]* So what do you like best about UTEP so far? *[wait for reply]*. *[agree with everything the participant says. Demonstrate active listening by saying "okay" and "mhm" while the participant is talking. When the participant says something, paraphrase what they say ("So you like ____") and then talk about how you like that as well.]*

So I would like to speak with you about the experiment. I'd like you to hear me out and listen to what I have to say before you explain your side of the story. Can you do that for me?

The lab manager and I looked over the logic problems you two solved. Based on your responses, we became convinced that the two of you did not follow the rules of the experiment. It looks to me like you shared information on at least one of the individual problems because you both had the same wrong answer on the triangle problem. It's highly unlikely that this would happen by chance. If you did share information, it's a major problem because it would mean that not only did you break the rules of the experiment, but you may have compromised the integrity of the study, which as you should have been told already is an important nation-wide study.

I wasn't really sure how to handle this situation so I called my professor to find out what I should do. I explained that the two of you came up with the same wrong answer on the triangle problem. He agreed that it was highly unlikely this would happen by chance. He said that the first thing we need to do is document what happened. He asked me to ask each of you to sign a piece of paper admitting that you shared information on the triangle problem.

Just so you know, I could tell by talking to him that he is pretty annoyed and upset that this is happening. I want to tell you upfront that I'm really not sure how he's going to handle this situation. I'm not sure how serious he's going to consider this or who else he might notify about the situation. He might even consider this a case of cheating.

The way I see it, though, this is probably the first time you've been involved in this kind of situation. You don't look like the kind of person who does this all the time. And besides, it was probably only one problem. It could have been much worse. It's not like you share answers on every exam you take. And anyway, this kind of thing happens all the time. Lots of people share answers during experiments and even on exams. Most people I know have shared answers at some point or another. Here's the statement that my professor wants you to sign. Are you going to sign it?

If participant signs, proceed to "PARTICIPANT SIGNS".

REFUSAL

Here's what I think happened. I don't think you meant to share answers. It was probably just an accident. I know you didn't come into the experiment thinking, 'Hey, I'm going to share answers on this!' No – you just came here to do the experiment and then things just happened. I know you didn't do this deliberately. It wasn't something you planned, I bet you didn't mean for things to turn out like they did.

You're probably under a lot of stress right now because of all the classes you're taking. When people are stressed, they don't think about what they're doing because the stress clouds their judgment. I know you would have acted differently if you hadn't been so stressed.

I'm willing to bet it was even the other participant who pressured you to share answers. I know you wouldn't have shared answers if it weren't for what the other participant did. Will you sign this statement?

If participant signs, proceed to “PARTICIPANT SIGNS”.

REFUSAL

I know you had a good reason for what you did. You probably saw that the other participant was having a hard time coming up with the answer to this problem. You look like someone who cares a lot about other people, and maybe you felt bad that the other participant couldn't figure out the answer. So you decided to give the other participant your answer. You were just trying to help the other participant out. Please sign this statement.

If the participant still does not sign the statement, proceed to “final remarks”.

PARTICIPANT SIGNS

Okay, why don't you tell me the whole story about what happened?

(Pause for participant to speak)

Okay, thanks. Is there anything else you want to tell me?

FINAL REMARKS

Thank you very much for speaking with me today. I don't want you to worry – based on what you've said, I can tell you that you're not in any trouble at all. Sit tight and I'll be back in a few minutes.

Guilt Induction

Hello, my name is [name]. I am the senior researcher who is in charge of this study. I have some things I want to talk to you about. Before we begin, however, I would like to learn a bit about you. What is your name? *[wait for reply]* And what is your major, [insert participant's first name]? *[wait for reply]* That's cool – that's my major, too! So did you grow up near here, or are you from somewhere else? *[wait for reply]* *[express liking of the location if you have visited there before; if not, express interest in visiting there or identify a connection to the location]* So what do you like best about UTEP so far? *[wait for reply]*. *[agree with everything the participant says. Demonstrate active listening by saying "okay" and "mhm" while the participant is talking. When the participant says something, paraphrase what they say ("So you like ____") and then talk about how you like that as well.]*

So I would like to speak with you about the experiment. I'd like you to hear me out and listen to what I have to say before you explain your side of the story. Can you do that for me?

The lab manager and I looked over the logic problems you two solved. Based on your responses, we became convinced that the two of you did not follow the rules of the experiment. It looks to me like you shared information on at least one of the individual problems because you both had the same wrong answer on the triangle problem. It's highly unlikely that this would happen by chance. If you did share information, it's a major problem because it would mean that not only did you break the rules of the experiment, but you may have compromised the integrity of the study, which as you should have been told already is an important nation-wide study.

I wasn't really sure how to handle this situation so I called my professor to find out what I should do. I explained that the two of you came up with the same wrong answer on the triangle problem. He agreed that it was highly unlikely this would happen by chance. He said that the first thing we need to do is document what happened. He asked me to ask each of you to sign a piece of paper admitting that you shared information on the triangle problem.

Just so you know, I could tell by talking to him that he is pretty annoyed and upset that this is happening. I want to tell you upfront that I'm really not sure how he's going to handle this situation. I'm not sure how serious he's going to consider this or who else he might notify about the situation. He might even consider this a case of cheating.

I'd like to remind you that this is an important nation-wide study. One of the major aims of this study is to develop support for creating scholarships for underprivileged and minority students. There are a lot of very smart students who can't attend college because they can't afford it. What we want to do with this study is to help those students out, help them go to college. But we'll only be able to do that if we have reliable data from this experiment. I'd like for you to take a minute to think about how it would feel if you were one of those students. Think about how it would feel if you spent time studying hard in high school, earned good grades, all while trying to support your family. Think about how it would feel to do all that work and not be able to go to college because you couldn't get a scholarship – a scholarship like the one we're trying to support with this experiment. Think about how it would feel to watch your dreams of going to

college fade away, just because you couldn't afford tuition. Here's the statement that my professor wants you to sign. Are you going to sign it?

If participant signs, proceed to "PARTICIPANT SIGNS".

REFUSAL

I think you're responsible for sharing answers. If you had done something differently, this would not have happened. You broke the rules of the experiment by sharing your answer on an individual problem. You could have prevented this if you had kept your answer to yourself, but you chose not to. No one forced you to share your answer; it was your decision. Will you sign this statement?

If participant signs, proceed to "PARTICIPANT SIGNS".

REFUSAL

You know that cheating is wrong and you know that you should not have done it. You should have kept your answers to yourself. I know you want to be a good student and you already know you didn't act like a good student during the experiment. Here at UTEP we expect more from our students. Sometimes people are faced with a choice between doing what is right and what is wrong. I think you were faced with that choice during the experiment. You should have chosen to do the right thing, but you didn't. I know you didn't act like the kind of student you want to be. Please sign this statement.

If the participant still does not sign the statement, proceed to "final remarks".

PARTICIPANT SIGNS

Okay, why don't you tell me the whole story about what happened?

(Pause for participant to speak)

Okay, thanks. Is there anything else you want to tell me?

FINAL REMARKS

Thank you very much for speaking with me today. I don't want you to worry – based on what you've said, I can tell you that you're not in any trouble at all. Sit tight and I'll be back in a few minutes.

Appendix H: Experiment 2 Confession Statement

I admit that I shared answers during the experiment.

Name

Date

Appendix I: Experiment 2 Questionnaire

Section A.

Answer the following questions, thinking about how you experienced the interview.

When the interviewer was questioning you about possible cheating...

1. How guilty did you feel?

1	2	3	4	5	6	7
Not at all						Extremely

2. How regretful did you feel?

1	2	3	4	5	6	7
Not at all						Extremely

3. How responsible did you feel?

1	2	3	4	5	6	7
Not at all						Extremely

4. How much pressure did you feel to sign the statement admitting to sharing your answer?

1	2	3	4	5	6	7
None at all						A lot

5. How much did you think you would be punished if you signed the statement admitting to sharing your answer?

1	2	3	4	5	6	7
None at all						A lot

6. How much did you think you would be punished if you DID NOT sign the statement admitting to sharing your answer?

1	2	3	4	5	6	7
None at all						A lot

7. How stressed were you?

1	2	3	4	5	6	7
Not at all						Extremely

8. How worried were you?

1	2	3	4	5	6	7
Not at all						Extremely

9. How anxious were you?

1	2	3	4	5	6	7
Not at all						Extremely

10. How much proof did you think the interviewer had that you shared your answer on the triangle problem?

1	2	3	4	5	6	7
None at all						A lot

11. How much did you like the interviewer?

1	2	3	4	5	6	7
Not at all						A lot

12. How much did the interviewer respect you?

1	2	3	4	5	6	7
Not at all						A lot

13. How much did you respect the interviewer?

1	2	3	4	5	6	7
Not at all						A lot

14. How much did the interviewer listen to what you said before asking you further questions?

1	2	3	4	5	6	7
Not at all						A lot

15. How much of a positive attitude did the interviewer have towards you?

1	2	3	4	5	6	7
Not at all						A lot

16. How much interest did the interviewer have in helping you out?

1	2	3	4	5	6	7
Not at all						A lot

17. How much empathy (positive feelings) did you feel the interviewer had towards you?

1	2	3	4	5	6	7
Not at all						A lot

18. How positive was your relationship with the interviewer?

1	2	3	4	5	6	7
Not at all						A lot

Section B.

1. What is the likelihood that someone else would sign the statement if that person were

INNOCENT (between 0 and 100%)? _____.

2. What is the likelihood that someone else would sign the statement if that person were

GUILTY (between 0 and 100%)? _____.

Section C.

1. Did you share information on the triangle problem? YES NO

2. Did you sign the statement admitting that you shared information? YES NO

3. Why did you sign (or not sign) the statement?

Section D.

1. Did the experimenter fully explain the true purpose of the experiment to you?

YES

NO

2. Did the experimenter explain you that there is no charge of academic dishonesty and that everything that happened was all part of the experiment?

YES

NO

Section E.

Sex: Male Female

Age: _____

Race/Ethnicity: ___ African-American
 ___ Asian
 ___ Hispanic/Latino
 ___ Native American or Aleut
 ___ Pacific Islander
 ___ White/Caucasian (Non-Hispanic)
 ___ Multiracial
 ___ Other

Vita

Skye Woestehoff earned a Bachelor of Arts in Psychology from the University of Northern Colorado in 2010 and a Master of Arts in Experimental Psychology from the University of Texas at El Paso in 2013. Skye worked as an intern at North Range Behavioral Health: Acute Treatment Unit in Greeley, Colorado (2009-2010), and at the Office of Research and Sponsored Projects in El Paso, TX (2013). Skye has published papers relating to interviewing and interrogation techniques (Evans et al., 2014; Meissner, Kelly, & Woestehoff, 2015), and jurors' perceptions of confessions (Woestehoff & Meissner, 2016). Skye has also taught several classes while at UTEP: Introduction to Psychology (5 times), Statistical Methods (1 time), and General Experimental Laboratory (2 times).

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This dissertation was typed by Skye Woestehoff.