"Should I Just Confess?": The Influence of Perceived Consequences Associated with Confessing on the Likelihood of True vs. False Confessions

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“SHOULD I JUST CONFESS?: THE INFLUENCE OF PERCEIVED CONSEQUENCES ASSOCIATED WITH CONFESSIONING ON THE LIKELIHOOD OF TRUE VS. FALSE CONFESSIONS

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“SHOULD I JUST CONFESS?": THE INFLUENCE OF PERCEIVED CONSEQUENCES ASSOCIATED WITH CONFESSIONING ON THE LIKELIHOOD OF TRUE VS. FALSE CONFESSIONS

By

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Abstract

The growing awareness of the problem of false confessions has lead social science researchers to investigate the factors that influence true vs. false confessions. Previous research suggested that minimization and maximization techniques may be interpreted by a suspect as the equivalent of an offer of leniency and a threat of harsher punishment, respectively. The current studies seek to further this literature by distinguishing between minimization and maximization techniques that may or may not influence a suspect's perceptions of the consequences associated with confessing. Results indicate that techniques that manipulate the perceived consequences of confessing increase false confession rates while those techniques that do not manipulate the perceived consequences of confessing increase true confession rates. The practical and theoretical implications of these findings are discussed.
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“Should I Just Confess?”: The Influence of Perceived Consequences Associated with Confessing on the Likelihood of True vs. False Confessions

The Deskovic Case

Jeff Deskovic was 16 years old when he falsely confessed to the rape and murder of his 15 year old classmate. He falsely confessed to this crime after an intense interrogation conducted by multiple police investigators lasting six hours. During this time, Jeff was also administered three polygraph examinations. Police first suspected Jeff because he was late to school the day after the girl had disappeared and then appeared overly emotional and distraught due to her death. During his interrogation, in which Jeff was isolated from the support of his parents or legal advice, investigators told him they were convinced of his guilt and misleadingly informed him that he had failed the polygraph test. By the end of the interrogation, Jeff was curled up in the fetal position underneath a table. He was brought to trial based solely on the confession evidence even though testing on the DNA evidence found on the victim excluded Jeff as a match. A jury convicted Jeff of rape and murder based solely on his false confession and he spent over 15 years in prison until he was exonerated in 2006 through the use of more sophisticated DNA testing technology. The DNA from the victim was later found to match Steven Cunningham, who was in prison for another murder, and he later confessed to the crime for which Jeff Deskovic had been wrongfully convicted. Similar examples of false confessions leading to wrongful conviction can be found on the Innocence Project website (www.innocenceproject.org). According to the data on this website, between 20% and 25% of the over 200 wrongful conviction cases were influenced, in part, by a false confession from the defendant (Drizin & Leo, 2004).
The Problem of False Confessions

Due to the growing awareness of the false confession phenomenon, social scientists have begun to examine the costs of false confession and wrongful conviction to the innocent. Drizin and Leo (2004) have analyzed 125 cases of “proven” false confessions in the United States and the resulting data provide significant insight into the repercussions of a false confession for the innocent person. In order to be classified as a “proven” false confession and be included in the Drizin and Leo (2004) analysis, one of four criteria had to be met: (a) the confession was for a crime that did not actually happen (b) it can be established that the suspect did not commit the crime because it would be physically impossible for him/her to do so (c) the actual guilty party is discovered and corroborating evidence is obtained to determine that person’s guilt (d) DNA or other types of scientific evidence can confirm the suspect’s innocence. In Drizin and Leo’s (2004) analysis, 81% of defendants that had falsely confessed and consequently went to trial were convicted of the crime. Additionally, 11% chose to plea bargain their cases to avoid the possibility of receiving the death penalty. After conviction, 80% of these innocent defendants were sentenced to more than 10 years in prison and 61% of those actually spent more than five years incarcerated before they were exonerated.

Given the role of confession evidence in many of the wrongful conviction cases and the cost of conviction for the innocent, research has also examined how mock jurors perceive confession evidence. Kassin and Neumann (1997) presented participants with trial summaries containing confession evidence, eyewitness testimony and character testimony. Their results indicated that the confession evidence was
significantly more damaging to the defendant’s case than the eyewitness or character testimony. In a similar study, Kassin and Sukel (1997) asked participants to read a transcript of a murder trial that contained a confession obtained either during a high pressure interrogation or a low pressure interrogation. Participants reported that they placed less weight on the confession if it was elicited during a high pressure interrogation. Despite this, participants continued to convict the defendant based upon the confession even in the high pressure interrogation condition. The results of these two studies suggest that a confession may have an overwhelming impact on a jury’s decision to convict. Unfortunately, recent research by Kassin, Meissner and Norwick (2005) suggests that both students and police perform at chance levels in distinguishing between true and false confessions. Given that jurors are unable to recognize and appropriately discount false confession evidence, researchers have begun to examine specific interrogation techniques, with the goal of identifying those that might lead to coerced, and possibly false, confessions.

**Interrogation Techniques**

The Reid Technique of investigative interviewing is the most widely used interrogative approach in the United States (Kassin & Gudjonsson, 2004). The first step of this technique is a pre-interrogation interview, the Behavior Analysis Interview (BAI). This interview is conducted to identify any deception on the part of the suspect through his or her verbal and non-verbal behavior. However, research suggests that law enforcement officers, as well as the average person, perform only slightly better than chance when attempting to detect truth vs. deception (Bond & DePaulo, 2006; Vrij, 2000). Research also suggests that police investigators often demonstrate a guilt bias
when evaluating suspects (Meissner & Kassin, 2002; 2004). Results from one study indicate that the BAI actually produced a pattern in which false presumptions of guilt could be placed on innocent suspects, opposite of the intended purpose of the BAI (Vrij, Mann, & Fisher, 2006a). Despite this research indicating people are poor lie detectors, the Reid Technique encourages investigators to interrogate suspects only after they have been found to be deceptive during the BAI.

Once a suspect has been deemed deceptive, an accusatorial interrogation begins on the assumption that the suspect is guilty. Kassin and Gudjonsson (2004) have divided the Reid Interrogation Technique into three processes: isolation, confrontation, and minimization. While in isolation, the police separate the suspect from family and other forms of support in order to intensify feelings of stress and anxiety while alone in the interrogation room. During the confrontation phase, the interrogator accuses the suspect of the crime and shuts down denials of guilt. The minimization phase involves the interrogator justifying the crime and providing the suspect with the option of confessing as a way to escape the interrogation (Kassin & Gudjonsson, 2004).

Kassin and McNall (1991) suggested that the techniques used by Reid and others can be broken down into two primary techniques, namely: maximization and minimization. Maximization techniques are confrontational in nature and use intimidation tactics to persuade the suspect to confess. This can be accomplished through the presentation of false evidence, exaggerating the seriousness of the consequences or maintaining a firm stance on the guilt of the suspect. For example, the interrogator might erroneously tell the suspect that his or her fingerprints have been found on the murder weapon. Minimization techniques are “soft sell” tactics that attempt to mislead the
suspect into a false sense of security. This can be achieved by justifying the situation, sympathizing with the suspect to gain trust or reducing the perceived consequences of confessing. For example, the interrogator might convey to the suspect that the crime was an act of self-defense, and therefore justifiable. To evaluate these two techniques, Kassin and McNall (1991) assessed participants’ perceptions of various interrogation transcripts. When minimization techniques were displayed, participants perceived the interrogation as non-coercive, but believed that an implicit offer of leniency was made in return for the suspect's confession. When they read the maximization transcript, participants believed there was a threat of harsher punishment if the suspect did not confess (Kassin & McNall, 1991). As a result, Kassin and McNall (1991) posited that the use of maximization and minimization techniques may alter a suspect’s perception of the expected consequences of confessing and this manipulation may affect a suspect’s decision to confess.

**Laboratory Research on Interrogations and Confessions**

Kassin and Kiechel (1996) developed the first laboratory paradigm, known as the “ALT key” paradigm, to investigate false confessions. In this paradigm, the participant is asked to type letters on a computer while they are being read aloud by a confederate who poses as another participant. Participants are specifically warned not to press the ALT key as this will cause the computer program to crash and all data will be lost. The computer used in this study was actually programmed to crash after a certain amount of time and the experimenter would then accuse the participant of pressing the ALT key (i.e., the “crime” in this paradigm). In the original Kassin and Kiechel (1996) study, the researchers manipulated the vulnerability of the subject by varying the speed that they
were expected to type the letters. By reading the letters, at a faster pace, the participant was more likely to accidentally strike the ALT key (though no participants actually hit the ALT key). The researchers also manipulated the use of false incriminating evidence by having the confederate testify to having seen the participant press the ALT key. The resulting overall confession rate for this study was 69%. In the high vulnerability with incriminating evidence condition, 100% of participants confessed to hitting the ALT key. This paradigm has been used to investigate other factors influencing false confessions including a preexisting state of stress (Forrest, Wadkins, & Miller, 2002), the gender of the interrogator or suspect (Abboud, Wadkins, Forrest, Lange & Alavi, 2002), the suspect’s age (Redlich & Goodman, 2003), individual difference variables like locus of control and authoritarianism (Forrest, Wadkins, & Larson, 2006), and the consequences of confession (Horselenberg, Merckelbach, & Josephs, 2003).

The ALT key paradigm has also been used to investigate the effects of minimization and maximization techniques (Klaver, Rose, & Lee, 2008). In the minimization condition, the experimenter reduced the participants’ culpability by blaming the computer program for the crash, deeming the crash an accident. In the maximization condition, the experimenter exaggerated the seriousness of the situation and used techniques to intimidate participants. Results indicated that the use of minimization techniques increased the likelihood of false confessions.

While the “ALT key” paradigm has been useful in studying interrogations and false confessions, it has certain limitations. Striking the ALT key is an accidental form of carelessness, rather than an intentional act, and this lack of intent makes it difficult to generalize to a real world criminal situation. It is also difficult to examine true vs. false
confessions using this paradigm given that all participants are innocent of pressing the ALT key. This limitation makes it impossible to examine the diagnostic value (i.e., the ratio of true vs. false confessions) of a given interrogation technique.

Recently, another paradigm has been developed by Russano, Meissner, Narchet, and Kassin (2005) that seeks to overcome some of the limitations of the ALT key paradigm. In this paradigm, participants are told that the researchers are examining individual versus team decision-making and participants are asked to work with a partner (who is actually a confederate of this experiment) to solve several individual and team logic problems. Participants are explicitly instructed not to work together on the individual problems. During the problem solving phase, the confederate asks the participant for assistance on one of the individual problems, thus manipulating the guilt-innocence of the participant. In previous studies using this paradigm, more than 90% of participants willingly gave assistance to the participant (Russano et al., 2005; Narchet, Meissner, & Russano, 2007). In the innocent condition, the confederate does not ask for any assistance. After the problem solving phase, the experimenter (who remains blind to the guilt-innocence of the participant) informs both parties that there seems to be a problem and separates the two. After a short period of isolation, the experimenter begins to “interrogate” the participant, based upon a scripted interaction.

This paradigm has several advantages over the original ALT key paradigm. First, the act of breaking the rules of the experiment and sharing information on the individual problem can be considered a form of academic dishonesty. This is considered a significant act in an academic setting and carries fairly serious consequences for the participant. Also, this act requires intent from the participants. They must choose
whether or not to give the confederate the information. In addition, the guilt or innocence of the participants can be manipulated so that researchers can examine various factors and the specific interrogation techniques that can lead both guilty and innocent participants to confess. Finally, this paradigm also allows researchers to examine the diagnostic value of interrogation techniques. By assessing diagnosticity, researchers are able to determine those techniques that will elicit the most useful, accurate information, and the use of these techniques may speed up the conviction process for guilty suspects and protect innocent suspects from wrongful convictions.

In the original Russano et al. (2005) study, the researchers examined the use of minimization techniques versus an explicit offer of leniency during an interrogation. Results indicated that the use of these techniques increased both true and false confessions. The researchers also examined diagnosticity, or the ratio of true to false confessions. Diagnosticity was lower when both minimization and leniency techniques were used and higher when neither technique was used. Additionally, innocent participants in the minimization interrogation condition felt more pressure to confess than those in the control condition. This paradigm has been used in subsequent studies to examine several other factors that impact interrogations and confessions such as investigator biases, non-coercive techniques and combinations of minimization and maximization techniques (Narchet et al., 2007).

Narchet et al. (2007) trained interrogators on 15 different interrogation techniques, including both minimization and maximization techniques. Interrogators were given information regarding the guilt or innocence of the participant and were then allowed to use any of the techniques they had been taught. Results indicated that the
use of minimization and maximization techniques reduced diagnosticity. Using a post-interrogation questionnaire, the authors found that perceived proof of guilt, participants’ feelings of guilt, and perceived pressure influenced decisions to confess for both guilty and innocent participants, while the perceived consequences of confessing influenced the decision to confess for guilty participants.

The Current Studies

As previously discussed, researchers have identified two common techniques used to elicit a confession, minimization and maximization (Kassin & McNall, 1991). These techniques often involve a “package” of techniques that are used in conjunction throughout an interrogation. For example, the interrogator may tell the suspect that officers found his fingerprints on the murder weapon, a maximization technique, and then justify the crime by saying that it must have been self-defense, a minimization technique. In another example, the interrogator may use minimization techniques to sympathize with the suspect to gain their trust and then, using maximization, exaggerate the consequences of not confessing.

Researchers have suggested that minimization and maximization techniques may influence decisions to confess through pragmatic implication that the consequences associated with confessing are controlled by the interrogator. Specifically, research suggests that this manipulation of consequences can be seen through the use of minimization as the equivalent of an offer of leniency, while maximization may be understood as the equivalent of a threat of harsher punishment (Kassin & McNall, 1991). It is proposed here and elsewhere (see Russano et al., 2005) that this manipulation of the perceived consequences may impact a suspect’s decision
to confess. However, not all techniques that have been categorized as minimization or maximization appear to involve the manipulation of consequences – thus, the current study sought to distinguish between these various techniques by identifying those that appear to manipulate a suspect’s perception of the consequences and those that do not. Examples of minimization and maximization techniques that vary the perceived consequences associated with confessing can be seen in Table 1. Given the implications of the use of these techniques and the decreased diagnosticity associated with their use (Narchet et al., 2007; Russano et al., 2005), it was important to further delineate between the various techniques that have been previously categorized as involving minimization and maximization.

In Experiment 1, I examined the social perceptions of minimization and maximization techniques that were manipulated to vary the consequences associated with confessing. An additional purpose of this experiment was to ensure that the scripts used in Experiment 2 successfully manipulated participants’ perceptions of the consequences associated with confession. Participants read a description of the Russano et al. (2005) paradigm and were asked to imagine that they were a participant in the study. After reading the scenario, participants read about the interrogation of the participant in which maximization and minimization techniques were manipulated. Participants then answered questions about whether they would confess to sharing information and whether other people would confess if they were in the same situation. Based on previous survey research (Henkel, Coffman, & Dailey, 2008), it was predicted that participants would recognize that others might falsely confess, but fail to recognize this possibility when considering themselves in the same situation.
The purpose of Experiment 2 was to examine how the use of interrogation techniques that manipulate the perceived consequences of confessing influence the likelihood of obtaining true versus false confessions. To assess this I employed the Russano et al. (2005) paradigm and manipulated the techniques presented to participants. It was predicted that minimization and maximization techniques that influence the perceived consequences of confessing will elicit less diagnostic information, and in particular increase the likelihood of a false confession. It was also hypothesized that participants’ perceptions of the interrogation as it relates to feelings of pressure, beliefs about the consequences associated with confessing, feelings of guilt, and perceptions of the proof against them would be associated with participants’ decision to confess.
Method

_Paricipants._ One hundred and thirty-eight participants were recruited from undergraduate psychology courses at the University of Texas at El Paso (UTEP). The sample was mostly Hispanic (74.6%) and female (60%), with a mean age of 24 years.

_Design and procedure._ A 2 (guilty vs. innocent participant) x 2 (interrogation methods that manipulate consequences vs. no consequences) x 2 (own vs. other likelihood of confession) mixed factorial design was used in the present study. Guilt-innocence and interrogation method were manipulated between-subjects, while participants’ ratings of own vs. other likelihood of confession were presented as a repeated measure.

Participants were presented with a description of the Russano et al. (2005) paradigm in which two students (A and B) were instructed to solve several logic problems, some of which were to be solved together and some individually. In the guilty condition, participants were told that during one of the individual problems, student A asked student B for help with one of the problems and that student B responded by providing the answer. Participants in the innocent condition were told that the experimental session went according to the instructions given. In both conditions, participants read that after finishing the set of logic problems, the research assistant entered the testing room, explained that there seemed to be a problem, and separated students A and B.

Participants then read an interrogation script in which the interrogation methods were manipulated. In the consequences condition, the research assistant (or
“interrogator”) employed minimization and maximization techniques that were hypothesized to manipulate the perceived consequences of confessing. In the no manipulation of perceived consequences condition, the research assistant employed minimization and maximization techniques that were hypothesized not to manipulate the perceived consequences of confessing. Examples of each of these techniques can be seen in Table 1. At the end of both interrogation scenarios, the research assistant asked student B to sign a statement admitting to sharing information on the individual problem.

After reading the introduction and interrogation scenario, participants answered to estimate the likelihood that: (1) they would sign a confession statement if they were placed in that situation and (2) other people would sign a confession statement if they were placed in that situation.
Experiment 1: Results & Discussion

A 2 (guilty vs. innocent participant) x 2 (interrogation methods that manipulate consequences vs. no consequences) x 2 (own vs. other likelihood of confession) mixed factorial ANOVA was conducted. Table 2 presents the mean estimates of confession across cells of the design. Main effects of own vs. other confession estimates, $F(1,134) = 23.58, p < .001, \eta^2 = .15$, guilt-innocence, $F(1,134) = 104.13, p < .001, \eta^2 = .44$, and interrogation method, $F(1,134) = 10.75, p < .01, \eta^2 = .07$, were found. Participants who read a guilty script were more likely to endorse confession (across own vs. other estimates, $M = 51.2\%$) than did those who read an innocent script ($M = 31.5\%$), and participants believed themselves less likely to confess than others in the same situation ($Ms = 22.5\%$ vs. $60.1\%$, respectively). Importantly, participants who read a script that was thought to manipulate the consequences associated with confession were significantly more likely to endorse confession ($M = 48.0\%$) when compared with those reading a script that was thought to not manipulate perceived consequences ($M = 34.7\%$).

In addition to the main effects, a significant guilt-innocence x own-other confession x interrogation method interaction was observed, $F(1,134) = 4.24, p < .05, \eta^2 = .03$. In order to assess this interaction, separate ANOVAs were conducted for each interrogation method. For the no manipulation of consequences script, main effects of guilt-innocence, $F(1,67) = 8.22, p < .01, \eta^2 = .11$, and own-other confessions, $F(1,67) = 62.0, p < .001, \eta^2 = .48$, were found. For the manipulation of consequences script, these main effects for guilt-innocence, $F(1,67) = 15.97, p < .001, \eta^2 = .19$, and own-other confession, $F(1,67) = 44.75, p < .001, \eta^2 = .40$, were found as well as a guilt-innocence x own-other interaction.
x own-other confession interaction, $F(1,67) = 10.86, p < .01, \eta^2 = .14$. (See Table 2 for means and standard deviations). The data suggest participants believed that while guilty others would be more likely to confess than innocent others when the consequences associated with confessing were not manipulated, they believed that both guilty and innocent individuals would be equally likely to confess under conditions in which the consequences of confessing were manipulated.

When considering whether they, themselves, would confess under these conditions, participants believed that, if guilty, they would be more likely to confess when the consequences were manipulated when compared with the no manipulation condition. If innocent, however, participants rated the likelihood of themselves confessing as low regardless of interrogation condition. When interpreting these results, however, it is important to note that the scales used for the own and other likelihood of confession rates were not equivalent. When evaluating their own likelihood of confession participants responded yes or no, whereas when evaluating others’ likelihood of confession participants provided a rating between 0 and 100. Replication of these findings using equivalent 0 to 100 point scales would appear appropriate.

Taken together, the results of Experiment 1 indicate that participants perceive the use of manipulative techniques in the interrogation scripts and understand that such techniques may lead (other) people to falsely confess. However, participants fail to recognize the impact of manipulative techniques when estimating their own confession decisions. This finding is consistent with prior research indicating that participants believe that false confessions occur and that people have certain vulnerabilities to false confessions, but that they themselves would never be a victim of these vulnerabilities.
(Henkel, Coffman, & Dailey, 2008). It appears that participants are falling victim to the fundamental attribution error (Ross, 1977) by failing to take into account situational factors, like manipulation of the perceived consequences of confessing, when evaluating their own behavior in the interrogation room. In contrast, they appear to be perceptive to situational factors when considering how other people would react to an interrogation. This finding could also be due to the self-serving bias, or the tendency for people to believe that personal successes (in this case not falling victim to manipulative interrogation techniques) are a reflection of their own abilities and efforts (Miller & Ross, 1975). This self-enhancement occurs because people accept information that fits with their goals or desires, while rejecting other conflicting information. In this case, participants maintain a positive self-image by believing that they would not be influenced by manipulative interrogation techniques and that they would therefore not provide a false confession. In Experiment 2, we moved from examining the social perception of interrogation techniques to examining the actual behavior of participants in the Russano et al. (2005) paradigm to test whether confession behavior was similar to social perception of confession behavior.
Experiment 2

Method

Participants. One hundred and thirty-two participants were recruited for the current experiment. Based on previous studies (Kassin et al., 2005; Lassiter et al., 2002), a cell size of 30 was estimated to achieve an effect size of $d = .50$ with power = .80 at alpha = .05 level. The current recruitment achieved 33 participants per cell of the design. All participants were undergraduate students at UTEP, mostly female (65.2%) and Hispanic (88.6%), with a mean age of 19 years.

Design and procedure. Participants were randomly assigned to one of four experimental conditions based on a 2 (guilt vs. innocence) x 2 (interrogation methods that manipulate consequences vs. no consequences) between-subjects factorial design.

Two male and two female undergraduate research assistants were recruited to participate as experimenters. Five female undergraduates were recruited to serve as confederates and lab managers. All research assistants were trained extensively to ensure that the interview scripts were followed for each participant and that the procedure was identical for each participant. Interrogations were video recorded and assessed to ensure that experimenters adhered to the scripted manipulations. The beginning of the experimental session was identical for all conditions. The confederate and participant arrived at the lab at the scheduled experiment time. The experimenter greeted both at the door and asked them to be seated in the testing room. The testing room was a small, bare room with no windows, similar to what may be used for interrogations in a police station. After the participant and confederate read and signed the informed consent, the experimenter explained that the purpose of the study was to
examine individual versus group decision-making. Several phases of the experiment then commenced.

In the rapport-building phase, the experimenter explained that in a realistic business setting, the team members would already know each other as co-workers. To simulate this realistic setting, the experimenter asked the participants to take a few minutes to get to know one another in order to help them feel more like co-workers and increase feelings of cooperation. The experimenter then encouraged the participants to exchange basic information and then left the room for two min to give them the privacy to do so.

After two min, the experimenter re-entered the room and began the problem-solving phase. The experimenter explained that the individual problems were to be completed entirely individually, without any discussion about answers or strategies. The team problems were to be worked on together by sharing information about strategies and answers. Participants were instructed to alternate between working on the individual problems and the team problems and that each problem should take about five min to complete. The experimenter instructed the participants to wait until both people were finished with the individual problems before moving on to the group problems and to try to come up with an answer for each problem. Participants were reminded several times about the importance of working together on the team problems and working alone on the individual problems. This instruction served as the critical rule of the experiment. Once the experimenter had given all of the directions, participants were asked to begin working on the problems and to open the door to let the
experimenter know when they had completed both packets. The experimenter then left the room so that the participants could work in the room by themselves.

During the manipulation phase, in the guilty condition, while working on the last individual problem, the “triangle problem,” the confederate pretended she was having a difficult time arriving at an answer. After waiting to ensure that the participant has come up with an answer to the problem, she asked the participant what answer he/she calculated. This allows the participant the chance to break the rules of the experiment or “cheat.” In the innocent condition, the confederate did not attempt to elicit any information about the problem from the participant. Participants that did not comply with the request for information in the guilty condition were not questioned by the experimenter. Participants that attempted to elicit information from the confederate in the innocent condition were also not questioned by the experimenter. Instead, both of these categories of participants ($n = 16$) moved from the problem solving phase to the debriefing phase.

The filler task phase began once the experimenter was notified that the participant and confederate had completed the problems, he or she re-entered the testing room, collected the completed packets, and instructed the participants to complete a post-problem solving questionnaire. The experimenter again left the room while the participants completed the questionnaire that asked them to respond to questions about individual and team work.

Once the participants informed the experimenter that they had completed the questionnaire, the experimenter re-entered the room and began the interrogation phase of the experiment. The experimenter explained that he or she had looked over the
packets and there appeared to be a problem. The experimenter did not actually review the problems as this may have alerted him or her to the experimental condition of the participant. He or she then asked the confederate to leave the room so that he or she could speak to both of them individually. The confederate then left the testing room and completed a post-experimental questionnaire to ensure that the manipulation was successful. After five min of isolation, the experimenter re-entered the testing room, moved the free chair around the table to be closer to the participant and began questioning the participant about breaking the rules of the experiment by sharing information on the triangle problem. The experimenter stated that the supervising professor had been notified and that he or she has been instructed to document the situation. The experimenter also informed the participant that the professor was irritated about the situation and may consider this a case of academic cheating. The participant was also told that the professor would make the final decision about the consequences of the situation and about whom else he may notify about the situation. At this point in the questioning, the experimenter continued with one of the two interview approaches used in Experiment 1 (see Appendices A and B).

Experimenters were kept blind to the guilt or innocence of the participant and were not aware of the expected results of each interrogation script and the research hypotheses. Experimenters completed a self report survey about their performance after each participant to alert the lab manager to any diversions from the script or inconsistencies in script delivery. Videotapes were also reviewed in order to ensure that each of the experimenters delivered the script consistently to each participant.
At the end of each of the interrogation scripts, the experimenter asked the participant to sign a handwritten statement admitting to sharing information on the triangle problem. If the participant signed the statement, the experimenter thanked him/her for his/her cooperation and asked for an explanation of his/her side of the story and exited the room, explaining that someone would be with the participant shortly. If the participant refused, the experimenter then went through up to two shorter reiterations of the script, repeating the same request using different words. If the participant still refused to sign the statement, the experimenter thanked the participant for his/her time and exited the room, explaining someone would be with him/her shortly.

Once the experimenter left the room, the lab manager immediately entered the testing room to begin thoroughly debriefing the participant. The lab manager first probed the participant for any suspicions they had before and/or during the experimental session. The lab manager explained the true purpose and set up of the experiment, explained that the participant is not in any trouble, and that there was no angry professor to face. The main focus of the debriefing was to ensure that the participant understood why the use of deception was necessary and that the participant understood he/she was not in any trouble. Participants were told that all events during the experimental session would remain completely confidential. At this time, participants were also informed about the videotaping of the session. Lab managers obtained a pressure rating, on a scale from 0 to 10, as a self report measure of how much pressure the participant felt to sign the statement admitting to sharing information. A Debriefing Questionnaire was completed by the participant using MediaLab. This questionnaire
informed the researchers about the effects of the interrogation tactics employed and the participant’s decision to sign or not sign the statement.

After completing the questionnaire, the lab manager explained the secondary consent form and obtained consent to use the videotapes for future research. The lab manager also explained the importance of maintaining confidentiality about the true purpose and nature of the experiment. Participants were asked to sign a confidentiality agreement, agreeing not to discuss or share any of the details of the study in order to maintain the integrity of the study. Upon completion of these forms, the participant was asked if he/she had any further questions about the experiment, was given the contact information of the researchers and was thanked and excused. The lab manager then completed a post-experimental questionnaire in order to report any suspicions the participant had or any problems with the experiment.
Experiment 2: Results & Discussion

*Manipulation check.* After the interrogation phase, participants completed a questionnaire assessing, among other items, how severe the consequences would be to admitting to sharing information on the triangle problem on a scale from 1 (extremely severe) to 7 (not at all severe). Participants in the consequences condition perceived that the consequences of admitting to sharing information would be less severe ($M = 4.00$, $SD = 1.72$) than those participants in the no manipulation of consequences condition ($M = 3.41$, $SD = 1.77$), $t(130) = 1.96$, $p = .05$, thereby confirming our successful manipulation of the perceived consequences of confessing.

*True vs. false confessions.* A 2 (interrogation method: consequences vs. no consequences) x 2 (guilt vs. innocence) x 2 (interrogator gender: male vs. female) hierarchical loglinear analysis was conducted on participants’ decision to confess (sign vs. no sign). While interrogator gender was included as a control variable, no main effects or interactions involving this variable were observed. Confession rates for guilty and innocent participants across the interrogation manipulation are presented in Table 3, along with diagnosticity ratios computed across the interrogative conditions.

Consistent with previous research, (Russano, 2005; Narchet, 2007) a significant main effect of guilt was found, $\chi^2(1) = 50.53$, $p < .001$, such that guilty participants were more likely to confess (89.4%) than innocent participants (31.8%). This main effect, however, was qualified by a significant interrogation method x guilt- innocence interaction, $\chi^2(1) = 8.48$, $p < .01$. To assess this interaction, the use of the two interrogation methods for guilty and innocent participants was investigated separately. Pairwise comparisons demonstrated that true confessions significantly decreased when
the interrogation involved implications regarding the consequences associated with confessing, \( \chi^2(1) = 4.50, p < .05 \). In addition, false confessions significantly increased when the consequences associated with confessing were implied, \( \chi^2(1) = 3.60, p = .05 \).

It is also informative to examine the diagnostic value of the confession evidence elicited by each interrogative approach. Diagnosticity can be computed as the ratio of true:false confessions elicited, with higher ratios indicating a greater likelihood of true (vs. false) evidence being elicited. Consistent with the trade-off in true vs. false confessions across the interrogation manipulation noted above, it appears that techniques that do not manipulate the perceived consequences associated with confessing were 2.37 times more diagnostic than techniques that manipulated participants’ perceptions of the consequences.

**Predicting true vs. false confessions.** Following the interrogation, participants were asked several items regarding their perceptions of the interrogation, including (a) the amount of pressure they felt was placed upon them by the interrogator, (b) their assessment of the consequences associated with confessing, (c) how guilty they were made to feel by the interrogator, and (d) their perceptions of the proof of guilt against them. These items were selected given that they were most predictive of confession in previous research (see Narchet et al., 2007). Logistic regressions were conducted separately for guilty and innocent participants to assess the associations between these measures and the likelihood of true vs. false confessions. Significant regression models were observed for both guilty, \( \chi^2(4) = 16.51, p < .01 \), and innocent, \( \chi^2(4) = 25.49, p < .001 \), participants. Results of the guilty model suggested that true confessions were significantly associated with participants’ feelings of guilt, \( b = .75, Wald = 4.13, p < .05, \)
and their perceptions of the proof of guilt, $b = .66$, Wald $= 4.15$, $p < .05$. In contrast, the innocent model demonstrated that false confessions were significantly associated with participants’ perceptions of pressure, $b = .55$, Wald $= 6.44$, $p = .01$, and the consequences associated with confessing, $b = .54$, Wald $= 8.39$, $p < .01$. True confessions were more likely when participants experienced increased feelings of guilt and thought the interrogator had proof of the transgression, while false confessions appeared to be motivated by increased perceptions of pressure and consequences of confession.
General Discussion

Previous research has found that the use of minimization and maximization techniques in interrogations can manipulate an individual’s perceptions of the consequences associated with confessing (Kassin & McNall, 1991). Given the implications of these techniques and their association with false confessions in general (Russano et al., 2005; Narchet et al. 2007), the current study sought to further delineate between the two sets of techniques by evaluating how this package of techniques might manipulate the perceived consequences of confessing. Additionally, it was important to determine the diagnosticity of these techniques.

The use of minimization and maximization techniques succeeded in manipulating the perceived consequences of confessing. Participants (in Exp. 2) who were exposed to the manipulation of perceived consequences condition believed that the consequences of confessing to sharing information would be less severe than those in the no manipulation of consequences condition. In the manipulation of consequences script, interrogators stressed the benefit of cooperation, minimized the seriousness of sharing information, presented false evidence against the participant, and exaggerated the charges against the participant. Overall, the script emphasized that confession was the best way to get out of the situation and the consequences of admitting to sharing information would be minimal. Given the use of these techniques, the participants’ beliefs that the consequences of confessing would be less severe than those in the no manipulation of consequences condition is consistent with previous research suggesting that minimization techniques may be considered equivalent to an offer of leniency and that maximization techniques are the equivalent to a threat of harsher punishment.
It appears that participants in the manipulation of consequences condition believed confessing to sharing information would result in the least severe consequences.

The manipulation of perceived consequences influenced both participants’ beliefs about whether they and others would confess (Exp. 1) and also influenced the diagnostic value of confession evidence (Exp. 2). Participants believed that other people would be more susceptible to falsely confessing when the consequences associated with confessing were manipulated, but did not believe this manipulation would affect their own decisions to confess if innocent. However, when actually participating in the Russano et al. (2005) paradigm, participants were vulnerable to the manipulation of consequences and were thereby more likely to provide a false confession. Additionally, the manipulation of consequences interrogation was less diagnostic than the no manipulation interrogation as it also reduced the likelihood of obtaining a true confession.

Given the high cost of false confessions for both society and the innocent, there would appear to be practice and policy considerations that relate to these findings. Under current interrogation methods, minimization and maximization techniques are used together to elicit a confession and all of the techniques tested in this study are legally permissible. Based on the findings in this study, this practice may be detrimental to the goal of eliciting true confessions and minimizing false confessions. The manipulation of consequences associated with some minimization and maximization techniques appear to yield fewer true confessions, something that is counterproductive for law enforcement. Further, the use of some of these techniques produced more false
confessions, increasing risk to the innocent suspect. By simply avoiding those dangerous and manipulative techniques, and focusing on other aspects of minimization and maximization, we can significantly improve the practice of interrogation and the diagnostic value of the evidence.

The current data suggest that true and false confessions may be predicted by different mechanisms. For innocent participants, the perception of consequences of confession and the perceived pressure to confess were significantly associated with provision of a false confession. However, guilty participants were driven to confess based on the perceived amount of proof the interrogator had against them and how guilty they felt about their actions. These findings suggest that techniques that focus on the strength of the (true) evidence against the suspect and emphasize the morality of confession may be more productive for eliciting true confessions and limiting the vulnerability of the innocent.

Future research is needed to further delineate the effects of minimization and maximization techniques. While the present research has identified one dimension along which these techniques may be distinguished (i.e., consequences associated with confession), there may be other dimensions along which one could differentiate minimization and maximization techniques. Other possible dimensions could include the type of rapport the interrogator builds with the suspect. Some techniques in this package require a friendly rapport between the suspect and interrogator while others require a more authoritative/submissive rapport. The overall tone with which the interrogator approaches the interrogation may influence the rate of true vs. false confessions.
Finally, if the suspect confesses and subsequently goes to trial, a jury will evaluate the confession evidence. Previous research has shown that confession evidence, whether disputed or not, has an overwhelming impact on jurors’ decisions to convict (Kassin & Sukel, 1997; Kassin & Neumann, 1997) and that people perform around chance levels when distinguishing between true and false confessions (Kassin, Meissner, & Norwick, 2005). The videotaped confessions collected during this study will be evaluated by participants in order to further investigate social perceptions of interrogation techniques and participants’ ability to distinguish between the true and false confessions. Results from Experiment 1 indicated that participants had a difficult time recognizing the situational influences of the interrogation scenario when evaluating others’ decisions to confess. Potential jurors’ may also have difficulty recognizing the situational influences of an interrogation scenario in which the interrogator manipulates the perceived consequences of confession.

The argument could be made that results from the current study cannot be generalized to the real-world because the paradigm does not compare to the actual experience of an interrogation. It is clear that the pressures and reality of a true criminal interrogation cannot be completely examined in a laboratory setting due to ethical concerns. However, just as criminal suspects face serious consequences for the conviction of crime for which they are accused, our student participants are aware of the serious consequences associated with academic dishonesty within the university setting (i.e., suspension from the university, loss of scholarship). The pressure and anxiety experienced by participants in the laboratory is genuine and significant (Russano et al. 2005). Just as criminal suspects are motivated to avoid serious consequences
associated with confession, our student participants appeared similarly motivated to avoid the consequences and stigma associated with a charge of academic dishonesty. The recent DNA exoneration and Drizin and Leo’s (2004) analysis of “proven” false confessions have revealed the important role of false confession evidence in many wrongful conviction cases. Researchers have begun to examine the factors that lead to false confessions and have found that the use of minimization and maximization techniques contribute to the false confession phenomenon. The current studies found that minimization and maximization techniques directly manipulate the perceived consequences of confession and thereby impact the diagnostic value of confession evidence. The use of this package of techniques provides little to no diagnostic value in that through their use, law enforcement not only reduces true confessions, but also increases false confessions.
References


Kassin, S.M., & Gudjonsson, G.H. (2004). The psychology of confessions: A review of
the literature and issues. *Psychological Science in the Public Interest, 5*, 33-67.


Table 1

*Minimization and Maximization Techniques that Vary and Do Not Vary the Perceived Consequences of Confession*

<table>
<thead>
<tr>
<th>Consequences</th>
<th>Minimization</th>
<th>Maximization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consequences</td>
<td>stress benefit of cooperation</td>
<td>exaggerate consequences</td>
</tr>
<tr>
<td></td>
<td>downplay consequences</td>
<td>co-conspirators against each other</td>
</tr>
<tr>
<td></td>
<td>face-saving excuses</td>
<td>overstate the charges</td>
</tr>
<tr>
<td>No Consequences</td>
<td>express sympathy</td>
<td>assume unfriendly demeanor</td>
</tr>
<tr>
<td></td>
<td>assume friendly demeanor</td>
<td>firm belief in guilt</td>
</tr>
<tr>
<td></td>
<td>boost ego/use flattery</td>
<td>shut down denials</td>
</tr>
</tbody>
</table>
Table 2

_Self vs. Others Confession Rates as a Function of Interrogation Method_

<table>
<thead>
<tr>
<th>Consequences</th>
<th>Guilty</th>
<th>Others</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Self</td>
<td>Others</td>
</tr>
<tr>
<td></td>
<td>50.0% (50.8)</td>
<td>68.9% (21.0)</td>
</tr>
<tr>
<td></td>
<td>8.6% (28.4)</td>
<td>64.4% (25.3)</td>
</tr>
<tr>
<td>No Consequences</td>
<td>Guilty</td>
<td>Others</td>
</tr>
<tr>
<td></td>
<td>25.7% (44.3)</td>
<td>60.0% (24.3)</td>
</tr>
<tr>
<td></td>
<td>Innocent</td>
<td></td>
</tr>
<tr>
<td></td>
<td>5.9% (23.8)</td>
<td>47.1% (26.3)</td>
</tr>
</tbody>
</table>
Table 3

*True and False Confession Rates and Diagnosticity by Interrogation Method*

<table>
<thead>
<tr>
<th>Condition</th>
<th>True Confessions</th>
<th>False Confessions</th>
<th>Diagnosticity</th>
</tr>
</thead>
<tbody>
<tr>
<td>Consequences</td>
<td>81.8%</td>
<td>42.4%</td>
<td>1.93</td>
</tr>
<tr>
<td>No Consequences</td>
<td>97.0%</td>
<td>21.2%</td>
<td>4.58</td>
</tr>
</tbody>
</table>
Appendix A

Interrogation Phase – No Manipulation of Consequences

*Experimenter reenters room approximately five minutes later and has a seat across from participant*

E:  Ok, “participant’s name,” I’ve just been talking to (Confederate’s name), and it looks like we DO have a problem.  What I’m going to ask you to do is to just hear me out and listen to what I have to say before you explain your side of the story, ok?

While you two completed the reaction questionnaires, I had a chance to look over the logic problems you two solved.  Based on what I saw, I 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 by working together.  The reason I think the two of you shared information during the individual problem-solving phase is because you have the same wrong answer on the triangle problem.  It’s HIGHLY unlikely that this would happen by chance, and if you did share information, it is 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.

After I separated the two of you, 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, and he agreed that it was highly unlikely that that 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.  Either way, whether you sign or you don’t sign, I have to call him back and see what he wants to do next.

Just so you know, I could tell by talking to him that he’s 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.

(Tone should be firm and unfriendly.)

Look, I’m going to level with you.  I already looked over the problems and I KNOW you guys broke the rules.  The statistical probability that you two would have come up with the SAME WRONG ANSWER just by chance is incredibly small.  I’ve run this study almost 100 times, and this has NEVER happened before.  That shows me you guys must have shared information on the problem.  So here is the situation – I think you should do the right thing and admit to working together.  I am sure you are a good person who would want to do the right thing and no one wants to be accused of cheating or breaking the rules.  I understand that and when I call my professor back I’ll
let him know that you came clean about what happened. He’ll see you did the right thing and I’m sure he’ll respect your honesty.

*(Tone should become much more friendly and compassionate, as if you are a friend and trying to help)* Look, I feel for you in this situation and it sucks that this is happening. I am sorry that you got caught up in all of it. I think you are a good person and you seem pretty intelligent to me. The smartest thing to do, and the right thing to do here is to sign the statement, trust me.

Ok, either way, whether you sign or don’t sign, I have to call him back and see what he wants to do next. I can’t guarantee either way what he’ll decide he wants to do. So here it is – are you going to sign this?

**Reiterate:**

1. What you’re telling me isn’t matching up with what I have seen. I think the smart thing to do is sign the statement. Here it is-will you sign it?

2. Your story is inconsistent with the evidence I have from the problems. I think the right thing to do is sign this statement. Are you going to sign?
Appendix B

Interrogation Phase – Manipulates Consequences

*Experimenter reenters room approximately five minutes later and has a seat across from participant*

E: Ok, “participant’s name,” I’ve just been talking to (Confederate’s name), and it looks like we DO have a problem. What I’m going to ask you to do is to just hear me out and listen to what I have to say before you explain your side of the story, ok?

While you two completed the reaction questionnaires, I had a chance to look over the logic problems you two solved. Based on what I saw, I 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 by working together. The reason I think the two of you shared information during the individual problem-solving phase is because you have the same wrong answer on the triangle problem. It’s HIGHLY unlikely that this would happen by chance, and if you did share information, it is 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.

After I separated the two of you, 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, and he agreed that it was highly unlikely that that 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. Either way, whether you sign or you don’t sign, I have to call him back and see what he wants to do next.

Just so you know, I could tell by talking to him that he’s 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.

Look, I’m going to level with you. I already talked to the other participant and I’m going to tell you the same thing I told her. So here is the situation – if you are willing to admit to sharing answers on the triangle problem, I think we can get this thing settled pretty quickly. I’ll call my professor back, but I’ll make sure to tell him that you guys came clean and explained what happened. I can’t guarantee what will happen, but my best guess is that he’ll probably just instruct me to throw out the data, and I should probably be able to have you out of here within ten minutes or so. BUT if you don’t admit to sharing answers, I’m afraid this is going to take awhile to straighten out. I’ll have to call my professor back, and he’ll probably have to come down here to deal with the situation himself, and my guess is that that will make your situation a lot worse.
He told me that if he comes down here, he’s going to bring the paperwork that he has to fill out for violations of academic misconduct. I really think you’re better off just handling the situation here with me.

Again, I am telling you the same thing I told (confederate’s name) - I think the two of you probably didn’t realize what a big deal it would be to work together. If I was in your shoes, I might have made the same mistake. I don’t think you intentionally meant to do anything wrong – from what I can tell after talking to her, I just think you were trying to be nice by helping her out. She has already signed the statement so here is my advice to you.

In my opinion, I really think it’s in your best interest to sign the statement, especially since she already has. If I call him back and tell him one of you signed and the other didn’t, he might become even more upset about the whole situation. Either way, whether you sign or don’t sign, I have to call him back and see what he wants to do next, but seriously, if I was you, I’d sign it. So here it is – are you going to sign this?

Reiterate:

1. Look, the other participant has already signed, there is no sense in denying what you did. I think you should just sign the statement.

2. The right thing for you to do is sign the statement, trust me. If you do, I can get you out of here pretty quick. Are you going to sign it?
Appendix C

Problem Solving Study Debriefing Questionnaire

1. How much stress did you feel when you were accused of cheating?

1 2 3 4 5 6 7
no stress extreme stress

2. When being questioned by the experimenter about cheating, there were times that I was worried about what would happen to me.

1 2 3 4 5 6 7
not at all very much

3. I felt nervous when the experimenter accused me of cheating.

1 2 3 4 5 6 7
not at all very much

4. I have been in a similar position where I had to deny something that I may or may not have done before.

1 2 3 4 5 6 7
extremely similar situation not at all similar

5. How much proof did you think the experimenter had that you had cheated on the triangle problem?

1 2 3 4 5 6 7
Overwhelming None

6. How guilty did you feel when the experimenter was questioning you about cheating on the triangle problem?

1 2 3 4 5 6 7
extremely guilty not at all guilty

7. How severe did you think that the consequences would be if you admitted to cheating on the triangle problem?
8. My heart was beating fast when the experimenter accused me of cheating.

1. not at all  
2.  
3.  
4.  
5.  
6.  
7. very much

9. The consequences for **not admitting** to cheating on the triangle problem would be severe.

1. strongly disagree  
2.  
3.  
4.  
5.  
6.  
7. strongly agree

10. I felt isolated in the room.

1. strongly disagree  
2.  
3.  
4.  
5.  
6.  
7. strongly agree

11. When you were being questioned by the experimenter, how much pressure did you feel to sign the statement?

1. no pressure at all  
2.  
3.  
4.  
5.  
6.  
7. most pressure you can imagine

11. Did you share any information ("cheat") on the triangle problem?

YES

NO

Why did you sign or not sign the confession statement?
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
______________________________________________________________________
Curriculum Vita

Allyson Judith Horgan was born in Cambridge, Massachusetts and then moved to Kingman, Arizona. She graduated from Kingman High School in 2001. Allyson began school at Grand Canyon University in Phoenix, Arizona and then transferred to Arizona State University’s West Campus where she earned her bachelor’s of science degree in psychology with a minor in criminal justice. While at Arizona State, Allyson worked as a research assistant in the Legal Psychology Research Lab under the direction of Dawn McQuiston-Surrett, Ph.D. After graduating from Arizona State, Allyson entered the Graduate School at the University of Texas at El Paso to pursue a Ph.D. in Legal Psychology under the direction of Christian A. Meissner, Ph.D.

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