THE EFFECT OF COUNTERFACTUAL PRIMES ON INFORMATION SHARING BIASES DURING GROUP DECISION MAKING

by Carrie E. Hall

We attempted to replicate and examine the process underlying Galinsky and Kray’s (in press) finding that decision-making groups primed with a counterfactual story are more likely to choose the correct decision alternative than groups primed with a non-counterfactual story. While we did replicate their original finding, we also uncovered a possible alternative interpretation. Our data suggest that the non-counterfactual prime is actually not an adequate control condition, and when a condition was added in which there was no prime, the main effect of the counterfactual prime disappeared. Therefore, it seems that the non-counterfactual prime may actually have depressed decision accuracy rather than the counterfactual prime bolstering decision accuracy. We also found no support for the idea that the counterfactual prime induced discussion that was indicative of a simulation mind-set.
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Important decisions are often delegated to groups on the assumption that multiple decision makers will make a better decision than a lone decision maker. This reasoning seems logical because group members do not ordinarily possess identical information or skills. Thus pooling their information should yield a greater amount of information and skills than any one member possesses, which should then lead to a better decision.

However, research has shown that groups often do not use member resources effectively. For example, Stasser and Titus (1985) demonstrated that groups tend to focus mainly on information that all group members already knew before the discussion began, and often fail to discuss information that is uniquely held by each individual. They demonstrated this inadequacy of group discussion through the use of “hidden profiles.”

In a hidden profile, each member of a group is given a set of information that is shared by all of the group members. This set of shared information favors an incorrect decision alternative. Each member of the group is also given a set of information that is uniquely known by that member. The uniquely known information is often referred to as the critical clues because the complete set of uniquely known information favors the correct decision alternative. Thus, when only the shared information is considered, an incorrect decision alternative is favored; however, when all of the critical clues are considered, the correct decision alternative is favored. The hidden profile condition is generally compared to an all shared condition in which all of the group members are given the complete set of information (which favors the correct decision alternative). Thus, decision quality can be measured by whether the group chooses the alternative that each individual’s information favored or the more-optimal alternative that the aggregate of the information favored. Many subsequent studies have revealed this bias towards discussing primarily information that was shared by all group members prior to the discussion (e.g. Stasser, 1992; Stasser, Taylor, & Hanna, 1989; Stasser & Titus, 1987).

Attenuating the bias towards primarily discussing already shared information would have significant real-world implications because many organizations form committees that are responsible for discussing decision alternatives and making
recommendations. During the past 15 years, researchers have attempted to identify factors that decrease this bias towards discussing primarily shared information (Larson, Foster-Fishman, & Keys, 1994; Stasser et al., 1989). For example, framing the decision making process as solving a problem (as opposed to making a judgment) seems to attenuate the bias (Stasser & Stewart, 1992). Also, when participants and their discussion group are informed of participants’ “expertise” about a particular decision alternative, the subsequent discussion is less biased towards discussing shared information than when no information is given about expertise or when information about expertise is given only to the “expert” in the discussion group (Stasser, Stewart, & Wittenbaum, 1995).

One method of inducing greater discussion of critical uniquely known information may be to increase the accessibility of procedural knowledge that supports this goal. A mind-set can be thought of as accessible procedural knowledge. Smith and Branscombe (1987) provided evidence that procedural knowledge can be primed and subsequently discussed how procedural primes and trait primes differ. They differentiated procedural primes from trait primes by demonstrating that while the effects of trait primes dissipated relatively quickly and were triggered by exposure to the trait concept itself, the effects of procedural primes lasted longer (15 min. in Smith and Branscombe’s study) and were triggered by engaging in activities that were relevant to the procedural primes.

Inducing a mind-set, or making procedural knowledge accessible, has previously been shown to influence the way that subsequent tasks are approached. A deliberative mind-set is a way of thinking in which one thinks about the possible decision options in a particular circumstance with the goal of deciding on a plan of action. In contrast, an implemental mid-set is a way of thinking in which one thinks about how to implement a plan of action. Gollwitzer, Heckhausen, and Steller (1990) induced either a deliberative or implemental mind-set by asking participants either to think about the pros and cons of a decision they might make or to think about a plan for implementing a decision they had made, respectively. Participants were then asked to write the next three sentences of three fairy tales. The fairy tales each briefly described a difficult situation that the main character was facing and then trailed off at which point the participant was asked to write the next couple of sentences. Two coders then independently counted the number of times each participant described the main character as deciding between possible plans.
(indicative of deliberative mind-set) and the number of times each participant described 
the main character as acting on a plan (indicative of implemental mind-set). Gollwitzer et 
al. (1990) found that the participants’ continuations of the fairy tales were more 
deliberative in nature when the participants had been primed with a deliberative mind-set 
than when they were primed with an implemental mind-set. Similarly, participants’ 
continuations of the fairy tales were more implemental in nature when the participants 
were primed with an implemental mind-set than when they were primed with a 
deliberative mind-set.

Gollwitzer et al.’s (1990) work demonstrated that mind-sets can affect the way 
people approach subsequent tasks. In particular, we are interested in whether inducing a 
mind-set will influence the amount of critical uniquely held information that group 
members discuss. Lord, Lepper, and Preston’s (1984) work and Hirt and Markman’s 
(1995) work seems to suggest that a simulation mind-set will induce a greater 
consideration of information that does not support an individual’s initial inclination.

Lord et al. (1984) found that instructing participants to “consider the opposite” 
when explaining an event reduced the amount of bias they exhibited toward the initial 
explanation. Expanding on this idea, Hirt and Markman (1995) demonstrated that 
considering any alternative explanation for an event will reduce the bias towards the 
initial explanation. They argue that considering alternative explanations may have 
induced a simulation mind-set in participants. A simulation mind-set is one in which a 
problem is thought about from many different perspectives, and one of these different 
perspectives often can be to consider the opposite, or converse, of the first solution that 
comes to mind (Kahneman & Tversky, 1982). A humorous example of people engaged in 
a simulation mind-set is the popular improv comedy task that requires participants to use 
an object in as many funny ways as possible in a short amount of time. This task engages 
a simulation mind-set because in order to come up with humorous ways to use the 
objects, one must break free of the recurring thoughts about how the object is intended to 
be used and mentally simulate other potential uses.

Simulation mind-sets may also be able to operate nonconsciously. Exposure to 
situations in which counterfactual thoughts are salient may be one way to prime a 
onconscious simulation mind-set (Galinsky & Moskowitz, 2000). Counterfactual
thoughts are thoughts about what might have been. Watching the bus pull away from the bus stop as one is running up to the bus stop would induce counterfactual thoughts because it is easy to imagine an alternate reality (if only I had not had to look for my keys, I would have caught the bus) when one misses the bus by seconds. Thinking about what might have been requires the person to consider alternative realities, or the opposite of what actually happened (Kahneman & Tversky, 1982).

In a series of studies, Galinsky and Moskowitz (2000) demonstrated that priming participants with a counterfactual did indeed induce a simulation mindset. Participants who first read a counterfactual story were more likely to solve the Dunker candle problem in which a box of tacks must be used to affix a candle to the wall. Solving this task required participants to simulate other uses for a box of tacks and realize that the box that the tacks are in can be tacked to the wall to fashion the candleholder.

In a second study, participants attempted to solve the Wason card selection task. This task involves testing the validity of a proposed rule, such as “every card with a “J” on the front must have an “8” on the back.” Participants are then asked which cards they must flip over in order to determine if the rule is true. There are four cards, one with a “J” facing up, one with an “8,” one with another letter, and one with another number. Participants primed with a counterfactual were more likely to pick both the other number and the “8.” Selecting the other number is a valid choice because if a “J” were on the reverse side, it would disprove the rule. However, selecting the “8” does not provide for a good test of the rule because it does not state that if an “8” is on one side, a “J” must be on the other side. Thus, Galinsky and Moskowitz (2000) showed that priming participants with a counterfactual seemed to induce a simulation mindset even when it does not increase decision accuracy.

Finally, Galinsky and Moskowitz (2000) demonstrated that participants primed with a counterfactual story tended to ask fewer questions designed to evoke hypothesis-confirming answers when attempting to get to know another participant who had been described as either introverted or extroverted. In sum, this series of studies seemed to demonstrate that counterfactuals induce a simulation mindset, which results in a mental simulation of alternative realities, particularly those that are opposite of the initial hypothesis or proposed reality.
Galinsky and Kray (in press) recently extended this work and examined the effect of priming groups with a simulation mind-set on the ability of the groups to make an optimal decision. According to one tenet of the biased sampling model, groups may discuss primarily shared information because this is the information that favors the initial group preference. Therefore, if participants could be induced to seriously consider other possible preferences, they may share more unshared information because the unshared information would support these alternative preferences.

Galinsky and Kray (in press) applied Galinsky and Moskowitz’s (2000) paradigm and Stasser and Titus’s (1985) hidden profiles to the current problem. Galinsky and Kray asked groups of three participants to first carefully read transcripts of interviews with suspects in a murder investigation, which contained both shared and unshared information, and then to individually come to a conclusion about whom they thought was guilty. Next, the groups of three participated in what they were told was a team building exercise, but was really the counterfactual or non-counterfactual prime. Groups that received the counterfactual prime read a short story about Sue’s trip to a rock concert during which she moved closer to the stage to get a better view, and the person who moved to her old seat won a large prize. Groups that received the non-counterfactual prime also read a short story about Sue at a rock concert, but in this version Sue stayed in her original seat and someone else won the large prize. In order to assess counterfactual thought activation, groups in both conditions wrote down what they thought Sue was thinking after reading the story. Then each group discussed the murder mystery and decided who they as a group thought was the murderer. Finally, after making a decision, each group member was given a checklist of six shared clues and six unique clues and was asked to indicate which clues their group had discussed.

The major finding of Galinsky and Kray’s (in press) work was that groups that were primed with the counterfactual story reported discussing significantly more unshared information than groups that were primed with the non-counterfactual story. They also found that groups that were primed with the counterfactual story chose the correct suspects significantly more often than groups that read the non-counterfactual story. Finally, they reported several interesting correlations. Specifically, the number of counterfactual thoughts attributed to Sue was positively correlated with both the number
of unshared clues that were recalled as having been discussed and with the accuracy of the group decision. Additionally, the number of unshared clues that were recalled as having been discussed was positively correlated with the accuracy of the group decision as to who was the guilty suspect.

Galinsky and Kray’s (in press) work raised several new questions. First, do counterfactually primed groups actually discuss more unshared information? Specifically, are more pieces of unshared information recalled at the end of the discussion in the counterfactual prime condition because more pieces of information were actually mentioned or they received more attention because once they were mentioned?

The sessions in Galinsky and Kray’s (in press) research were not audio taped and so the number of pieces of shared and unshared information that were discussed were inferred from responses to a post-discussion recall task. In the current study, we addressed this issue by audio taping the sessions and then counting the actual number of pieces of shared and unshared information that were discussed in order to determine if the differences observed were due to differential frequencies of introduction into the discussion or due to differential tendencies to remember discussing shared versus unshared information.

If the number of shared and unshared clues introduced into the discussion does not differ in the counterfactual and non-counterfactual prime conditions, one possible reason for differential recall between the two conditions may be related to how much attention is paid to the information once it is introduced into the discussion. It is possible that something about being primed with a simulation mind-set makes people more likely to repeat unshared information, which would conceivably result in a higher rate of recall for unshared information in that condition. We addressed this question by counting the number of times each piece of shared and unshared information was repeated or commented upon once it had been introduced into the discussion.

If group members do actually share more unique information after being primed with a counterfactual story, what is the process that is operating to attenuate the bias toward focusing on shared information? Galinsky and Kray (in press) suggested that the simulation mind-set causes the groups to consider alternatives to their initial solution. If so, there should be a demonstrable difference in the distributions of the number of pieces
of information about each suspect that are discussed depending on whether the groups are primed with the simulation mind-set. Specifically, groups not primed with the simulation mind-set should primarily discuss the suspect that is the group’s ultimate choice as the murderer. However, groups primed with the simulation mind-set should discuss a more even amount of information about each suspect if the simulation mind-set really does lead groups to consider converse alternatives. We tested this hypothesis by comparing the distributions of the number of pieces of information about each suspect that were discussed between the two conditions.

Finally, we further tested the above hypothesis that the counterfactual prime is operating though the induction of a simulation mind-set that results in a more equitable discussion of the suspects by including information distribution as a factor. If this was the case, groups primed with the simulation mind-set should have discussed a more equitable amount of information about the suspects regardless of whether the information is all shared or if some of the information is unshared (i.e. hidden profile).

Method

Design

A 2 (Prime: counterfactual vs. non-counterfactual) X 2 (Information distribution: all shared vs. hidden profile) factorial design was used.

Participants

Two hundred and sixty-four college students in Introductory Psychology and Introductory Statistics classes participated in the experiment for partial credit towards a course requirement or extra credit, respectively. Participants were arranged into groups of three, which resulted in twenty-two groups in each of the four cells of the design.

Materials

Counterfactual and Non-Counterfactual Primes. The counterfactual and non-counterfactual primes in this experiment were first used by Galinsky and Moskowitz (2000). The counterfactual prime consists of a paragraph describing how Sue was at a rock concert and decided to switch seats in order to have a better view. The emcee then announced that there would be a lottery and that the winner would receive a prize. The winning seat turned out to be Sue’s old seat, which was now occupied by someone else.
The non-counterfactual prime presented the same situation, except that Sue stayed in her original seat and the winning seat was a different seat altogether.

Information Distribution. A scenario was presented and a decision alternative was chosen on the basis of group discussion. The scenario is that of a homicide investigation. In the all shared condition, all of the information about the homicide was shared, thus each participant in the group had identical information. Because all group members were given all of the information, it was fairly easy to make the correct judgment about whom the guilty party is. In contrast, in the hidden profile condition (Stasser & Titus, 1985), each participant had unique information about the suspects in addition to a subset of information that was shared by all of the group members. The information given to each participant favored choosing a particular (incorrect) suspect. However, if participants all disclosed their information to each other so that all of the information was then shared, the correct suspect was implicated. Thus, in order to make the correct decision, participants must have shared their unique information during the discussion. See Appendix A for the information about the homicide that was given to participants in the shared and hidden profile conditions.

Procedure

A total of 8 participants could sign up for any given session. Once the session started, participants were randomly assigned to 3-member groups until no more groups of 3 could be formed. Any remaining participants were asked to participate in an unrelated study.

Once participants were assigned to a group, each group was led to a separate room. Participants were each given a packet that contained transcripts of interviews with the murder suspects. In the shared condition, all group members received packets that contained all of the clues. In the hidden profile condition, each group member received a packet that contained clues unique to that packet in addition to a subset of clues that were shared. Groups were not informed that they might not have all received the same information. Group members were given 20 minutes to carefully read the transcripts contained in their packets. After reading the transcripts, each group member responded to a questionnaire that asked which suspect the person believed committed the crime and how certain that person was that the suspect was guilty.
Next, the groups were told that they would complete an exercise designed to help them work in their teams. Half of the groups were then given the counterfactual prime and half were given the non-counterfactual prime. Groups read the scenario and then wrote down what they thought Sue was thinking after the emcee announced the name of the prizewinner. This thought listing was later coded for the total number of thoughts and the number of thoughts that were counterfactual in nature.

The groups were then asked to discuss the information about the murder suspects and to decide as a group who they believed committed the crime. The participants were knowingly audio taped during this discussion. After the groups reached a decision, they were then asked to individually indicate which pieces of information were discussed. Finally, participants were thanked and debriefed.

Results

Coding

Two coders independently counted the total number of thoughts and the number of counterfactual thoughts that each group listed in the thought listing after reading the scenario involving Sue and the concert (the prime manipulation). Examples of thoughts that were coded as being counterfactual in nature are “if only I hadn’t changed seats” or “if only I had asked the tall person to move”. Sixty-four percent of groups did not list any counterfactual thoughts, and as a result, the number of counterfactual thoughts was recoded as whether the group listed 0 counterfactual thoughts or at least 1 counterfactual thought. A third coder then resolved any discrepancies in coding in which one coder indicated that a group had listed 0 counterfactual thoughts and the other listed at least one counterfactual thoughts. Kappa was computed rather than a correlation because of the categorical nature of the data. Kappa was .73, which is above the accepted lower limit of .70. The correlation between the coders for total number of thoughts was also high, \( r = .98, p < .01 \).

Manipulation Checks

As a manipulation check, a chi-square test was conducted to determine whether members of the counterfactual prime groups actually produced at least one counterfactual thought more often than members of the non-counterfactual prime group in response to the priming story. The chi-square was performed with prime (counterfactual vs. non-
counterfactual) as the independent variable and whether the group produced at least one counterfactual thought as the dependent variable. Groups that were counterfactually primed were more likely to produce at least one counterfactual thought (54.5%) than groups that were not counterfactually primed (18.2%), $X^2 (1, N = 88) = 12.57, p < .01$.

However, the counterfactual prime groups and the non-counterfactual prime groups should not differ on number of total thoughts generated in response to the priming story. A t-test was performed with prime (counterfactual vs. non-counterfactual) as the independent variable and the total number of thoughts listed as the dependent variable. Groups did not differ on the total number of thoughts they produced as a function of whether they received the counterfactual prime or the non-counterfactual prime, ($M = 4.54$), $F (1, 87) = 1.52, p = .22$.

**Decision Accuracy**

Our first prediction was that the groups that read the hidden profiles would choose the correct suspect more often when they were primed with the counterfactual story than when they were not. However, when the groups read the packets that contained all of the information, the counterfactual prime should not influence the tendency to choose the correct suspect because each group member already possessed the complete set of information. The percentages of groups who chose the correct suspect in each condition are given in Figure 1. The predicted interaction was tested using a 2 (Information distribution: all shared, hidden profile) X 2 (Prime: counterfactual, non-counterfactual) chi-square with the raw number of correct decisions as the dependent variable. This predicted interaction was not significant, $X^2 (1, N = 88) = 2.23, p = .14$. However, there was a main effect of prime on decision accuracy. Groups in the counterfactual prime condition were more likely to guess the correct suspect (63.6%) than groups in the non-counterfactual prime condition (34.1%), $X^2 (1, N = 88) = 7.69, p < .01$. There was no difference in how often groups that received the hidden profile (47.7%) and groups that received all of the information (50%) guessed the correct suspect, $X^2 (1, N = 88) = .05, p = .83$. 
Figure 1. The Effect of Prime and Information Distribution on Decision Accuracy

To determine whether counterfactual thought activation influenced decision accuracy a chi-square was performed using the presence or absence of counterfactual content in the thought listing task as the independent variable and decision accuracy as the dependent variable. Although not significant, $X^2 (1, N = 88) = 2.20, p = .14$, the pattern is consistent with our expectations. Of the groups who did not list any counterfactual thoughts, 43% correctly identified the guilty suspect, whereas 59% of the groups that listed at least one counterfactual thought correctly identified the guilty suspect.

Discussion Data

Coding of Discussions

Two undergraduate assistants independently coded each discussion after a brief training period. Due to the high volume of coding, two pairs of coders were utilized. Each coder assigned a three-digit code to each piece of information that was mentioned during the discussion (see Appendices B and C for Coding Instructions and Codes). Inter-rater reliability was high for all categories of interest (shared clues: .85, critical clues: .76, repetition of shared clues: .67, repetition of critical clues: .65, total clues discussed: .77, total discussion events: .87)

Total Number of Clues Discussed

We predicted that the total number of clues discussed would not be affected by whether the groups were primed with the counterfactual prime. It would make sense if
there was a main effect of information distribution though, as the members in the all shared condition each received the complete set of information. Because each group member possessed all of the information, it would seem more likely that they would mention more clues than the groups in the hidden profile condition in which each member received some information that was unique. A 2 (Information distribution: all shared, hidden profile) X 2 (Prime: counterfactual, non-counterfactual) ANOVA was conducted with total number of clues discussed as the dependent variable. The average number of clues discussed by groups in each condition is summarized in Figure 2. (See Appendix B for coding instructions and Appendix C for items that were coded). There was no main effect of either prime, $F(1, 79) = 1.25, p = .27$, or information distribution, $F(1, 79) = 1.13, p = .29$. However, there was an unexpected interaction between prime and information distribution when predicting the total number of clues mentioned, $F(1, 79) = 8.01, p < .01$. Simple effects analyses revealed that in the all shared condition, the non-counterfactual groups ($M = 13.85$) and the counterfactual groups ($M = 11.89$) tended to mention about the same number of clues during discussion, $F(1, 79) = 1.39, p = .24$. In contrast, in the hidden profile condition, the counterfactual groups ($M = 13.91$) discussed significantly more of the clues than the non-counterfactual groups ($9.41$), $F(1, 79) = 8.29, p < .01$. In addition, within the counterfactual condition, groups in the all shared condition ($M = 11.89$) and in the hidden profile condition ($M = 13.91$) tended to mention about the same number of clues during discussion, $F(1, 79) = 1.54, p = .22$. In the non-counterfactual condition, however, groups in the all shared condition ($M = 13.85$) tended to mention more of the clues during discussion than groups in the hidden profile condition ($M = 9.41$), $F(1, 79) = 7.69, p < .01$.

Figure 2. The Effect of Prime and Information Distribution on Total Number of Clues
Discussed

To summarize, prime did not affect the number of clues mentioned in the all shared condition, but did affect the number of clues mentioned in the hidden profile condition. Also, information distribution did not affect the number of clues mentioned in the counterfactual condition, but in the non-counterfactual condition, groups in the all shared condition tended to mention more clues than groups in the hidden profile condition. Overall, groups in the non-counterfactual/hidden profile condition mentioned fewer clues during discussion than groups in any of the other conditions. This is reasonable given these groups were given both of the manipulations that do not support information sharing. Group members in the hidden profile condition were each given some information that was uniquely known, which one would expect to impede discussion of the clues. Also, groups in the non-counterfactual prime condition were not given the prime that was expected to promote information exchange.

Total Number of Discussion Events

We were also interested in whether information distribution and prime affected the total number of discussion events. A discussion event is defined as a thought that is contributed to the discussion. Similar to above results regarding the effect of prime and information distribution on the total number of clues mentioned, there was no main effect of either prime, F(1, 79) = 0.00, p = .96, or information distribution, F(1, 79) = .16, p = .69. Also, similar to the results regarding the effect of prime and information distribution on the total number of clues mentioned, the interaction was significant, F(1, 79) = 5.04, p = .03. Simple effect analyses revealed that within the all shared condition, the counterfactually primed and non-counterfactually primed groups did not differ significantly in the total number of discussion events, F(1, 79) = 2.47, p = .12, although the non-counterfactually primed groups tended to have more discussion events (M = 87.70) than the counterfactually primed groups (M = 67.76). Within the hidden profile condition, the counterfactually primed and non-counterfactually primed groups also did not differ significantly in the total number of discussion events, F(1, 79) = 2.58, p = .11. However, there does appear to be a trend for the counterfactually primed groups (M = 83.82) to have had more discussion events than the non-counterfactually primed groups (M = 64.66). Additionally, within the counterfactual condition, groups in the all shared
condition \((M = 67.76)\) and the hidden profile condition \((M = 83.82)\) did not differ in the total number of discussion events, \(F(1, 79) = 1.68, p = .20\). However, within the non-counterfactual condition, groups in the all shared condition \((87.70)\) had more discussion events than groups in the hidden profile condition \((M = 64.66)\), \(F(1, 79) = 3.55, p = .06\). Although not identical to the pattern of results regarding the effect of prime and information distribution on the total number of clues mentioned, the pattern of means is in the same direction for total number of discussion events.

*Discussion of Critical Clues*

We predicted that the proportion of the critical clues that were discussed would not differ between the shared/counterfactual prime condition and the shared/non-counterfactual prime condition. Since group members in the all shared conditions received all of the information, it seemed unlikely that the prime would affect discussion of the critical clues. In addition, we did not expect the proportion of critical clues discussed to differ between the latter conditions and the hidden profile/counterfactual condition because we thought the prime would induce groups to discuss the critical clues at a fairly high rate even though each critical clue is only known by one group member in this condition. However, we did expect groups in the hidden profile/non-counterfactual prime condition to discuss significantly fewer of the critical clues than the other conditions. We tested the above hypothesis using a 2 (Information distribution: all shared, hidden profile) X 2 (Prime: counterfactual, non-counterfactual) ANOVA with proportion of critical clues discussed as the dependent variable. The average proportion of the critical clues that were discussed by groups in each condition is presented in Figure 3. The proportion of critical clues that were discussed did depend on information distribution, \(F (1, 79) = 12.03, p < .01\). Groups in the all shared condition \((M = .43)\) discussed a significantly greater proportion of the critical clues than groups in the hidden profile condition \((M = .30)\). In addition, the proportion of critical clues actually discussed also depended on the prime, \(F (1, 79) = 6.74, p = .01\). Groups that were counterfactually primed \((M = .42)\) discussed a significantly greater proportion of the critical clues than groups that were non-counterfactually primed \((M = .31)\). The interaction did not reach significance, \(F (1, 79) = 1.57, p = .21\).
However, it is important to note that the longer a group discussed, the more critical clues it is likely that the group discussed. In order to determine if the effect of prime and information distribution on the discussion of the critical clues is independent of the effect on the total number of discussion events, the total number of discussion events was entered as a covariate. As defined earlier, a discussion event is a contributed idea. Each contributed idea counts toward the total number of discussion events regardless of redundancy. Total number of discussion events was a significant covariate, F (1, 78) = 75.00, p = .00. When the total number of discussion events was covaried out, the main effects of prime, F (1, 78) = 13.38, p = .00, and of information distribution, F (1, 78) = 19.63, p = .00, were strengthened. In addition, the p-value associated with the interaction rises to .67, F (1, 78) = .19, p = .67.

Figure 3. The Effect of Prime and Information Distribution on Actual Discussion of Critical Clues

Discussion of Shared Clues

We hypothesized that information distribution and prime would not affect the total number of shared clues each group discussed since all of the group members already know all of the shared information. The average proportion of the shared clues that were discussed by groups in each condition is presented in Figure 4. As predicted, a 2 (Information distribution: all shared, hidden profile) X 2 (Prime: counterfactual, non-counterfactual) ANOVA revealed that there was no main effect of either prime, F(1, 79)
=.15, \( p = .70 \), or information distribution, \( F(1, 79) = .11, p = .74 \). However, the interaction between prime and information distribution significantly predicted the proportion of shared clues that were discussed, \( F(1, 79) = 9.87, p < .01 \). Simple effects analyses revealed that groups in the all shared condition discussed more of the shared clues when they were counterfactually primed (\( M = .22 \)) than when they were not (\( M = .28 \)), \( F(1, 79) = 3.58, p = .06 \). However, the opposite was true for groups in the hidden profile condition; groups that were counterfactually primed (\( M = .30 \)) discussed more of the shared clues than groups that were not counterfactually primed (\( M = .22 \)), \( F(1, 79) = 6.61, p = .01 \). In addition, within the counterfactual condition, groups in the hidden profile condition (\( M = .30 \)) discussed more of the shared clues than groups in the all shared condition (\( M = .22 \)), \( F(1, 79) = 5.94, p = .02 \). Within the non-counterfactual condition, groups in the all shared condition (\( M = .28 \)) discussed more the shared clues than groups in the hidden profile condition (\( M = .22 \)), \( F(1, 79) = 4.01, p = .05 \).

As mentioned earlier, discussing for a longer period of time makes it more likely that pieces of information will be mentioned. Thus, in order to determine if the effect of the interaction of prime and information distribution on the discussion of the shared clues is independent of the effect on the total number of discussion events, the total number of discussion events was covaried out. However, although the total number of discussion events was a significant covariate, \( F(1, 78) = 181.286, p = .00 \), the interaction remained significant, \( F(1, 78) = 4.93, p = .03 \). The main effects of prime, \( F(1, 78) = .58, p = .45 \), and information distribution, \( F(1, 78) = 1.45, p = .23 \), remained non-significant.

Figure 4. The Effect of Prime and Information Distribution on Actual Discussion of Shared Clues
Focus of Discussion.

We hypothesized that the counterfactual prime may be affecting decision accuracy by affecting the focus of the discussion. We defined focus as the proportion of the total number of clues that were discussed that were critical clues. By considering the proportion, the effects of the total number of clues discussed are eliminated (some groups may have discussed more critical clues merely because they discussed more clues in general). In addition, considering the proportion of the total number of clues discussed that were critical clues allowed us to assess whether the relative focus on the critical clues versus the shared clues predicted decision accuracy. The relative focus is important because primarily discussing the shared clues should hinder groups in identifying the guilty suspect since the shared clues incriminate the innocent suspects. A 2 (Information distribution: all shared, hidden profile) X 2 (Prime: counterfactual, non-counterfactual) ANOVA was conducted with the proportion of the total clues that were critical clues as the dependent measure. Contrary to our prediction, there was no effect of prime on the focus of the discussion, \( F (1, 78) = .95, p = .33 \). However, there was a main effect of information distribution. Groups in the all shared condition (.34) focused more on the critical clues than groups in the hidden profile condition (.23), \( F (1, 78) = 20.73, p < .01 \). This is not surprising as each of the group members in the all shared condition possessed all of the critical clues, whereas only one group member per group in the hidden profile condition possessed each critical clue. The interaction was not significant, \( F (1, 78) = 1.27, p = .26 \).

We also examined the relationship between discussion content and decision accuracy (results are summarized in Table 1). We expected the number of critical clues that were discussed to be correlated with decision accuracy. It seems reasonable that the more of the critical clues that the groups discussed, the more likely the group would be to correctly identify the guilty suspect since the critical clues all point to the guilty suspect. Although not significant, there was a trend in this direction. We also expected the focus of the discussion to be related to decision accuracy. The groups should be more likely to correctly identify the guilty suspect when more of the clues they discuss are critical clues. There was a trend for this to be the case. Groups that focused more on the critical clues
tended to be somewhat more likely to correctly guess the guilty suspect. Neither the proportion of the shared clues that were discussed nor the total number of clues that were discussed predicted decision accuracy.

Table 1. Relationship Between Discussion Content and Decision Accuracy

<table>
<thead>
<tr>
<th></th>
<th>Pearson r</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total discussion</td>
<td>.07</td>
<td>.54</td>
</tr>
<tr>
<td>Discussion of critical clues</td>
<td>.17</td>
<td>.13</td>
</tr>
<tr>
<td>Discussion of shared clues</td>
<td>-.02</td>
<td>.90</td>
</tr>
<tr>
<td>Focus of discussion</td>
<td>.19</td>
<td>.10</td>
</tr>
</tbody>
</table>

We suspected that the non-significant correlations between the discussion of the critical clues and decision accuracy and between the focus of discussion and decision accuracy were largely due to the anomalous all shared/non-counterfactual condition in which the groups correctly identified the guilty suspect at a surprising low rate even though they discussed a relatively large proportion of the critical clues (possible reasons for the low solve rate associated with these groups are discussed further in the discussion section of the current paper). When the correlations were recomputed without considering the groups in the all shared/non-counterfactual condition, the correlations shifted in the predicted direction (See Table 2). Greater discussion of the critical clues is now associated with a greater likelihood of correctly identifying the guilty suspect, and the trend for the focus of the discussion to predict decision accuracy is also stronger.

Although groups that discussed more of the clues were more likely to correctly identify the guilty suspect, this was likely driven by the effect of discussion of the critical clues since discussion of the shared clues was not related to decision accuracy.

Table 2. Relationship Between Discussion Content and Decision Accuracy Omitting the All Shared/Non-Counterfactual Condition

<table>
<thead>
<tr>
<th></th>
<th>Pearson r</th>
<th>Sig.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Total discussion</td>
<td>.27</td>
<td>.03</td>
</tr>
<tr>
<td>Discussion of critical clues</td>
<td>.30</td>
<td>.02</td>
</tr>
<tr>
<td>Discussion of shared clues</td>
<td>.17</td>
<td>.19</td>
</tr>
</tbody>
</table>
Recall of Discussion Content

Recall of Discussion of Critical Clues

We attempted to replicate Galinsky and Kray’s (in press) result such that within the hidden profile condition, groups that were counterfactually primed recalled discussing a significantly greater proportion of the critical clues than groups that were given the non-counterfactual prime. In addition, we did not expect either of the all shared conditions to differ from the hidden profile/counterfactual condition. We tested this hypothesis by using a 2 (Information distribution: all shared, hidden profile) X 2 (Prime: counterfactual, non-counterfactual) ANOVA with percentage of critical clues recalled as having been discussed as the dependent variable. The average proportion of the critical clues that were recalled as having been discussed by the groups in each condition is summarized in Figure 5. Again the predicted interaction did not reach significance, F (1, 84) = .38, p = .54. However, there was a main effect of information distribution. Groups in the all shared condition recalled discussing a higher proportion of the critical clues (M = .47) than groups in the hidden profile condition (M = .26), F (1, 84) = 32.31, p < .01. There was no effect of prime on recall of discussion of critical clues, F (1, 84) = 1.36, p = .25.

Figure 5. The Effect of Prime and Information Distribution on Recalled Discussion of Critical Clues
To determine whether activation of a simulation mind-set increased the recall of discussion of critical clues a t-test was conducted with counterfactual thought activation as the independent variable (groups that produced at least one counterfactual thought in response to the priming story vs. groups that did not produce at least one counterfactual thought in response to the priming story) and proportion of critical clues recalled as having been discussed as the dependent variable. There was no significant difference in the proportion of critical clues that were discussed based on whether counterfactual thoughts were listed, $F(1, 86) = .43, p = .51$.

**Recall of Discussion of Shared Clues**

Interestingly, the proportion of shared information that was recalled as having been discussed did depend on information distribution and the interaction between information distribution and prime. A 2 (Information distribution: all shared, hidden profile) X 2 (Prime: counterfactual, non-counterfactual) ANOVA with proportion of shared clues recalled as having been discussed as the dependent variable was run. The average proportion of the shared clues that were recalled as having been discussed by the groups in each condition is summarized in Figure 6. There was no effect of either prime, $F(1, 84) = .00, p = 1.00$, or information distribution, $F(1, 84) = .00, p = .95$. The interaction between information distribution and prime was significant, $F(1, 84) = 13.72, p < .01$. Simple effects analyses revealed that in the all shared condition, non-counterfactually primed groups recalled discussing more shared clues ($M = .30$) than counterfactually primed groups ($M = .22$), $F(1, 84) = 6.86, p = .01$. In contrast, in the hidden profile condition, counterfactually primed groups recalled discussing more shared info ($M = .30$) than non-counterfactually primed groups ($M = .22$), $F(1, 84) = 6.86, p = .01$. In addition, within the counterfactual condition, groups in the hidden profile condition ($M = .30$) recalled discussing more of the shared clues than groups in the all shared condition ($M = .22$), $F(1, 84) = 7.08, p = .01$. Within the non-counterfactual condition, groups in the all shared condition ($M = .30$) recalled discussing more of the shared clues than groups in the hidden profile condition ($M = .22$), $F(1, 84) = 6.63, p = .01$. This pattern of results is not surprising given that it is very similar to the pattern of results obtained for the actual discussion of the shared clues.
Figure 6. The Effect of Prime and Information Distribution on Recalled Discussion of Shared Clues

Relationship Between Actual and Recalled Discussion of Clues

We expected the correlation between the number of critical clues that the groups reported discussing and the number of critical clues that the groups actually discussed to be significant. As expected, recall of discussion of the critical clues was significantly positively correlated with actual discussion of the critical clues, \( r(81) = .75, p = .00 \). We also expected the correlation between the number of shared clues that the groups reported discussing and the number of shared clues actually discussed to be significant. Recall of discussion of the shared clues was significantly positively correlated with actual discussion of the shared clues, \( r(81) = .81, p = .00 \).

**Process Hypotheses**

*Equity of Discussion*

We had hypothesized that if the counterfactual prime does induce a simulation mind-set as Galinsky and Kray (in press) suggested, it would be reasonable to expect the simulation mind-set to produce greater decision accuracy by inducing more equitable discussion of the decision alternatives. We tested this idea using the standard deviation of the number of clues discussed about the three suspects as the dependent variable. If an equal number of clues related to each suspect were discussed, then the standard deviation would equal zero. As the inequity of discussion rises, so will the standard deviation. Specifically, we predicted that if the counterfactual prime is actually inducing groups to discuss a more equitable amount of information about the suspects, then there should be a
main effect of prime on the standard deviation of the number of critical clues related to each suspect that are discussed. In the counterfactual prime condition, we expected groups to discuss a more equitable number of pieces of information about each suspect, thus resulting in a relatively small standard deviation. However, in the non-counterfactual condition, we expected groups to primarily discuss information about the suspect that is implicated in the individual packets, thus resulting in a relatively large standard deviation. This hypothesis was tested using a 2 (Information distribution: all shared, hidden profile) X 2 (Prime: counterfactual, non-counterfactual) ANOVA with standard deviation of the number of pieces of information about each suspect that were discussed as the dependent variable. There were no significant effects of prime (F (1, 78) = .31, p = .58), information distribution (F (1, 78) = .00, p = .97), or the interaction (F (1, 78) = 1.28, p = .26) on equity of discussion.

Repetition of Clues

We had hypothesized that an alternative way the counterfactual prime may operate is through increasing the attention that is given to the critical clues. The number of times each critical clue was repeated once it was introduced into the discussion served as our measure of the amount of attention that was given to the critical clues. We tested this hypothesis using a 2 (Information distribution: all shared, hidden profile) X 2 (Prime: counterfactual, non-counterfactual) ANOVA with total number of times the critical clues were repeated as the dependent variable. However, the average number of times the critical clues were repeated was not significantly affected by prime, F (1, 78) = .01, p = .91, information distribution, F (1, 78) = .00, p = .98, or the interaction, F (1, 78) = .13, p = .72. A 2 (Information distribution: all shared, hidden profile) X 2 (Prime: counterfactual, non-counterfactual) ANOVA with total number of times the shared clues were repeated as the dependent variable revealed that prime, F (1, 78) = .65, p = .42, information distribution, F (1, 78) = .31, p = .58, and the interaction, F (1, 78) = .00, p = 1.00, also did not affect the number of times the shared clues were repeated.

Discussion

Processes Through Which the Counterfactual Prime May Operate

We successfully replicated Galinsky and Kray’s (in press) finding that groups primed with the counterfactual prime were more likely to correctly identify the guilty
suspect than groups primed with the non-counterfactual prime. In addition, groups that were counterfactually primed discussed significantly more critical clues than groups that were non-counterfactually primed, and there was a non-significant tendency for the number of critical clues that were discussed to be correlated with decision accuracy. In contrast, as expected, there was no main effect of priming condition on the discussion of the shared clues and also no relationship between discussion of the shared clues and decision accuracy.

We added information distribution as a factor in the design and included an all shared condition in which all of the group members were given all of the information. Since all of the group members already knew the complete set of information in the all shared conditions, we expected decision accuracy to be more likely among groups in the all shared conditions than among groups in the hidden profile conditions. This was not the case; however, close inspection revealed that the failure to obtain a main effect of information distribution was likely due to the abnormally low percentage of groups in the all shared/non-counterfactually primed condition that correctly identified the guilty suspect.

We also tested two potential processes through which the counterfactual prime might have operated. The first process we tested was Galinsky and Kray’s (in press) idea that the counterfactual prime was operating by priming a simulation mind-set. Recall that a simulation mind-set is a mind-set in which, rather than fixating on the first solution that comes to mind, one thinks about a problem from many different angles and comes up with alternate solutions, one of which may be the opposite of the first solution that comes to mind (Galinsky & Kray, in press). If the counterfactual prime does operate by priming a simulation mind-set, one would expect the counterfactually primed groups to discuss a more equitable amount of information about the suspects. However, the data do not support this hypothesis. There was no significant difference in the equity of discussion based on either the type of prime, the information distribution, or the interaction.

We had also alternatively hypothesized that the counterfactual prime might increase the groups’ focus on the critical clues (the clues that implicated the guilty suspect) once those clues had been introduced into the discussion. If the critical clues were repeated more often, then it was possible that the groups were considering them
more seriously and these clues would be more likely to influence the groups’ final
decision. However, we also found no evidence that prime, information distribution, or the
interaction predicted decision accuracy.

One untested reason that the counterfactual prime, or simulation mind-sets in
general, may produce greater group decision accuracy is that it may reduce the group
members’ evaluation bias against information that does not support their initial decision.
Greitemeyer and Schulz-Hardt’s (2003) work seems to suggest that what many successful
attempts at attenuating the bias towards discussing primarily shared information have in
common is that they increase the perceived importance of critical uniquely known
information. In their second study, half of the participants read a transcript of a group
discussion in which all of the information about managerial candidates was disclosed.
The other half of the participants first read a packet of information that did not contain all
of the information about the managerial candidates, and the information it did contain
favored one of the less desirable candidates. These participants then read the same
transcript of a group discussion in which all of the information was disclosed. They found
that participants who read the hidden profile first and formed a preference for a particular
managerial candidate later rated information that favored that candidate as more
important and more positive than information that did not favor their preferred candidate.
This was not true for the participants that only read the transcript of the group discussion,
which suggests that the participants who read the discussion after making a decision
evaluated the information contained in the transcripts in a biased manner. This means that
not only must the tendency to discuss primarily shared information be overcome in order
for groups to make better decisions than individuals (Stasser & Titus, 1985), but so must
the tendency to evaluate information in a biased manner in order to support one’s initial
decision (Greitemeyer & Schulz-Hardt, 2003). Priming group members with a simulation
mind-set may do just that; by inducing consideration of the other alternatives, the biased
evaluation of information that does not support one’s initial choice may be attenuated,
which allows the critical information to influence the group choice.

One way to examine the effect of a simulation mind-set on the evaluation of
information and decision quality would be to replicate Greitmeyer and Schulz-Hardt’s
(2003) study using the homicide investigation information set with the addition of a
counterfactual condition. Half of the participants would individually read a hidden profile and half would read a version of the story that contained all of the information. All participants would then indicate who they believed was the guilty suspect. Then, one third would receive the counterfactual prime, one third would receive the non-counterfactual prime, and the final third would serve as the control group and receive no prime. Next, all groups would read the transcript of a group discussion that contains all of the information, and after each statement, participants would rate the importance, positivity, and credibility of the statement. Participants would then be asked to make a decision as to who committed the murder while thinking aloud and being recorded. Finally participants would be asked to complete as many “if only” statements related to the story as they feel comfortable completing. This design would allow for the examination of both the effect of a simulation mid-set on evaluation of information and also on the likelihood of thinking in a counterfactual manner. If the counterfactual prime does operate by reducing the bias against information that does not support the initial decision, then when participants read the hidden profile, they should not show the bias against the information that does not support their initial decision when they are counterfactually primed, but they should show the bias when they are not counterfactually primed. In addition, in the hidden profile condition, the reduction of bias against information that does not support the initial decision in the counterfactual prime condition should result in a greater likelihood of choosing the guilty suspect in the counterfactually primed condition than in the non-counterfactually primed conditions.

The Peculiar Data in the All Shared/Non-Counterfactual Condition

The low solve rate of the groups in the all shared/non-counterfactual condition is particularly troubling. Even though group members in these groups were given all of the information, they correctly identified the guilty suspect the least often of all of the conditions. This is troubling because if the non-counterfactual prime was actually an effective control condition, the groups should be solving at the rate that is typically seen in the all shared condition in this literature, which is about 65% as opposed to the 27% solve rate observed in the current study. Especially puzzling is the fact that the low solve rate cannot be explained by lack of discussion of the critical clues. The all shared/non-counterfactual condition in which 27% of the groups correctly identified the guilty
The suspect discussed the critical clues at a rate similar to that of the all shared/counterfactual prime condition in which 73% of the groups correctly identified the guilty suspect (the highest solve rate of the four conditions). It is possible that the non-counterfactual prime was actually priming the groups with an unexpected concept. We investigated this possibility by running two control conditions in which groups were either given the hidden profile or all shared materials but no prime at all to determine whether the non-counterfactual prime is not an effective control condition.

The data suggest that the non-counterfactual prime is not an effective control. While groups in the hidden profile/control condition and groups in the hidden profile/non-counterfactual prime condition correctly identified the guilty suspect at similar rates (40.9% and 42.9%, respectively), 61.9% of the groups in the all shared/control condition correctly identified the guilty suspect compared to 27% of the groups in the all shared/non-counterfactual prime condition.

The question then becomes why is the non-counterfactual prime an ineffective control, especially in the all shared condition. Although the answer is not yet clear, we have ruled out several possible explanations. First, it was possible that the non-counterfactual prime somehow influenced participants to choose one of the innocent suspects at an increased rate. However, the groups that chose an incorrect suspect tended to show the same distribution of choice between the two possible incorrect suspects no matter what priming condition they were in (in the all shared condition; counterfactual prime: 50% chose Suspect B, 50% chose Suspect M; non-counterfactual prime: 62.5% chose Suspect B, 37.5% chose Suspect M; control condition: 62.5% chose Suspect B, 37.5% chose Suspect M). Clearly, the non-counterfactual prime is not biasing the groups towards choosing a particular one of the incorrect suspects.

Second it was possible that for some reason the pre-discussion preferences differed between the priming conditions. As is well-documented, pre-discussion preferences heavily influence and predict the group discussion (Stasser, 1999; Brodbeck, Kerschreiter, Mojzisch, Frey, & Schulz-Hardt, 2002; Schulz-Hardt, Frey, Lüthgens, & Moscovici, 2000). Because the pre-discussion preferences are indicated before the priming manipulation, there is no reason to believe that the priming manipulation caused these differences; the distributions of pre-discussion choices could differ between the
priming condition just by chance. After examining the pre-discussion preferences, it appears that the pre-discussion preferences are distributed roughly similarly between conditions (See Table 3), and thus cannot explain the anomalously low decision accuracy of the groups in the all shared/non-counterfactual prime condition.

Table 3. Distribution of Pre-discussion Preferences

<table>
<thead>
<tr>
<th>Information Distribution</th>
<th>Prime Condition</th>
<th>Suspect B (Incorrect)</th>
<th>Suspect M (Incorrect)</th>
<th>Suspect E (Correct)</th>
</tr>
</thead>
<tbody>
<tr>
<td>All Shared</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Counterfactual Prime</td>
<td>27.3%</td>
<td>21.2%</td>
<td>51.5%</td>
<td></td>
</tr>
<tr>
<td>Non-Counterfactual Prime</td>
<td>28.8%</td>
<td>27.3%</td>
<td>39.4%</td>
<td></td>
</tr>
<tr>
<td>Control Condition</td>
<td>36.5%</td>
<td>20.6%</td>
<td>42.9%</td>
<td></td>
</tr>
</tbody>
</table>

Another possibility is that the non-counterfactual prime somehow primed a group norm. Postmes, Spears, and Cihangir (2001) demonstrated that groups that participated in a consensus norm inducing task (making a collage together) before discussing hypothetical academic position candidates were less likely to choose the candidate that was the best suited for the position than the groups that participated in a critical norm inducing task (evaluating a policy proposal as a group). It is possible that the non-counterfactual prime induced a consensus norm, which then resulted in decreased decision accuracy. This is a reasonable assumption given that groups in the non-counterfactual prime conditions often seemed unsure of what to do when asked to write down what Sue was thinking after the concert because the non-counterfactual story was so straight-forward (basically Sue went to a concert, and someone else won a prize). It may be that this group uncertainty resulted in a consensus norm because there did not appear to be a correct or logical way of proceeding. However, if this is the case, it is uncertain why the non-counterfactual prime would not have the same effect in the hidden profile condition.

An important note is that the low solve rate in the all shared/counterfactual prime does not necessarily indicate a failure to replicate Galinsky and Kray’s (in press) results. Upon close inspection, our data from the all shared condition looks much more like their
data, which was collected in a hidden profile paradigm. One possible explanation may be that Galinsky and Kray allowed their participants to take notes while they read the homicide investigation transcript and then use those notes during the discussion. Having notes may lend the same kind of validity to information as having affirmation by another group member. Parks and Cowlin (1996) demonstrated that when a piece of information can be verified by re-examining the written source of the information, only one person needs to have access to it in order for the group to continue discussing it (operationalized as repetition of the information). However, if the source of the information cannot be re-examined, Parks and Cowlin found that at least two group members must have originally been given the piece of information in order for the group to continue discussing it. So, it may be that Galinsky and Kray’s (in press) paradigm in which participants could take notes was essentially more similar to an all shared paradigm in the sense that the notes lend the same kind of validity to information as sharing the information does. This could mean that the difference in solve rates between the counterfactually primed and non-counterfactually primed groups that they found may have been inflated due to the same mysterious effect of the non-counterfactual prime that we found in our all shared/non-counterfactual prime condition. In fact, when we considered only data from the counterfactual prime conditions and the control conditions in our study, there is no effect of prime on decision accuracy, $\chi^2 (1, N = 86) = 1.12, p = .29$.

Thus, it may be that Galinsky & Kray’s (in press) finding that counterfactually primed groups are more likely to correctly solve a group problem than non-counterfactually primed groups is due more to the deleterious effect of the non-counterfactual prime than to any positive effect of the counterfactual prime. Further research should investigate the process through which the non-counterfactual prime is operating and determine whether it is actually depressing group decision accuracy.
References


Galinsky, A., & Kray, L. J. (in press). From thinking about what might have been to sharing what we know: The role of counterfactual mind-sets on information sharing in groups.


Appendix A

Note: The participants in the all shared conditions will receive all of the interview information. In the hidden profile conditions, one participant will receive clues 11, 41, and 61; the second participant will receive clues 12, 42, and 62; and, the third participant will receive clues 13, 43, and 63. These unshared clues are highlighted in this version of the mystery for easy identification, but are not highlighted in the materials that the participants will receive.

The Case of the Fallen Businessman

By Garold Stasser

Revisions by Gwen Wittenbaum and Dennis Stewart

Web version created by Jamonn Campbell

URL for WEB version: http://www.users.muohio.edu/campbeqj/Task/

Miami University
Oxford, OH 45056
MAJOR CHARACTERS

Robert Guion: The Victim

Marion Guion: The victim’s wife

Lt. Mark Moody: Detective in charge of the investigation

Sgt. Cassini: Police officer assisting in the investigation

Eddie Sullivan: Handyman who worked for the Guions

Billy Prentice: Yardman who worked for the Guions

Mickey Malone: Owner of MM Auto Parts; business associate of the victim

Sam Nietzel: Parts manager for Guion Lincoln/Mercury

Dave Daniels: Owner of Dave’s Quick Stop in the Eastwood Shopping Center

** The suspects under consideration are:

Mickey Malone
Billy Prentice
Eddie Sullivan
LOCAL BUSINESSMAN
MURDERED

Robert Guion, a prominent local businessman was found dead behind his Crestview home this morning. Detective Lt. Mark Moody of the Hilltown precinct reported that Mr. Guion had apparently been assaulted when leaving his home to play golf early this morning. He was struck on the head over the left eye and fell down a flight of stairs leading from a second story deck at the rear of the house.

The preliminary coroner’s report concluded that death was cause by injuries sustained from the fall and not from the blow to the head. The report estimated that Mr. Guion’s death occurred between 6:30 and 7:00 AM. Lt. Moody would neither confirm nor deny rumors that Mr. Guion had been robbed. “We’re following all leads. That’s all I have to say for now,” said Lt. Moody.

[From an article in the weekend edition of the local paper, the Valley Sentinel.]
Marion Guion

Excerpts from
Lt. Moody’s (Lt.M) interview with
Marion Guion (Ms. G), wife of Robert Guion

Lt. M: Mrs. Guion, I know this isn’t going to be easy, but I need you to answer some questions for me.

Ms. G: It’s OK. It has to be done. And please call me Marion.

Lt. M: OK,… Marion,… tell me what you remember about Saturday morning.

Ms. G: Well, I always sleep in on Saturdays. I got up around 9 or 9:15 and did aerobics from 9:30 to 10. After that I showered and was drying my hair when I heard a knock at the patio door. It was Eddie Sullivan, our handyman.

Lt. M: That was about 10:30?

Ms. G: Yes, I think so… I’m not absolutely sure.

Lt. M: You are sure about the times that you got up and did aerobics?

Ms. G: Yes, I’m fairly sure of those times. You see, I watch an aerobics program on TV; it’s on every morning from 9:30 to 10.

Lt. M: So, when Mr. Sullivan told you that your husband was hurt, what did you do?

Ms. G: He didn’t actually tell me that it was Bob… not at first. He just said that there had been an accident and that I should call an ambulance… I remember feeling scared, but it didn’t occur to me that it might be Bob.
Lt. M: This was the first that you knew that something had happened?

Ms. G: Yes, Bob always plays golf on Saturday morning; he always leaves early and doesn’t return until 11 or so. I though he was that the country club.

Lt. M: You said that you were scared. Did you suspect the Mr. Sullivan wasn’t telling you everything?

Ms. G: Not really… I suppose that I was just reacting to the urgency in Eddie’s voice.

Lt. M: Do you know if Mr. Guion ever left the house during the morning?

Ms. G: No, I’m not sure. All I remember is that he was talking on the phone in the study… it’s across the hall from the bedroom. I remember it was light outside. must have been around 6. Next thing I knew, I heard voices, or a voice… shouting… I’m not sure. I was still half-asleep. It sounded like it was coming from outside.

Lt. M: Where is the bedroom located?

Ms. G: At the back of the house, on the northwest corner. Anyway, I thought it was Bob. I though maybe he was yelling at the cat. She sometimes runs out the patio door when he’s leaving and it infuriates him. But then I heard what sounded like a groan… and something fall. This woke me up completely. I went to the window and looked out but didn’t see anything.

Lt. M: Can you see the deck from your window?
Ms. G: No, not very well. I remember looking at the clock. It was about 6:40. I thought, “Bob is usually gone by now.” Then I heard a car on the gravel driveway. I went to the study window at the front of the house but didn’t see anyone.

Lt. M: Did you think it was a car leaving?

Ms. G: Yes, I thought so. I saw Bob’s pickup in the carport and I assumed that he took the Mercury out of the garage. Sometimes he takes the pickup. I remember thinking that the noise I heard must have been the garage door closing. It always comes down with such a bang.

Lt. M: Can you see under the carport from the study window?

Ms. G: Oh… yes, I can see under it completely.

Lt. M: So you suspected nothing until Mr. Sullivan came to the patio door?

Ms. G: That’s right. I thought it was unusual that he was at the back door. He usually comes to the front door. And he looked upset. He opened the door partway when he saw me and shouted, “Call an ambulance. There’s been an accident.” Or something like that. He mad it sound very urgent.

Lt. M: So what did you do?

Ms. G: I called for an ambulance like he said… Then I went out… on the deck (bursts into tears).

Lt. M: I know that this is hard Marion… but we’re just about through.

Ms. G: I can’t go on.
Lt. M: I know you are upset, but please try to continue. It’s very important… now when did you realize that it was your husband?

Ms. G: When I got out on the deck… I looked down over the railing… I was stunned… Eddie looked up at me and shook his head. Then I could tell that it was Bob, and somehow I knew that he was… gone (sobbing). I fell apart. I couldn’t stand looking at him. I went back inside… I and stayed there until the ambulance came. Eddie came up, and asked if there was anything he could do. I think I asked him to call my sister. Anyway she got here just before the ambulance.

Lt. M: Marion, there was no wallet or identification on your husband. Did he ordinarily carry a wallet?

Ms. G: Yes, he always does.

Lt. M: Did he carry a lot of money?

Ms. G: Not a large amount. Usually no more than $50.

Lt. M: Do you mind if we see if he left his wallet somewhere in the house on Saturday?

Ms. G: No, go ahead.

Lt. M: Thank you for your help Marion. Take care.

[Lt. Moody and Marion Guion searched the house, but did not find the wallet.]
Eddie Sullivan

Excerpts from
Sgt. Cassini’s (Sg. C) Interview with
Eddie Sullivan (Ed. S), The Handyman

Sg. C: Mr. Sullivan, you said that you arrived at Mr. Guion’s about 6 Sat. morning. You were tearing down a barn for him, I believe.
Ed. S: Yeah.. about 6… the sun was just coming up. I like to get my work done early before it gets real hot.

Sg. C: Did you notice anything unusual when you arrived?

Ed. S: No… The light was on in Mr. Guion’s study, but that wasn’t unusual. He is always up when I get there in the morning. He was a hard worker. He earned his money; it wasn’t given to him.

Sg. C: How did you happen to notice Mr. Guion’s body?

Ed. S: I went back to my truck to get my crowbar. I left it laying next to the truck. When I got there, the crowbar was gone. I looked around… that’s when I saw Mr. Guion laying in the grass through the breezeway. At first, I thought it was Billy.. you know Billy… ah … Prentice, he cuts the grass on Saturdays. He’s always there bright and early and I though maybe he had hurt himself. Anyway, I ran back there. I was shocked to see M. Guion. I didn’t think he was even there ‘cause he plays golf on Saturday morning. He leaves at 6:30, regular as clockwork, and is never back till about noon.

Sg. C: OK, so you ran over to Mr. Guion…

Ed. S: Yeah, like I say I was shocked. He looked real bad… blood on his head and laying there real awkward. I ran up the stairs and pounded on the patio door. I
started to open it and then I saw Mrs. Guion coming in from the living room. I
thought I shouldn’t alarm her too much so I just said, “Call an ambulance.
There’s been an accident.” She started to run past me like she knew it was bad
but I stopped her and said, “It’s alright, just call the ambulance.” I never told her
it was Mr. Guion. I didn’t know he was dead till I got back down the stairs.

Sg. C: Did you ever find the crowbar?

Ed. S: What?… Oh… no. I never did. I never looked again. I was real upset. I didn’t
even go back to the barn. I just left after the ambulance came. By the time Mrs.
Guions’s sister and her husband were there and I didn’t figure that I could do
anything.

Sg. C: You said at first you thought it was Billy Prentice lying there in the grass instead
of Mr. Guion. Was Billy there Saturday morning?

Ed. S: You know I don’t know… come to think of it his car wasn’t there and none of the
yard tools, or the lawn mower, was out. But I though I heard his station wagon
earlier.

Sg. C: When was that?

Ed. S: I can’t say for sure. I just remember hearing a car with a loud muffler and
thinking, “That’s Billy.” None of Guion’s cars would ever sound like that. I’d
guess around 7.

Sg. C: Did you hear anything else? Did you hear anything like a fight or, perhaps, Mr.
Guion falling?

Ed. S: No, can’t say as I did. You know the barn is quite a piece from the house…
probably 200 or 300 yards. And there’s a woods between there too.
Sg. C: You said you went back to pick up your crowbar by your truck. Where was your truck?

Ed. S: It was in the carport beside Guion’s pickup.

Sg. C: Why didn’t you drive it down to the barn where you were working?

Ed. S: Well… it had rained the night before, and I didn’t want to get it stuck down there. There’s a gravel path but it’s not wide enough. Besides Mr. Guion didn’t want me making ruts in the grass.

Sg. C: Eddie, did you and Mr. Guion get along?

Ed. S: Yeah… I always liked him… He was real fair when it came to business… paid well… easy to work for.

Sg. C: Your daughter worked at Guion’s car dealership, didn’t she? How did they get along?

Ed. S: Yeah… She was his bookkeeper for several years. All of a sudden she quit. I didn’t ask her about it. She seemed upset, but I figured that that was their business. You know what I mean?

Sg. C: Sure, if you think of anything else that I should know, give me a call. I’ll be in touch.
Mickey Malone

Excerpts from
Lt. Moody’s (Lt. M) Interview with
Mickey Malone (M.M.), owner of MM Auto Parts

Lt. M: Mr. Malone, I have to ask you some hard questions. It’s well known that you and Mr. Guion go back a long way but things were kind of rough between the two of you lately.

M. M.: We had some differences.

Lt. M: Did you call Mr. Guion Saturday morning?

M. M.: Yes

Lt. M: Why?

M. M.: Well… we always play golf with two other fellows on Saturday mornings… a foursome, you know. Well… the last 2 weeks things had been awkward… downright nasty at times. I told him we either put this thing behind us or else… or else either he or I should drop out of the foursome. It just wasn’t fair to the others… to ruin their golf.


M. M.: Yeah. Anyways, I wanted to clear thing up before we got to the country club.

Lt. M: You play at Mountain View?

M. M.: Yeah.

Lt. M: What did Mr. Guion say when you called him?
M. M.: Bob told me to stuff it. I told him, “If you’re playing golf, I’m not!” He said, “Fine, do what you want.”

Lt. M: What did you do?

M. M.: My first impulse was to drive over to his place and work this out face-to-face. I go to the Crestview turnoff and thought o myself, “This is silly. We’ll just end up fighting.” I turned back.. stopped at a coffee ship across from Eastwood… there on 160th. I thought about it some more and decide to go play golf. Just ‘cause Bob wanted to be a horse’s rear didn’t mean I had to ruin my day.

Lt. M: What time did you leave home?

M. M.: 6:20.. 6:30… I don’t know… somewhere around then.

Lt. M: How long does it take to get to Crestview from your house?

M. M.: I don’t know. Maybe… it’s about a mile north of Meadowlane… that’s about 9 miles then… probably 15 minutes

Lt. M: How long were you at the café?

M. M.: I don’t recall for sure. Why? What does it matter anyway?

Lt. M: Mr. Malone, you and Mr. Guion were not on the best of terms. To be honest, we don’t know what happened last Saturday morning but its clear that there was foul play. We are just following all leads. If you don’t want to answer my questions, you don’t have to… at least, not right now.

M. M.: I really don’t know. As I remember, I drank 2 cups of coffee and then left… maybe 10 minutes.
Lt. M: You went to the golf course straight from the café?

M. M.: Right.

Lt. M: It’s about 5 miles from Eastwood to Mountain View golf course?

M. M.: Yeah… about.

Lt. M: So you left home somewhere around 6:20 or 6:30. Fifteen minutes to Crestwiew; a couple of minutes back to the café, let’s say; 10 or so minutes of coffee drinking; and say another 8 minutes to Mountain view… Let’s see… That should have put you at the golf course around 7, give or take 5 minutes. Is that about right?

M. M.: Sounds right.. yeah, I got there right at 7; that’s when we always meet.

Lt. M: You did not go to Guion’s place on Saturday morning?

M. M.: No, I didn’t.

Lt. M: Thanks, Mr. Malone, for your time.
Lt. M: Billy, I need to talk to you about Mr. Guion’s death. You did hear about it didn’t you?
B. P.: Yes, sir. It was awful, wasn’t it?

Lt. M: Yeah, too bad. Were you at Mr. Guion’s place on Saturday morning?
B. P.: No, sir.

Lt. M: Don’t you usually cut the grass on Saturday?
B. P.: Yes, sir… usually…, but not last Saturday.

Lt. M: Why not?
B. P.: Ah.. I just cut it the week before.

Lt. M: But this time of year.. don’t you usually cut it every week?
B. P.: Yeah, but … I wasn’t feeling good last Saturday morning.. Besides it rained Friday night and the grass was probably wet.

Lt. M: But I mowed my grass last Saturday morning. By 9:30, the sun had dried the grass out. Remember, it was clear and hot. Didn’t it occur to you that the grass would be dry later in the morning?
B. P.: I guess so… but by then I figured I wouldn’t have time to get it done before my ball game.

Lt. M: Billy, what time was your ball game?

B. P.: Noon.

Lt. M: How long does it usually take you to cut the grass?

B. P.: A couple of hours, but I had other things I needed to do out there.

Lt. M: Couldn’t you have done those other things while the grass was drying and still been able to make it to your ball game?

B. P.: I suppose so… I don’t know… I like to get to the game early… Besides I said I wasn’t feeling so good in the morning.

Lt. M: Billy, I should tell you right out… Mr. Sullivan… You know Mr. Sullivan don’t you?

B. P.: You mean Eddie, the carpenter? Yes, sir, I know him.

Lt. M: Well, Mr. Sullivan heard your car at Guion’s on Saturday morning. How do you explain that?

B. P.: How’d he know it was my car? When?

Lt. M: He just said that he heard your car about 7 Saturday morning. He said that he recognized the loud muffler.

B. P.: No, he couldn’t have. I wasn’t there at 7 on Saturday.
Lt. M: Billy, come one. We know that your car was at Guion’s place. We picked up fresh tire tracks along the edge of the gravel near the carport. They match your tires, Billy, and we know they weren’t a week old.

B. P.: OK… OK… I was there Friday to ask Mr. Guion for an advance. I was a little short on money. He gave it to me.

Lt. M: What time on Friday?

B. P.: Around 4:00, just before ball practice. I was broke and he always helps me out.

Lt. M: So you borrow money a lot? What do you need the money for?

B. P.: Ah… yeah, I suppose so… for my car. I work on my car a lot, fixing it up, keeping it in good shape.

Lt. M: OK, Billy, that’s all for now. We’ll talk later.

B. P.: Sir,… you know I didn’t hit Mr. Guion… You know I wouldn’t hurt him… He was always good to me.

Lt. M: Sure, Billy, I know… See you around.
Lt. M.: I’d like to ask some questions about Mickey Malone.
R. R.: I’ll be glad to help if I can.

Lt. M.: You play golf with Mr. Malone on Saturday morning. Right?

R. R.: Yes, I do. We have a regular foursome.

Lt. M.: Can you tell me anything about his relationship with Mr. Guion?

R. R.: They were always good friends… until this last few weeks. They had some sort of business disagreement. Mickey wouldn’t say a whole lot about it, though. They’ve had problems in the past, but it’s never been this bad.

Item 61  Lt. M.: What time did Mr. Malone arrive at the golf course last Saturday?

R. R.: Around 7 as usual.

Sg. C: Dave, when you called Saturday morning, you said that you found a wallet behind your store. Where did you find it?

D. D.: It was laying beside the dumpster in the back… next to some boxes that I had stacked out there.

Sg. C: What did the wallet look like?

D. D.: It was a nice one. It looked new… and expensive… so I thought it was strange that someone would throw it away.

Sg. C: Did it have any money in it?

D. D.: No, in fact it was empty. All that I found were Mr. Guion’s credit cards inside the dumpster.

Sg. C: You never found any money or a driver’s license?

D. D.: No, just 3 credit cards.

Item 62  Sg. C: What time did you find the wallet?

D. D.: Probably about 7 AM. Yeah, I remember because I got to the store just before 7 and was checking some stock in the back room right before I found the wallet.
Sg. C: What made you go outside?

D. D.: I heard a car pull up in back and then speed away. I went out to see what was going on but the car was gone by the time I got out there. That’s when I saw the wallet.

Item 43 Sg. C: So you heard a car right before you went out and saw the wallet. Are you sure it was a car?

D. D.: No… not really. I assumed it was a car because it ran real quite. I probably wouldn’t have heard it but the tires squealed when it left. Like I say, I didn’t see it.

Sg. C: Could it have been a pickup?

D. D.: I suppose so.

Sg. C: Are you sure the wallet wasn’t there earlier?

D. D.: Pretty sure, I walked right past there when I came in just a little earlier and I don’t know how I would have missed it if it was there.

Sg. C: Thanks, Dave. If you think of anything else, call me.
Sam Nietzel

Excerpts from
Lt. Moody’s (Lt. M) Interview with
Sam Nietzel (S. N.), Parts Manager for Guion Lincoln/Mercury

Lt. M: Mr. Nietzel, I need to ask you some question in regards to Guion’s connection with MM Auto parts. Were Guion and Malone having difficulties?

S. N.: Yes, I suppose so. We’ve done business with Malone for years. In fact, he started supplying parts for us when he was still operating out of the barn on the old Malone place.

Lt. M: I’ve heard that Malone got his real start by being a supplier for Guion and they were friends for years.

S. N.: Yes, that’s right… They’ve been friends way back… but they had their ups and downs… They always worked things out before… until this last thing. It seems that Malone started giving Guion substandard parts, which really steamed Bob because he is very concerned about giving his customers quality service. He even told me to stop ordering from Malone.

Lt. M: What was wrong with the parts?

S. N.: Well, some of them didn’t fit; some seemed to wear out and break easily. My guess is that they were either rebuilt or after marked parts.

Lt. M: When did you realize this was going on?

S. N.: About 2 months ago… It’s been a mess around here since.
Lt. M: So would you like to go back to MM Parts?

S. N.: No, and I especially wouldn’t do it without Mr. Guion’s OK. And he was deadset against it. Wouldn’t even talk about it! Mr. Guion was a proud and stubborn man.

Lt. M: Another matter… Do you know anything about Ms. Sullivan’s leaving the firm?

S. N.: That would be Sue Sullivan, the bookkeeper?

Lt. M: Yes, Sue Sullivan.

S. N.: No, I don’t really know anything in particular?

Lt. M: Nothing out of the ordinary happened before she left?

S. N.: Well, maybe… I didn’t know there was a problem until I overheard them arguing in his office. I didn’t mean to hear, but I couldn’t help it. I was going in the talk to Mr. Guion about something. Next thing I knew she was leaving… I mean leaving for good, packing up her things.

Lt. M: Did you hear what they were arguing about?

S. N.: No, they sounded real mad, but I couldn’t make out what they were saying… They stopped when they saw me coming.

Lt. M: Had they argued like that before?

S. N.: No, not that I know of. They always seemed to get along real well. Maybe it was… well, I don’t know.
Lt. M: Do you know if Mr. Guion had any enemies or dissatisfied customers?

S. N.: Not really. Mr. Guion treated his customers like royalty. He always said, “The customer is always right… always!” he not only said it, he lived by it.

Lt. M: Thanks, Sam, for your time. If you think of anything else, give me a call. You’ve been a great help.

S. N.: Glad to be… Want to get this mess sorted out.
Lt. M: I’d like to ask you a few questions if you don’t mind.
M. S.: Sure. What can I do for you?

Lt. M: Were you working here last Saturday?
M. S.: Yes, I was. The morning shift.

Lt. M: So you would have been here at 7 in the morning?
M. S.: Yes, I was covering the counter and the cash register.

Lt. M: Do you remember seeing this man in here last Saturday?
[He shows her a picture of Mickey Malone.]

M. S.: Hmm… yes, as a matter of fact, I do. He came in early; I’d guess around 6:30 or 6:45. Somewhere around then, shortly after I got here. Ordinarily I wouldn’t remember him because we get a lot of one-time traffic from the freeway and I know he’s not a regular. But I do remember because he just sat there and drank 2 cups of coffee rather quickly and then left all of a sudden - - like he was late for something. He didn’t even wait for his bill. He just left 2 dollars on the counter. I remember thinking, “I wish everyone would tip like that for a cup of coffee.”

Lt. M: How long was he here?
M. S.: Not very long… maybe 10 minutes, 15 minutes at most.
Lt. M: Can you tell me anything else about him? You said he seemed in a hurry. Did you notice anything else unusual?

M. S.: No, I wasn’t paying that much attention to him. We were pretty busy at the time.

Lt. M: OK, thanks for your time. Here’s 2 dollars for the coffee. See Malone isn’t the only big tipper. We cops appreciated service with a smile, too.
Lt. M: Marion, I need your help to clear up a couple of matters if you don’t mind.  
Ms. G: Sure.

Item 41  
Lt. M: Billy Prentice claims that he came by on Friday to ask your husband for an advance. Do you know anything about this?  

Ms. G: Why… yes, he did come by… in the afternoon, I believe.  

Lt. M: Did your husband give him any money?  

Ms. G: Yes, he did. I’m not sure how much, but I remember he said, kind of jokingly, “I wonder if I’ll ever get to pay Billy AFTER he does the work.”  

Lt. M: Do you know exactly what time it was on Friday when he came by?  

Ms. G: No, I’d only be guessing… late afternoon, I’d say.  

Lt. M: Billy Prentice seems to have problems handling his money. Does he borrow… or ask for advances on his wages… often?  

Ms. G: Yes… quite often.  

Lt. M: Do you have any idea what he uses the money for?  

Ms. G: Well… I’m not sure, but I think he has been involved with gambling.
Lt. M: What make you say that?

Ms. G: Well, I know he plays poker with some friends of his, and Bob and I ran into him once at the racetrack. We’ve only been there a few times, but I always like to go just to watch the horses. I think they’re beautiful. Anyway, Bob and I never bet more than a few dollars. But when we saw Billy there, he had quite a stack of betting slips in his hand. He noticed us just then and seemed really nervous and quickly walked away from the betting window. After this incident, Bob said he would keep an eye on Billy.

Lt. M: How long ago did this happen?

Ms. G: Hmm… about… it was soon after he started working for us. Probably 2 years ago.

Lt. M: One other thing, was Billy here anytime on Saturday morning?

Ms. G: No, I can’t say that he was, come to think of it. I guess with everything else I never gave it a thought, but he didn’t show up… At least, he never mowed the lawn.

Item 13 Lt. M: As I recall, you heard a car on the gravel out front about 6:40. You thought at the time that it was your husband driving away. Could it have been Billy or someone else driving up the drive?

Ms. G: Maybe… but, no. It couldn’t have been anyone driving up… If it had been it seems that I would have seen them. The only thing that I saw was Bob’s pickup in the carport… nothing else.

Lt. M: Did Mickey Malone come by anytime Saturday?
Ms. G: No… I don’t think so… Melissa, Mickey’s wife, called early Saturday afternoon. She said that they had just heard on the radio and wanted to know if there was anything that they could do.

Lt. M: They didn’t come over at any time?

Ms. G: Not on Saturday. They stopped by briefly on Sunday to offer their condolences.

Item 12 Lt. M: One other matter… Is it true that Eddie Sullivan has a hearing problem?

Ms. G: Yes, he is very hard of hearing. Sometimes when he gets a phone call, I have to call him. I’ve tried calling to him from the deck, but he never hears me. I have to walk right up to him before I can get his attention.

Lt. M: Doesn’t he have a hearing aid?

Ms. G: He has one, but the doesn’t wear it while he is working. He says that it doesn’t fit well. It’s one of those tiny ones and he’s afraid he will lose it.

Lt. M: I think that’s all, Marion. Thanks for your patience. I hope I don’t have to bother you again with these details.
Sgt. Cassini’s (Sg. C) Follow-up Interview with
Billy Prentice (B. P.), Guion’s Yardman

Sg. C: Billy, since you talked with Lt. Moody, some new things have come up. I remind you, Billy, that you don’t have to answer my questions if you don’t want to.

B. P.: Sir, I don’t mind. I have nothing to hide.

Sg. C: Very well. You said that you went to Guion’s on Friday night, not Saturday morning… Right?

B. P.: Yes Sir… Well, actually I went there Friday afternoon, not Friday night.

Sg. C: To borrow some money, I think you said.

B. P.: Yes, that’s right.

Sg. C: Was this money to pay off gambling debts, Billy?

B. P.: No. No, sir.

Sg. C: Is it true that you are an excessive gambler?

B. P.: No! I mean.. well, I gamble as much as the next guy… you know, poker with the boys… racetrack every now and then. I used to do it a lot more a couple years back, but I’ve really cut down. I don’t have a problem with it sir… really!

Sg. C: OK, so you were there on Friday and not on Saturday?
B. P.: Yes, sir, that’s what I said!

Sg. C: Those tire tracks that Lt. Moody told you about… Billy, those tracks were almost certainly made after Friday night’s rain. And, as you know, it rained from about 10 to midnight.

B. P.: But… [long pause]… I…

Sg. C: Billy are you sure that there is nothing that you want to tell me?

B. P.: Alright, sir… I was there… I went to do some work. I saw Mr. Guion just laying there. I want over to him. It was awful.

Sg. C: Billy, why didn’t you say something before?

B. P.: Nobody’s going to believe me. I though I’d just better get out of there an act like I didn’t know nothing.

Sg. C: So you ran.

B. P.: I sure did. I almost hit Mr. Sullivan’s truck when I was pulling out of the carport. I couldn’t get out of there fast enough. I swerved… that’s probably when I went off the road.

Sg. C: While you were at Guion’s did you see a crowbar?


Item 42 Sg. C: Where did you see it?
B. P.: It was laying in front of the garage door, the side door where I get the mower out. I remember moving it to the side so I could get the mower out.

Sg. C: That’s all? You just moved it over to the side?

B. P.: Yes, sir.

Sg. C: Anything else you remember about that?

B. P.: Well, I remember thinking that it must be Mr. Sullivan’s ‘cause Mr. Guion didn’t haven any tools to speak of around the place… excepting some garden tools. But then I thought that that was odd ‘cause Mr. Sullivan always makes this big thing about keeping his tools locked up when he’s not around. And I didn’t see him anywhere… just his truck.

Sg. C: Billy, the crowbar was found in the bushes south of the garage… with your fingerprints on it. Can you explain that?

B. P.: No, Sarg, I swear… I did pick it up, why would I throw it in the bushes?

Sg. C: That’s what I’d like to know… OK, let’s go on. What time would you say that you were at Guion’s on Saturday?

B. P.: I don’t rightly recall. I was late. Maybe 8, I’d guess. Like I said, I wasn’t feeling so good.

Sg. C: Did you take Mr. Guion’s billfold?

B. P.: No, sir. You gotta believe me. When I saw he was dead, I just got out of there!
Sg. C: How did you know that he was dead?

B. P.: I don’t know… He looked dead… He didn’t move when yelled… he wasn’t laying there natural like.

Sg. C: Did you go over to him? Did you check his pulse? Didn’t you even try to get help? Maybe call Mrs. Guion or something?

B. P.: No, I just got out of there. I didn’t think there was anything I could do.

Sg. C: Okay, thanks Billy. That’ll be all for now.
Eddie Sullivan – 2nd Interview

Excerpts from
Sgt. Cassini’s (Sg. C) Follow-up Interview with
Eddie Sullivan (Ed. S), the Handyman

Sg. C.: Eddie, since we last talked we found your crowbar in the bushes south of Guion’s garage. At least, we think it’s yours: it has “ES” stamped on it.

Ed. S.: Yeah, all of my tools are stamped. You can’t be too careful. They borrow them and forget they’re yours. You know what I mean?

Sg. C.: Do you have any idea how it got in the bushes?

Ed. S.: No… Can’t say as I do.

Sg. C.: We’re trying to get some things about last Saturday sorted out. You said you got to the Guion’s about 6 in the morning and went straight to the barn. Then about 7 you heard a car… with a loud muffler. Mrs. Guion thought you came to the patio door around 10:30. Is that about the time that you discovered Mr. Guion’s body?

Ed. S.: I’m not sure about that. It could have been around then. I really don’t remember.

Sg. C.: OK, Eddie, if you think of anything else, give me a call.
Mickey Malone – 2nd Interview

Excerpts from
Lt. Mood’s (Lt. M) Follow-up Interview with
Mickey Malone (M. M.), owner of MM Auto Parts

Lt. M.: Mr. Malone, I need to double check some things that you told me the other day.
You said you left home about 6:20 or 6:30 with the idea of going to Mr. Guion’s
house to talk to him.

M. M.: That’s right.

Lt. M.: But you never actually went to his place, rather you stopped for coffee.

M. M.: Yes

Lt. M.: So you were at the café about 10 minutes, I believe you said. And then you went
to the golf course, arrived there around 7.

M. M.: Yeah.

Lt. M.: You said that you had made overtures to Mr. Guion, wanted to clear things up.

M. M.: That’s right, but he’s been so hard headed.

Lt. M.: Well, is it true that you gave defective parts to Mr. Guion?

M. M.: My auto parts are of respectable quality as far as I know. If Bob had any
problems with the parts I gave him, it wasn’t my doing.

Lt. M.: Did he write this note to you?
M. M.: Ah, yeah, he did. When I read that he was going to ruin my business with other customers, I offered him the best terms I could. I was even willing to sell him parts at cost to try and patch things up. I mean… if I lost the business, I don’t know what I would do. But he can be so stubborn. So I called him Saturday morning. I just thought it was time to work this out, one on one.

Lt. M.: When did you receive the note?


Lt. M.: I see. OK, Mr. Malone, that’s all for now.
Appendix B

INSTRUCTIONS FOR CODING

Correct Information

Includes recall of specific pieces of information pertaining to the case. If the information is “echoed” by group members (i.e. one person states a piece of information and then another group member repeats it) it is counted only once. If the information is mentioned once and then is brought up again later, count it twice. Corrections of incorrectly recalled information are coded under this category. When a piece of information is brought up but not attributed to a suspect (e.g., “One if the suspects was on drugs but I don’t remember who.”), it is coded under “Other” unless the suspect’s name is immediately recalled by someone in the group.

--To Code: Use the item number under the appropriate category (see item key). If a piece of information is mentioned that pertains to the case but doesn’t fit into one of the numbered pieces of information, use “79” under the appropriate category. If a piece of information is used differently than it was intended on the item key (e.g., an implicating item for Billy is used to exonerate Billy instead), use the additional codes of “E”, “I”, or “N” in addition to the item number (e.g., 23E, 44I, 32N). Use these additional codes only if the different interpretation is fairly obvious.

Incorrect Information

Includes statements that incorrectly recall pieces of information from the case. There are five possible cases: the information may be recalled correctly, but attributed to the wrong suspect (e.g., “Mickey went out bar-hopping.”), the information may be recalled incorrectly but attributed to the right suspect (e.g., “Marion did aerobics at 6:00 am.”), the information is recalled incorrectly and attributed to the wrong person, general information that doesn’t pertain to a suspect is incorrectly recalled, or information is “made up” altogether.

--To Code: For right info./wrong person, code the correct item number under who it was attributed to. For wrong info./right person, code the correct item number under the correct suspect. For wrong info./wrong person, code the correct item number under the suspect it was attributed to. For wrong general information, code the correct item number under the “Other” category. And for information that is completely “made up,” use “90” under the
appropriate category. Again if items are used differently than as they are listed on the item list, use “E”, “I”, and “N”. (Again, use only in fairly obvious cases.)

**Inferences, Implications, or Embellishments**

This category includes statements that draw conclusions about a suspect based on the information in the case (e.g., “Billy needed money all the time; he probably is in debt to a loan shark.”), statements that make an assertion about the consequences of a certain action (e.g., “Eddie said he never looked for his crowbar; that could mean he tried to hide the evidence.”), or statements that elaborate or expand on the information (e.g., “Billy was always lying.”).

--To Code: Use a tally under the appropriate category for each occurrence.

**Statement of Preference**

Includes statements of who is suspected and who is not suspected (e.g., “I think Eddie did it.” or “I don’t think Mickey did it.”), and statements of indecision (e.g., “Uh-huh…” or “Yeah, I think so too.” Or “No, I don’t think so.”), these are coded as statements of preference under the appropriate category.

--To Code: Use a “+” under the appropriate suspect if a group member expresses suspicion of him. Use a “-“ under the appropriate suspect if a group member expresses doubt of his guilt. Use a “0” if a group member expresses confusion (e.g., “I don’t know who did it.”). If the confusion is directed at a suspect (e.g., “I’m not sure if Eddie did it.”), code the “0” under that suspect. Otherwise, code the “0” under “Other.” If other people are suspected (e.g., Marion), use the appropriate code under “Other.”

**Related Questions, Statements**

Includes questions (requests for clarification, forgotten info., etc.) or statements (opinions, personal experiences, etc.) that are DIRECTLY related to the information in the case (e.g., “What was the fight between Guion and Sue all about?” or “I’ve been hungover before; I can see why Billy didn’t want to cut the grass Sat. morning.”).

--To Code: Use a tally under the appropriate category. If a person is telling a long story or is beating around the bush to get to his or her question, only tally once for the person. If a person asks two different questions in a row, code each question.
Other “Non-related” Questions, Statements

Includes questions or statements that ARE related to the experiment, but AREN’T related to the information in the case itself (e.g., “Should we press the button now?” or “I guess we should go over all the information first before we make up our minds.”).

--To Code: Use a tally in the “Other” category for each occurrence.

Unrelated, Irrelevant, or Uncodable

Includes statements, comments, questions, etc. that are irrelevant for the purpose of the experiment or are uninterpretable (e.g., “This is my last experiment.” Or “What are you doing this weekend?” or “Aren’t all grad students geeks?”).

--To Code: Use a tally in the “Other” category for each occurrence. If several people are talking at once but you can’t any sense out of it, code a tally for each person (i.e., five tallies) and wait for something interpretable.
Appendix C
Information Coded for Murder Mystery (90-91 Edition)

EDDIE

Implicating:
11 Sue S’s argument with Mr. Guion (SN)
12 Hearing problem (MsG2)
13 Marion did not see Eddie’s truck in carport at 6:40 (MsG2)
14 Eddie habitually looks up tools (BP2)
15 Eddie knew that Guion always left around 6:30 (ES1)
16 Left his crowbar out for over several hours (ES1, ES2)

BILLY

Implicating:
31 Problems with money and gambling (MsG2, BP2)
32 No wallet on body; wallet was later found without money (MsG1, DD)
33 Eddie reported hearing Billy’s car around 7 (ES1, ES2, BP2)
34 Fingerprints on crowbar (BP2)
35 Lied about being at Guion’s Sat morning (BP1, BP2)
36 Tire tracks made Sat morning matched Billy’s (BP1, BP2)

Exonerating:
41 Marion confirmed borrowing money (MsG2)
42 Billy’s story about moving crowbar (BP2)
43 Car that dropped wallet quiet (DD)

MICKEY

Implicating:
51 Business Feud with Guion (MM1, SN, RR)
52 Argued with Guion on phone Sat morning (MM1)
53 Given time left home, would have arrived at Guion’s about 6:40 (MM1)
54 Wallet found near route that Mickey would have taken from Guion’s to golf course (MM1, DD)
55 Note from Guion to Mickey (MM2)
56 Guion’s continued refusal to accept Mickey’s offer (MM2, SN)
Exonerating:

61 Arrived at golf course at 7:00 (RR)
62 Car dropped wallet at 7:00 (DD)
63 Waitress confirmed stop for coffee (MS)

OTHER

71 Guion died between 6:30 and 7:00 (News)
72 Struck with crowbar; death due to fall (News)
73 Marion heard noise and vehicle leave at 6:40 (MsG1)
74 Marion arose around 9 and did aerobics from 9:30 to 10 (MsG1)
75 Guion liked by customers (SN)
76 Eddie arrived at 6:00; saw light in study (ES1)
77 Eddie reported finding Guion’s body (ES1, MsG1, ES2)
78 Eddie parked truck in carport (ES1, BP2)
79 Sue Sullivan quit job at Guion’s (ES1)
80 Billy felt ill Sat morning (BP1)
81 Billy did not cut grass Sat morning (BP1, MsG2)
82 Billy had a ball game at noon (BP1)
83 Mickey gave Guion defective auto parts (SN, MM2)
84 Mickey and spouse visited Marion on Sun (MsG2)
85 Crowbar found in bushes (ES2, BP2)
86 Rained Fri night (BP1, ES1, BP2)
87 “ES” stamped on crowbar (ES2)
89 Other details of case
90 Fabricated information

Note: Codes in parentheses refer to location(s) of information in the mystery. For example, ES1 is the first interview with Eddie, MsG2 is the second interview with Mrs. Guion, SN is the interview with Sam Nietzel, and News is the newspaper article.