

MOTIVATED FORGETTING AND ATTITUDE CHANGE

by

AMANDA LEIGH MORIN

Bachelor of Arts, 2004  
Baylor University  
Waco, Texas

Submitted to the Graduate Faculty of the  
College of Science and Engineering  
Texas Christian University  
in partial fulfillment of the requirements  
for the degree of

Master of Science

December 2008



## Acknowledgements

I would first like to express my sincere gratitude to Dr. Charles Lord, who has been my mentor over the last two years. The support and guidance you gave have made this very document and all it involves possible. I would also like to thank my committee members for all their suggestions and help throughout this process.

An earnest thank you to Dr. JoAnn Tsang whose mentoring during my years as an undergraduate has prepared me for the rigors of graduate school.

To my dear family, I owe a tremendous deal of gratitude. For my husband Philippe, you have been a constant presence of love and support throughout this process. Thank you for believing in me and sacrificing so much as I have pursued something that means so much to me. To my sweet Sophie, you are one of the distinct joys of my life.

Mom and Dad, through your purposeful parenting and loving guidance, I have become the person I now am, something I can claim with pride. The two of you have been my rock. Eric, it was a great adventure growing up with you. Thank you for being a fantastic brother and friend.

## TABLE OF CONTENTS

Acknowledgements .....	ii
List of Figures .....	iv
List of Tables .....	v
I. Introduction .....	1
Importance of Memory for Attitude-Relevant Actions .....	3
Role Playing.....	3
Cognitive Dissonance .....	4
Repeated Attitude Expression .....	4
Foot-in-the-Door Effect .....	5
Beliefs About Previous Attitude-Relevant Actions .....	5
Effects of “I Do Not Recall” on Memory .....	6
Effects of Repeated Memory Simulation and Genuine Memory Performance .....	6
II. Study 1 .....	7
Method .....	7
Participants .....	7
Procedures and Materials .....	8
Results and Discussion .....	10
Memory Accuracy .....	10
Memory Confidence .....	12
Attitudes .....	15
Summary of Results .....	16

III. Study 2	.....	19
Method	.....	19
Participants	.....	19
Procedures and Materials	.....	20
Results and Discussion	.....	22
Memory Accuracy	.....	22
Memory Confidence	.....	23
Attitudes	.....	27
Summary of Results	.....	30
IV. General Discussion	.....	31
Appendix	.....	36
References	.....	78
Vita		
Abstract		

## LIST OF FIGURES

1. Attitude Representation Model taken from Lord & Lepper (1999) .....	2
--	---

## LIST OF TABLES

1.	Mean Percentage of Correct Answers to Recognition Memory Questions in Session 3 (Experiment 1) .....	12
2.	Mean Confidence in Answers to Recognition Memory Questions in Session 3 (Experiment 1) .....	14
3.	Mean Session 3 Attitudes Toward Gay Men (Experiment 1) .....	17
4.	Mean of three semantic differential ratings (Good, Pleasant, Moral) for Gay Men (Experiment 1) .....	18
5.	Mean Percentage of Correct Answers to Recognition Memory Questions in Session 3 for Participants in the Do Not Recall Strategy Condition (Experiment 2) .....	24
6.	Mean Percentage of Correct Answers to Recognition Memory Questions in Session 3 (Experiment 2) .....	25
7.	Mean Confidence for Answers to Recognition Memory Questions in Session 3 for Participants in the Do Not Recall Strategy Condition (Experiment 2) .....	26
8.	Mean Confidence for Answers to Recognition Memory Questions in Session 3 (Experiment 2) .....	27
9.	Mean Session 3 Attitudes Toward Capital Punishment (Experiment 2) .....	29
10.	Mean of three semantic differential ratings (Good, Pleasant, Moral) for Capital Punishment (Experiment 2) .....	30

## Motivated Forgetting and Attitude Change

“Behavior is modified as a result of experience, that somehow a person retains residues of experience of such a nature as to guide, bias, or otherwise influence later behavior”.

--Donald Campbell (1963, p.97)

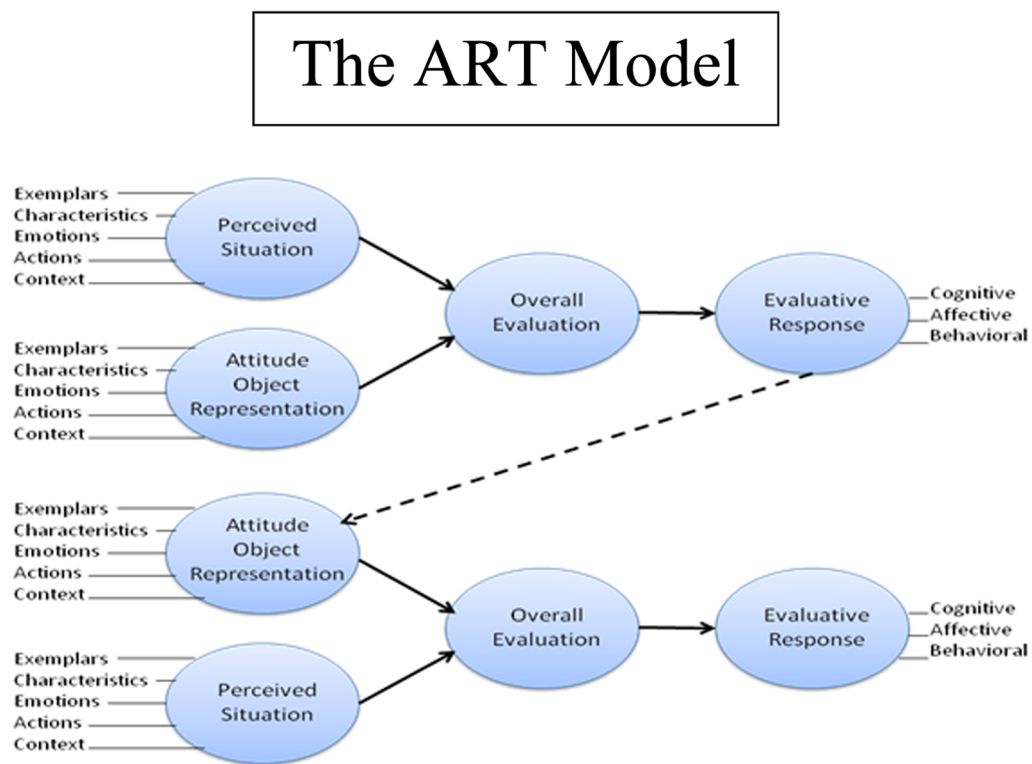
On March 13, 2007, Alberto Gonzales the 80<sup>th</sup> Attorney General of the United States testified before Congress as to his involvement in the dismissal of nine U.S. attorneys. Many media commentaries noted that on as many as 71 different occasions his answer to committee questions was that he “could not recall” the events that transpired. These media sources typically questioned whether these answers were truthful or an attempt to avoid incrimination. Commentators did not typically address the question suggested by research literature on memory, which is whether saying “I do not recall” 71 times might have actually impaired his memory for events. After not recalling so many times, did he stop remembering? The proposed experiments will investigate specifically whether saying “I do not recall” can impair memory for attitude-relevant actions. This is a theoretically important research question because prominent theories of attitudes hold that attitude reports are based in part on memories for actions taken in the past toward attitude objects.

Inducing people to act in line with a desired attitude can change thoughts and feelings concerning an attitude object and, as a result, change behavior as well (Bem, 1972; Festinger, 1957; Lord & Lepper, 1999). Is it possible that actions alter attitudes because people remember what they did and those memories are included in future cognitive associations when evaluating an attitude object? According to Attitude Representation Theory (Lord & Lepper, 1999), as shown by the dotted diagonal arrow in Figure 1, the evaluative response



made concerning the attitude object at Time 1 can be incorporated into the attitude object's representation at Time 2 and contribute to the overall evaluation of the attitude object at that time. When participants perform a positive behavior toward a gay man at Time 1 (the Time 1 behavioral response in Figure 1), for instance, the diagonal dotted arrow in the figure shows that the behavioral response can become one of the actions in the attitude object representation at Time 2.

Figure 1



Attitude Representation Model taken from Lord & Lepper (1999).

Do actions alter attitudes because people remember what they did? Do these memories inform new attitudes? Previous research has shown that people who remember behaving positively toward an attitude object report more positive attitudes toward that object than do people who remember behaving negatively toward the attitude object, even when

they “remember” behaviors that they only imagined and never actually performed (McIntyre, Lord, Lewis & Frye, 2003). McIntyre et al.’s (2003) study shows that actions are not always necessary, and that mere memory of attitude-relevant actions can be sufficient to alter attitudes. It follows then, that forgetting positive or negative actions, either performed or imagined previously, would result in less attitude change.

### Importance of Memory for Attitude-Relevant Actions

#### *Role Playing*

In an article on role playing and opinion change, Janis & King (1954) instructed participants to speak as sincere advocates of one side of a relevant social issue. Participants were given the position that was in the opposite direction of their own, and more extreme. Those participants who spoke persuaded themselves and changed their attitudes in the direction of the attitude position that they had advocated. Janis and King (1954) explained their results through biased scanning, stating that arguments supporting the assigned position became more salient or memorable and arguments against the assigned position became less salient or memorable. In these studies, participants started with an initial attitude, were induced to advocate a different position, formed biased memories of the relevant arguments, and those biased memories informed attitudes in line with the advocated position. Role-playing is most likely to change attitudes when participants improvise their own arguments (Greenwald, 1970; King & Janis, 1956), participate actively in the process (Janis & Mann, 1965), and are motivated to persuade others (Elms & Janis, 1965). In such circumstances, role-playing can change attitudes even when participants do not go through with a persuasive communication, but only anticipate doing so (Greenwald, 1969). These findings suggests that memories can change attitudes even when the initial attitude is opposite in direction.

### *Cognitive Dissonance*

The classic study by Festinger and Carlsmith (1959) on insufficient justification and the cognitive consequences of forced compliance saw participants experiencing dissonance when they were paid a small sum to lie about liking a boring experimental procedure. Later they were asked how much they liked doing the task involved in the experiment. They claimed to like it, even though participants in a control condition said they very much disliked the same task. Festinger and Carlsmith explained this result by suggesting that the freely performed attitude action created cognitive dissonance and caused participants to gather consonant cognitions to explain their earlier actions. When viewed in light of Attitude Representation Theory (Lord & Lepper, 1999), participants started with a negative attitude toward the task, were induced to claim it was fun, as a result remembered the more positive associations, and so reported more positive attitudes.

### *Repeated Attitude Expression*

A study by Downing, Judd, and Brauer (1992) showed that as the frequency of participants' vocalizing attitudes toward an issue increased, the more extreme their attitudes became. An inference to group polarization made in this study was that at least some of the extreme attitudes observed during the discussions may have been due to repeated attitude expression. Processes like social comparison, mere thought, public commitment, and associative learning were previously suggested as the foremost explanations in group polarization studies (Downing et al., 1992). Another mechanism might be memory for the repeated statements. Participants stated their position repeatedly, remembered making those statements vividly, and thus expressed a more polarized attitude.

### *Foot-in-the-Door Effect*

The Foot-in-the-Door Effect (Freedman & Fraser, 1966) was observed in the 1960's when housewives did or did not comply with a large request of allowing six men to rummage through all the cupboards in their house. When the women had previously agreed to a small request, they were more likely to consent to the larger, more invasive request. Possible mechanisms proposed by Burger (1999) to explain this phenomenon were consistency needs, self perception, commitment, self-attributions, conformity, and the women's involvement in the initial activity. Viewed from an attitude perspective, the women remembered complying with a similar request, which changed their cognitive representation to "this is the type of action I tend to take," so they developed more positive attitudes and agreed to the larger request.

Overall, these studies involving role playing, dissonance, self-perception phenomena, repeated attitude expression, and foot-in-the-door effects could potentially be explained by people remembering previous attitude-relevant actions, and these memories changing their subsequent attitudes and behaviors.

#### Beliefs About Previous Attitude-Relevant Actions

To examine how past behavior can influence future behavior, participants in a study by Albarracin & Wyer (2000) were told that they previously supported or opposed comprehensive exams. To create a plausible story in which participants would believe they had either shown support or opposition to the exams, they were presented with campus issues subliminally on a computer screen and were told to intuitively respond to each issue. The computer then told the participants that they had voted in favor or against the comprehensive exams. Participants then rated their attitudes toward comprehensive exams and cast a vote

for or against the exams at their university. Participants who were informed their prior behavior was positive toward comprehensive exams rated their attitudes significantly more positive toward the exams than did participants whose behavior was said to be negative toward the exams. The positive behavior participants were also significantly more likely to vote in favor of comprehensive exams than were the negative behavior participants. These participants used their behavior feedback to evaluate their attitudes and to determine their future behavior.

Two studies by McIntyre et al. (2003) examined false memories and attitudes, on the assumption that memory for past actions affects attitude reports. Participants viewed a list of positive and negative attitude-relevant actions and circled every one that they had ever taken toward gay men. Later, those participants wrote fictional accounts of themselves taking actions they had not circled on the lists. Later when reporting their attitudes and actions they had taken, their attitudes had changed and become more positive or negative in the same direction as the scenarios they imagined, and attitude change was positively correlated with how many actions they ‘remembered’ taking. Study 2 addressed the limitations of Study 1, and showed that the effect would not occur if participants imagined someone other than themselves performing the actions.

#### Effects of “I Do Not Recall” on Memory

##### *Repeated Simulation of Memory Impairment and Genuine Memory Performance*

A small step from attitudes and memory is attitudes and forgetting. Remembering performing an action affects attitudes, but can the same be said about actions that people like Attorney Gonzales claim to have forgotten?

In a study by Bylin (2002), participants read a scenario about themselves committing a violent crime and were questioned about the details in three sessions spanning three weeks. Participants either answered genuinely all three times, simulated memory loss once and then answered genuinely the other two times, or simulated memory loss twice for the events and then answered genuinely the last time questioned. Those who feigned memory loss later had worse memory for the scenarios, even when urged to be accurate. The findings of this study show that repeated simulation of memory impairment can affect genuine memory performance. Feigned amnesia for a crime event decreases later recall. This is a problem for the legal system when those on trial feign memory loss as an evasion tactic to avoid being caught in an outright lie. Between 25-45% of persons accused of murder or other serious crimes claim amnesia for the crime event (Kopelman, 1995).

#### STUDY 1: FORGETTING AND ATTITUDE-RELEVANT ACTIONS TOWARD A SOCIAL GROUP

The proposed synthesis of studies involved memory, forgetting, and attitude-relevant actions. In a procedure adapted from that of Bylin (2002), we examined attitude-relevant actions and forgetting that is caused by claiming inability to remember. The present hypothesis was that feigned inability to recall positive or negative attitude-relevant actions would impair memory and the attitude change that would otherwise occur.

#### Method

##### *Participants*

Participants were 111 undergraduate students (34 men and 77 women). Students participated in the study for course credit.

### *Procedure and Materials*

In the first of three sessions two days apart, participants signed a standard consent form (Appendix A). Then we asked participants to imagine themselves as a boss who takes a mixture of positive and negative actions toward three male workers, one of whom is explicitly gay.

After first learning and being quizzed on some “facts” about each worker to insure participants knew that one of the workers was gay (Appendix B), participants imagined (and briefly described) taking six actions toward each of the three workers. In the *Discriminatory treatment* condition (Appendix C), four of the actions toward the other two workers were positive (e.g. praising the worker) and only two were negative (e.g. blaming the worker), whereas five of the actions toward the gay worker were negative and only one was positive. In the *Preferential treatment* condition (Appendix D), two of the actions toward the other two workers were positive and four negative, whereas five of the actions toward the gay worker were positive and only one was negative.

In imagination, then, half of the participants (in the Discriminatory treatment condition) imagined treating the gay worker worse than the other two workers, and the other half of the participants (in the Preferential treatment condition) imagined treating the gay worker better than the other two workers.

In the second session two days later, the same participants were questioned about the actions they did and did not take in the imagined scenarios (Appendix E). Participants in all conditions were seated in a classroom and the experimenter projected the number of each question as a PowerPoint slide and read the question aloud. All participants, regardless of condition, heard questions about whether or not they took each of 36 actions toward each of

the three workers, for a total of 108 questions, of which 18 were the ones they actually imagined taking toward the three workers in the first session.

All participants had in front of them a booklet with 108 numbered blank lines on which they were to write their answers. One-third of the participants in each of the Discriminatory and Preferential treatment conditions received each of three types of instructions. Participants in the *Recall* condition were told to answer every question as best they could with “Yes, I did that” or “No, I did not.” They were also told that because of a computer malfunction, some of the slides would change from a white background to a different color background, but that they should ignore these glitches and simply answer the questions. Participants in the *Do Not Recall* condition were told that we needed to get all three types of answers that occur in normal conversation: “Yes, I did that,” “No, I did not,” and “I do not recall.” They were told that they were to answer every question as best they could with yes or no, except for the 10 questions on which the background color changed from white to blue in the Preferential condition or white to orange in the Discriminatory condition. On those questions, they had to write “I do not recall.” They were to ignore all other color changes, which were said to be caused by computer glitches. Finally, participants in the *Control* condition were not told to answer the questions but instead to copy the last four words of each question, and to ignore the computer glitches. This control procedure was adopted to insure that participants at least listened to the questions, even if they did not have to answer.

In the third session two days after session 2, all participants took a memory test in which they decided whether or not they imagined each of the 108 action-worker pairings in the first session (Appendix F). To motivate all participants to perform well on this test, we



awarded a \$40 gift certificate to the top scorer. After they finished this recognition memory test, the participants were asked to go back over their answers to the 108 questions and rate their confidence that each answer was correct. Participants also completed a brief questionnaire regarding their attitudes toward three attitude objects (Appendix G), one of which was gay men. The order in which the attitude questionnaire and the memory recognition task were given was counterbalanced and no order effects were found.

Finally, participants were debriefed (Appendix H). They were told the hypothesis in general terms, told that we were interested in the cognitive processes that contribute to reported attitudes and not in measuring or changing attitudes toward any specific group, reminded that the boss-worker scenarios were only figments of their imagination and never actually happened, told that imaginary scenarios should not in any way affect their pre-existing attitudes toward any groups, and thanked for their participation.

## Results & Discussion

### *Memory Accuracy*

In session 1, participants imagined taking 6 actions toward a gay man. When they were asked about the target 5 of those actions in session 2, they were instructed on how to answer (try to recall, claim not to recall, or write the last four words.) For the other one they were not instructed. In the session 3 memory test the correct answer to all 6 of these questions was yes. In the session 3 memory test participants were also asked whether they had taken 30 other actions that they had not imagined in session 1. For 5 of those they were instructed how to answer and for the other 25 they were not instructed. The correct answer to all 30 of these questions was no. For each participant we computed the percentage of correct answers in each of four categories: actions they imagined and were instructed how to answer,

actions they imagined and were not instructed how to answer, actions they did not imagine and were instructed how to answer, and actions they did not imagine and were not instructed how to answer.

The percentage correct scores were analyzed in a 3 (Strategy: Control, Recall, Do Not Recall) X 2 (Imagined: Yes, No) X 2 (Instructions: Yes, No) Analysis of Variance (ANOVA), in which the Strategy factor was between subjects and the other two factors were within subjects. The ANOVA yielded a significant effect of Instructions,  $F(1, 108) = 41.46$ ,  $p < .001$ . Participants remembered the actions on which they did not receive instructions worse ( $M = 65.05$ ,  $SD = 17.21$ ) than the actions on which they were instructed ( $M = 79.98$ ,  $SD = 19.52$ ). The only other significant effect in the ANOVA was an Imagined X Strategy interaction,  $F(2, 108) = 7.70$ ,  $p < .001$ . The means for that interaction are shown in Table 1. By simple effects tests, Strategy affected memory for the imagined actions  $F(1, 108) = 3.46$ ,  $p < .05$ , with participants in the Recall and Do Not Recall groups being less accurate than participants in the Control group. Note that participants in the Do Not Recall condition did remember fewer of the imagined actions than did participants in the Control condition, as predicted. This pattern was expected to occur, however, only for the actions on which they were instructed to claim lack of recall, and not on all the imagined actions, as occurred here. Strategy also affected memory for the actions that were not imagined  $F(1, 108) = 4.49$ ,  $p < .05$ , but for those actions participants in the Recall and Do Not Recall group were more accurate than the Control group. There was no main effect of Strategy. Strategy did not interact with instructions,  $F(2, 108) = 1.39$ , *ns*, and when treatment (positive vs. negative actions), order (memory vs. attitude measure first), and gender were added as factors in the ANOVA, they produced no significant effects or interactions.

Table 1  
Mean Percentage of Correct Answers to Recognition Memory Questions in Session 3  
(Experiment 1).

	Strategy		
	Control	Recall	Do Not Recall
	n= 36	n= 39	n= 36
Imagined	81.39 <sup>a</sup>	68.98 <sup>b</sup>	72.78 <sup>b</sup>
	(24.63)	(26.73)	(21.19)
Not Imagined	62.24 <sup>c</sup>	74.71 <sup>d</sup>	75.08 <sup>d</sup>
	(13.94)	(15.54)	(15.32)

Note: Standard deviations are shown in parentheses. Row means that have different superscripts differed significantly.

### *Memory Confidence*

In session 3, participants rated how confident they were (on a scale from 0-10) in each of their answers to the memory test. Mean confidence scores were calculated for the actions that they imagined and were instructed how to answer, actions they imagined and were not instructed how to answer, actions they did not imagine and were instructed how to answer, and actions they did not imagine and were not instructed how to answer. Six participants did not make confidence ratings and were excluded from the analysis.

The confidence ratings were analyzed in a 3 (Strategy: Control, Recall, Do Not Recall) X 2 (Imagined: Yes, No) X 2 (Instructions: Yes, No) ANOVA, in which the Strategy factor was between subjects and the other two factors were within subjects. The ANOVA yielded a main effect of Imagined,  $F(1, 102) = 25.88, p < .001$ , in which participants were more confident about the actions that they had imagined ( $M = 7.27, SD = 2.34$ ) than the actions they had not imagined ( $M = 6.28, SD = 2.13$ ). The ANOVA also yielded a significant effect of instructions,  $F(1, 102) = 8.87, p < .01$ , in which participants were more confident about the actions for which they were not instructed how to answer, ( $M = 7.05, SD = 2.22$ ) than the actions for which they were instructed how to answer ( $M = 6.48, SD = 2.24$ ). There was also a significant Imagined X Strategy interaction,  $F(2, 102) = 4.20, p < .05$ , and a significant Instructions X Strategy interaction,  $F(2, 102) = 4.40, p < .05$ . Both of these two way interactions, however, were qualified by a significant three way Imagined X Instructions X Strategy interaction,  $F(2, 102) = 4.56, p < .05$ . The means for that three-way interaction are shown in Table 2.

By simple effects tests, Strategy did not affect confidence in memory for imagined actions for which participants were instructed how to answer,  $F < 1$ . Strategy did affect confidence in memory for imagined actions for which participants were not instructed how to answer,  $F(1, 102) = 17.14, p < .001$ , where participants in the Do Not Recall condition expressed the lowest confidence. Strategy also affected confidence in memory for actions that were not imagined but participants were instructed how to answer,  $F(1, 102) = 9.32, p < .001$ , and marginally affected confidence in memory for actions that were not imagined and participants were not instructed how to answer,  $F(1, 102) = 2.95, p = .057$ . For both sets of not-imagined actions participants expressed least confidence in the Control condition.

Table 2

Mean Confidence in Answers to Recognition Memory Questions in Session 3 (Experiment 1).

		Strategy		
		Control	Recall	Do Not Recall
		n= 34	n= 37	n= 34
Imagined	Instructions	6.94 <sup>a</sup> (2.27)	7.01 <sup>a</sup> (2.44)	7.16 <sup>a</sup> (2.20)
	No Instructions	7.74 <sup>b</sup> (2.84)	8.38 <sup>b</sup> (2.91)	6.24 <sup>c</sup> (3.86)
Not Imagined	Instructions	5.01 <sup>d</sup> (2.48)	6.59 <sup>e</sup> (2.40)	6.11 <sup>e</sup> (2.85)
	No Instructions	6.19 <sup>f</sup> (2.02)	7.09 <sup>g</sup> (1.57)	6.56 <sup>g</sup> (1.90)

Note: Standard deviations are shown in parentheses. Row means that have different superscripts differed significantly.

The predicted results, based on Bylin (2002) findings, were that Strategy would interact with Imagined and Instructions in a specific way. The prediction was that participants in the Do Not Recall condition would express significantly lower confidence in their memory for imagined actions for which they received instructions. This prediction was

not supported (see top row of Table 2). It is interesting that the Do Not Recall group showed memory deficits for the imagined actions on which they were not told how to answer, but the prediction did not apply to those actions, because on those actions they were treated no differently than the other groups.

### *Attitudes*

Memory impairment was predicted to moderate the effects of imagining positive or negative actions on attitudes. One participant did not answer the attitude item and was removed from the analysis. Session 3 attitudes toward gay men were analyzed in a 3 (Strategy) X 2 (Treatment: Preferential, Discriminatory) ANOVA that yielded a marginally significant effect of strategy,  $F(2, 104)=2.97, p=.056$ , and a significant effect of Treatment  $F(1,104)= 4.39, p<.05$ , but the predicted Strategy X Treatment interaction was not significant,  $F(2,104)<1, ns$ . When Gender was added as a factor, however, the three way Gender X Strategy X Treatment interaction proved significant  $F(2,98)= 4.02, p<.05$ . The means for that ANOVA are shown in Table 3. The prediction was that Preferential versus Discriminatory actions would have the least effect on attitudes in the Do Not Recall condition because participants would be less able to recall taking those actions. As the difference scores in the table show, this prediction was not supported for male participants. Female participants in the Do Not Recall condition, however, showed the least effect on attitudes of imagining Preferential versus Discriminatory actions, which was the predicted effect.

Another measure of attitudes was provided by answers to the three semantic differential questions about how good, pleasant and moral gay men were. Two participants did not answer the semantic differential questions and were removed from the analysis.

These three semantic differential questions were averaged ( $\alpha=.88$ ) and the average was subjected to a 3 (Strategy) X 2 (Treatment: Preferential, Discriminatory) X 2 (Gender) ANOVA. That ANOVA yielded a marginally significant three way Gender X Strategy X Treatment interaction,  $F(2,97)= 4.36, p=.091$ , the means for which are shown in Table 4. Again the prediction was that Preferential versus Discriminatory actions would have the least effect on attitudes in the Do Not Recall condition because participants would be less able to recall taking those actions. As the difference scores in the table show, this prediction was not supported for male participants. Female participants in the DNR condition, however, showed the least effect on attitudes of imagining Preferential versus Discriminatory actions, which was the predicted effect.

#### *Summary of Results*

In summary, the results for memory items were inconsistent. Participants in the control condition remembered more actions when they had imagined the actions and less when they had not imagined them. This is interesting because those participants in the control condition also expressed the least confidence for actions they did not imagine. However, participants in the Do Not Recall condition were the least confident about actions they were instructed to not recall, although their memory for those actions did not suffer.

Table 3

Mean Session 3 Attitudes Toward Gay Men (Experiment 1).

		Strategy		
		Control	Recall	Do Not Recall
Men	Treatment			
	Preferential	0.83 (1.33) n= 6	1.00 (1.41) n= 5	1.13 (1.13) n= 8
	Discriminatory	-1.67 (1.16) n= 3	1.57 (1.27) n= 7	-0.01 (1.23) n= 5
	Difference	2.50	-0.57	1.14
Women	Preferential	1.08 (1.51) n= 12	2.00 (1.11) n= 14	1.11 (1.17) n= 9
	Discriminatory	0.47 (1.73) n= 15	0.69 (1.38) n= 13	1.38 (1.66) n= 13
	Difference	0.61	1.31	-0.27

Note: Standard deviations are shown in parentheses.



Table 4

Mean of three semantic differential ratings (Good, Pleasant, Moral) for Gay Men (Experiment 1).

		Strategy		
		Control	Recall	Do Not Recall
		n= 36	n= 39	n= 34
Men	Treatment			
	Preferential	0.17 (1.13)	1.20 (1.19)	1.92 (0.89)
	Discriminatory	-0.33 (2.33)	1.52 (1.32)	0.07 (1.14)
Women	Difference	n= 6 0.50	n= 5 -0.32	n= 8 1.85
	Preferential	n= 3 0.89 (1.56)	n= 7 1.81 (1.22)	n= 5 1.00 (1.17)
	Discriminatory	n= 12 0.20 (1.34)	n= 14 1.15 (1.18)	n= 8 1.08 (1.58)
	Difference	n= 15 0.69	n= 13 0.66	n= 13 -0.08

Note: Standard deviations are shown in parentheses.

Although the Do Not Recall participants' memory was not impaired, the female participants showed the expected effect of the least amount of attitude change. Do women prefer to have more consistent attitudes toward gay men and although they remember equally well, use the Do Not Recall manipulation as a way to maintain consistency? Would having an actual behavior to forget performing, instead of an imaginary behavior affect the memory of the participants in the Do Not Recall condition? These are interesting questions for future research.

#### EXPERIMENT 2: FORGETTING AND ROLE-PLAYING ARGUMENTS ON A SOCIAL ISSUE

Experiment 2 tested the same hypothesis as in Experiment 1: that impaired memories of attitude-relevant behaviors can keep attitudes from changing when they otherwise would change. Experiment 2 tested that conceptual hypothesis in a different way. First, the behavior was not imaginary but instead an actual behavior of writing pro or con arguments. Second, the attitude object was not a social group but instead a social issue, namely capital punishment. Third, the to-be-remembered behaviors were not actions taken in a workplace but instead self generated arguments in favor of or against the issue. Fourth, the questioning was done individually, face-to-face, instead of in a large group. The procedure was adapted from previous research on improvisational role-playing (Mann & Janis, 1968) and from Bylin (2002.)

#### Method

##### *Participants*

Participants were 127 undergraduate students (36 men and 91 women). Participants were selected because they indicated either an exactly neutral attitude toward capital punishment or fell at -1 or +1 (on a scale from -3 to +3) in a previous questionnaire at the start of the semester. Students participated in the study for course credit.

### *Procedure and Materials*

In the first of three weekly sessions, participants signed a standard consent form (Appendix I). Then they were told a cover story that we were investigating different forms of written communication. They were told some participants were in a poetry condition but they were in a persuasive argument condition. They were instructed to write seven very compelling, persuasive arguments about capital punishment. Half of the participants were told that these arguments were to be very much in favor of capital punishment (Appendix J) and the other half were told that they were to generate arguments very much opposed to capital punishment (Appendix K.) All participants were told that they would first have five minutes to sit and think about arguments they could use so they could select their best seven non-redundant arguments. They were also told that the arguments they wrote would be shown to other students who would rate their arguments on how persuasive they were, so they should try to do the best possible job in coming up with arguments that would persuade readers to adopt the position that they were arguing.

Between the first and second weekly session, we coded the arguments generated by all participants into approximately 40 different distinct ideas on each side of the issue. These codings were used to assign stimulus materials tailored to each individual participant in session 2. (Appendix L shows 40 of the arguments generated on each side of the issue.)

In session 2, one week after session 1 where participants generated their arguments on capital punishment, the same participants were questioned individually, face-to-face, about the arguments that they did and did not write in session 1. They were asked questions about 40 arguments either for or against capital punishment, depending on which condition they were in. Each participant's questions included the seven arguments that the participant

actually wrote and 33 other arguments (see above) that other participants wrote but that participant did not. All the arguments were phrased in generic terms so that a participant could not identify his or her own ideas through idiosyncratic wording. One-third of the participants in each of the pro-capital punishment and anti-capital punishment conditions received one of three types of instructions. Participants in the *Recall* condition were told to answer every question as best they could with “Yes, I wrote that” or “No, I did not” (Appendix M). Participants in the *Do Not Recall* condition were told that we needed to get all three types of answers that occur in normal communication: “Yes, I wrote that”, “No, I did not”, and “I do not recall.” (Appendix N). They were told that they were to answer every question as best they could with yes or no, except for the questions on which the experimenter would give them a signal (placing a red card on the table) *after* reading the question. On those ten total questions, which included 5 of their own 7 arguments, they must write “I do not recall.” Participants in the *Control* condition did not answer questions but instead copied the last 4 words of the question (Appendix O.)

One week after that, in Session 3, all participants took a memory test in which they decided whether they wrote each of the 40 arguments in the first session. To motivate all participants to perform well on the test, we awarded a \$40 certificate to the best scorer. After this task, participants were asked to go over the 40 items and rate their confidence that they were correct on each item (Appendix P.)

The experimenter asked participants to complete a brief questionnaire regarding their attitudes toward several attitude objects, one of which was capital punishment, as well as questions to assess if they had thought or talked about capital punishment between sessions

(Appendix Q.) The order in which the attitude questionnaire and the memory recognition task were given was counterbalanced and analyzed for differences, with none found.

Finally, participants were debriefed (Appendix R.) They were told the hypothesis in general terms, told that we were interested in the cognitive processes that contribute to reported attitudes and not in measuring or changing attitudes toward any specific issue, shown a list of 80 arguments for and against capital punishment (Appendix S), told that the arguments they generated as part of a role playing exercise should not in any way affect their pre-existing attitudes on capital punishment, and thanked for their participation.

## Results & Discussion

### *Memory Accuracy*

In session 1, participants wrote 7 arguments either in favor of or opposed to capital punishment. When they were asked about the target 5 of those arguments in session 2, participants in the Do Not Recall condition were instructed on how to answer (claim not to recall). For the other two arguments they were not instructed. Participants in the Do Not Recall condition were also asked whether they had written 33 other arguments that they had not written in session 1. For 5 of those they were instructed how to answer and for the other 28 they were not instructed. In the session 3 memory test, the correct answer to all 33 of these questions was no and the correct answer to the 7 questions about arguments they wrote was yes.

The percentage correct scores for participants in the Do Not Recall condition were analyzed in a 2 (Wrote: Yes, No) X 2 (Instructions: Yes, No) ANOVA in which the two factors were within subjects. Three participants did not answer these items in full and were removed from the analysis. The ANOVA yielded no significant results of Wrote,  $F(1,38)=$

2.16, *ns*, or Instructions,  $F(1,38)= .35$ , *ns*. Contrary to predictions, participants in the Do Not Recall condition were equally correct about questions they had ( $M= 77.69$ ,  $SD= 18.28$ ) or had not ( $M= 75.92$ ,  $SD= 17.02$ ) been given instructions on how to answer. The means are seen in Table 5.

The percentage correct scores for all participants were analyzed in a 3 (Strategy: Control, Recall, Do Not Recall) X 2 (Wrote: Yes, No) ANOVA in which Strategy was the between subjects factor and Wrote was within subjects. Four participants did not give complete answers for these items and were removed from the analysis. The ANOVA did not produce any significant results of Strategy,  $F(2,120)= 1.51$ , *ns*, or Wrote,  $F(1,120)= 1.03$ , *ns*. Participants were no more correct on arguments that they had written ( $M= 75.38$ ,  $SD= 25.58$ ) than arguments they had not written ( $M= 78.62$ ,  $SD= 20.99$ ). The means are seen in Table 6.

When arguments (positive vs. negative), order, and gender were added as factors in the ANOVA, they produced no significant effects or interactions.

The results were predicted to follow those of Bylin (2002), creating a Strategy X Instruction X Wrote interaction. Participants in the Do Not Recall condition were expected to remember significantly fewer of the written and instructed actions than would participants in the other two groups. This prediction was not supported.

### *Memory Confidence*

Participants rated their confidence in each of their memory recall items in session 3 (on a scale from 0-10). Mean confidence scores were calculated for arguments that they wrote and were instructed how to answer, arguments they wrote and were not instructed how to answer, arguments they did not write and were instructed how to answer, and arguments they did not write and were not instructed how to answer.

Table 5

Mean Percentage of Correct Answers to Recognition Memory Questions in Session 3  
for Participants in the Do Not Recall Strategy Condition (Experiment 2).

		Strategy
		Do Not Recall
		n= 36
Imagined	Instructions	74.87 (22.81)
	No Instructions	71.79 (34.02)
Not Imagined	Instructions	80.51 (24.92)
	No Instructions	80.04 (19.18)

Note: Standard deviations are shown in parentheses.

Table 6

Mean Percentage of Correct Answers to Recognition Memory Questions in Session 3  
(Experiment 2).

	Strategy		
	Control	Recall	Do Not Recall
	n= 41	n= 43	n= 39
Imagined	74.22 (21.72)	79.73 (19.28)	71.79 (34.02)
Not Imagined	75.46 (25.69)	80.34 (17.44)	80.04 (19.18)

Note: Standard deviations are shown in parentheses.

The confidence ratings of participants in the Do Not Recall condition were analyzed in a 2 (Wrote: Yes, No) X 2 (Instructions: Yes, No) ANOVA in which the two factors were within subjects. The ANOVA yielded only a marginally significant effect of Wrote,  $F(1,31)= 3.41, p=.07$ , in which participants were more confident about arguments they had not written ( $M= 8.54, SD= 1.93$ ) than arguments they had written ( $M= 8.91, SD=1.32$ ). The means are seen in Table 7.

The confidence ratings for all participants were analyzed in a 3 (Strategy: Control, Recall, Do Not Recall) X 2 (Wrote: Yes, No) ANOVA in which Strategy was the between subjects factor and Wrote was within subjects. The ANOVA yielded only a significant effect



of strategy,  $F(2,104)= 5.54, p<.01$ , where participants in the control condition were significantly less confident about their memory for arguments overall ( $M= 8.06, SD= 1.41$ ) when compared to the recall ( $M= 9.00, SD= .85$ ) and do not recall ( $M= 8.55, SD= 1.26$ ) conditions. The means are seen in Table 8.

Table 7

Mean Confidence for Answers to Recognition Memory Questions in Session 3 for Participants in the Do Not Recall Strategy Condition (Experiment 2).

		Strategy
		Do Not Recall
		n= 39
Imagined	Instructions	8.68 (1.83)
	No Instructions	8.41 (2.26)
Not Imagined	Instructions	9.00 (1.35)
	No Instructions	8.81 (1.34)

Note: Standard deviations are shown in parentheses.

Table 8

Mean Confidence for Answers to Recognition Memory Questions in Session 3 (Experiment 2).

	Strategy		
	Control	Recall	Do Not Recall
	n= 41	n= 43	n= 39
Imagined	8.23	9.00	8.36
	(1.29)	(.95)	(2.23)
Not Imagined	7.89	8.99	8.74
	(1.99)	(1.05)	(1.39)
Total	8.06 <sup>a</sup>	9.00 <sup>b</sup>	8.55 <sup>ab</sup>

Note: Standard deviations are shown in parentheses. Row means that have different superscripts differed significantly.

### *Attitudes*

Session 3 attitudes toward capital punishment were analyzed in a 3 (Strategy: Control, Recall, Do Not Recall) X 2 (Arguments: Positive, Negative) X 2 (Gender: Male, Female) X 2 (Order: Memory first, Memory second) ANOVA that yielded a marginally significant main effect of Arguments,  $F(1, 103) = 3.59, p = .06$ . Participants who wrote positive arguments rated their attitudes as being more positive ( $M = .46, SD = 1.49$ ) than did participants who wrote negative arguments ( $M = -.27, SD = 1.35$ ). However there was no

significant effect of Strategy,  $F(2, 103) = 1.17, ns$ . The Strategy X Arguments interaction (shown in Table 9) was significant,  $F(2, 103) = 4.05, p < .05$ . The interaction was not qualified by a significant interaction with Gender,  $F(2, 103) = 2.47, ns$ , or Order,  $F(2, 103) = 1.04, ns$ . By simple effects and Tukey tests, participants who wrote positive arguments were more likely to report positive attitudes toward capital punishment in the Do Not Recall Condition ( $M = 1.15, SD = 1.18$ ) than participants in the Control ( $M = .05, SD = 1.40$ ) or Recall ( $M = .23, SD = 1.66$ ) conditions,  $F(2, 103) = 3.47, p < .05$ . No such differences were found among the negative argument conditions, simple effects  $F(2, 103) = .66, ns$ . Although the intended interaction was produced, the means were in the opposite direction of what was expected. As seen in Table 9, the largest difference score was in the Do Not Recall condition, in which writing positive versus negative statements had the largest effect on attitudes.

The three semantic differential questions about how good, pleasant and moral capital punishment is were used as a second measure of attitudes. The responses were averaged ( $\alpha = .77$ ) and analyzed with a 3 (Strategy) X 2 (Arguments) ANOVA. The ANOVA produced a significant main effect of Arguments,  $F(1, 121) = 14.60, p < .001$ . Participants considered capital punishment more good, pleasant and moral when they wrote positive arguments ( $M = .47, SD = 1.11$ ) than when they wrote negative arguments ( $M = -1.20, SD = 1.06$ ). There was no significant effect of Strategy,  $F(2, 121) = 1.82, p = .17, ns$ , and no significant Strategy X Arguments interaction,  $F(2, 121) = 1.28, p = .28$ . Means and difference scores are shown in Table 10.

An interesting effect worth noting was that when asked at the end of the experiment whether they would have preferred writing positive or negative arguments if given the choice, participants choose the preference to which they had been randomly assigned,

$F(1,110) = 10.06, p < .01$ . This is even more interesting because the participants had been either neutral or only slightly positive or negative according to a pretest when selected for the experiment.

Table 9

Mean Session 3 Attitudes Toward Capital Punishment (Experiment 2).

	Strategy		
	Control	Recall	Do Not Recall
Treatment			
Positive	0.05 <sup>a</sup> (1.40) n= 21	0.23 <sup>a</sup> (1.66) n= 22	1.15 <sup>b</sup> (1.18) n= 20
Negative	0.00 <sup>c</sup> (1.48) n= 22	-0.43 <sup>c</sup> (1.20) n= 23	-0.37 <sup>c</sup> (1.38) n= 19
Difference	0.05	0.66	1.52

Note: Standard deviations are shown in parentheses. Row means that have different superscripts differed significantly.

Table 10

Mean of three semantic differential ratings (Good, Pleasant, Moral) for Capital Punishment (Experiment 2).

	Strategy		
	Control	Recall	Do Not Recall
Treatment			
Positive	-0.84 (1.16) n= 21	-0.50 (1.30) n= 22	-0.05 (0.63) n= 20
Negative	-1.15 (0.95) n= 22	-1.35 (1.22) n= 23	-1.09 (1.02) n= 19
Difference	.31	.85	1.04

Note: Standard deviations are shown in parentheses.

### *Summary of Results*

In summary, having an actual behavior instead of an imagined behavior did not change the outcome of Study 2 in the way we predicted. The memory manipulation did not affect memory for arguments in any Strategy condition, although participants in the Do Not

Recall condition were somewhat more confident about items they imagined and participants in the Control condition were less confident. Results of confidence for the participants in the Control condition were similar to that of Study 1. Participants in the Do Not Recall condition did not forget arguments they wrote. In fact, writing positive versus negative arguments mattered the most for them and affected their attitudes the most.

## General Discussion

Study 1 tested whether participants who are told to write Do Not Recall would have impaired memory for performing positive or negative actions toward a gay man and whether their overall attitude change would be less, compared to a control group. As seen in Table 1 those participants in the Do Not Recall condition in Study 1 did in fact have a reduced memory for the actions they performed compared to the Control, but the memory impairment extended to all actions, not just the ones for which they had feigned memory loss in Session 2. This effect might be due to a generalization effect the simulated memory loss had on the questions they tried to answer correctly. It also could be a result of the difference in the procedures used. In Bylin's (2002) procedure, participants pretended to be criminals facing prosecution and the motivation to forget was high, whereas in the present procedures, the motivation to simulate memory loss was only to follow the instructions of the experimenter.

In addition, Table 2 shows that the participants in the Do Not Recall condition were less confident about their memory for the actions they imagined than were the Control participants but this was only seen for actions that they were not instructed how to answer in Session 2. These are the questions where they were to answer accurately and not feign memory loss. It is possible that being told to fake memory loss for some actions created uncertainty in memory for other actions, though that same pattern did not emerge for the

participants' confidence in their answers for actions they did not imagine, even though they received instructions on some, but not all, of those actions as well.

Interestingly, although the memory results did not turn out as hypothesized for men or women, Table 3 shows that the women in Study 1 produced the predicted results in terms of their reported attitudes. In the control group, women's attitudes toward gay men was more positive after they had taken positive actions toward the gay male employee and less positive when they had taken negative actions, as predicted by previous research. However, women in the Do Not Recall group did not. Although this finding agrees with what was predicted, it is questionable because the mediating factor of the memory accuracy results was not entirely supportive and also because the effect was seen in women but not men. That said, if we examine only the means for the control and Do Not Recall conditions in Experiment 1, we see in Table 3 that men reported attitudes more in line with their imagined actions in the control than Do Not Recall condition, and so did women. If the Recall condition is ignored, it could be suggested that the attitude results seen in Study 1 were actually consistent with the predicted pattern, although the memory results were not. In light of this observation, perhaps the Recall condition was unnecessary. This condition was intended as similar to the Do Not Recall condition in that participants thought about whether they had imagined the actions or not but they received no instructions to feign memory loss. This condition could have had the unwanted effect of introducing doubts or qualitatively different motivations. Bylin (2002) had no such condition. The important predictions for the present study were that participants in the Do Not Recall condition would remember fewer of the imagined actions that they were instructed on how to answer, and change their attitudes less compared to the

Control condition that read and understood the same actions but had no special instructions on how to answer.

Study 2 used a different attitude topic: capital punishment. Instead of imagining performing actions, they actually wrote either pro or con persuasive arguments about capital punishment. The predicted results were the same as in Study 1. Participants in the Do Not Recall condition were predicted to remember fewer of the actions they performed and have the least change in their attitudes in line with the arguments they wrote, as compared to the Control condition. Unfortunately, as seen in Tables 5-8, the manipulation produced no significant changes in memory accuracy or memory confidence. Even without the changes in memory accuracy or confidence, there were significant changes in attitudes toward capital punishment, although in the opposite direction of what was predicted. Participants in the Do Not Recall condition reported the most difference in attitudes in line with their written arguments, but participants in the Control condition did not have any significant differences. It is unusual that writing positive or negative statements had no effect on participants' attitudes in the Control condition, because numerous studies of role playing (Janis & King, 1954; King & Janis, 1956; Janis & Mann, 1965) and attitudinal advocacy (Festinger, 1957; Festinger & Carlsmith, 1959) have shown these effects. It is possible that having no choice or even illusion of choice in their writings nullified the effect for Control participants. In studies of attitudinal advocacy, the effects are not found when there is a blatant lack of choice (Harmon-Jones & Mills, 1999; Matz & Wood, 2005). If that was the case, it is difficult to understand why participants in the Do Not Recall condition, who also had no choice in the position they advocated, reported more positive attitudes after writing positive than negative arguments, as seen in Table 9. A possibility to consider is that writing Do Not



Recall made those arguments seem more plausible to them when they later reported their attitudes. Since half of the arguments in the Do Not Recall manipulation had been generated by the participant, those arguments may have been more familiar (Jacoby, Woloshyn & Kelly, 1989), subjectively easier to generate (Schwarz, 2005), and more plausible (Nisbett & Wilson, 1977). The Do Not Recall manipulation may not have enhanced memory for the actual arguments but it could have deepened cognitive processing, familiarity, subjective ease, and/or plausibility (Craik & Tulving, 2004; Jacoby, Shimizu, Daniels & Rhodes, 2005). These effects could have made the arguments count more when the participants were assessing their own attitudes. This possibility is supported by the finding in Study 2 that participants in general tended to say that if given the choice, they would have preferred to be assigned the side of the issue to which they had been randomly assigned.

A future direction of research extending from these experiments with imagined actions and self-generated arguments would involve actions participants say they have actually taken toward an attitude object. McIntyre and his colleagues (2003) successfully induced participants to “remember” having taken positive or negative actions toward a gay man that they had previously denied taking. They did this by having the participants write detailed scenarios in which participants performed the actions they had previously denied taking. These scenarios involved specific details and an interior monologue of thoughts and actions. Participants incorporated these written scenarios into their memory of actions taken toward a gay man. Consistent with previous research on source monitoring errors (Johnson, 2006) and false memories (Laney, Morris, Bernstein, Wakefield & Loftus, 2008), they claimed to remember taking the actions they wrote about and changed their attitudes accordingly. A follow up to McIntyre et al’s (2003) study would involve a Do Not Recall

condition in which some time after reporting their past attitude-congruent actions, participants would be induced to feign memory loss for the actions. It would be interesting to discover if the feigned memory loss would increase forgetting of these actions and make attitudes less extreme. It would also be interesting to create a laboratory model of the situation described at the beginning of this report, involving former Attorney General Alberto Gonzalez. He was presumably motivated to feign memory loss for fear of prosecution, just as Bylin's (2002) participants were pretending to be. The challenge for such research would be to introduce a motivation to feign memory loss for actual behaviors that would not carry with it an implication that the experimenter wants the participant to adopt a particular attitude. The trick is to separate ecological validity from experimental demand.

Appendix A: STATEMENT OF CONSENT

I, the undersigned, do hereby give my informed consent to my participation in this study. I have been informed about each of the following:

- The purposes of the study- the research is intended to examine memory and attitudes.
- The procedures – I will be imagining some mental scenes, answering questions regarding those scenes, and reporting several of my social attitudes.
- The benefits – Participants will experience the research process, and receive three hours of research credit for their participation.
- The risks- minimal
- I may only receive credit for participating in the present study once, and I must participate in all three sessions to receive credit.

I understand that I may withdraw at any time before or during the experiment at my option, if I become upset or begin feel uncomfortable. Recognizing the importance of avoiding bias in the results of this experiment, I agree not to discuss any of the details of the procedure with other participants. I understand that all of the research and evaluation materials will be confidentially maintained. The means used to maintain confidentiality are:

- My data will be given a code number for research identification, and my name will be kept anonymous.
- Data, along with consent forms, will be kept in a locked file cabinet.
- Only the investigators will have access to my identification data.

I understand that if I have questions concerning the research, I can call the following persons:

- Amanda Morin- Graduate Student  
-Department of Psychology, 257-7414
- Dr. Charles Lord- Faculty Sponsor  
-Department of Psychology, 257-7410
- Dr. Christie Scollon-Chair, Department of Psychology Human Subjects Committee  
-257-6424
- Dr. Timothy Hubbard -TCU Committee on Safeguards of Human Subjects – Psychology  
-257-6412
- Jan Fox, TCU Coordinator-Research and Sponsored Projects  
-257-7515

\_\_\_\_\_  
Participant's Name (PLEASE PRINT)

\_\_\_\_\_  
Participant's TCU Student ID#

\_\_\_\_\_  
Participant's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Professor

\_\_\_\_\_  
Class

My E-mail: \_\_\_\_\_

## Appendix B

Please imagine that you are the work supervisor of three workers. Here's a brief description of each.

Albert B. is 22 years old. He is married, has one son, and lives near work. In his spare time, Albert likes to read, go camping, and shoot hoops with his friends.

Brad T. is 24 years old. He is married, has two daughters, and lives in a rural area 15 miles from work. In his spare time, Brad likes to play tennis, have family outings, and attend concerts.

Gary M. is 23 years old. He is single and lives in a studio apartment in the arts district. In his spare time, he likes to go shopping for nice clothes, volunteer for the Gay Alliance, and hang out with his other gay friends.

Please take the next 3 minutes to memorize all the information about each of these workers, and then take the quiz on the next page.

Appendix B (Continued)

Please try to answer these questions from memory. Then look back at the previous page and correct any that you got wrong.

Albert B.

Is \_\_\_\_\_ years old.

Is he single or married? \_\_\_\_\_

Where does he live? \_\_\_\_\_

What three activities does he like to do in his spare time?

\_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

Brad T.

Is \_\_\_\_\_ years old.

Is he single or married? \_\_\_\_\_

Where does he live? \_\_\_\_\_

What three activities does he like to do in his spare time?

\_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

Gary M.

Is \_\_\_\_\_ years old.

Is he single or married? \_\_\_\_\_

Where does he live? \_\_\_\_\_

What three activities does he like to do in his spare time?

\_\_\_\_\_, \_\_\_\_\_, and \_\_\_\_\_.

## Appendix C – Discriminatory Treatment Condition **Set 1**

*(For the purpose of saving space and paper, the blank lines below each question where the participant wrote their answers have been removed.)*

Now we want you to imagine as vividly as possible your taking some actions toward each of these workers as their boss. For each action, please try to construct a vivid scene in which you take that action toward that particular worker. Try to put yourself in the scene so that all your thoughts and feelings are what they would be in that scene. Take a minute to see it happening in your mind's eye, and then take a minute to write it out so that the reader can see it too, with all the details.

Be sure to describe all of the thoughts and feelings that you will have while the events are occurring. Give the reader a window into what you will be thinking and feeling. Be sure to include as many details as possible, as in “I will do this, then feel this, then the other person will say this and I will think that, then I say this...”

Use your imagination. Make the event seem as real and vivid as possible. Tell the reader what the circumstances are that lead up to the event and what you hear, see, and especially what you think and feel. Describe in detail what happens and produce a compelling, *believable* first-person account that emphasizes your thoughts and feelings for each scenario.

1. You praise Albert B. in public.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

2. You give a good raise to Brad T.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

3. You blame Gary M. for things that go wrong.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

4. You set unrealistic goals for Brad T.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

5. You make Gary M. work on a holiday.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

6. You complain loudly about a mistake that Albert B. made.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

7. You trust Gary M. with an important job.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

8. You rely on Albert B.'s judgment.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

9. You seek Brad T.'s advice.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

10. You ignore complaints from Albert B.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

11. You compliment Brad T. in private.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

12. You scold Gary M. in private.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

13. You renege on promises to Brad T.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

14. You adjust work schedules for Albert B.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

15. You usually give the worst jobs to Gary M.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

16. You support Albert B.'s work efforts.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

17. You assign menial tasks to Gary M.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

18. You bend the rules for Brad T.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

### Discriminatory Treatment Condition **Set 2**

Now we want you to imagine as vividly as possible your taking some actions toward each of these workers as their boss. For each action, please try to construct a vivid scene in which you take that action toward that particular worker. Try to put yourself in the scene so that all your thoughts and feelings are what they would be in that scene. Take a minute to see it happening in your mind's eye, and then take a minute to write it out so that the reader can see it too, with all the details.

Be sure to describe all of the thoughts and feelings that you will have while the events are occurring. Give the reader a window into what you will be thinking and feeling. Be sure to include as many details as possible, as in "I will do this, then feel this, then the other person will say this and I will think that, then I say this..."

Use your imagination. Make the event seem as real and vivid as possible. Tell the reader what the circumstances are that lead up to the event and what you hear, see, and especially what you think and feel. Describe in detail what happens and produce a compelling, *believable* first-person account that emphasizes your thoughts and feelings for each scenario.

1. You give special treatment to Albert B.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

2. You cover a shift for Brad T.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
3. You give a poor performance review to Gary M.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
4. You give no bonus to Brad T.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
5. You chew out Gary M. in public.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
6. You criticize Albert B.'s work efforts.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
7. You listen to valid complaints from Gary M.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
8. You consider reasonable requests from Albert B.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
9. You smile and be cheerful toward Brad T.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
10. You compare Albert B. unfavorably to other workers.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
11. You tell people you enjoy working with Brad T.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
12. You underestimate Gary M.'s abilities.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
13. You make jokes at Brad T.'s expense.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
14. You try to hire more people like Albert B.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
15. You demote Gary M. for a minor mistake.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
16. You recommend Albert B. for a promotion.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
17. You insult Gary M.'s educational background.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
18. You take Brad T. to lunch.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.



## Appendix D – Preferential Treatment Condition **Set 1**

Now we want you to imagine as vividly as possible your taking some actions toward each of these workers as their boss. For each action, please try to construct a vivid scene in which you take that action toward that particular worker. Try to put yourself in the scene so that all your thoughts and feelings are what they would be in that scene. Take a minute to see it happening in your mind's eye, and then take a minute to write it out so that the reader can see it too, with all the details.

Be sure to describe all of the thoughts and feelings that you will have while the events are occurring. Give the reader a window into what you will be thinking and feeling. Be sure to include as many details as possible, as in “I will do this, then feel this, then the other person will say this and I will think that, then I say this...”

Use your imagination. Make the event seem as real and vivid as possible. Tell the reader what the circumstances are that lead up to the event and what you hear, see, and especially what you think and feel. Describe in detail what happens and produce a compelling, *believable* first-person account that emphasizes your thoughts and feelings for each scenario.

1. You praise Gary M. in public.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

2. You give a good raise to Gary M.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

3. You blame Brad T. for things that go wrong.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

4. You set unrealistic goals for Albert B.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

5. You make Brad T. work on a holiday.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

6. You complain loudly about a mistake that Brad T. made.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

7. You trust Albert B. with an important job.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

8. You rely on Albert B.'s judgment.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

9. You seek Gary M.'s advice.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

10. You ignore complaints from Gary M.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

11. You compliment Brad T. in private.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

12. You scold Albert B. in private.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

13. You renege on promises to Albert B.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

14. You adjust work schedules for Brad T.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

15. You usually give the worst jobs to Albert B.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

16. You support Gary M.'s work efforts.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

17. You assign menial tasks to Brad T.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

18. You bend the rules for Gary M.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

### Preferential Treatment Condition **Set 2**

Now we want you to imagine as vividly as possible your taking some actions toward each of these workers as their boss. For each action, please try to construct a vivid scene in which you take that action toward that particular worker. Try to put yourself in the scene so that all your thoughts and feelings are what they would be in that scene. Take a minute to see it happening in your mind's eye, and then take a minute to write it out so that the reader can see it too, with all the details.

Be sure to describe all of the thoughts and feelings that you will have while the events are occurring. Give the reader a window into what you will be thinking and feeling. Be sure to include as many details as possible, as in "I will do this, then feel this, then the other person will say this and I will think that, then I say this..."

Use your imagination. Make the event seem as real and vivid as possible. Tell the reader what the circumstances are that lead up to the event and what you hear, see, and especially what you think and feel. Describe in detail what happens and produce a compelling, *believable* first-person account that emphasizes your thoughts and feelings for each scenario.

1. You give special treatment to Gary M.

Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

2. You cover a shift for Gary M.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
3. You give a poor performance review to Brad T.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
4. You give no bonus to Brad T.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
5. You chew out Albert B. in public.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
6. You criticize Gary M.'s work efforts.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
7. You listen to valid complaints from Albert B.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
8. You consider reasonable requests from Gary M.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
9. You smile and be cheerful toward Gary M.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
10. You compare Brad T. unfavorably to other workers.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
11. You tell people you enjoy working with Brad T.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
12. You underestimate Albert B.'s abilities.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
13. You make jokes at Albert B.'s expense.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
14. You try to hire more people like Brad T.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
15. You demote Albert B. for a minor mistake.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
16. You recommend Gary M. for a promotion.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
17. You insult Brad T.'s educational background.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.
18. You take Albert B. to lunch.  
Take 1 minute to construct the scene mentally, and then take 1 minute to write about it below.

Appendix E – Recall Condition

You will now be questioned about the actions you did and did not take in the last session. Answer every question as best you can with “Yes, I did that” or “No, I did not.” You must write something on every question and these are your only options.

Please write your answer to each question in the blank next to the number. *Do Not abbreviate* any of the answers. Write “Yes, I did that” or “No, I did not” in full for each question.

\*Note- We are having technical difficulties with our PowerPoint slide show. Some of the slides may change color while you are reading them. Please ignore these color changes and answer the questions as accurately as you can.

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- .....

Appendix E (continued) – Do Not Recall Condition

You will now be questioned about the actions you did and did not take in the last session. We need to get all three types of answers that occur in normal conversation: “Yes, I did that”, “No, I did not”, and “I do not recall”.

Answer every question as best you can with “Yes, I did that” or “No, I did not” except for when signaled to write “I do not recall”. The signal is that the slide background will change to blue/(orange- *for set 2*) while you are reading the question. When you see the slide background color change, you MUST write “I do not recall” on that line. You cannot give any other answer to those questions.

Please write your answer to each question in the blank next to the number. *Do Not abbreviate* any of the answers. Write “Yes, I did that”, “No, I did not”, or “I do not recall” in full for each question.

\*Note- because of technical difficulties, when changing some slides, other slides also changed to orange/(blue- *for set 2*). This is a computer glitch in our Power Point program that we have not been able to fix. So please ignore the extra changes to blue/orange. On those questions, just go ahead and write, “Yes, I did that” and “No, I did not” as accurately as possible.

\*\*Note- The slides where the background color changes to blue/(orange- *for set 2*) are the ONLY ones which you will write “I do not recall.” On all the other questions, you will write either “Yes I did that” or “No, I did not.”

- 1. \_\_\_\_\_
- 2. \_\_\_\_\_
- 3. \_\_\_\_\_
- .....

Appendix E (continued) –Control Condition

Sentences about the actions you did and did not take in the last session will appear on the screen. Please copy the **last four words** of each sentence in the blank next to each number.

Please copy the last four words of each sentence in the blank next to the number. *Do Not abbreviate* any of the answers. Copy the **last four words** in their entirety.

\*Note- We are having technical difficulties with our PowerPoint slide show. Some of the slides may change color while you are reading them. Please ignore these color changes and copy the last four words accurately.

1. \_\_\_\_\_
2. \_\_\_\_\_
3. \_\_\_\_\_
- .....

Appendix E (continued)– Session 2 Questions that will appear in the slide show.

1. Did you criticize Brad's work efforts?
2. Did you trust Gary with important jobs?
3. Did you consider reasonable requests from Albert?
4. Did you give poor performance reviews to Brad?
5. Did you cover a shift for Brad?
6. Did you assign menial tasks to Gary?
7. Did you demote Albert for a minor mistake?
8. Did you recommend Gary for a promotion?
9. Did you try to hire more people like Gary?
10. Did you seek Albert's advice?
11. Did you assign menial tasks to Albert?
12. Did you make jokes at Albert's expense?
13. Did you insult Gary's educational background?
14. Did you insult Albert's educational background?
15. Did you give special treatment to Brad?
16. Did you renege on promises to Brad?
17. Did you set unrealistic goals for Gary?
18. Did you rely on Albert's judgment?
19. Did you support Brad's work efforts?
20. Did you give good raises to Brad?
21. Did you bend the rules for Gary?
22. Did you chew out Albert in public?
23. Did you praise Gary in public?
24. Did you adjust work schedules for Albert?
25. Did you give special treatment to Gary?
26. Did you usually give the worst jobs to Brad?
27. Did you smile and be cheerful toward Brad?
28. Did you renege on promises to Gary?
29. Did you trust Brad with important jobs?
30. Did you ignore complaints from Albert?
31. Did you underestimate Albert's abilities?
32. Did you give good raises to Gary?
33. Did you complain loudly about Gary?
34. Did you praise Brad in public?
35. Did you smile and be cheerful toward Albert?
36. Did you take Brad to lunch?
37. Did you compliment Gary in private?
38. Did you scold Brad in private?
39. Did you compare Gary unfavorably to other workers?
40. Did you tell people you enjoy working with Brad?
41. Did you ever blame Albert for things that went wrong?
42. Did you set unrealistic goals for Brad?
43. Did you scold Albert in private?
44. Did you withhold a bonus from Gary?

45. Did you make Brad work holidays?
46. Did you seek Gary's advice?
47. Did you recommend Albert for a promotion?
48. Did you criticize Albert's work efforts?
49. Did you ever blame Gary for things that went wrong?
50. Did you listen to valid complaints from Albert?
51. Did you assign menial tasks to Brad?
52. Did you insult Brad's educational background?
53. Did you tell people you enjoy working with Gary?
54. Did you renege on promises to Albert?
55. Did you rely on Brad's judgment?
56. Did you scold Gary in private?
57. Did you withhold a bonus from Albert?
58. Did you chew out Gary in public?
59. Did you smile and be cheerful toward Gary?
60. Did you compliment Albert in private?
61. Did you complain loudly about Albert?
62. Did you support Gary's work efforts?
63. Did you compare Brad unfavorably to other workers?
64. Did you criticize Gary's work efforts?
65. Did you bend the rules for Albert?
66. Did you take Gary to lunch?
67. Did you compliment Brad in private?
68. Did you ignore complaints from Brad?
69. Did you adjust work schedules for Gary?
70. Did you give special treatment to Albert?
71. Did you usually give the worst jobs to Albert?
72. Did you demote Brad for a minor mistake?
73. Did you consider reasonable requests from Gary?
74. Did you listen to valid complaints from Gary?
75. Did you recommend Brad for a promotion?
76. Did you make Albert work holidays?
77. Did you tell people you enjoy working with Albert?
78. Did you bend the rules for Brad?
79. Did you praise Albert in public?
80. Did you rely on Gary's judgment?
81. Did you give poor performance reviews to Albert?
82. Did you underestimate Brad's abilities?
83. Did you take Albert to lunch?
84. Did you ignore complaints from Gary?
85. Did you trust Albert with important jobs?
86. Did you consider reasonable requests from Brad?
87. Did you adjust work schedules for Brad?
88. Did you make jokes at Gary's expense?
89. Did you try to hire more people like Brad?
90. Did you chew out Brad in public?



91. Did you cover a shift for Albert?
92. Did you complain loudly about Brad?
93. Did you cover a shift for Gary?
94. Did you listen to valid complaints from Brad?
95. Did you give poor performance reviews to Gary?
96. Did you set unrealistic goals for Albert?
97. Did you underestimate Gary's abilities?
98. Did you seek Brad's advice?
99. Did you usually give the worst jobs to Gary?
100. Did you withhold a bonus from Brad?
101. Did you support Albert's work efforts?
102. Did you demote Gary for a minor mistake?
103. Did you try to hire more people like Albert?
104. Did you make jokes at Brad's expense?
105. Did you ever blame Brad for things that went wrong?
106. Did you give good raises to Albert?
107. Did you make Gary work holidays?
108. Did you compare Albert unfavorably to other workers?

## Appendix F

In this session, we will give you a memory test for the scenes that you imagined back in Session 1. This is a test of your memory ability. To motivate you to perform well, we will give a \$40 gift certificate to the TCU Bookstore to the student who gets the highest number of the 108 memory questions right. The prize will be split in the case of ties. You must answer **all** the questions to be eligible for the prize. Circle the correct answer for each question.

Did you criticize Albert's work efforts?	YES	NO
Did you criticize Brad's work efforts?	YES	NO
Did you criticize Gary's work efforts?	YES	NO
Did you ever blame Albert for things that went wrong?	YES	NO
Did you ever blame Brad for things that went wrong?	YES	NO
Did you ever blame Gary for things that went wrong?	YES	NO
Did you trust Albert with important jobs?	YES	NO
Did you trust Brad with important jobs?	YES	NO
Did you trust Gary with important jobs?	YES	NO
Did you insult Albert's educational background?	YES	NO
Did you insult Brad's educational background?	YES	NO
Did you insult Gary's educational background?	YES	NO
Did you tell people you enjoy working with Albert?	YES	NO
Did you tell people you enjoy working with Brad?	YES	NO
Did you tell people you enjoy working with Gary?	YES	NO
Did you ignore complaints from Albert?	YES	NO
Did you ignore complaints from Brad?	YES	NO
Did you ignore complaints from Gary?	YES	NO
Did you renege on promises to Albert?	YES	NO
Did you renege on promises to Brad?	YES	NO
Did you renege on promises to Gary?	YES	NO
Did you adjust work schedules for Albert?	YES	NO
Did you adjust work schedules for Brad?	YES	NO
Did you adjust work schedules for Gary?	YES	NO
Did you give poor performance reviews to Albert?	YES	NO
Did you give poor performance reviews to Brad?	YES	NO
Did you give poor performance reviews to Gary?	YES	NO

Did you listen to valid complaints from Albert?	YES	NO
Did you listen to valid complaints from Brad?	YES	NO
Did you listen to valid complaints from Gary?	YES	NO
Did you set unrealistic goals for Albert?	YES	NO
Did you set unrealistic goals for Brad?	YES	NO
Did you set unrealistic goals for Gary?	YES	NO
Did you rely on Albert's judgment?	YES	NO
Did you rely on Brad's judgment?	YES	NO
Did you rely on Gary's judgment?	YES	NO
Did you compare Albert unfavorably to other workers?	YES	NO
Did you compare Brad unfavorably to other workers?	YES	NO
Did you compare Gary unfavorably to other workers?	YES	NO
Did you make jokes at Albert's expense?	YES	NO
Did you make jokes at Brad's expense?	YES	NO
Did you make jokes at Gary's expense?	YES	NO
Did you try to hire more people like Albert?	YES	NO
Did you try to hire more people like Brad?	YES	NO
Did you try to hire more people like Gary?	YES	NO
Did you scold Albert in private?	YES	NO
Did you scold Brad in private?	YES	NO
Did you scold Gary in private?	YES	NO
Did you support Albert's work efforts?	YES	NO
Did you support Brad's work efforts?	YES	NO
Did you support Gary's work efforts?	YES	NO
Did you withhold a bonus from Albert?	YES	NO
Did you withhold a bonus from Brad?	YES	NO
Did you withhold a bonus from Gary?	YES	NO
Did you consider reasonable requests from Albert?	YES	NO
Did you consider reasonable requests from Brad?	YES	NO
Did you consider reasonable requests from Gary?	YES	NO
Did you make Albert work holidays?	YES	NO
Did you make Brad work holidays?	YES	NO
Did you make Gary work holidays?	YES	NO

Did you give good raises to Albert?	YES	NO
Did you give good raises to Brad?	YES	NO
Did you give good raises to Gary?	YES	NO
Did you underestimate Albert's abilities?	YES	NO
Did you underestimate Brad's abilities?	YES	NO
Did you underestimate Gary's abilities?	YES	NO
Did you recommend Albert for a promotion?	YES	NO
Did you recommend Brad for a promotion?	YES	NO
Did you recommend Gary for a promotion?	YES	NO
Did you usually give the worst jobs to Albert?	YES	NO
Did you usually give the worst jobs to Brad?	YES	NO
Did you usually give the worst jobs to Gary?	YES	NO
Did you seek Albert's advice?	YES	NO
Did you seek Brad's advice?	YES	NO
Did you seek Gary's advice?	YES	NO
Did you bend the rules for Albert?	YES	NO
Did you bend the rules for Brad?	YES	NO
Did you bend the rules for Gary?	YES	NO
Did you chew out Albert in public?	YES	NO
Did you chew out Brad in public?	YES	NO
Did you chew out Gary in public?	YES	NO
Did you cover a shift for Albert?	YES	NO
Did you cover a shift for Brad?	YES	NO
Did you cover a shift for Gary?	YES	NO
Did you complain loudly about Albert?	YES	NO
Did you complain loudly about Brad?	YES	NO
Did you complain loudly about Gary?	YES	NO
Did you praise Albert in public?	YES	NO
Did you praise Brad in public?	YES	NO
Did you praise Gary in public?	YES	NO
Did you demote Albert for a minor mistake?	YES	NO
Did you demote Brad for a minor mistake?	YES	NO
Did you demote Gary for a minor mistake?	YES	NO

Did you smile and be cheerful toward Albert?	YES	NO
Did you smile and be cheerful toward Brad?	YES	NO
Did you smile and be cheerful toward Gary?	YES	NO
Did you take Albert to lunch?	YES	NO
Did you take Brad to lunch?	YES	NO
Did you take Gary to lunch?	YES	NO
Did you assign menial tasks to Albert?	YES	NO
Did you assign menial tasks to Brad?	YES	NO
Did you assign menial tasks to Gary?	YES	NO
Did you compliment Albert in private?	YES	NO
Did you compliment Brad in private?	YES	NO
Did you compliment Gary in private?	YES	NO
Did you give special treatment to Albert?	YES	NO
Did you give special treatment to Brad?	YES	NO
Did you give special treatment to Gary?	YES	NO

**\*\*Important:** Now go back and write a number from 0-10 next to each question to show how confident you are that you got that question right. You must give a confidence rating to every question to be eligible for the memory prize.

0= Not at all confident  
10= Completely confident

## Appendix G- Final Attitudes Questionnaire

Using the scale below, please indicate your attitude by writing your answer in the blank.

-3	-2	-1	0	1	2	3
Very Negative			Neither Positive nor Negative			Very Positive

- a. What is your attitude toward gay men? \_\_\_\_\_
- b. Using the same scale above, what is the most positive, or least negative, you can imagine your attitude toward gay men being? \_\_\_\_\_
- c. Using the same scale above, what is the most negative, or least positive, you can imagine your attitude toward gay men being? \_\_\_\_\_
- d. Considering only the positive qualities of gay men and ignoring their negative ones, evaluate how positive their positive qualities are on the following 4-point scale: a) not at all positive; b) slightly positive; c) moderately positive; d) extremely positive.
- e. Considering only the negative qualities of gay men and ignoring their positive ones, evaluate how negative their negative qualities are on the following 4-point scale: a) not at all negative; b) slightly negative; c) moderately negative; d) extremely negative.
- f. Where would you place gay men on the following numeric scale? \_\_\_\_\_

Bad						Good
-3	-2	-1	0	1	2	3

- g. Where would you place gay men on the following numeric scale? \_\_\_\_\_ .

Unpleasant						Pleasant
-3	-2	-1	0	1	2	3

- h. Where would you place gay men on the following numeric scale? \_\_\_\_\_

Immoral						Moral
-3	-2	-1	0	1	2	3

Using the scale below, please indicate your attitude by checking the appropriate box.

-3	-2	-1	0	1	2	3	
Very Negative			Neither Positive nor Negative				Very Positive

- a. What is your attitude toward capital punishment? \_\_\_\_\_
- b. Using the same scale above, what is the most positive, or least negative, you can imagine your attitude toward capital punishment being? \_\_\_\_\_
- c. Using the same scale above, what is the most negative, or least positive, you can imagine your attitude toward capital punishment being? \_\_\_\_\_
- d. Considering only the positive qualities of capital punishment and ignoring its negative ones, evaluate how positive its positive qualities are on the following 4-point scale: a) not at all positive; b) slightly positive; c) moderately positive; d) extremely positive.
- e. Considering only the negative qualities of capital punishment and ignoring its positive ones, evaluate how negative its negative qualities are on the following 4-point scale: a) not at all negative; b) slightly negative; c) moderately negative; d) extremely negative.
- f. Where would you place capital punishment on the following numeric scale? \_\_\_\_\_

Bad						Good
-3	-2	-1	0	1	2	3

- g. Where would you place capital punishment on the following numeric scale? \_\_\_\_\_ .

Unpleasant						Pleasant
-3	-2	-1	0	1	2	3

- h. Where would you place capital punishment on the following numeric scale? \_\_\_\_\_

Immoral						Moral
-3	-2	-1	0	1	2	3

Using the scale below, please indicate your attitude by checking the appropriate box.

-3	-2	-1	0	1	2	3	
Very Negative			Neither Positive nor Negative				Very Positive

- a. What is your attitude toward engaging in regular physical exercise? \_\_\_\_\_
- b. Using the same scale above, what is the most positive, or least negative, you can imagine your attitude toward engaging in regular physical exercise being? \_\_\_\_\_
- c. Using the same scale above, what is the most negative, or least positive, you can imagine your attitude toward engaging in regular physical exercise being? \_\_\_\_\_
- d. Considering only the positive qualities of engaging in regular physical exercise and ignoring its negative ones, evaluate how positive its positive qualities are on the following 4-point scale: a) not at all positive; b) slightly positive; c) moderately positive; d) extremely positive.
- e. Considering only the negative qualities of engaging in regular physical exercise and ignoring its positive ones, evaluate how negative its negative qualities are on the following 4-point scale: a) not at all negative; b) slightly negative; c) moderately negative; d) extremely negative.
- f. Where would you place engaging in regular physical exercise on the following numeric scale? \_\_\_\_\_

Bad						Good
-3	-2	-1	0	1	2	3

- g. Where would you place engaging in regular physical exercise on the following numeric scale? \_\_\_\_\_ .

Unpleasant						Pleasant
-3	-2	-1	0	1	2	3

- h. Where would you place engaging in regular physical exercise on the following numeric scale? \_\_\_\_\_ .

Immoral						Moral
-3	-2	-1	0	1	2	3



## Appendix H Oral Debriefing

Our hypothesis was that when people are asked about actions that they took in the past, the answers that they give will affect their memory for those actions. If the actions in question were positive actions toward some group the more they remember taking the actions the more their attitudes will change in a positive direction and the less they remember taking the actions the less their attitudes will change in a positive direction. The opposite is true for remembering negative actions. The ideal way to test this hypothesis would be to have people actually take positive or negative actions toward members of a particular social group-- ideal but impractical. Instead, we decided to have participants imagine taking positive or negative actions toward members of a social group, in this case a gay man. The main focus of the study though was on the effects of answering questions about the previous actions. Because that was the main focus in session two we had people answer questions about the actions they had imagined. Participants in different conditions were asked to give different kinds of answers to the questions. We predicted that the different types of answers would affect their memory for the imagined events, so in session 3 we had to have a memory test. We also predicted (as explained previously) that the better the memory for the positive or negative actions the more people's attitudes would change in that direction. So at the end we had to have an attitude questionnaire. You can see that the experiment was very straightforward and there was no deception. We actually were interested in your memory for the actions you imagined. The only possible risk in the procedure might be if participants let the procedures affect their attitudes after they left the experiment. Previous research has shown however that if the process is explained to participants during the debriefing any attitude change goes away before they leave the experimental room (Carlsmith, Ellsworth, Aronson; 1976; Ross, Lepper, Hubbard; 1975). So you should leave the experiment with the same attitudes you had before the experiment. Also please do not discuss this or any other experiment with other students, because they might be participants in the future.

Appendix I: STATEMENT OF CONSENT

I, the undersigned, do hereby give my informed consent to my participation in this study. I have been informed about each of the following:

- The purposes of the study- the research is intended to examine memory and attitudes.
- The procedures – I will be writing some statements, answering questions regarding those statements, and reporting several of my social attitudes.
- The benefits – Participants will experience the research process, and receive two hours of research credit for their participation.
- The risks- minimal
- I may only receive credit for participating in the present study once, and I must participate in all three sessions to receive credit.

I understand that I may withdraw at any time before or during the experiment at my option, if I become upset or begin feel uncomfortable. Recognizing the importance of avoiding bias in the results of this experiment, I agree not to discuss any of the details of the procedure with other participants. I understand that all of the research and evaluation materials will be confidentially maintained. The means used to maintain confidentiality are:

- My data will be given a code number for research identification, and my name will be kept anonymous.
- Data, along with consent forms, will be kept in a locked file cabinet.
- Only the investigators will have access to my identification data.

I understand that if I have questions concerning the research, I can call the following persons:

- Amanda Morin- Graduate Student  
-Department of Psychology, 257-7414
- Dr. Charles Lord- Faculty Sponsor  
-Department of Psychology, 257-7410
- Dr. Christie Scollon-Chair, Department of Psychology Human Subjects Committee  
-257-6424
- Dr. Timothy Hubbard -TCU Committee on Safeguards of Human Subjects – Psychology  
-257-6412
- Jan Fox, TCU Coordinator-Research and Sponsored Projects  
-257-7515

\_\_\_\_\_  
Participant's Name (PLEASE PRINT)

\_\_\_\_\_  
Participant's TCU Student ID#

\_\_\_\_\_  
Participant's Signature

\_\_\_\_\_  
Date

\_\_\_\_\_  
Professor

\_\_\_\_\_  
Class

My E-mail: \_\_\_\_\_

## Appendix J: Pro Capital Punishment

We are examining various forms of written communication. We have two conditions, a poetry condition and a persuasive writing condition. You are in the persuasive writing condition.

The arguments you write are to be very much in favor of capital punishment. Take the first five minutes and sit and think about arguments that you can use. When the five minutes are up, select your best 7 *non-redundant* arguments and write them. These arguments will be shown to other students who will rate them on how persuasive they are so try to do the best possible job in coming up with arguments that will persuade readers to adopt the position you are arguing, an attitude in favor of capital punishment.

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_
4. \_\_\_\_\_  
\_\_\_\_\_
5. \_\_\_\_\_  
\_\_\_\_\_
6. \_\_\_\_\_  
\_\_\_\_\_
7. \_\_\_\_\_  
\_\_\_\_\_

\*\*\*Now go back and check to be sure that you do not make the same argument twice, be sure each argument is clearly different from the others.

## Appendix K: Anti Capital Punishment

We are examining various forms of written communication. We have two conditions, a poetry condition and a persuasive writing condition. You are in the persuasive writing condition.

The arguments you write are to be very much against capital punishment. Take the first five minutes and sit and think about arguments that you can use. When the five minutes are up, select your best 7 *non-redundant* arguments and write them. These arguments will be shown to other students who will rate them on how persuasive they are so try to do the best possible job in coming up with arguments that will persuade readers to adopt the position you are arguing, an attitude opposed to capital punishment.

1. \_\_\_\_\_  
\_\_\_\_\_
2. \_\_\_\_\_  
\_\_\_\_\_
3. \_\_\_\_\_  
\_\_\_\_\_
4. \_\_\_\_\_  
\_\_\_\_\_
5. \_\_\_\_\_  
\_\_\_\_\_
6. \_\_\_\_\_  
\_\_\_\_\_
7. \_\_\_\_\_  
\_\_\_\_\_

\*\*\*Now go back and check to be sure that you do not make the same argument twice, be sure each argument is clearly different from the others.

## Appendix L- Selection of arguments generated by participants

### ANTI CAPITAL PUNISHMENT ARGUMENTS

1. Some offenders are psychologically ill and capital punishment wouldn't be right for them.
2. It costs more money to go through the process of administering the death penalty than life in prison.
3. Some innocent people will surely be wrongly sentenced.
4. If the wrong person is killed, the case dies with him/her.
5. Very few civilized countries still have the death penalty.
6. For many religious people, capital punishment is still considered murder and therefore sinful.
7. The techniques used for the death penalty are painful.
8. There are other options for punishment that don't result in death.
9. Capital punishment is inhumane.
10. Capital punishment is not moral.
11. Capital punishment is a weak spot of our legal system.
12. Christians believe in forgiveness and capital punishment doesn't show forgiveness to people.
13. When we enforce capital punishment, we lessen the enormity of the original crime.
14. Capital punishment is the product of an outdated system of laws.
15. Capital punishment is cruel and unusual punishment- an awful way to die.
16. It could be considered easier than life in prison.
17. The convicted criminal receives too much attention when executed.
18. Execution is quick and so criminals don't suffer enough and feel bad about their actions long enough.
19. The appeals process is so lengthy and the case stays in court too long.
20. Capital punishment ends any investigation- there may be more to it.
21. Capital punishment is inappropriate for children.
22. Most cases are not simple open and shut and capital punishment is not always a good fit.
23. Capital punishment should require a more thorough investigation before being considered.
24. The death penalty is a quick and easy way to judge criminals but that doesn't make it the right way.
25. Walk a mile in their shoes, would you want to be on death row?
26. Tax payer money goes to the high costs of the multiple court battles, keeping them on death row and the execution.
27. Our country would be a more fair and safe place if capital punishment ended.
28. Does capital punishment really hurt people?
29. Sometimes a person will plead guilty for a lesser crime to avoid capital punishment but they are not guilty at all.
30. Capital punishment violates free speech.
31. Capital punishment violates freedom to use your money how you see fit.
32. Capital punishment publicizes private matters.
33. The death penalty is wrong because often there is a lack of evidence.

34. Evidence may surface later to clear the alleged criminal.
35. The death penalty punishes a murderer by murdering him/her.
36. Something about capital punishment just feels wrong.
37. "Capital punishment" is worse than "Capitol punishment"
38. The 'pit' in capital punishment stands for the pitfall that it is.
39. Capital punishment is a very permanent solution.
40. People who like capital punishment are not intelligent.

## PRO CAPITAL PUNISHMENT ARGUMENTS

1. Capital punishment is eye-for-an-eye punishment, equal treatment.
2. Why does a murderer deserve life?
3. More economic than life in prison.
4. They could hurt another prisoner.
5. They could kill another prisoner.
6. This is justice for the friends and family of the victim.
7. This brings closure for the friends and family.
8. How can you say the death of the victim is worth a certain number of years in jail for the perpetrator?
9. Capital punishment keeps dangerous criminals out of society for good and makes life safer.
10. The friends and family of the victim can rest relieved that the criminal has been punished.
11. It will serve as a warning for other criminals.
12. It will reduce the crime rate.
13. A dangerous criminal could receive probation.
14. The criminal could escape from prison.
15. They can't continue to commit crimes while in jail if they are dead.
16. We have established a precedence of capital punishment and should continue it.
17. Appointed judges decide in favor of capital punishment and we should trust them.
18. Those sentenced to the death penalty had a fair trial with a jury of their peers.
19. If you commit a crime punishable by capital punishment, you should be separated from all people.
20. Capital punishment shows that there is no person or crime that is above the law.
21. The offender learns his/her lesson more than when punished by jail time.
22. Creates a sense of undisputable power and authority in our legal system.
23. Receiving punishment after suing someone might deter future criminals.
24. The criminal might become a better person and repent for his deeds.
25. The death penalty is an example of paying for crimes by punishment.
26. If a person violates another's right to live, they shouldn't have that right, capital punishment is a rightful punishment.
27. They are not fit to live among the rest of us.
28. Capital punishment lets people know justice exists.
29. Places where capital punishment is the policy will attract honest people.
30. Capital punishment is an obvious and unmistakable standard for acceptable behavior.
31. Capital punishment sets obvious consequences for actions.

32. The death penalty lets criminals know what citizens think of wretched crimes.
33. Capital punishment helps maintain the law.
34. The death penalty is the only appropriate punishment for some crimes.
35. Death is the only thing that can stop some criminals.
36. Capital punishment helps relieve the overcrowded prison system.
37. Capital punishment will stop drug trafficking.
38. Capital punishment will hurt far fewer people in the long run.
39. The death penalty has been used world wide from the beginning of written history.
40. Criminals would walk all over us if there weren't harsh policies for punishment.

Appendix M– Recall Condition Pro or Con Capital Punishment Arguments

You will now be questioned about the arguments you did and did not make in the last session. Answer every question as best you can with “Yes, I wrote that” or “No, I did not”.

Please write your answer to each question in the blank next to the number. *Do Not abbreviate* any of the answers. Write “Yes, I wrote that” or “No, I did not” in full for each question. The statements will be written in generic terms to keep you from identifying your own statements based simply on your writing style.

- |  |   |
|--|---|
| <ol style="list-style-type: none"> <li>1. _____</li> <li>2. _____</li> <li>3. _____</li> <li>4. _____</li> <li>5. _____</li> <li>6. _____</li> <li>7. _____</li> <li>8. _____</li> <li>9. _____</li> <li>10. _____</li> <li>11. _____</li> <li>12. _____</li> <li>13. _____</li> </ol> | <ol style="list-style-type: none"> <li>14. _____</li> <li>15. _____</li> <li>16. _____</li> <li>17. _____</li> <li>18. _____</li> <li>19. _____</li> <li>20. _____</li> <li>21. _____</li> <li>22. _____</li> <li>23. _____</li> <li>24. _____</li> <li>25. _____</li> <li>26. _____</li> </ol> |
|--|---|

27. \_\_\_\_\_
28. \_\_\_\_\_
29. \_\_\_\_\_
30. \_\_\_\_\_
31. \_\_\_\_\_
32. \_\_\_\_\_
33. \_\_\_\_\_
34. \_\_\_\_\_
35. \_\_\_\_\_
36. \_\_\_\_\_
37. \_\_\_\_\_
38. \_\_\_\_\_
39. \_\_\_\_\_
40. \_\_\_\_\_



Appendix N– Do Not Recall Condition Pro or Con Capital Punishment Arguments

You will now be questioned about the actions you did and did not write in the last session. We need to get all three types of answers that occur in normal communication: “Yes, I wrote that”, “No, I did not”, and “I do not recall.” Answer every question as best you can with “Yes, I wrote that” or “No, I did not” except for the questions we have randomly selected to be the “I do not recall” questions. You will know which questions to answer “I do not recall” to because the experimenter will place a red card on the table *after* reading you the question. When you see this signal, please write “I do not recall” in the blank.

Please write your answer to each question in the blank next to the number. *Do Not abbreviate* any of the answers. Write “Yes, I wrote that”, “No, I did not”, or “I do not recall” (for signaled questions) *in full* for each question.

The statements will be written in generic terms to keep you from identifying your own statements based simply on your writing style.

Remember: Write “I do not recall” **only** when you see the red card. Answer all other questions by writing either “Yes, I wrote that” or “No, I did not.”

- |           |           |
|-----------|-----------|
| 1. _____  | 14. _____ |
| 2. _____  | 15. _____ |
| 3. _____  | 16. _____ |
| 4. _____  | 17. _____ |
| 5. _____  | 18. _____ |
| 6. _____  | 19. _____ |
| 7. _____  | 20. _____ |
| 8. _____  | 21. _____ |
| 9. _____  | 22. _____ |
| 10. _____ | 23. _____ |
| 11. _____ | 24. _____ |
| 12. _____ | 25. _____ |
| 13. _____ | 26. _____ |

27. \_\_\_\_\_
28. \_\_\_\_\_
29. \_\_\_\_\_
30. \_\_\_\_\_
31. \_\_\_\_\_
32. \_\_\_\_\_
33. \_\_\_\_\_
34. \_\_\_\_\_
35. \_\_\_\_\_
36. \_\_\_\_\_
37. \_\_\_\_\_
38. \_\_\_\_\_
39. \_\_\_\_\_
40. \_\_\_\_\_

Appendix O- Control Condition Pro or Con Capital Punishment Arguments

You will now hear a selection of arguments about Capital Punishment that have been generated. Please listen and write the last four words of each statement.

Do not abbreviate any of the words but write the last four words *in full*.

- |           |           |
|-----------|-----------|
| 1. _____  | 21. _____ |
| 2. _____  | 22. _____ |
| 3. _____  | 23. _____ |
| 4. _____  | 24. _____ |
| 5. _____  | 25. _____ |
| 6. _____  | 26. _____ |
| 7. _____  | 27. _____ |
| 8. _____  | 28. _____ |
| 9. _____  | 29. _____ |
| 10. _____ | 30. _____ |
| 11. _____ | 31. _____ |
| 12. _____ | 32. _____ |
| 13. _____ | 33. _____ |
| 14. _____ | 34. _____ |
| 15. _____ | 35. _____ |
| 16. _____ | 36. _____ |
| 17. _____ | 37. _____ |
| 18. _____ | 38. _____ |
| 19. _____ | 39. _____ |
| 20. _____ | 40. _____ |

Appendix P- Session 3 Memory Test (7 of the items in the memory test were customized to be similar to what the participant wrote in session 1)

In this session, we will give you a memory test for the arguments that you made back in Session 1. This is a test of your memory ability. To motivate you to perform well, we will give a \$40 gift certificate to the TCU Bookstore to the student who gets the highest number of the 108 memory questions right. The prize will be split in the case of ties. You must answer **all** the questions to be eligible for the prize. Circle the correct answer for each question. Did you write each of these ideas in Session 1? (The arguments are not verbatim, but paraphrased.)

1. Capital punishment is eye-for-an-eye punishment, equal treatment.  
YES NO
2. Why does a murderer deserve life?  
YES NO
3. More economic than life in prison.  
YES NO
4. They could hurt another prisoner.  
YES NO
5. They could kill another prisoner.  
YES NO
6. This is justice for the friends and family of the victim.  
YES NO
7. This brings closure for the friends and family.  
YES NO
8. How can you say the death of the victim is worth a certain number of years in jail for the perpetrator?  
YES NO
9. Capital punishment keeps dangerous criminals out of society for good and makes life safer.  
YES NO

*(This document had forty total statements to which participants answered 'yes' or 'no'.)*

**\*\*Important:** Now go back and write a number from 0-10 next to each question to show how confident you are that you got that question right. You must give a confidence rating for every statement to be eligible for the memory prize.

0= Not at all confident    10= Completely confident

## Appendix Q- Final Attitudes Questionnaire

Using the scale below, please indicate your attitude by writing your answer in the blank.

-3	-2	-1	0	1	2	3
Very Negative			Neither Positive nor Negative			Very Positive

- i. What is your attitude toward gay men? \_\_\_\_\_
- j. Using the same scale above, what is the most positive, or least negative, you can imagine your attitude toward gay men being? \_\_\_\_\_
- k. Using the same scale above, what is the most negative, or least positive, you can imagine your attitude toward gay men being? \_\_\_\_\_
- l. Considering only the positive qualities of gay men and ignoring their negative ones, evaluate how positive their positive qualities are on the following 4-point scale: a) not at all positive; b) slightly positive; c) moderately positive; d) extremely positive.
- m. Considering only the negative qualities of gay men and ignoring their positive ones, evaluate how negative their negative qualities are on the following 4-point scale: a) not at all negative; b) slightly negative; c) moderately negative; d) extremely negative.
- n. Where would you place gay men on the following numeric scale? \_\_\_\_\_

Bad						Good
-3	-2	-1	0	1	2	3

- o. Where would you place gay men on the following numeric scale? \_\_\_\_\_ .

Unpleasant						Pleasant
-3	-2	-1	0	1	2	3

- p. Where would you place gay men on the following numeric scale? \_\_\_\_\_

Immoral						Moral
-3	-2	-1	0	1	2	3

Using the scale below, please indicate your attitude by checking the appropriate box.

-3	-2	-1	0	1	2	3
Very Negative			Neither Positive nor Negative			Very Positive

- i. What is your attitude toward capital punishment? \_\_\_\_\_
- j. Using the same scale above, what is the most positive, or least negative, you can imagine your attitude toward capital punishment being? \_\_\_\_\_
- k. Using the same scale above, what is the most negative, or least positive, you can imagine your attitude toward capital punishment being? \_\_\_\_\_
- l. Considering only the positive qualities of capital punishment and ignoring its negative ones, evaluate how positive its positive qualities are on the following 4-point scale: a) not at all positive; b) slightly positive; c) moderately positive; d) extremely positive.
- m. Considering only the negative qualities of capital punishment and ignoring its positive ones, evaluate how negative its negative qualities are on the following 4-point scale: a) not at all negative; b) slightly negative; c) moderately negative; d) extremely negative.
- n. Where would you place capital punishment on the following numeric scale? \_\_\_\_\_

Bad						Good
-3	-2	-1	0	1	2	3

- o. Where would you place capital punishment on the following numeric scale? \_\_\_\_\_ .

Unpleasant						Pleasant
-3	-2	-1	0	1	2	3

- p. Where would you place capital punishment on the following numeric scale? \_\_\_\_\_

Immoral						Moral
-3	-2	-1	0	1	2	3

Using the scale below, please indicate your attitude by checking the appropriate box.

-3	-2	-1	0	1	2	3
Very Negative			Neither Positive nor Negative			Very Positive

- i. What is your attitude toward engaging in regular physical exercise? \_\_\_\_\_
- j. Using the same scale above, what is the most positive, or least negative, you can imagine your attitude toward engaging in regular physical exercise being? \_\_\_\_\_
- k. Using the same scale above, what is the most negative, or least positive, you can imagine your attitude toward engaging in regular physical exercise being? \_\_\_\_\_
- l. Considering only the positive qualities of engaging in regular physical exercise and ignoring its negative ones, evaluate how positive its positive qualities are on the following 4-point scale: a) not at all positive; b) slightly positive; c) moderately positive; d) extremely positive.
- m. Considering only the negative qualities of engaging in regular physical exercise and ignoring its positive ones, evaluate how negative its negative qualities are on the following 4-point scale: a) not at all negative; b) slightly negative; c) moderately negative; d) extremely negative.
- n. Where would you place engaging in regular physical exercise on the following numeric scale? \_\_\_\_\_.

Bad						Good
-3	-2	-1	0	1	2	3

- o. Where would you place engaging in regular physical exercise on the following numeric scale? \_\_\_\_\_.

Unpleasant						Pleasant
-3	-2	-1	0	1	2	3

- p. Where would you place engaging in regular physical exercise on the following numeric scale? \_\_\_\_\_.

Immoral						Moral
-3	-2	-1	0	1	2	3

Did you think about Capital Punishment issues between the sessions? YES NO

If yes, how much? Circle one:

0= not at all 1=very rarely 2= occasionally 3= often 4= very often

Anything specific?

---

Did you talk about Capital Punishment issues between the sessions? YES NO

If yes, how much? Circle one:

0= not at all 1=very rarely 2= occasionally 3= often 4= very often

Anything specific?

---

Did the person/people you talked to disagree with your views? YES NO

Anything

specific? \_\_\_\_\_

How easy or difficult was it for you to think of statements to write about capital punishment?

0= very difficult 1= a little difficult 2=not hard or difficult 3= a little easy 4= very easy

Given the choice, would you rather have written positive or negative statements about capital punishment in session 1?

Positive

Negative

Why?

---

---

---

---



## Appendix R

### Oral Debriefing

Our hypothesis was that when people are asked about arguments that they made in the past, the answers that they give will affect their memory for those arguments. If the arguments in question were in favor of some social issue, the more they remember writing the arguments, the more their attitudes will change in a positive direction and the less they remember writing the arguments the less their attitudes will change in a positive direction. The opposite is true for remembering opposing arguments on a social issue. The main focus of the study though was on the effects of answering questions about the previously generated arguments.

Because that was the main focus in the session two we had people answer questions about the arguments they had written. Participants in different conditions were asked to give different kinds of answers to the questions. We predicted that the different types of answers would affect their memory for the written arguments so in session 3 we had to have a memory test. We also predicted (as explained previously) that the better the memory for the pro or con arguments, the more people's attitudes would change in that direction. So at the end we had to have an attitude questionnaire. You can see that the experiment was very straightforward and there was no deception. We actually were interested in your memory for the arguments you wrote. The only possible risk in the procedure might be if participants let the procedures affect their attitudes after they left the experiment. Previous research has shown however that if the process is explained to participants during the debriefing any attitude change goes away before they leave the experimental room (Carlsmith, Ellsworth, Aronson; 1976; Ross, Lepper, Hubbard; 1975). So you should leave the experiment with the same attitudes you had before the experiment. Please do not discuss this or any other experiment with other students, because they might be participants in the future.

## Appendix S- (Example) List of all Pro/Con Arguments Generated

This is a list of all the arguments generated both in favor of and against Capital Punishment. Take a few moments to look them over. The purpose of this is for you to have exposure to both sides of the issue before leaving the experiment.

### ANTI CAPITAL PUNISHMENT ARGUMENTS

1. Some offenders are psychologically ill and capital punishment wouldn't be right for them.
2. It costs more money to go through the process of administering the death penalty than life in prison.
3. Some innocent people will surely be wrongly sentenced.
4. If the wrong person is killed, the case dies with him/her.
5. Very few civilized countries still have the death penalty.
6. For many religious people, capital punishment is still considered murder and therefore sinful.
7. The techniques used for the death penalty are painful.
8. There are other options for punishment that don't result in death.
9. Capital punishment is inhumane.
10. Capital punishment is not moral.
11. Capital punishment is a weak spot of our legal system.
12. Christians believe in forgiveness and capital punishment doesn't show forgiveness to people.
13. When we enforce capital punishment, we lessen the enormity of the original crime.
14. Capital punishment is the product of an outdated system of laws.
15. Capital punishment is cruel and unusual punishment- an awful way to die.
16. It could be considered easier than life in prison.
17. The convicted criminal receives too much attention when executed.
18. Execution is quick and so criminals don't suffer enough and feel bad about their actions long enough.
19. The appeals process is so lengthy and the case stays in court too long.
20. Capital punishment ends any investigation- there may be more to it.
21. Capital punishment is inappropriate for children.
22. Most cases are not simple open and shut and capital punishment is not always a good fit.
23. Capital punishment should require a more thorough investigation before being considered.
24. The death penalty is a quick and easy way to judge criminals but that doesn't make it the right way.
25. Walk a mile in their shoes, would you want to be on death row?
26. Tax payer money goes to the high costs of the multiple court battles, keeping them on death row and the execution.
27. Our country would be a more fair and safe place if capital punishment ended.
28. Does capital punishment really hurt people?

29. Sometimes a person will plead guilty for a lesser crime to avoid capital punishment but they are not guilty at all.
30. Capital punishment violates free speech.
31. Capital punishment violates freedom to use your money how you see fit.
32. Capital punishment publicizes private matters.
33. The death penalty is wrong because often there is a lack of evidence.
34. Evidence may surface later to clear the alleged criminal.
35. The death penalty punishes a murderer by murdering him/her.
36. Something about capital punishment just feels wrong.
37. "Capital punishment" is worse than "Capitol punishment"
38. The 'pit' in capital punishment stands for the pitfall that it is.
39. Capital punishment is a very permanent solution.
40. People who like capital punishment are not intelligent.

## PRO CAPITAL PUNISHMENT ARGUMENTS

1. Capital punishment is eye-for-an-eye punishment, equal treatment.
2. Why does a murderer deserve life?
3. More economic than life in prison.
4. They could hurt another prisoner.
5. They could kill another prisoner.
6. This is justice for the friends and family of the victim.
7. This brings closure for the friends and family.
8. How can you say the death of the victim is worth a certain number of years in jail for the perpetrator?
9. Capital punishment keeps dangerous criminals out of society for good and makes life safer.
10. The friends and family of the victim can rest relieved that the criminal has been punished.
11. It will serve as a warning for other criminals.
12. It will reduce the crime rate.
13. A dangerous criminal could receive probation.
14. The criminal could escape from prison.
15. They can't continue to commit crimes while in jail if they are dead.
16. We have established a precedence of capital punishment and should continue it.
17. Appointed judges decide in favor of capital punishment and we should trust them.
18. Those sentenced to the death penalty had a fair trial with a jury of their peers.
19. If you commit a crime punishable by capital punishment, you should be separated from all people.
20. Capital punishment shows that there is no person or crime that is above the law.
21. The offender learns his/her lesson more than when punished by jail time.
22. Creates a sense of undisputable power and authority in our legal system.
23. Receiving punishment after suing someone might deter future criminals.
24. The criminal might become a better person and repent for his deeds.
25. The death penalty is an example of paying for crimes by punishment.

26. If a person violates another's right to live, they shouldn't have that right, capital punishment is a rightful punishment.
27. They are not fit to live among the rest of us.
28. Capital punishment lets people know justice exists.
29. Places where capital punishment is the policy will attract honest people.
30. Capital punishment is an obvious and unmistakable standard for acceptable behavior.
31. Capital punishment sets obvious consequences for actions.
32. The death penalty lets criminals know what citizens think of wretched crimes.
33. Capital punishment helps maintain the law.
34. The death penalty is the only appropriate punishment for some crimes.
35. Death is the only thing that can stop some criminals.
36. Capital punishment helps relieve the overcrowded prison system.
37. Capital punishment will stop drug trafficking.
38. Capital punishment will hurt far fewer people in the long run.
39. The death penalty has been used world wide from the beginning of written history.
40. Criminals would walk all over us if there weren't harsh policies for punishment.

## REFERENCES

- Albarracin, D., & Wyer, R.S., Jr. (2000). The cognitive impact of past behavior: Influences on beliefs, attitudes, and future behavioral decisions. *Journal of Personality and Social Psychology, 79*, 5-22.
- Bem, D. J. (1972). Self-perception theory. In L. Berkowitz (Ed.), *Advances in experimental social psychology*, (Vol. 6, pp. 1-62). New York: Academic Press.
- Burger, J.M. (1999). The foot-in-the-door compliance procedure: A multiple-process analysis and review. *Personality and Social Psychology Review, 3*, 303-325.
- Bylin, S. (2002). How does repeated simulation of memory impairment affect genuine memory performance? *Psychology, Crime & Law, 8*, 265-288.
- Campbell, D.T. (1963). Social Attitudes & other acquired behavioral dispositions. In S. Koch (Ed.), *Psychology: A Study of Science* (Vol. 6, pp. 94-172). New York: McGraw- Hill.
- Craik, F.I.M., & Tulving, E. (1975). Depth of processing and the retention of words in recognition memory. *Journal of Experimental Psychology: General, 104*, 268-294.
- Downing, J.W., Judd, C.M., & Brauer, M. (1992). Effects of repeated expressions on attitude extremity. *Journal of Personality and Social Psychology, 62*, 17-29.
- Elms, A. C., & Janis, I.L. (1965). Counter-norm attitudes induced by consonant versus dissonant conditions of role-playing. *Journal of Experimental Research in Personality, 1*, 50-60.
- Festinger, L. (1957). *A theory of cognitive dissonance*. Stanford, CA: Stanford University Press.
- Festinger, L., & Carlsmith, J.M. (1959). Cognitive consequences of forced compliance. *Journal of Abnormal & Social Psychology, 58*, 203-210.

- Freedman J., & Fraser, S. (1966). Compliance without pressure: The foot-in-the-door technique. *Journal of Personality and Social Psychology*, 4, 195-202.
- Greenwald, A.G. (1969). The open-mindedness of the counterattitudinal role player. *Journal of Experimental Social Psychology*, 5, 375-388.
- Greenwald, A.G. (1970). When does role playing produce attitude change? Toward an answer. *Journal of Personality and Social Psychology*, 16, 214-219.
- Harmon-Jones, E., & Mills, J. (1999). An introduction to cognitive dissonance theory and an overview of current perspectives on the theory. In E. Harmon-Jones & J. Mills (Eds.), *Cognitive dissonance: Progress on a pivotal theory in social psychology* (pp. 3-21). Washington, DC: American Psychological Association.
- Jacoby, L.L., Woloshyn, V., & Kelley, C. (1989). Becoming famous without being recognized: unconscious influences of memory produced by divided attention. *Journal of Experimental Psychology*, 118, 115-125.
- Jacoby, L.L., Shimizu, Y., Daniels, K.D., & Rhodes, M.G. (2005). Modes of cognitive control in recognition and source memory: Depth of retrieval. *Psychonomic Bulletin and Review*, 12, 852-857.
- Janis, I.L., & King, B.T. (1954). The influence of role-playing on opinion change. *Journal of Abnormal and Social Psychology*, 49, 211-218.
- Janis, I.L., & Mann, L. (1965). Effectiveness of emotional role playing in smoking habits and attitudes. *Journal of Experimental Research in Personality*, 1, 84-90.
- Johnson, M.K. (2006). Memory and reality. *American Psychologist*, 61, 760-771.
- King, B.T., & Janis, I.L. (1956). Comparison of the effectiveness of improvised versus non-improvised role-playing in producing opinion changes. *Human Relations*, 9, 177-186.
- Kopelman, M.D. (1995). *The assessment of psychogenic amnesia*. In A.D. Baddeley, B.A.

- Wilson and F.N. Watts (Eds.), *Handbook of memory disorders* (pp. 427-448). West Sussex, England: Wiley.
- Laney, C., Morris, E.K., Bernstein, D.M., Wakefield, B.M., & Loftus, E.F. (2008). Asparagus, a love story: healthier eating could be just a false memory away. *Experimental Psychology*, *55*, 291-300.
- Lord, C.G., & Lepper, M.R. (1999). Attitude representation theory. In M.P. Zanna, (Ed.). *Advances in experimental social psychology* (Vol. 31, pp. 265-343). New York: Academic Press.
- Matz, D. C., & Wood, W. (2005). Cognitive dissonance in groups: The consequences of disagreement. *Journal of Personality and Social Psychology*, *88*, 22-37.
- Mann, L., & Janis, I.L. (1968). A follow-up study on the long-term effects of emotional role playing. *Journal of Personality and Social Psychology*, *8*, 339-342.
- McIntyre, R.B., Lord, C.G., Lewis, S.L. & Frye, G.D.J. (2003). False memories of attitude-relevant actions. *Social Cognition*, *21*, 395-420.
- Nisbett, R. E., & Wilson, T.D. (1977). Telling more than we can know. *Psychological Review*, *84*, 231-259.
- Schwarz, N. (2005). When thinking feels difficult: Meta-cognitive experiences in judgment and decision making. *Medical Decision Making*, *25*, 105-112.

## VITA

Amanda L. Morin

Texas Christian University  
Department of Psychology  
TCU box 298920  
E-mail: [a.wallace@tcu.edu](mailto:a.wallace@tcu.edu)

### **Biographical Data**

Birthdate: February 1, 1982  
Place of Birth: Waco, TX  
Citizenship: USA  
Married Philippe Morin, August 12, 2006

### **Education**

Master of Science – Experimental Psychology  
December, 2008  
Emphasis: Social  
Texas Christian University – Fort Worth, TX

Bachelor of Arts – Psychology  
December, 2004  
Baylor University – Waco, TX

### **Teaching Experience** - Assistant

General Psychology – Spring 2007  
General Psychology – Fall 2007

### **Papers**

Taylor, C.A., Lord, C.G., Ito, S. Mittie, S.K., Harrison, H., Morin, A., & McIntyre, R.B.  
(in prep). Hillary vs. Hillary: When the same role model inspires or fails to inspire  
improved performance under stereotype threat.

### **Grants**

Fall 2008 Graduate Student advisor to undergraduate grant recipient for TCU  
Undergraduate Research and Creativity Initiative Grant - \$1250

### **Professional Memberships**

Society for Personality and Social Psychology  
Social Psychology Network

### **Honors and Awards**

2006 Jack Kent Cooke Graduate Scholar  
2002 Jack Kent Cooke Undergraduate Transfer Scholar  
2000 McLennan Community College Presidential Scholarship



## ABSTRACT

### MOTIVATED FORGETTING AND ATTITUDE CHANGE

by Amanda Leigh Morin, MS, 2008  
Department of Psychology  
Texas Christian University

Thesis Advisor: Charles Lord, Professor of Psychology

Two experiments tested whether feigned memory loss for attitude-relevant actions can cause forgetting and decrease the impact of those actions on subsequently reported attitudes. Compared to participants in a control group, participants in Experiment 1 correctly recalled fewer of imagined attitude-relevant actions for which they feigned memory loss, and also displayed less effect of the imagined actions on their attitudes toward a social group. Compared to participants in a control group, participants in Experiment 2 had no memory impairments for self-generated arguments favorable or unfavorable to capital punishment after feigning memory loss for those arguments, but they displayed a greater effect of the arguments on subsequently reported attitudes. The discussion suggests reasons why results of the two experiments were discrepant.