

Running head: SELF-PRESENTATION AND HINDSIGHT BIAS

Relationship Between Self-Presentation and Hindsight Bias

Student's Name

University of Central Arkansas

Abstract

Hindsight bias is a tendency for people to believe that they would have known the answer to a question once the answer is revealed. This study examined the effect of increased social pressure on hindsight bias. Participants were randomly assigned to one of four groups. Group 1 received the answers to the questions and believed that their “knowledge” score would be shared with other participants (answer/share), Group 2 was answer/no share, Group 3 was no answer/share, and Group 4 was no answer/no share. As expected, groups that received the answers demonstrated greater hindsight bias. However, participants in groups that believed their score would be shared demonstrated reduced hindsight bias.

### Relationship Between Self-Presentation and Hindsight Bias

By claiming to have known something after the fact, people utilize the social phenomena identified as hindsight bias. It is formally defined by social psychologists as the tendency to judge events as more predictable when the outcome information is known (Myers, 1991). It is commonly referred to as the “I knew it all along” phenomenon. In addition to claiming to have known something people often have a need to self-present themselves in a positive manner. This allows for people to protect their self-concepts (Myers, 1991). There have been extensive investigations regarding these two social psychological theories.

Hindsight bias has a strong, comprehensive foundation in people’s interactions. It is an event that is not restricted to certain disciplines or matters of life (Szalanski & Willham, 1991). Hindsight has been used as an explanation for having known about layoffs, the fate of the stock market, medical diagnoses, and answers to test questions (Melvin & Mellor, 1991; Szalanski & Willham, 1991). In two studies by Phol and Hell (1996), people clung to the hindsight bias after having been informed of the bias and after being previously informed of the study’s design. Studies have uncovered several factors that produce this effect.

Hindsight bias is influenced by several factors. It is greater when the subject matter has positive self-relevance (Melvin & Mellor, 1991), when outcome is important to the situation, when the situation is unambiguous, and when less time is given to respond (Creyer & Ross, 1993). However, it has been reported that if the subject matter’s outcome is either surprising and or not relevant to the person making the judgment, the bias will be reduced (Melvin & Mellor, 1991; Ofir & Mazursky, 1997).

Self-presentation, also widely utilized by people, has similar factors affecting it. People are more likely to self-present when the social context is of importance, self-relevant, beneficial,

related to attractive skills, believable, and will be publicly known (Schlenker, Weiglod & Hallam, 1990). In addition, Friedrich (2000) found that self-serving and self-presentation was high when social desirable circumstances were at an above average level. In this study it was found that people falsely saw themselves as better at performing socially desirable tasks as compared to others. However, the study by Schlenker et al. (1990) found low self-esteem to decrease self-presentation.

Knowing that there are many factors that affect the self-serving bias, Campbell and Sedickedes (1999) put together a meta-analytic study of 14 factors that contribute to the bias. The 14 factors were: (1) role of actor or observer, (2) task importance, (3) self-esteem, (4) achievement motivation, (5) self-focused attention, (6) choice in participation, (7) outcome expectancies, (8) perceived difficulty, (9) competitive vs. noncompetitive, (10) equal or unequal status between people, (11) positive or negative affect, (12) locus of control, (13) gender, and (14) task type. The combination of these factors was renamed self-threat. The study found that when people's favorable views of themselves were questioned, mocked, or challenged, the person was motivated to present more self-serving bias. This "minimizes the threat and maintains the integrity of a positive self-concept in the face of threatening information" (Campbell & Sedikides, 1999, p. 513). They found that people are "motivated to protect, maintain, or enhance the positivity of the self-concept" (Campbell & Sedikides, 1999, p. 514).

Along with all the research pertaining to hindsight bias, several theories have been formed. One of the first theories is that memory has been impaired (Stahlberg, Eller, Maass, & Frey, 1995). This theory states that hindsight bias occurs because new knowledge becomes integrated with previous knowledge and this leads to a permanent modification. Another more recent theory is that using the hindsight bias is necessary for memory in that it updates the base

of knowledge for that particular situation involving hindsight bias (Hoffrage, Hertwig, & Gigerenzer, 2000). A view that directly relates to this study is the self-presentational explanation. Stahlberg et al. (1995) explain that the hindsight bias can be driven by the motivation to self-present. This allows for people to maintain a high self-esteem. Stahlberg's study did not find confirmation for this explanation, however it did focus on hindsight biases between groups. Another study also found that although hindsight bias was prevalent, it was not affected by self-presentation (Pohl, Stahlberg, & Frey, 1999). This study did not concentrate on the manipulation in creating motivation for self-presentation.

The current study seeks to find the affects of self-presentation in the social tendency to report hindsight bias. It is proposed that hindsight bias will occur more when outcomes are given than when they not and that it will be increased when pressure to self-present exists. By controlling for factors that elicit hindsight bias and self-presentation this study proposes to find these result. It is unsure what the results will be for groups who do not know the outcome but will self-present and for those who do know the outcome and will not self-present.

## Method

### *Participants*

Participants were students recruited as volunteers from the university's General Psychology classes. There were a total of 60 students. Forty-six were female and 14 were male. Some of the students were awarded extra credit points for their participation.

### *Materials*

The materials used for this study included the Superlab software program (Cedrus Corp.) on personal computers. The program presented a series of 30 general knowledge questions. The questions were devised to be a level of difficulty that gave the researchers confidence that the

participants had at some point been exposed to the questions and would also have been familiar with answers.

### *Procedure*

Participants arrived at the experimental lab and signed in. They were instructed to sit at a computer station to read and sign a written consent form, then wait for further instructions. The consent form included statements describing the purpose of the study and how the data would be collected. The exact purpose of the study was not disclosed to the participants. Instead, they were told they would be reviewing questions that average college students can answer correctly. This statement was used in order for participants to be motivated to work in an environment likely to induce hindsight bias and self-presentation. The motivation comes from feeling that the purpose of the study was believable, relevant to their self-esteem, and that the skills needed to succeed were desirable. After all participants completed the forms, they were directed to begin the session. Participants began the session first by reading the instructions on the computer screen and continuing to answer the questions by following the prompts given on the screen.

Participants were randomly placed into one of four groups with an equal number of participants in each group. There were four experimental sessions, with each session addressing one of four conditions. The four conditions were created as follows: half the participants were placed in groups that reviewed each question followed by its answer (answer groups), while the other half reviewed just the questions (no answer groups). Questions were shown for ten seconds and answers shown for four seconds. Either upon reading the question and answer or just the question, participants were asked, "If you had to answer the question, would you have answer it correctly? Press "Y" for yes and "N" for no." Next, both the answer and no answer groups were further divided in half according to whether they were to believe that the number of "yes"

responses would be shared with the other participants or kept confidential. This division created the four final groups. They are as follows: answer/share, answer/no share, no answer/share, and no answer/no share.

In summary, the answer/share group was created to measure hindsight bias and the relationship with self-presentation. The answer/no share group was created to measure hindsight bias only. The no answer/share measured self-presentation only and the no answer/no share group served as the control. The following figure represents the design:

		Share Answers	
		Yes	No
Get Answers	Yes	Answer/Share (hindsight bias & self-presentation)	Answer/No Share (hindsight only)
	No	No Answer/Share (self-presentation only)	No Answer/No Share (control)

Upon completing all 30 questions, all participants were told that the experiment was completed and would be sent a letter by e-mail discussing the purpose and results of the research. This was done to prevent participants from discussing the study with potential participants.

### Results

Participants responded to each question by answering either “yes” or “no”. The dependent variable was the number of “yes” responses. Only the comparisons of the number of “yes” responses (score) was needed to determine whether hindsight bias and self-presentation occurred.

It was believed that the groups who received the answers would demonstrate more hindsight bias by having more “yes” responses than those who were not given the answers. Due to self-presentation, groups that were told they would share answers were also expected to respond “yes” more often than groups who expected their answers to be kept private.

Table 1 shows means and SDs for each group. Figure 1 shows the comparison of mean scores between each group. The table and figure show that participants who received the answers scored higher in the number of “yes” responses than those who did not receive the answers. However it can be seen that groups who did not believe they would share responded “yes” more often than the groups who were told they would be sharing.

A 2x2 between-subjects ANOVA was used to assess the main effects and interaction. Participants who received the answers scored significantly higher than participants who did not,  $F(1,65)=8.409, p=.005$ . Also, participants who believed their scores would be shared scored significantly lower than the participants who did not believe they would be sharing scores,  $F(1,63)=4.813, p=.032$ . No interaction occurred between the answer and sharing groups,  $F(1,63)=1.004, p=.32$ .

### Discussion

This research found that when participants were given answers to the questions, they reported that they would have known the answer had they been asked. Participants who were not given the answers reported significantly fewer questions they would have answered correctly. Participants who believed they would share their answers reported that they would have known fewer answers than those who did not believe they would share.

As hypothesized, participants displayed hindsight bias. This was seen by the greater number of “yes” responses, when answers were given, as compared to when no answers were



given. This finding corresponds to the numerous amount of research that has demonstrated the use of hindsight bias (Creyer & Ross, 1993; Melvin & Mellor, 1991; Szalanski & Willham, 1991). It also adds to the list of subject areas of Pohl and Hell's (1996) meta-analysis study that hindsight occurs in.

When participants believed they were going to share their score, they reported they would not have known the answers more often as compared to those who believed their score would not be shared. This finding does not correspond to the prediction of this study. Research used to conduct this study reported that people use self-presentational styles that make them look good to their peers. Research has reported that people tend to want to impress others by displaying positive qualities (Stahlberg et al., 1995).

This opposing finding may be due to several factors. One reason may be that participants did not want to look over-confident. They may have anticipated that others would not have known as much as them and therefore would have looked foolish for knowing too much. It is also likely that participants were not aware of how they were going to share their answers. If they did not think they were going to share them out loud and be identified with their score, they may have been more honest instead of wanting to self-present. A third explanation may be that participants did not regard the task as important or competitive. Research by Campbell and Sedikides (1999) states that the factors of the task will be reflected in the amount of self-presentation. A last possibility is that these people had a lower self-esteem. Research by Schlenker et al. (1990) showed that people with a lower self-esteem, self-present less. They are more likely to be modest in how they portray themselves to others.

Even though many studies have been done for both hindsight bias and self-presentation, more studies are needed to understand the interaction between the two. It would be important to

look at variables such as self-esteem, competitiveness, and relatedness in regards to the nature of participants and design of the study.

## References

- Campbell, W., & Sedikides, C., (1999). Self-threat magnifies the self-serving bias: A meta-analytic integration. *Review of General Psychology*, 3, 23-43.
- Creyer, E., & Ross, W., (1993). Hindsight bias and inferences in choice: The mediating effect of cognitive effort. *Organizational Behavior and Human Decision Processes*, 55, 61-77.
- Friedrich, J., (2000). On seeing oneself as less self-serving than others: The ultimate self-serving bias? *Handbook of Demonstrations and Activities in the Teaching of Psychology*. (2<sup>nd</sup> ed.), Vol. 3.
- Hoffrage, U., Hertwig, R., & Gigerenzer, G., (2000). Hindsight bias: Not just a convenient memory enhancer but an important part of an efficient memory system. *Journal of Experimental Psychology: Learning, Memory and Cognition*, 26. Retrieved February 7, 2001, from the World Wide Web: <http://www.eurekaalert.org/releases/apa-hbn050500>.
- Melvin, M., & Mellor, S., (1991). Effect of self-relevance of an event on hindsight bias: The foreseeability of a layoff. *Journal of Applied Psychology*, 76, 469-577.
- Myers, D., (1999). *Social Psychology* (6<sup>th</sup> ed.). Boston: McGraw-Hill.
- Orif, C., & Myzursky, M., (1997). Does a surprising outcome reinforce or reverse the hindsight bias? *Organizational Behavior and Human Decision Processes*, 69, 51-57.
- Pohl, R., & Hell, W., (1996). No reduction in hindsight bias after complete information and repeated testing. *Organizational Behavior and Human Decision Processes*, 67, 49-58.
- Pohl, R., Stahlberg, D., & Frey, D., (1999). I'm not trying to impress you, but I surely knew it all along! Self-presentation and hindsight bias. *Sonder Forschungs Bereich*, 504, 99-19.

- Schlenker, B., Weigold, M., & Hallam, J., (1990). Self-serving attributions in social Context: Effects of self-esteem and social pressure. *Journal of Personality and Social Psychology*, 58, 855-863.
- Stahlberg, D., Eller, F., Maass, A., & Frey, D., (1995). We knew it all along: Hindsight bias in groups. *Organizational Behavior and Human Decision Processes*, 63, 46-58.
- Szalanski, J., & Willham, D., (1991). The hindsight bias: A meta-analysis. *Organizational Behavior and Human Decision Processes*, 48, 147-168.

Table 1

*Comparison of Mean “Yes” Responses Between Groups*

Answer Condition	Share Condition	Mean	SD	N
Answer	Share	16.67	4.16	18
	No Share	19.68	2.89	19
	Total	14.87	3.26	16
No Answer	Share	14.87	3.26	16
	No Share	16.00	4.99	14
	Total	15.40	4.12	30
Total	Share	15.82	3.82	34
	No Share	18.12	4.27	33
	Total	16.96	4.18	67

Figure Caption

*Figure 1.* Mean score of “yes” responses as a comparison between groups.

