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General Audience Abstract

PRIMED GOALS AS A MODERATOR OF
ACCOUNTABILITY INDUCED CONFORMITY

Andrew Quinn
2nd Lieutenant, Air Force

University of Florida
2000

Total # of pages: 75

Degree awarded: M.S. in psychology

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Participants took part in what they perceived as two separate studies on decision making. The first introduced a prime disguised as everyday decision-making scenarios that elicited either an accuracy orientation or a getting-along orientation. The second study consisted of a business administration scenario dealing with money allocation between two alternative products.

Although both accountable and unaccountable participants viewed another participant's (actually a confederate's) decision, only accountable participants receiving the accuracy prime failed to show a conformity effect.

This study provides encouraging results in one of the first steps toward refining the widely accepted social psychological theory that accountability predisposes people to conform to a judging audience. Furthermore, given the widespread use of accountability in such varied arenas as business, military service, engineering, medicine, etc., the results of this study could have useful policy implications for organizations across the nation. This study suggests that training or accountability alone may not produce the desired results of independent critical thinking; a combination of the two seems necessary.

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ACCOUNTABILITY INDUCED CONFORMITY

By

ANDREW QUINN

A THESIS PRESENTED TO THE GRADUATE SCHOOL
OF THE UNIVERSITY OF FLORIDA IN PARTIAL FULFILLMENT
OF THE REQUIREMENTS FOR THE DEGREE OF
MASTER OF SCIENCE

UNIVERSITY OF FLORIDA

2000

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Abstract of Thesis Presented to the Graduate School
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By

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August 2000

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Major Department: Psychology

An experiment was conducted to explore the boundaries of accountability induced conformity by introducing primed motivational goals. Past research has dealt with many situations suggesting that accountability to an audience with known views creates a conforming tendency. This study suggests a limitation of that traditional paradigm. Participants took part in what they perceived as two separate studies on decision making. The first introduced a prime that elicited either an accuracy orientation or a getting-along orientation. The second study consisted of a business administration scenario dealing with money allocation between two alternative products. Although both accountable and unaccountable participants viewed another participant's (actually a confederate's) decision, only accountable participants receiving the accuracy prime failed to show a conformity effect.

CHAPTER 1 INTRODUCTION

Accountability, or being answerable for one's actions, beliefs, or feelings, characterizes nearly every major decision. Executives are accountable to CEOs and stockholders, scientists are accountable to panels who judge their conclusions, engineers report to contractors, military officers answer to higher-ranking officers, etc. In many cases the accountable actor is unaware of the judging audience's pre-existing views regarding the relevant issue, but certainly accountability to an audience with known views occurs quite frequently. Given that the overwhelming majority of past research in the accountability domain suggests that accountable people will try to conform to an audience's view, how can organizations requiring accountability still promote independent and critical decision making?

Past studies have typically operationalized accountability through four methods: 1) mere presence of another, 2) identifiability (subjects expect their actions or words will be personally associated with them), 3) evaluation (being judged by others according to some normative standards and implied consequences), 4) or reason-giving (anticipating having to explain actions) (Lerner & Tetlock, 1999). Regardless of the form accountability takes, it causes people to be concerned over how they are evaluated and the consequences. Research suggests people use two primary methods to deal with such concern: 1) preemptive self-criticism, which involves more complex thinking to produce

a decision that can be justified and defended to audiences, or 2) conformity to a judging audience's known views, thereby increasing the likelihood of being judged favorably by that audience (Lerner & Tetlock, 1999). Tetlock (1985) suggested that people are cognitive misers and engage in preemptive self-criticism primarily when the cognitively "lazy" option of conforming is unavailable because the views of the audience are unknown. The majority of past studies in the accountability area have demonstrated a conformity effect to known views of an audience (Lerner & Tetlock, 1999).

This study explores the moderating variable of motivational goals on the typical conformity effect of accountability to an audience with known views. Specifically, it examines whether an accuracy-primed mindset, as opposed to a getting-along mindset, will interact with accountability and cause people to defend a decision based on merit even though the easy option of conforming to an audience's view exists.

CHAPTER 2 REVIEW OF LITERATURE

Knowledge of Audience Views and Predecisional Accountability

When the views of the possibly judging audience are known before forming one's own opinion, a conformity effect is likely (Tetlock, Skitka, & Boettger, 1989).

Conforming should prove the easiest path for accountable participants to take. They forgo the stress of arguing, being different, and actually avoid the cognitive processing required to come up with viable alternatives to the audience members' known views (Lerner & Tetlock, 1999). For example, Tetlock (1983) and Tetlock et al. (1989) showed that participants reported more liberal views on a controversial social issue when they expected to justify their responses to a liberal, and vice-versa when expecting to be accountable to a conservative.

This propensity to conform seems more pronounced for people with certain personality traits. For example, high self-monitors, low individualists, and the socially anxious all show a greater tendency to conform to the known views of a prospective audience (Chen, Shecter, & Chaiken, 1996).

Conformity is not an option though for people accountable to an audience having unknown views. People may simply presume the audience's views based upon normative expectations or situational cues and then shift their attitudes in line with this synthesized standard (Weigold & Schlenker, 1991). Or participants may engage in more effortful

processing by carefully considering all the options and formulating well thought out arguments as opposed to using heuristic shortcuts to problem solving (Tetlock, 1983). Different conditions of both the Tetlock (1983) and Tetlock et al. (1989) studies showed that when the observing audience's views were unknown, participants engaged in more flexible, multidimensional thinking (preemptive self-criticism) before taking a position.

Postdecisional Accountability

No prior commitment to a belief certainly makes conformity an easy option requiring little cognitive processing for someone who is aware of a judging audience's views. The arguments for the consensus belief have already been formulated and defending them should be no problem because disagreements will not exist between the participant and the audience. But it seems logical that a postdecisional accountability situation would motivate someone to work at preserving his or her initial beliefs. By publicly stating one's opinion on an issue or a decision, they have put their rationale, intelligence, and personality characteristics that factored into the decision on the table for critique. Therefore, they have a vested interest in protecting these constructs by preserving their beliefs. Such a prediction is consistent with both cognitive dissonance and impression management theories (Lerner & Tetlock, 1999). This is the first domain of postdecisional accountability: rationalization of a prior public decision or commitment.

Participants viewing commitment to a particular action as more desirable than a conforming shift will generate as many reasons as possible to support their view and disparage opposing views (Lerner & Tetlock, 1999). This cognitively biased information processing may then lead to a more extreme view. Research on the sunk cost effect

provides some of the most salient examples of this phenomenon. Fox and Staw (1979) showed that administrators committed more resources to a failing prior course of action (sunk cost) they had chosen when they were accountable as opposed to unaccountable. They strengthened or polarized their initial decision even though it seemed to be consuming more resources than it returned, because they had a vested interest in protecting it. An administrator's whole career is based upon appropriate decision making for a company, so there should be a strong desire for an administrator to make his past decisions look good and commitment to them may be the easiest way.

In postdecisional studies like the "trapped administrator" scenarios, participants were concerned with rationalization of a prior public commitment, which often resulted in a failure to conform and instead a public strengthening of initial views. But when can accountability under predecisional situations result in the absence of a conformity effect? Certainly the least amount of research has been done in this area and examples are hard to come by. However, predecisional accountability is the most common situation in many decision-making environments.

Legitimate Versus Illegitimate Accountability

Despite a general lack of studies exploring the limits of accountability-induced conformity, an absence of the conformity effect has emerged in a few studies. While the studies vary on specific manipulations, they are all tied together by an overarching theme I will refer to as legitimacy because they all deal with the audience's ability and/or right to judge someone. According to Lerner and Tetlock (1999), past research suggests that accountability perceived as illegitimate (e.g., someone not of proper authority, or with ill-

regarded intentions) can result in belief polarization away from the advocated position, a decline in intrinsic motivation, less cognitively complex processing, and excessive stress.

Legitimate accountability, on the other hand, may yield positive results such as more coherent and thoughtful arguments and more quality work. In order to illustrate the opposing sides of legitimacy, consider a group of studies in which performance monitoring led to decreased motivation when participants perceived the monitoring as representative of a lack of trust or an attempt to control (Lerner & Tetlock, 1999).

Although participants were being evaluated and faced consequences as a result, they perceived themselves as accountable to an audience that didn't trust them and was trying to control them. These perceived motivations behind the observing audience created an unfavorable perception of them and made them illegitimate observers akin to the Gestapo. Motivation did not decrease though when the purpose of surveillance was not associated with any controlling intentions.

Legitimacy need not be restricted only to the purpose behind accountability though. Fitzpatrick and Eagly (1981) looked at legitimacy in terms of perceived relative expertise, that is whether the participants viewed the audience as worthy of legitimately judging them. They found that only participants who expected to discuss their opinions on an important issue with someone of perceived equal expertise strengthened their belief and adopted a more extreme position. Perhaps participants were only concerned with prevailing in an argument with someone equal to them due to social comparison concerns (see Wood, 1989). An inferior opponent creates no worry of losing and a more expert opponent is not a fair comparison. Regardless, this study also exemplifies how

accountability might strengthen preexisting tendencies instead of producing a conformity effect.

Anticipatory Attitude Shifts

The work on anticipatory attitude shifts fits in nicely with accountability themes and fills the gap between predecisional and postdecisional accountability arenas. Participants in these studies already had opinions, but never openly disclosed them for critique prior to learning their audience's views. This lack of public commitment sharply deviates from postdecisional studies dealing with rationalization of previous actions. Past anticipatory attitude shift studies often showed that expecting to discuss one's views with an audience having known views led participants to strategically shift their beliefs more in line with those of the audience (Cialdini, Levy, Herman, & Evenbeck, 1973; Cialdini, Levy, Herman, Kozlowski, & Petty, 1976; Tetlock, 1983). They are referred to as strategic or "elastic" shifts because participants tend to slide their views back to their original positions after the threat of discussing opinions with an opposing audience is removed (Cialdini et al., 1973; Cialdini et al., 1976). But not all research in this area assumes transient shifts. McFarland, Ross, and Conway (1984) found that the duration of these shifts depended upon situational factors driving the attitude changes. If the anticipatory attitude change resulted from self-presentation alone, which most past studies have reasoned is the heart of the attitude shift, they showed the change to be temporary. Conversely, a self-persuasion route to attitude change, occurring by generating arguments in favor of the conflicting position, demonstrated greater longevity.

Regardless of duration, these shifts can manifest themselves in different ways

depending on the situation. For example, an expert audience with known persuasive views may produce a larger shift towards their view because people would view a confrontation as difficult to win (Deaux, 1972). People may even be worried about looking stupid in the eyes of an objectively more qualified arguer. A more moderate shift may occur to gain the self-presentational advantages of being open-minded and unsusceptible to an embarrassing defeat of one's own view (Cialdini et al., 1973). This moderation effect is most likely for people expecting to discuss a topic of little importance to them with peers (Cialdini et al., 1976). It seems reasonable that people put less cognitive deliberation into personally unimportant topics. If they did not exert effort to construct a solid position, changing their beliefs would not really threaten internal characteristics like intelligence. When the topic is of high personal relevance and important to them, a polarization effect may actually occur, breaking away from the normal conformity result (Cialdini et al., 1976). This phenomenon is said to demonstrate commitment and a willingness to defend the issue. Additionally, Cialdini et al. (1976) found polarization under low importance if participants were told the interview would be delayed, probably giving them more time to formulate a convincing argument. Regardless of these situational variations that produced differences in conformity rates, all the anticipatory attitude shifts shared one major situational element; they all dealt with the reporting of opinions.

Real Decision Making Environments

Beside the anticipatory attitude shift literature, most of the studies discussed so far have framed accountability within the domain of reported opinions. These studies

provide a valuable starting point, but the dynamics surrounding the disclosure of an opinion may differ from those surrounding a decision that must be implemented and definitely carries tangible consequences. An opinion is generally regarded as a point of view that, despite deliberation, can never be proven objectively better than another point of view. As an example, for the majority of Americans, saying they have a positive or negative opinion of the NRA will do little to affect their lives beyond spurring an argument with someone who disagrees. Conversely, someone who must choose what to major in at college makes a decision that carries consequences much more tangible and important than simply reporting an opinion. Regardless, accountability induced conformity is a powerful effect that may occur even at the expense of a more adaptive decision. Adelberg & Batson (1978) demonstrated this effect by having students playing the role of financial-aid agents allocate a scarce amount of money among needy students. Because financial-aid is a limited resource, an equal splitting of the pie could actually result in pieces too small to benefit anyone. Of course, efficiently narrowing the recipients of such funds also requires decision-makers to justify their selection strategy to disgruntled people receiving no money. Only when the participants were unaccountable did they allocate the money efficiently by making sure that a few people had enough instead of giving everyone equal amounts. When the participants were accountable to either the recipients or the financial providers, they tried to please everyone by giving equal portions, which resulted in wasted funds.

Another two-experiment study along similar lines conducted by Pennington and Schlenker (1999) demonstrated a strong conformity effect on a more ambiguous decision

still carrying powerful consequences. Participants believed that they were judging a real honor court case regarding cheating and that their recommendations could be implemented by the honor court. Results revealed that participants recommended harsher punishment if they expected to explain their decision to an official from the honor court or the professor who brought the charge of cheating as opposed to the accused student.

Certainly the audience's views seemed to shift the accountable participant's decisions. But unlike the "elastic" shifts that disappeared when the expectation of accountability was removed, participants in this study retained their beliefs. Therefore, a limited self-presentational explanation may not fully encompass the dynamic decision-making process. By self-presentational I mean the desire to look good in the eyes of the judging audience in order to reap the benefits that follow. Such an explanation implies a somewhat Machiavellian view that participants never changed their decision making process and always arrived at the same conclusion, but only reported a skewed conclusion to gain favor in the eyes of the judging audience. However, the permanence of the decision maker's opinions, as shown by Pennington and Schlenker's ability to generate similar results with participants who wrote their decisions after learning the expected meeting was cancelled, suggests that cognitive reasoning was actually affected. Expecting to be accountable to a certain audience apparently affected the decision making process such that they reached a conclusion they felt was right, not just one they wanted to portray to an observer.

A broad based explanation of their results rests in the notion of motivated

reasoning (Kunda, 1990). Perhaps accountability initially induces a directional goal of conformity with a particular audience. Then this goal is facilitated by cognitive biases that more heavily weight the arguments on one side of an argument, or create filters with which to explain away contrary evidence. For example, the audience may create a shift in perspective that causes the participants to focus on different situational attributes and apply different rules and standards than they would if unaccountable (Pennington & Schlenker, 1999). Of course, directional reasoning is still restricted by the availability and strength of the evidence, so presumably accountability will only have a conformity effect with attitudes and decisions that can be viewed as rational.

Regardless of underlying cognitive mechanisms, if we accept the generalizability of accountability-induced conformity even in the face of important or objectively more correct decisions, as the vast majority of past research shows, we are left with a nagging question. Under what conditions will accountability fail to induce a conformity effect and actually result in independent thought and robust decisions that most organizations employing accountability are trying to foster?

Most past studies failing to show a conformity effect have manipulated the legitimacy of accountability and the importance and self-relevance of either the issue or being accurate (Cialdini et al., 1976; Fitzpatrick & Eagly, 1981; Lerner & Tetlock, 1999). But beyond the commonly cited accountability literature, a parallel to the accountability-conformity link exists in relation to the "trapped administrator" (Staw, 1976). As previously discussed, such studies involve a subject who commits to one course of action that is shown to fail and then is presented with an option to change courses of action.

This creates an agonizing choice between cutting the losses and pursuing the current best strategy versus justifying one's past actions by showing commitment and hopefully spending enough money to turn the problem around. Like the previously mentioned Adelberg and Batson (1978) study regarding inefficient financial-aid distribution as a result of accountability, a large body of "trapped administrator" studies are linked with the common thread of adherence to a poor policy. In most trapped administrator studies (Fox & Staw, 1979; Simonson & Staw, 1992; Staw, 1976; Staw, Sandelands, & Dutton 1981), participants lead to believe they previously made a decision that produced negative results were more likely to act as if only one option existed when they were accountable rather than unaccountable. They ignored the sunk cost pitfall and escalated their commitment to a failing position when they were accountable to higher level administrators, but not when they were unaccountable. Although these studies clearly show strengthening rather than moderation or reversal of attitudes, it remains unclear whether participants assumed the higher level administrators' positions to be contrary to their original positions. Also, by previously committing to a course of action, the participant forms an opinion, making these studies fall under the heading of post-decisional accountability, which is often associated with defensive bolstering.

The trapped administrator studies raise the issue of attenuated conformity and belief or decision making polarization when no previous opinion exists. My experiment explores an explanation derived from research by Chen, Shechter, and Chaiken (1996). They showed that a simple priming task suggesting different motivational goals (see Bargh, 1990) led to higher or lower conformity rates depending on the goal. Participants'

attitudes on the issue of whether the media should broadcast presidential election returns before all the election booths close were initially assessed in a mass testing session.

During the actual experimental session, participants completed the priming tasks under the pretense of it being a separate experiment. Half the participants received primes promoting the motivational goal of being accurate while the other half received primes making the importance of getting along or being compatible salient. Experimental manipulations revealed that participants in accountable conditions showed a much stronger conformity effect if they were primed to get along rather than to be accurate. This tendency was also magnified by participants characterized as high self-monitors (very concerned about their impression on others) on the basis of the Self-Monitoring Scale. It should be noted that this study is again only operating within the context of opinion reporting and not decision implementation.

Pros and Cons of Accountability

These subsets of accountability move us closer to understanding the positive and negative effects of accountability within the context of decision making. Possibly the most positive result, if performance enhancement is the goal, that can be attributed to accountability is open-minded critical thinking. Such thinking should be most likely when someone is accountable to an audience (a) whose views are unknown, (b) who is concerned with accuracy, (c) who is interested in the decision process rather than specific outcomes, (d) who is reasonably well-informed, and (e) who has a legitimate reason for observing the participant's decision-making (Lerner & Tetlock, 1999). However, even

among studies subscribing to this very design, effects have varied across judgement tasks (Lerner & Tetlock, 1999).

Beyond the consequence of improving critical thinking that attenuates bias within the decision-making arena, accountability can only have three more possible consequences: no effect, the amplification of bias, or the polarization or strengthening of existing tendencies. The absence of effect should be expected when participants simply lack additional skills to tackle a problem-solving dilemma even after more effortful thinking (Lerner & Tetlock, 1999). An increase in bias corresponds to the common conformity effect or moderation effect that results from conserving cognitive resources and striving to avoid the undesirable effects of disagreement. The precursors to polarization are less definite, but the perceived importance of the issue as well as the legitimacy of accountability have been associated with participants strengthening their positions in a limited number of studies. Perhaps polarization is really an amplification of bias. While someone may be motivated to cognitively justify one side more vigorously, accountability may simply promote confidence or induce certain personality characteristics that promote polarization, like independence. Regardless, it is an effect worth separating from conformity.

A parsimonious model of the effects of accountability that has been largely accepted in the past suggests that conformity is the likely result of accountability when the audience's views are known (Tetlock, 1983). Thorough processing, on the other hand, results from accountability when the audience's views are unknown. People may make a choice in line with an audience's view in order to avoid looking foolish or simply

sticking with a decision that at least seems to be justifiable by others (Lerner & Tetlock, 1999). Without denying that conformity can have benefits for decision-makers, such as time-saving, group acceptance, and conflict avoidance, it should be apparent that ways to attenuate such an effect are of interest.

Accordingly, my research aims to explore the effect of primed motivational goals as a possible moderator of accountability. While a conformity tendency is not necessarily bad, in certain accountability-laden decision-making contexts like business administration, military service, and engineering, just to name a few, it can result in improper problem assessment and/or policy implementation.

My study attempts to delve into such an arena by presenting participants with a real-life business decision that carries important consequences. Although participants will not have a prior opinion on the course of action, as problems are often not addressed until they are noticed, the real-life example is intended to peak interest and create some sense of importance. The decision that participants must make will be revealed in a purposely ambiguous case study that should induce a clear preference for one course of action, while not making the other outlandish.

I hypothesize that accountable participants primed to get along will actually show more conformity to a decision deemed poorer by objective assessment than participants primed to strive for accuracy in their approach to the problem. Assuming accountability motivates people to reach a particular conclusion in line with the conclusion of another decision-maker, this effect may be countered by opposing motivation. As relevant to the case at hand, my experiment involves a condition that I feel would typically elicit a

conformity effect. Therefore additional motivation to be compatible should not threaten this effect, but opposing motivation to objectively seek the truth should. Additionally, accountability may not only attenuate conformity, but actually cause a polarization of views (as seen in the trapped administrator studies) among accuracy primed participants so that their support of the objectively stronger decision becomes heightened in order to better defend an apparently right decision. For example, it is possible that people become frustrated by another's failure to see a conclusion based upon their objective search for truth and then strengthen their own position to intimidate the opposition. It is also possible that an opposing view causes someone driven by accuracy to review the results and accordingly replicate and strengthen his or her position. I offer no a priori predictions for unaccountable participants. It is possible that removing the threat of accountability will also remove a conformity effect, but a lack of conformity may also reduce the effort expended on the decision. These opposing effects encompass a wide spectrum of possible results that I hope this study will narrow down.

This study serves to test the boundary of the robust findings regarding an accountability-induced conformity effect. It also intends to expand the sparse knowledge behind polarization effects. As such, it will expand the results of motivational priming found by Chen et al. (1996). The strong connection to past trapped administrator studies also sets this experiment in more practical territory. Rather than dealing with a controversial social issue or an opinionated attitude measure, the administrative scenario deals with a problem requiring an important consequence laden decision.

CHAPTER 3 METHODS

Overview and Design

Participants were told the session would consist of two studies investigating different aspects of decision making. The first study supposedly examined decision making in everyday situations. Participants were asked to read three scenarios describing everyday events and then report how they would deal with the events. In actuality, the scenarios were written to induce one of two psychological orientations: an accuracy orientation, in which people were motivated to achieve the correct answers or solutions to problems, and a compatibility orientation, in which people were motivated to get along with others. These priming tasks were developed by Chen, Shechter, and Chaiken (1996) and used successfully to prime these different motivational goals in their research on attitude change.

The second study supposedly investigated decision making and performance on practical business problems that might be confronted by an administrator in a company. Participants were asked to play the role of an administrator who must make a decision affecting the performance of an organization. They read a business problem and then made a decision about which of two alternative courses of action the company should pursue. The problem presented a variation of the “trapped administrator” situation used frequently in prior research on accountability (Fox & Staw, 1979; Simonson & Staw,

1992; Staw, 1976). One alternative in the scenario represented a continuation of the status quo, which previously produced disappointing outcomes for the company; whereas, the second alternative was designed to seem more promising, but represent a departure from past investment decisions for the company.

Participants found out that, depending on the condition to which they were randomly assigned, they may or may not have to meet with other members of their company and discuss their decisions. In the experimental conditions, participants learned the opinion of one other member of their company prior to making their decision to simulate the flow of information in the modern workplace. This other person (actually fictitious) endorsed the status quo solution by sticking to the past investment strategy. I manipulated accountability by leading participants to believe they would later meet this other person and justify their solution (accountable condition), or would never meet this other, nor have to justify their solution (unaccountable condition). Participants in an offset control group did not receive any information about the preferences of others nor did they expect to meet others or justify their solution. Participants then made their decision and evaluated the alternative courses of action.

The design is thus a 2 (Task Orientation: Accuracy or Compatibility) by 2 (Accountability: Accountable or Unaccountable) factorial with an offset control group. In addition, participants' self-ratings on the trait dimension, independence - interdependence, were obtained during mass pre-testing at the start of the semester. These self-ratings allowed investigation of possible individual differences in reactions

based on self-images of being independent and autonomous versus interdependent and compatible with others.¹

Participants

117 students enrolled in introductory psychology classes at the University of Florida participated and received credit toward satisfying a research requirement in the course.

At the start of the semester, students taking introductory psychology classes completed questionnaires during a mass testing session. This questionnaire contained items asking for self-ratings of independence versus interdependence and the importance of this dimension to their own self-conception. I included these items to see if individual differences in self-images of independence versus interdependence would moderate reactions to the pressures of accountability. These same questions reappeared at the end of the major questionnaire that participants filled out at the completion of the study to see if events during the experiment may have induced shifts in self-images or whether stable traits may have impacted participants' responses. The exact items are shown at the end of the questionnaire in Appendix A, page 2.

Materials

Six priming scenarios were taken directly from a previous study by Chen, Shechter, and Chaiken (1996) with permission from the primary author. The scenarios

¹Dividing the participants into three categories (interdependent, neutral, independent) based upon their pre-test scores of independence produced no significant results on the main dependent variables and will not be discussed further.

describe events that lead readers to think about solving problems or objectively searching for the correct solution or by working cooperatively with others and trying to get along with them. Three of the scenarios focus on the objective search for truth (Appendix B-1-3) and three focus on getting along (Appendix B-4-6).

The administrative decision scenario describes a brewing company that produces two products: a lager tailored for an American market and a more expensive lager designed to compete in the European market. The company previously invested most of its advertising budget promoting the European lager. However, sales in Europe have been relatively disappointing, whereas American sales have exceeded expectations. Participants were asked to divide the current advertising budget of \$10 million between these two markets. The alternatives were devised to make the American alternative seem more cost-effective while the European alternative represented a continuation of the status quo and still appear as a defensible choice (the scenario is presented in Appendix C).

Procedure

Participants were run in groups of up to six people at a time. On arrival at the lab, an experimenter, sitting at a desk in the hallway, met participants and asked them their names in order to direct them to the right room. This gave the appearance that two sessions were taking place (the need for this will be apparent later) even though everyone ended up in the same room. Participants sat in individual, partitioned cubicles to restrict visual contact with one another.

The written instructions (see Appendix D) explained that, for reasons of

efficiency, they would participate in two separate studies dealing with decision making. The first study supposedly consisted of decision making in everyday situations. It actually contained the priming scenarios designed to elicit an accuracy orientation or a compatibility orientation.

The second study supposedly involved an administrative decision task typical of a business setting. Experimenters told participants that they were to analyze a real-world scenario derived from an actual company's past situation and had to weigh the evidence and make a funding allocation. Specifically, the scenario outlined a beer company's desire to market two new types of beer directed at two completely different markets. The European beer that was more heavily promoted in the past showed disappointing financial returns while the American beer outperformed expectations. Possible explanations for these unexpected results, such as misjudging the American lager's market, or an unexpected reluctance to change in the European community, were also covered. The scenario informed participants that the company had ten million dollars to allocate between the two beers' marketing campaigns and asked them to make a decision about how to divide the money.

In order to justify providing participants with feedback from another (fictitious) participant in the company, prior to receiving the scenario, participants read that the study intended to examine the impact of different decision environments dealing with the flow of information. Thus the different flow of information represented accountability conditions and set up the experimental manipulation.

In the accountable condition, participants read:

You have been assigned to the condition where you will go through a "post-decision" meeting. This condition simulates some real business situations in which there is a symmetrical or even flow of information. After you and the other person have made your decisions, you will exchange answer sheets and meet one another to discuss what you did. You will have an opportunity to explain to the other person why you made the decision you did, and he or she will have the opportunity to do likewise. This post-decision meeting is important because it gives both of you an opportunity to examine your thoughts and resolve questions.

At the end of the study, you will be given feedback about your decision.

In the unaccountable condition, participants read:

You have been assigned to the condition where you will learn the final decision of the other person, however, he/she will NOT learn your decision. This condition simulates some real business situations in which the flow of information is asymmetrical or lopsided. Further, you will NOT have to meet the other person nor discuss what you did or why you did it. After you have made your decision, the session will be over.

In the control condition, participants read:

You have been assigned to the condition where you will not learn the final decision of the other person and he/she will NOT learn your decision. This condition simulates some real business situations in which information flow does not take place. Further, you will NOT have to meet the other person nor discuss what you did or why you did it. After you have made your decision, the session will be over.

Regardless of whether participants expected to be accountable or unaccountable, all participants in the experimental conditions (everyone but the controls) received a sheet on which a participant (actually fictitious) in the other room wrote his/her "recommended solution" to the problem. In all cases, the other participant recommended a continuation of the status quo and allocated \$8 million to marketing the European lager and only \$2 million to marketing the American lager. Additionally, via other dependent measures, the other participant rated himself/herself as fairly confident and convinced that this solution

was a profitable move. A brief written explanation justified the solution as follows:

I am allocating 8 million dollars toward the European market. The company has already invested money in that market and I think it is a good idea to stay the course and not change. Eventually it will pay off. Besides, there was greater satisfaction with the product in Europe.

Experimenters first gave participants the administrative decision problem to read while they went to check on the experimenter running the other session. After allowing time for the participants to read the scenario, the experimenter returned to the room carrying "decision sheets" supposedly completed by participants in the other room. The experimenter explained, "Since the other group is a little ahead, I'll just pass out your experimental partner's decision sheets now so you can look them over while I get your decision sheets." The solution sheets (Appendix A-1) contained the dependent measures including (a) a decision about how to allocate the \$10 million marketing budget between the two brands, (b) a rating of their confidence in the decision, (c) evaluations of the alternatives, (d) a brief written explanation of their decision, (e) self-ratings on relevant traits (e.g., independent, cooperative, friendly) and feelings (e.g., nervous, happy). Participants randomly assigned to the offset control condition did not receive a recommended solution from another participant, nor did they believe they would have to discuss their solution with anyone else.

After participants completed the decision sheets, the experimenter collected them to avoid contamination, and passed out an additional question sheet intended to tap various personality constructs that I thought might correlate with either conformity or individuality (see Appendix A-2). Next, experimenters distributed a third sheet with the accountability manipulation check and some questions attempting to uncover mindsets

related to the primes (see Appendix A-3). A self-consciousness scale taken from Fenigstein, Scheier, and Buss (1975) comprised the final sheet of participant responses (see Appendix A-4). I hoped the scale would shed light on secondary elements affecting participants, such as social anxiety, or their individual concern of public versus private self-consciousness. Once these sheets were collected the experiment ended. Participants were debriefed, given credit, and thanked for their participation.

CHAPTER 4 RESULTS

Manipulation Checks

A written check, disguised as a standard practice to ensure the clarity of the directions, confirmed that the accountability manipulation was effective, $F(1, 90) = 135.99, p < .0001$. On a nine-point scale, with nine being “definitely meet” and one being “definitely not meet,” accountable participants expected to meet with another participant ($M = 7.17$) while unaccountable participants did not ($M = 2.29$).

To determine the effectiveness of the primes, experimenters rated participants' responses to the priming scenarios. For each scenario, they rated on 5-point scales (a) the extent that responses reflected a desire to objectively seek truthful information as well as, (b) the extent that responses reflected a desire to get along and please others. Two different raters judged each participant's responses and a total of four raters worked on the data set. I assessed the interrater reliability of the coded prime responses by averaging each rater's ratings on the three scenarios of the same type, and then correlating those scores across the two raters. Analyzing the truth and getting-along ratings separately revealed expectedly high correlation coefficients between the raters. Results showed significant reliability between raters for the truth ratings ($r = .897, p < .0001$) as well as the getting along ratings ($r = .884, p < .0001$). Given this high reliability between raters, I constructed a new variable using each participant as the unit of analysis and

averaging the two raters' judgements on the truth questions across the three scenarios. I also performed the same operations on the getting-along questions so that each participant had two index scores: truth and getting-along.

Results show that the primes elicited responses in the desired directions corresponding with each participant's assigned experimental conditions. The new variable reflecting one overall truth index for each participant produced a main effect of priming condition, $F(1, 108) = 1557, p < .0001$, where truth primed participants gave responses reflecting more of an orientation toward truth and accuracy ($M = 4.50$) than getting along primed participants ($M = 1.54$). Conversely, a getting-along index variable constructed in the same manner produced another significant main effect of priming condition, $F(1, 108) = 1609, p < .0001$, but in the opposite direction. Getting-along-primed participants responded to the primes with more of a getting along orientation ($M = 4.21$) than truth-primed participants ($M = 1.54$).

Investment Decision

Table 1 shows the means and standard deviations for subjects' allocation of money towards the American lager. Because participants only had a limited resource of ten million dollars to allocate between both lagers, the sum of the American and European allocations must equal ten if participants followed directions. Therefore the European allocation is $10 -$ (the American allocation amount), so any analysis done on one of the variables must be equal to those done on the other variable. Inspection of the means reveals that the money allocated to the American lager and European lager sums to 10, so participants followed directions. For the main statistical analysis, I treated the

Table 1

Mean Allocation of Money for American Lager

Condition	Truth Prime			Getting-Along Prime		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Accountable	5.25a	1.60	24	4.13b	1.70	24
Unaccountable	3.80b	1.29	25	4.33bc	1.53	21
				<u>M</u>	<u>SD</u>	<u>n</u>
Control (primes collapsed)				4.91ac	1.83	23

Notes. Means with a common letter subscript are not significantly different from each other at $p < .05$ level. In addition, as mentioned in the text, the control conditions were collapsed across primes because no significant difference existed between their means, which was also corroborated by a follow-up study. Nonetheless, the prime specific means are as follows: control-truth, $\underline{M} = 4.33$; control-along $\underline{M} = 5.55$.

design as a 2x2 between factorial design using the independent variables of accountability condition and priming condition. A three-way analysis including gender was also done, and while there was a main effect for gender on allocation, $F(1, 90) = 11.60, p < .05$, with females allocating more money toward the American lager than males on average ($M_s = 4.77$ and 3.72 respectively), gender did not interact with priming or accountability condition on any dependent variable other than success. Interpretation of the interaction revealed a substantively unimportant effect that did not contribute to understanding the phenomenon at hand.¹ I dropped gender from the analysis, because it produced results of little importance to my theoretical question, and analysis revealed that it did not qualify the main fiscal allocation differences.

In order for the results to support my hypothesis, that priming motivational goals moderates the typical conformity effect caused by accountability, I would expect that participants in the accountable-truth condition would invest significantly more money in the American lager than participants in the accountable-along condition. As a reminder, the American lager was designed to appear as an objectively better investment, which someone concerned with seeking the accurate truth would be expected to endorse more favorably. To show that priming alone was not driving the preference for the American

¹The only significant three way interaction involving gender among all the dependent variables was for the subject's anticipated success of the European lager. By adding American success with European success, I created a 2 level within-subjects factor. Using a repeated measures analysis produced a significant four way interaction, but examining the means just showed females were more pronounced in their discrimination. That is, when in the accountable-truth condition, females saw the American lager as having more potential for success. This discrimination disappeared for females in the accountable-along condition. Males, on the other hand, consistently rated the American lager as have more potential for success, but there were less differences by condition.

lager, accountable-truth participants should invest more money in the American lager than their truth-primed counterparts in the unaccountable condition. Participants in the unaccountable conditions should not differ because the primes should be irrelevant to people not expecting to justify their decision. The results support these predictions. Analysis of variance (ANOVA) on the 2 x 2 between factor model showed a main effect of accountability condition on money allocation, $F(1, 90) = 4.71, p < .05$, as participants held accountable allocated more money to the American lager on average than their unaccountable counterparts ($M_s = 4.69$ and 4.10 respectively), qualified by an accountability x priming condition interaction, $F(1, 90) = 7.03, p < .05$. Dissecting the interaction with simple effects tests showed that participants given a truth prime allocated significantly more money towards the American lager when they were accountable as opposed to unaccountable, $F(1, 90) = 10.94, p = .001$. The getting along prime produced no significant differences between the accountability conditions. Additionally, when participants were accountable, they gave significantly more money to the American lager when primed to seek the truth rather than agree, $F(1, 90) = 6.45, p < .05$. Unaccountable participants failed to demonstrate the same pattern.

So far, I have only discussed the relationship between the four experimental conditions, neglecting the offset controls. Because control participants were never exposed to the outside influence of the confederate's response, the primes should have had no impact on their decision. They could not filter through poor arguments or choose to go along with them if they never saw the arguments. Contrast testing revealed that

they were not significantly different on any dependent measure, so the two controls were collapsed into one for ease of analysis and explanation.²

In reference to the money allocation, control participants should lack the pressures of normative or informational influence because they are completely unaware of the decision made by anyone else and do not expect to defend their position. Therefore, I expected control participants to make decisions in line with an unbiased appraisal of the scenario and produce results similar to those of accountable-truth participants.

Contrasting the accountable-truth condition with the control produced no significant difference as expected. The unaccountable-truth condition was significantly different from the control, $F(1, 117) = 5.82, p < .05$ as expected. Similarly, at the marginal level, the accountable-along condition differed from the control group, $F(1, 117) = 2.86, p = .09$. While the unaccountable-along condition did not differ significantly from the control, it did have a lower mean allocation toward the American lager that differed significantly from that of the accountable-truth condition, $F(1, 117) = 3.69, p = .057$.

Lager Success Ratings

In addition to making a financial allocation decision, participants also rated the anticipated success of the two lagers. I would expect these items to follow the same

²Further evidence for combining the control conditions comes from a replication of the study with only a slight modification to the business scenario. In the replication, the first year revenues after the initial money allocation were identical for each lager as opposed to the current study that showed the European lager bringing in more total money. In both studies the per capita investment return largely favors the American lager. The replication's control conditions were nearly identical in terms of American lager money allocation ($M_s = 5.50$ and 5.69). The differences on other dependent variables were comparable.

general pattern as the allocation decisions, with accountable-truth participants rating the American lager highest and the European lager lowest. These ratings were not subject to the same additive rules (summing to ten) as the allocation measures. The success ratings were used to form levels of a repeated measure resulting in a 2 (accountable, unaccountable) x 2 (truth prime, getting-along prime) x 2 (American success, European success) split plot design with the success ratings as a within-subjects factor. Analysis revealed a significant three-way interaction with accountability condition and prime, $F(1, 90) = 5.39, p < .05$. Examining the differences between the two success ratings for each of the four experimental conditions (displayed in Table 2) most easily illustrates the interaction. Participants in the accountable-truth condition rated the potential success of the American lager significantly higher than that of the European lager, $F(1, 90) = 17.36, p < .001$. No significant differences between success ratings existed for participants in the accountable-along or unaccountable-truth conditions. The unaccountable-along condition also rated the American lager as potentially more successful than the European lager, $F(1, 90) = 8.59, p < .05$. While this finding initially may seem counterintuitive, it is not that surprising given that the participants in question never expected to meet with anyone, rendering their getting-along priming condition irrelevant. Although they conformed to the confederate in relation to money allocation, the success of each lager may not have been central to their decision. Unaccountable-along participants may have decided to go along with the confederate for reasons not expressed in the confederate's response, such as trying to force equality on the lagers' earning potentials by giving a larger budget to

Table 2

Mean Success Ratings for Each Lager

American Lager							
Condition	Truth Prime			Getting-Along Prime			
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>	
Accountable	7.42	1.06	24	6.79	1.41	24	
Unaccountable	7.08	1.22	25	7.29	1.01	21	
					<u>M</u>	<u>SD</u>	<u>n</u>
Control (primes collapsed)					7.13	1.58	23

Table 2 Continued

European Lager						
Condition	Truth Prime			Getting-Along Prime		
	<u>M</u>	<u>SD</u>	<u>n</u>	<u>M</u>	<u>SD</u>	<u>n</u>
Accountable	5.83	1.09	24	6.13	1.60	24
Unaccountable	6.76	1.42	25	6.10	1.55	21
Control (primes collapsed)				<u>M</u>	<u>SD</u>	<u>n</u>
				5.61	1.83	23

the lager with a less successful outlook. The inconsistency between the success ratings and the allocation is explained even easier by past research suggesting that unaccountable participants often make less coherent decisions than accountable participants (Tetlock, 1985).

Analysis including the control group showed that although the mean success ratings for the control and accountable-truth condition were the highest for American success and the lowest for European success, they did not differ significantly from the other conditions. In the only exception, the control group did differ significantly from the unaccountable-truth condition on European success, $F(1, 117) = 6.95, p < .05$, where the unaccountable-truth participants rated the European lager more successful ($M = 6.76$) than did the control group ($M = 5.61$). This result is of little relevance to my primary hypothesis and may reflect an aberrant finding due to the lack of any convincing explanation for this one mean to stick out, especially given that the other unaccountable condition showed no significant difference from the control.

Sticking to the Past Strategy and Confidence in Allocation

For exploratory purposes, I included several other measures to probe possible areas of interest in terms of participants' decision making. Of these, the dependent variables of confidence and the importance of sticking with the company's past investment strategy (questions #2 and #5 in appendix A-1), as the confederate advocates, both exhibited a main effect for accountability. As a depth of processing model like that of Shelly Chaiken's (1980) or Philip Tetlock's (1983) might suggest, accountable participants gave lower value to staying with the past investment strategy, $F(1, 90) =$

4.96, $p < .05$. This devaluation of staying with a past investment strategy reflects what is expected. The heightened cognitive processing induced by accountability led participants to logically conclude that a decision should be based more on substantial evidence rather than whether or not it had been made before (granted this can be an important question to ask in order to extract the results of a past decision).

Accountable participants also felt less confident in their decision, $F(1, 90) = 4.28$, $p < .05$. The reasons for the decreased confidence among accountable participants are less clear, although a cognitive processing approach can again be applied based upon second guessing and heavier consideration of opposing views. Using the cognitive processing model, because accountability heightened cognitive processing, accountable participants carefully examined all of the information available, including the confederate's response sheet. In less engaged participants, like the unaccountable groups, this information would have most likely been analyzed in much less depth and taken for granted. Although the sheet contained an argument I designed to be weak, it still may have set the accountable participants' mind turning over other evidence or considerations that could support the confederate's position. This additional processing would be absent from the less concerned unaccountable participants. As a result more vigilant information processing by the accountable group may have led to second-guessing their decision, resulting in decreased confidence. Alternately, participants expecting to discuss their decision with someone else may have planned to adopt a less confident stature allowing them flexibility to abandon their position without losing much face if the meeting brought about heavy opposition to their initial decision.

Ancillary Measures

As mentioned in the methods section, many secondary dependent measures were gathered at the end of the study for exploratory purposes. One such group of measures consisted of a self-rating of independence and its importance to the individual's self-concept. These ratings did not vary significantly across conditions, suggesting that the experimental manipulations did not influence how participants viewed themselves on independence despite the varying degrees of conformity shown by the different conditions.

A series of semantic differential rating scales (Appendix A-2) were used to form four personality constructs I thought might relate to conforming tendencies. I selected the constructs a priori. The only construct that didn't display strong correlations between the individual measures in its cluster was autonomy (e.g., item: autonomous vs. controlled), which produced an alpha of .47. The friendliness construct (e.g., items: sociable vs. withdrawn, cooperative vs. stubborn) showed acceptable reliability (alpha = .72). Both constructs of nervousness (e.g., items: anxious vs. relaxed) and power (e.g., strong vs. weak) produced high reliabilities (alpha = .84 and .86 respectively). Nonetheless, when used as dependent measures, no significant results were found for any of the constructs.

Finally, I used the self-consciousness scale (Fenigstein, Scheier, & Buss, 1975) to produce three additional personality constructs. The scale consisted of personal ratings of statements on five-point scales with a rating of one corresponding to "not at all characteristic of me," and five corresponding to "very characteristic of me." Private self-consciousness consisted of items such as, "I reflect about myself a lot." Public self-

consciousness consisted of items like, "I'm very concerned about the way I present myself." Items such as, "Large groups make me nervous," comprised the third variable, social anxiety. Like the other ancillary measures, analyses of these dependent variables produced no significant results.

CHAPTER 5 DISCUSSION AND CONCLUSIONS

Analysis of Results

The results support the hypothesis of an interaction between priming and accountability in relation to a conformity effect. On average, only accountable participants also receiving a truth-prime put over half the allotted marketing budget towards the lager designed to seem more objectively appealing. All other conditions, excluding the controls, gave significantly less money to the American lager. While I expected a more pronounced conformity effect with participants more closely mirroring the decision of the confederate, results were more moderate. An explanation lies in the anchoring of the scale relative to the confederate's reported allocation. By giving the American lager only \$2 million, there was little room for participants to further undercut the confederate's decision. This may have resulted in a ceiling effect, or an artificially attenuated conformity effect in the conditions other than the accountable-truth one. Nonetheless, the direction of the mean differences of allocation decisions between conditions is indicative of a conforming tendency.

This tendency to conform even appeared among unaccountable participants who only viewed the confederate's responses not expecting to ever meet with him or her. It may seem most plausible that the unaccountable participants simply took the path of least resistance seeing as how they could not possibly be too personally invested in a decision that was irrelevant to them (Although, it should be noted that was not always the case, as

several participants took the time to tell me they really enjoyed dealing with a real-world business problem). This method of decision making based on ease and the “lazy” option of conformity is an extension of Tetlock’s (1985) view of decision-makers as cognitive misers. Tetlock only applied his explanation to accountable participants wishing to avoid confrontation, but for both accountable and unaccountable participants, the motive to make a quick and easy decision is best facilitated by conforming to a previously suggested decision. Additionally, not expecting to confront another participant or justify their responses explains why the prime had little effect one way or the other for unaccountable participants.

Conversely, accountability should have created a situation that heightened personal involvement. Suddenly, their decision-making abilities and reasoning were subject to critique by another. Given that the participants already knew the opinions of their critiquing audience, past research would suggest that they could avoid stress and achieve a positive evaluation most easily by swinging their reported decision in line with that of their audience (Lerner & Tetlock, 1999; Tetlock, 1983; Tetlock, Skitka, & Boettger, 1989). That is exactly what happened among accountable participants primed to get along. I expected this conformity effect to be absent among accountable-truth participants and possibly even acting in the opposite direction, so that beyond a lack of conformity, they might polarize or take a more pro-American larger position than that of an objective participant not exposed to the confederate’s position (i.e. the control group). The means reflect this polarization pattern, but the differences are not significant. Instead the accountable-truth subjects, unlike the other conditions, fail to exhibit

conformity, and choose to dig their heels in and defend what seems to be the objectively sound decision.

In most respects, this finding is more encouraging than a polarization effect. Such an effect would have been another biased decision not necessarily reflecting an accurate appraisal of the information, but rather an appraisal meant to over emphasize a position. While this might have advantages from a persuasion standpoint, it is not indicative of well-thought out decision-making in the face of typical conformity pressures induced by accountability. The unbiased evaluation that emerged in this study represents the ideal in terms of the context we have examined and wish to generalize across. For example, consider some of the problems that could emerge from a polarization effect. For an administrator given a business allocation decision, over-investing beyond an optimal amount, just to prove a point, could result in depleted capital or the starvation of funds from other resources. In the military, an exaggerated commitment of troops or weaponry to a particular position could reduce the economy of force, create a logistical burden, prematurely warn the enemy of buildup, or even weaken other positions. Like the Adelberg and Batson (1978) study dealing with the distribution of financial aid and the Pennington and Schlenker (1999) study dealing with honor court sanctions, sound decision-making could take a back seat to situational pressures, regardless of whether accountability induces conformity or polarization. Because many of the most important decisions in the world are made by people held accountable, it is important to ensure that this accountability is employed in a way that maximizes cognitive effort and quality of

decisions rather than simply encouraging an easy way to protect one's decision and image.

Support for my thesis is not tied to just the money-allocation dependent variable. Several other significant findings also converge on the same dynamic surrounding accountability and priming in relation to decision making. For example, the finding that accountable participants are less confident in their decision than unaccountable participants may reflect a desire to portray a more moderate stance that allows for easier defense or abandonment during a confrontation. The decreased confidence may also correspond to more thorough systematic processing (see Chen, Shechter, & Chaiken, 1996) employed by those held accountable. It is very easy to say with definitive confidence that one position is better than another when counter arguments are ignored. It is much more difficult to carefully weigh opposing evidence and conflicting decisional stands, which clearly existed in this study, and then display absolute confidence in a decision. This explanation is in line with Tetlock's (1983) idea of accountable participants generating "more integratively complex thoughts and evaluatively inconsistent interpretations of issues" (p. 76) than unaccountable participants. Although Tetlock's explanation referred specifically to cases where the views of the audience were unknown, it is possible that a similar effect emerged in this study despite participants' knowledge of the audience's views.

At first glance, this explanation may seem to contradict the theory of belief perseverance (Anderson, Lepper, & Ross, 1980; Ross & Anderson, 1982; Ross & Lepper, 1980), which showed greater analysis led to more confidence in the correctness of an

initial conception despite conflicting evidence. In the belief perseverance studies, participants were first forced to extensively examine only one side of the issue, sometimes writing an explanation for their theory. However, in my study, participants received the confederate's response immediately after reading the scenario and certainly before ever having to explain any propensity toward one over the other. This is a different situation that I argue does not allow sufficient time to form a defensible belief that would motivate them to discredit opposing information. Instead, participants concerned with actually digesting the input supplied by the confederate are simply faced with additional evidence that makes a conclusion more complex.

Accountable participants' relatively critical appraisal of the importance of staying with the past investment strategy, as advocated by the confederate, further supports the notion that accountability induces more systematic processing. A more thoughtless analysis, as one might expect of unaccountable participants, should result in more advocacy of the ready-made position endorsed by the confederate that includes staying the course. Systematic processing, as probably employed by accountable participants, should result in a more thorough examination of the options and, as expected, a realization that staying the course is not always the best option. It is important to note, however, that more cognitively involved processing need not result in less bias (Kunda, 1990). An accountable participant may just employ more resources to justify conforming to another's decision. The accuracy prime was intended to focus the elevated cognitive effort on objectively seeking answers and therefore attenuate bias. Ideally, this would have produced an accountability x prime interaction for the dependent measure dealing

with the importance of staying the course, which the means do correspond with, but not significantly (for accountable participants, $M_s = 5.08$ and 6.21 for truth and getting-along primes respectively, while unaccountable participants showed virtually identical means, $M_s = 6.40$ and 6.55 for truth and getting-along primes respectively). Furthermore, it is possible that this measure of the importance of sticking to past investment strategies serves as an outlet for accountable-along participants to passively disagree with the confederate, while still conforming to the confederate's overall investment strategy. The importance of staying the course measure allows participants to show that they at least recognize the illogic of the argument as the basis for the future investment, reflecting their more thorough processing of the info, while not necessarily disagreeing with the confederate's ultimate decision. Perhaps they focus on some other aspect to justify sinking more money into the European lager like a desire to help a struggling product. This pattern of responses gives participants a more moderate stance that can be defended to go along with either side if need be. Again, this explanation is closely tied to motivated reasoning (Kunda, 1990).

The success measures also offer support for the proposed hypothesis independent of any correlation with the allocation variable.¹ As predicted, accountable-truth participants believed the American lager would be more successful and the European

¹I expected the success ratings to be strongly correlated with the allocation decisions. Past literature suggesting that accountable participants put more effort into decisions and make more coherent thoughts may predict higher correlations among the accountable participants. While this literature specifically deals with accountability to an audience with unknown views, it seems reasonable that similar dynamics promoting this public consistency of ratings and allocation decision may characterize a situation involving an audience with known views. One could also reasonably predict that accountable participants may try moderating their stance in

preparation of a meeting with another participant by keeping some disparity between the success and allocation measures allowing them to shift either way as needed. The former effect seems to emerge on the measure of European success, with accountable participants showing a higher correlation between this measure and their allocation toward the American lager ($r = -.76$, $p < .001$) than unaccountable participants ($r = -.36$, $p < .05$). However, the later effect emerges in reference to American success ($r = .22$, $p = .14$, and $r = .37$, $p = .01$, for accountable and unaccountable participants respectively). These results make a confident explanation difficult and may actually reflect both a consistency and bet-hedging motivation. Future exploration into these findings are needed for any reliable conclusion to be drawn.

lager less successful than their accountable-along counterparts. Consistent with the patterns found on other dependent variables in this study, no difference existed between the unaccountable conditions. The success ratings given by the accountable-truth participants reflect what I propose is an unbiased critical examination of the information.

While the accountable-along participants may have employed systematic processing, it was in the service of supporting a more confederate-friendly response, which explains the disparity between them and the accountable-truth participants. Again the results suggest that the primes failed to affect the unaccountable participants.

I expected a lack of influence by the primes among unaccountable participants, because the absence of a future confrontation negates any desire to impress others or defend a position. Essentially, this lack of accountability removes the major situational pressures that drove the conformity effect in past accountability and anticipatory attitude shift studies (Cialdini et al., 1973; Cialdini et al., 1976; Lerner & Tetlock, 1999). If they were systematically processing the information in an unbiased manner, I would expect their results to more closely match those of the accountable-truth and control participants, which they usually do not. These results point to conformity under conditions where unaccountable participants did not expend great cognitive effort analyzing the situation.

Considering that conformity can manifest itself as either the result of normative or informational influence (Deutsch & Gerard, 1955), the unaccountable conditions seem to induce primarily informational conformity. Rather than simply conforming in the public arena to gain favor of an audience (normative), unaccountable participants privately reported decisions consistent with the confederate's responses. Such results may reflect the influence of exposure to another's opinions and subsequently being persuaded by the arguments (informational), especially if little cognitive effort is expended in an attempt to refute the arguments. The participants then subsume the decision, or a similar decision, as their own. These results correspond to Deutsch and Gerard's (1955) original statement that, "It is possible that one will accept an opponents beliefs as evidence about reality even though one has no motivation to agree with him, per se" (p. 630).

Looking at these results from the slightly different perspective presented in McFarland et al. (1984) anticipatory attitude change study, the conformity effect most likely results from different pressures depending on the condition. In the accountable-along condition, self-presentational concerns should have been most salient and therefore behind the conforming tendency of participants. However, unaccountability removes those self-presentational concerns, requiring some other factor to drive the conformity effect. McFarland et al. (1984) suggest self-persuasion in the form of generating arguments favorable toward the position advocated by the confederate. The key element is that these self-persuasion attitude changes are more durable as opposed to the traditional elastic shifts that would characterize the accountable participants' responses. Although, the short-term outcome is identical in both conditions, differences could

emerge as future information contradictory to the original position emerges, or even with variations of decision implementation like a final vote following a group discussion, and shielding people in anonymity. An experimental variation with time-lapse reporting could answer such questions.

Policy Implications

Looking beyond the particulars creating the disparity between the accountable-truth condition and both unaccountable conditions reveals a possible policy implementation consequence for many organizations. Paying heed to the widely published findings that accountability to an audience with known views may induce conformity, an organization may appropriately try to shield decision makers from their peers' and superiors' opinions. However, this is not always practical and may even create inefficiency. In such cases, a company desperately seeking to abolish a conformity effect among its employees, may be lured into removing accountability. Based on attenuating the commonly documented effect of accountability-induced conformity (Lerner & Tetlock, 1999), this action would seem theoretically sound. However, the findings of my study suggest otherwise. Even training employees and emphasizing an accuracy orientation, as mimicked by this study's priming scenarios, may not be sufficient to stifle a conformity effect. The additional element of making people accountable is needed in conjunction with the training in order to produce the desired outcome.

Limitations and Suggestions for Future Research

The results support the hypothesis, but leave the question of polarization lingering. Future research into situations that actually swing the conformity bias in the

opposite direction towards polarization could yield fruitful results expanding on the possible boundaries of accountability effects raised by this study. The most obvious possibility suggested by this study is expanding the priming method to endorse hostile disagreements rather than just seeking the truth. Of course that is woefully impractical in any real-life context. The legitimacy and expertise of the judging audiences provide another avenue to explore. As previously mentioned, Fitzpatrick and Eagly (1981) found evidence of polarization on opinions when participants expected to discuss a personally important issue with someone of equal expertise. A decision-making context, like the one portrayed in my study, may interact with expertise differently. For instance, would an administrator fear giving a suggestion differing from a relative expert, or revel in the opportunity to instantly build a reputation by outperforming an expert? This double-edged sword also pertains to someone of relatively lesser expertise. Would an administrator demonstrate supreme confidence in his decision over that of an amateur, or fear heightened embarrassment at being outperformed by a novice? Additional experimentation can easily answer these questions. It may also be useful to vary the situation surrounding how accountability is manifested. For example, imagine a situation where participants anticipate having to arrive at a common solution with someone of equal or lesser expertise who holds an opposite position on the issue to begin with. Then participants might take an extreme position, expecting to compromise later and arrive at a mutually agreeable solution close to what they originally wanted.

Additional experimentation may also shed light on the limitations of the present study. This study leaves the longevity of the priming influence (see Bargh, 1990) and the

subtlety of the prime required to produce an effect unknown. It seems reasonable to assume that the induction of a motivated goal in the real-world would be much more straightforward and take place over a greater time period, which should result in a more robust mind set. Simple variations on the current design could answer these questions. Also, while I'd like to treat the business scenario as a random factor in order to generalize to other decision-making contexts, it is possible that a business problem invokes different concerns than a military problem or some technical engineering debate. For instance, a military decision-making scenario could involve the expenditure of lives, which I suspect people view as less acceptable to gamble with than money. Future research employing modified scenarios could offer insight to the depth of generalizability. Finally, because priming is meant to induce a particular mindset or orientation, it is likely that other elements could factor into this orientation. The most likely would be personality characteristics. While I included some simple personality items taken from the Self-Consciousness scale (Fenigstein, Scheier, & Buss, 1975) as well as self-report measures on independence, the results were inconclusive. This post-experiment method of assessing personality may be insufficient for detecting an effect though. Instead, assigning participants to conditions based upon extreme personality scores taken from a pre-test could offer a test with more power to detect personality differences.

Summary and Conclusion

The results of this study revealed that accountable participants primed to seek the truth failed to conform to an administrative decision supposedly made by another participant by allocating more money to an opposing product on average. Evidence of

the traditional accountability induced conformity effect emerged in the accountable-along and both unaccountable conditions, regardless of prime. An offset control group, not subjected to outside information influence, or the threat of accountability, produced results that did not differ from the accountable-truth condition.

This study adds a limitation to the general theory that accountability to an audience with known views causes conformity. The findings suggest other situational variables affecting one's mindset at the time moderate the conformity effect of accountability. In this case, priming scenarios induced a motivated goal that either contrasted or corresponded to the typical conformity effect. However, this motivational goal alone was insufficient to produce deviation from conformity unless paired with the pressures of accountability. As alluded to earlier, a prime in the real world could be represented as a class in critical thinking, recent exposure to a strong willed, or apparently unbiased character, or a training program, such as those implemented by law enforcement agencies, military personnel, doctors, engineers, etc. It is important to realize the tools that people carry into important decision making tasks, because, as this study suggests, these tools interact with the subsequent situation; neither variable alone can account for the resulting behavior.

APPENDIX A
QUESTIONNAIRE MATERIAL

ADMINISTRATIVE DECISION-MAKING ANSWER SHEET

- 1) You are asked to make a decision about how much money to allocate to marketing the American lager and the European lager. You have a total of \$10 million to allocate between the two. What is your allocation? (please use multiples of 1 million)?

_____ million dollars to the American lager

+ _____ million dollars to the European lager

\$10 million dollars total marketing allocation for the next fiscal year

- 2) How confident are you in your allocation decision?

NOT AT 1 2 3 4 5 6 7 8 9 VERY
ALL CONFIDENT CONFIDENT

- 3) Given a proper marketing strategy, how potentially successful in economic terms do you see the American lager?

NOT AT 1 2 3 4 5 6 7 8 9 VERY
ALL SUCCESSFUL SUCCESSFUL

- 4) Given a proper marketing strategy, how potentially successful in economic terms do you see the European lager?

NOT AT 1 2 3 4 5 6 7 8 9 VERY
ALL SUCCESSFUL SUCCESSFUL

- 5) In the past, the company made a relatively large marketing investment in the European market. How important do you think it is to continue this investment pattern?

NOT AT 1 2 3 4 5 6 7 8 9 VERY
ALL IMPORTANT IMPORTANT

- 6) Please write a brief explanation of the reasoning behind your decision.

Please rate yourself as you feel right now on each of the qualities below. Place a check or "X" on the spot along each line to indicate your feelings.

Proud : _____ : Ashamed
 Anxious : _____ : Relaxed
 Nervous : _____ : Calm
 Intimidated : _____ : Confident
 Comfortable : _____ : Uncomfortable
 Friendly : _____ : Unfriendly
 Sociable : _____ : Withdrawn
 Cooperative : _____ : Stubborn
 Free : _____ : Constrained
 Strong : _____ : Weak
 Powerful : _____ : Powerless
 Individualistic : _____ : Team player
 Autonomous : _____ : Controlled
 Inner-directed : _____ : Outer-directed
 Leader : _____ : Follower
 Task-Oriented : _____ : Person-Oriented

How do you see yourself?

Some people see themselves as highly *independent*. They feel strongly that they are self-reliant and individualistic. They voice their own opinions even if others disagree. Other people see themselves as highly *interdependent*. They feel strongly that it is important to work well with others, get along, fit in, and cooperate. They agree with others to make things more pleasant, even if they might privately have different feelings.

1. How independent versus interdependent do you see yourself? Circle a number from 1 to 5 to best describe yourself.

- 1 = Extremely independent
- 2 = Independent
- 3 = Slightly Independent
- 4 = Slightly Interdependent
- 5 = Interdependent
- 6 = Extremely interdependent

2. How important is this dimension of independence versus interdependence to your conception of self? Is it something that is unimportant or important to your sense of self? Circle a number from 1 to 5 to best describe yourself.

- 1 = Not important to my sense of who I am
- 2 = Slightly important to my sense of who I am
- 3 = Somewhat important to my sense of who I am
- 4 = Very important to my sense of who I am
- 5 = Extremely important to my sense of who I am

1. We are checking on the clarity of the instructions. According to the instructions, will you meet with another participant-administrator to explain and discuss your solution?

DEFINITELY NO 1 2 3 4 5 6 7 8 9 DEFINITELY YES

2. Whenever people discuss issues with other people they always balance the importance of arriving at the correct solution with having a pleasant interaction and being compatible. Regardless of your experimental condition, assuming you were to meet with someone to discuss your administrative decision, how important would accuracy be to you?

NOT AT ALL 1 2 3 4 5 6 7 8 9 VERY
IMPORTANT IMPORTANT

3. How important would getting along smoothly with your discussion partner be to you?

NOT AT ALL 1 2 3 4 5 6 7 8 9 VERY
IMPORTANT IMPORTANT

4. What percentage of the other subjects do you estimate made an allocation decision within 1 million dollars of yours?

- a)over 75%
- b)between 50% and 75%
- c)between 25% and 50%
- d)less than 25%

5. When trying to determine the best solution to a problem, people often take into account the solutions that others have reached. To what extent did you think about how other people might solve the problem when arriving at your own decision?

NOT AT ALL 1 2 3 4 5 6 7 8 9 A GREAT DEAL

6. How important is it to you that others agree with your decision?

NOT AT ALL 1 2 3 4 5 6 7 8 9 VERY
IMPORTANT IMPORTANT

Please indicate how characteristic each of the following statements is of you. Write a number between 1 and 5 next to each statement, using the following scale:

1	2	3	4	5	
Not at all				Very	
Characteristic of me				Characteristic of me	

- _____ 1. I'm always trying to figure myself out.
- _____ 2. I'm concerned about my style of doing things.
- _____ 3. Generally, I'm not very aware of myself.
- _____ 4. It takes me time to overcome my shyness in new situations.
- _____ 5. I reflect about myself a lot.
- _____ 6. I'm very concerned about the way I present myself.
- _____ 7. I'm often the subject of my own fantasies.
- _____ 8. I have trouble working when someone is watching me.
- _____ 9. I never think about why I do what I do.
- _____ 10. I get embarrassed very easily.
- _____ 11. I'm very self-conscious about the way I look.
- _____ 12. I don't find it hard to talk to a stranger.
- _____ 13. I'm generally attentive to my inner feelings.
- _____ 14. I usually worry about making a good impression.
- _____ 15. I'm constantly examining my motives.
- _____ 16. I feel anxious when I speak in front of a group.
- _____ 17. One of the last things I do before I leave the house is look in the mirror.
- _____ 18. I sometimes have the feeling that I'm off somewhere watching myself.
- _____ 19. I'm concerned about what other people think of me.
- _____ 20. I'm alert to changes in my mood.
- _____ 21. I'm usually aware of my appearance.
- _____ 22. I'm aware of the way my mind works when I work through a problem.
- _____ 23. Large groups make me nervous.

APPENDIX B
PRIMING SCENARIOS

SCENARIOS

Please read the following scenarios that ask you to imagine yourself in a particular situation. In the lines below each scenario, please take no more than two minutes to consider and respond to each of the situations presented in the scenarios.

1) Imagine that you have been a reporter for your school newspaper for a year now. You were just informed that your big opportunity to write an editorial has arrived. The editorial will address the question of whether or not Washington Place should be closed to all traffic. This issue initially arose due to last spring's car accident in Washington Square Park. Those who are in favor of an end to traffic on this street are concerned with student safety issues. Opponents are concerned with creating more traffic gridlock which will also increase pollution levels. You don't know that much about the issue *yet* but you are really excited and anxious to find out more and do a good job on this editorial. Some of the former editorial writers have given you small pointers and have reminded you that this is your chance to express what you really believe on this issue.

You have a week or so to prepare the editorial. As the reporter, what are some of the things you might do? Where would you go find out more about the pros and cons of this issue? What might you read and who might you talk to in order to find out accurate information on the issue? How would you go about finally deciding where you personally stand on this issue?

APPENDIX C BUSINESS SCENARIO

Elsinore Beer Company

Elsinore beer company (false name) is a successful American micro-macro brewing company out of Boston. They have had multiple types of lagers and ales in national circulation for over half a century, but primarily cater to upper-class customers. In order to increase their economic viability and expand operations they decided to produce 2 new labels. One label is aimed at more budget concerned drinkers in the U.S. and has a lower sale price, and another label is a higher quality beer for export to Europe. They developed two new types of lagers for each purpose.

Given their financial constraints, Elsinore was only able to allocate 5 million dollars for marketing the two new labels (distributed over two years). A company official who made the decision did not want to risk the effectiveness of the marketing campaigns by splitting the money equally, and thereby running the danger of shortchanging both markets. Instead, the official decided to allocate the marketing dollars disproportionately. Based on historical sales data, the European beer market seemed to be slightly more robust. The official therefore allocated more money to the European advertising campaign. The European campaign received 4 million dollars for marketing while the campaign for the American lager received 1 million dollars.

The new lagers have now been on sale for two years in each market. Results were comparable in both years. The financial results over the past two years reveal that the 4 million dollars spent on the European market generated 50 million dollars in revenue. This result was below expectations and somewhat disappointing to analysts. Conversely, the 1 million dollars invested in the lower-end American market generated 35 million dollars in revenue. This result was a pleasant surprise and exceeded expectations. These results were accompanied by satisfaction ratings gathered by accounting firms that show marginally but not significantly higher satisfaction ratings of the European product.

Brewery officials thought the sales figures might be due to several considerations. The unexpected positive outcomes in the U.S. market may have resulted in part from inadequate initial market data, which may have underrepresented the number of potentially interested American beer drinkers, while the unexpected outcomes in the European market may have reflected a failure to consider a pattern of resistance to new beer products in Europe. Also, the discouraging past sales performance of the European lager may reflect intangible differences in the marketing campaigns and the relative

interests of the target consumers. The target consumer population sizes are not significantly different between the two markets, and neither is close to reaching peak consumption and creating diminishing returns for marketing investment.

With the new fiscal year approaching, Elsinore has cleared some past debt and now has 10 million dollars to allocate between the lagers, however they see fit, during the next fiscal year. Your job is to analyze the situation and make an allocation decision. How would you allocate the 10 million dollars between marketing for the European lager and American lager?

APPENDIX D EXPERIMENT INSTRUCTIONS

Instructions

Today's session involves two separate studies that were combined for efficiency. This way, in one session, you can get a full hour of credits – 2 credits toward your requirement – rather than having to come to the lab twice, each time for a shorter study. And, we can get twice as much done during available lab time.

Both studies do have something in common – they both deal with decision making, although with very different types. The first study deals with decision making in everyday life. It focuses on how people deal with the types of situations they might normally encounter everyday. We would like you to read three short scenarios that describe everyday situations that require some thought and a decision about how to act. We would like you to read each scenario carefully and then tell us how you would respond to it by writing down your answers.

The second study is investigating decision making and performance in response to practical, business problems. We are interested in examining how different types of decision environments will influence performance. You will be asked to play the role of an administrator who must make a decision that will affect the performance of your organization. You will read a problem and then make a decision about which of two alternatives should be pursued by your company. In order to create as much realism as possible, the case study was derived from an actual major corporation, whose name is disguised. Depending on the decision environment to which you are randomly assigned, the type of information and resources you will be given will vary, but these are all intended to simulate real world conditions. Also, you may or may not have to meet with other members of your company and discuss your decision. We hope that the information we learn from our studies can be applied in everyday situations to aid in selecting particular types of environments for particular types of tasks.

Attached is an informed consent slip. It indicates that the studies have been described to you and you agree to participate. If you have any questions, raise your hand and the experimenter will answer them

Instruction Set 3A

STUDY 2
BUSINESS DECISION MAKING

This study is investigating decision making and performance in response to practical, business problems. We are interested in examining how different types of decision environments will influence performance.

You will be asked to play the role of an administrator who must make a decision that will affect the performance of your organization. You will read a problem and then make a decision about which of two alternatives should be pursued by your company. In order to create as much realism as possible, each problem or case study was derived from an actual major corporation, whose name is disguised. Several different case studies are being used. You will work on one of these case studies.

As in most real companies, more than one person will be working on each problem. Depending on your condition assignment, you may end up exchanging more or less information (or even no information) with that other person. This is designed to simulate the flow of information – which is sometimes even, sometimes uneven, and sometimes nonexistent – in modern companies. In order to ensure that no “unintended” information is exchanged, you have been randomly paired with another participant in another room. This way, you will be able to exchange only the types of information appropriate to your assigned decision environment.

Although you and the other person will be working on the same problem, you will be making your final decisions separately. Your performance, and therefore the performance of your company, will be determined solely by the decision you make.

You have been assigned to the condition where you will go through a “post-decision” meeting. This condition simulates some real business situations in which there is a symmetrical or even flow of information. After you and the other person have made your decisions, you will exchange answer sheets and meet one another to discuss what you did. You will have an opportunity to explain to the other person why you made the decision you did, and he or she will have the opportunity to do likewise. This post-decision meeting is important because it gives both of you an opportunity to examine your thoughts and resolve questions.

At the end of the study, you will be given feedback about your decision.

Instruction Set 3U

STUDY 2
BUSINESS DECISION MAKING

This study is investigating decision making and performance in response to practical, business problems. We are interested in examining how different types of decision environments will influence performance.

You will be asked to play the role of an administrator who must make a decision that will affect the performance of your organization. You will read a problem and then make a decision about which of two alternatives should be pursued by your company. In order to create as much realism as possible, each problem or case study was derived from an actual major corporation, whose name is disguised. Several different case studies are being used. You will work on one of these case studies.

As in most real companies, more than one person will be working on each problem. Depending on your condition assignment, you may end up exchanging more or less information (or even no information) with that other person. This is designed to simulate the flow of information – which is sometimes even, sometimes uneven, and sometimes nonexistent – in modern companies. In order to ensure that no “unintended” information is exchanged, you have been randomly paired with another participant in another room. This way, you will be able to exchange only the types of information appropriate to your assigned decision environment.

Although you and the other person will be working on the same problem, you will be making your final decisions separately. Your performance, and therefore the performance of your company, will be determined solely by the decision you make.

You have been assigned to the condition where you will learn the final decision of the other person, however, he/she will NOT learn your decision. This condition simulates some real business situations in which the flow of information is asymmetrical or lopsided.

Further, you will NOT have to meet the other person nor discuss what you did or why you did it. After you have made your decision, the session will be over.

At the end of the study, you will be given feedback about your decision.

Instruction Set 6C

STUDY 2
BUSINESS DECISION MAKING

This study is investigating decision making and performance in response to practical, business problems. We are interested in examining how different types of decision environments will influence performance.

You will be asked to play the role of an administrator who must make a decision that will affect the performance of your organization. You will read a problem and then make a decision about which of two alternatives should be pursued by your company. In order to create as much realism as possible, each problem or case study was derived from an actual major corporation, whose name is disguised. Several different case studies are being used. You will work on one of these case studies.

As in most real companies, more than one person will be working on each problem. Depending on your condition assignment, you may end up exchanging more or less information (or even no information) with that other person. This is designed to simulate the flow of information – which is sometimes even, sometimes uneven, and sometimes nonexistent – in modern companies. In order to ensure that no “unintended” information is exchanged, you have been randomly paired with another participant in another room. This way, you will be able to exchange only the types of information appropriate to your assigned decision environment.

Although you and the other person will be working on the same problem, you will be making your final decisions separately. Your performance, and therefore the performance of your company, will be determined solely by the decision you make.

You have been assigned to the condition where you will not learn the final decision of the other person and he/she will NOT learn your decision. This condition simulates some real business situations in which information flow does not take place. Further, **you will NOT have to meet the other person nor discuss what you did or why you did it.** After you have made your decision, the session will be over.

At the end of the study, you will be given feedback about your decision.

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BIOGRAPHICAL SKETCH

Andrew Quinn earned a Bachelor of Science in behavioral science as a Distinguished Graduate from the United States Air Force Academy in 1999. His first military assignment was to pursue a Master of Science degree in psychology from the University of Florida. Expected completion of that degree is August 2000.