THE FLORIDA STATE UNIVERSITY COLLEGE OF BUSINESS

DOES FORTHCOMINGNESS MATTER? EXPLORING THE DETERMINANTS OF MANAGERS' LONG-TERM REPORTING CREDIBILITY

By

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A Dissertation submitted to the Department of Accounting in partial fulfillment of the requirements for the degree of Doctor of Philosophy

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I dedicate this to the most influential person in my life, my mother Linda. Without her unwavering love and support I would not be where I am today.



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ABSTRACT

This study develops and tests a model of manager reporting credibility in an earnings guidance setting. I use two experiments in which I manipulate forthcomingness, investors' status (i.e. current vs. prospective investors), reputation, and news valence to examine their influence on investors' assessments of management's long-term reporting credibility. In the first experiment, I examine the influence of forthcomingness and investors' status on management's reporting credibility. I find that prospective investors exhibit an incremental sensitivity to forthcoming disclosure compared to current investors. Additionally, I examine investing experience as a covariate and find that this incremental sensitivity is not driven by investing experience. I also find that the long-term impact of forthcomingness on credibility is partially mediated by investors' affective reactions to forthcomingness. In the second experiment I examine the influence of reputation and news valence on prospective investors' assessments of management's reporting credibility. The results suggest that initially managers who report negative news are rated as having lower reporting credibility than those who report positive news. However, with additional trading periods only forthcomingness reliably predicts changes in investors' assessments of management reporting credibility. Moreover, I find that prospective investors exhibit an increased willingness to rely on subsequent disclosure and this willingness to rely is positively associated with their credibility assessments regarding management's reporting credibility. I also find that both the benefits (increases) and risks (decreases) to managers' reporting credibility are magnified when earnings news is negative. Overall, the results suggest that forthcomingness has a positive impact on long-term investor assessments of manager reporting credibility and this effect is greater for prospective investors over multiple periods.



CHAPTER ONE

INTRODUCTION

1.1 Background, Research Problem, and Significance

Earnings guidance has become an increasingly contentious issue in recent years. Critics have argued that earnings guidance creates a myopic environment for both firm managers and investors alike (CFA Institute 2006; U.S. Chamber of Commerce 2007). The contention that earnings guidance may be unwarranted is bolstered by academic evidence which demonstrates that attempts by management to establish credibility with investors may be unsuccessful (Kasznik and Lev 1995; Mercer 2005; Tucker 2007). For example, Mercer (2005) found that the short-term credibility assessments attributable to forthcomingness do not persist over time due to memory constraints. Absent from the current debate is systematic evidence on the determinants of investor assessments of management credibility when management credibility *does* matter. Recent research in accounting suggests investor type (current versus prospective) may influence investor judgments (Harris and Jackson 2011; Cianci and Falsetta 2008). However, there is no evidence explicitly linking investors' status to long-term credibility. I develop and test a long-term management credibility model which suggests that current and prospective investors respond asymmetrically to earnings guidance.

Specifically, I argue that management forthcomingness is most likely to matter when investors' contemplate an investment position (potential investor), as opposed to already having an investment position (current investor) in the firm because this assessment can directly influence their directional preference.³ The management credibility model developed herein suggests that investor status influences investors' assessments of manager's long-term reporting credibility. This prediction is based on research in psychology which has shown that individuals' probability assessments systematically differ when there is limited potential for a judgment to reduce future costs (Harris, Corner, and Hahn 2009). This expectation is consistent with prior

³ Prior research has demonstrated that investors develop differential directional (positive or negative) expectations regarding financial information depending on investment position (Hales 2007; Hales et al. 2010; Han and Tan 2010). The term investment position refers to whether an investor holds a long or short position in the stock.



¹ This is consistent with Graham, Harvey and Rajgopal (2005) which reported that executives who responded to their survey indicated that meeting or beating earnings benchmarks was very important and managers were willing to sacrifice economic value in order to manage reporting perceptions.

² See section 1.5 for detailed discussion key terms and definitions.

accounting studies which demonstrate differences in investors' judgments based on investor status (Cianci and Falsetta 2008; Harris and Jackson 2011). I argue that this differential sensitivity to forthcomingness results in higher credibility and increased willingness to rely on disclosure and this effect is strengthened with additional firm-specific experience regarding forthcomingness (i.e. reputation). Moreover, I posit that consistent with attribution theory, investor assessments regarding management's credibility should be higher when managers are forthcoming regarding negative earnings news as opposed to positive news.

1.2 Overview of Methodology

I conducted two experiments which vary Investor Status (current/prospective investor), Forthcomingness (present/absent), News Valence (above/below consensus analyst forecast) and Reputation (consistent/inconsistent or nonexistent forthcoming disclosure). Experiment One isolates the impact of investor status and forthcomingness on investors' management credibility assessments. In the first experiment participants were either assigned a long position (current investor) or are endowed with cash to invest (prospective investor) in a fictional company. All participants were provided with financial information for the company and asked to assess management reporting credibility. Participants in the high forthcomingness treatment were then provided with a voluntary disclosure regarding future earnings from management. Prospective investors were then permitted to select an investment position in the firm (short, long, none) and all participants are provided with the actual earnings news, which is always below consensus analyst forecast. All participants were then paid based on the actual value of their investment. After a two-week delay, participants returned to complete the post-experimental questionnaire, which included their final assessments of management's reporting credibility and willingness to rely on subsequent disclosures.

Experiment Two is identical to Experiment One with three notable exceptions. First, Experiment Two only includes analysis of prospective investors' management credibility assessments. Second, Experiment Two expands the number of trading periods from one period to two periods. Lastly, Experiment Two differs from Experiment One in that the direction of the actual earnings news is manipulated between periods as above or below consensus analyst forecast.

⁴ See Appendix A and B for the experimental instruments used in Experiment One and Two, respectively.



In Experiment Two the investing scenario is expanded from one to two periods to evaluate the impact of consistent forthcoming disclosure (or lack thereof) over multiple periods. In period one participants were provided financial information and voluntary disclosure from management that was either forthcoming (present) or not (absent). All participants selected an investment position in the firm (long, none, or short) and were then paid based on the actual value of their investment. Participants returned two-weeks later and answered credibility assessment questions and immediately began the second trading period. In the second investment period forthcomingness again was either high (consistent) or low (inconsistent or nonexistent). Again all participants selected an investment position in the firm (long, none, or short) and were then paid based on the actual value of their investment. After another two-week delay, participants completed the post-experimental questionnaire, including manipulation checks, final credibility assessments, process variable assessments, and willingness to rely measures.

1.3 Overview of Results

I find evidence that investor status has an incremental impact on investor assessments of manager credibility. Specifically, in Experiment One I find that forthcomingness only has a positive influence on the management credibility assessments of prospective investors. I find evidence that the influence of forthcomingness on potential investors' long-term credibility assessments were partially mediated by their affective reactions to forthcomingness but not to news valence. I also find that this result is not driven by differential levels of investing experience across conditions.

Additionally, I find that over multiple periods, managers develop a reporting reputation for forthcoming disclosure. The results provide evidence that managers who report negative news are initially rated as having lower reporting credibility than those who report positive news. However, over multiple periods the predictive power of news valence diminishes with respect to investors' credibility assessments. I find that in the second period only forthcomingness reliably predicts changes in investors' assessments of management credibility. Overall, the results suggest that forthcomingness has a positive impact on manager reporting credibility and subsequent willingness to rely on disclosure and this effect is greater for prospective investors over multiple periods. The findings also suggest that this long-term impact of forthcomingness on credibility is mediated by investors' affective reactions to forthcomingness but not by their



affective to news valence. Lastly, I find that the benefits and risks to a manager's reporting credibility are exacerbated when earnings news is negative. This results suggest that management's reporting credibility is particularly sensitive to the valence of earnings news.

1.4 Contribution

These results are important for several reasons. First, I inform the general voluntary disclosure literature by developing a theoretical framework for understanding the determinants of long-term reporting credibility for prospective investors. Mercer (2005) provided a theoretical framework for understanding how managers' reporting decisions affect credibility with current investors. I extend Mercer's framework to a setting where individuals assume the role of a prospective investor over multiple periods. The current study combines the accounting management credibility research with the growing stream of investor status research. Second, the current study addresses the question of whether forthcomingness is an important dimension of financial disclosure to prospective investors over time. Intertemporal studies are important because experimental results (such as sensitivity to forthcomingness) may not generalize over time (Mercer 2005). Accordingly, the proposed study answers the call for more research on intertemporal consequences of disclosure (Hirst et al. 1999; Hirst et al. 2008). Lastly, my study provides additional evidence in the increasingly political debate over earnings guidance. Specifically, I assess an environment where a focus by management on current period earnings may be preferred by a subset of investors.

This study should be of interest to managers who issue disclosures and are interested in enhancing their reporting reputations. Graham et al. (2005) noted that 90% of managers surveyed indicated that a key motivating factor for voluntary disclosure was a desire to develop a reputation for accurate and transparent reporting. However, there is both empirical and experimental research which indicates that the intertemporal benefit of forthcomingness is fleeting (Kasznik and Lev 1995; Mercer 2005; Tucker 2007). My study provides experimental evidence on the intertemporal impact of both forthcomingness and reputation on prospective investor credibility assessments and investment behavior. This is important because earnings guidance may be specifically targeted to prospective investors rather than long-term current investors (Harris and Jackson 2011).

1.5 Definitions of Key Terms



I use the term management credibility to refer to investors' perceptions of management's competence and trustworthiness in financial reporting (Mercer 2005). Consistent with prior research I use the term forthcomingness to refer to the accuracy, timeliness, and completeness of disclosed information (Mercer 2005). I use the term investor status to denote whether an investor is endowed with a long investment position (current investor) or has no investment position (prospective investor) in a stock. Lastly, I use the term news valence to refer to whether the actual earnings news was positive (above consensus analyst forecast) or negative (below consensus analyst forecast).

1.6 Organization of Dissertation

The remainder of the dissertation is organized as follows. In the next section I present the theoretical model and develop my hypotheses. In section three I present my experimental design and analysis of Experiment One. Section four provides the results of Experiment Two. An overall summary and discussion is presented in the final section of the dissertation.



CHAPTER TWO

HYPOTHESIS DEVELOPMENT

2.1 Chapter Organization

This chapter examines why investor status may influence investor assessments of management's long-term reporting credibility and develops the hypotheses examined herein. Section 2.2 summarizes relevant literature of differences between short- and long-term investor assessments of management reporting credibility. Section 2.3 examines potential differences between current and prospective investors and develops the cognitive model. In section 2.4, I develop the expectations relating to the possible influence of investing experience. Section 2.5 discusses the possible reputational effects from multiple periods. The influence of news valence is addressed in section 2.6. An overall summary of the chapter is presented in section 2.7.

2.2 Background

Prior research demonstrates that more credible managers are better able to communicate information to the capital markets than less credible managers (Williams 1996; Mercer 2004). Mercer (2004) develops a model of disclosure credibility based on a review of the relevant literature. Mercer finds four general attributes that are affiliated with disclosure credibility: 1) management credibility; 2) situational incentives; 3) external and internal assurance; and 4) characteristics of the disclosure. Miller (2009) suggests that of the four attributes identified in Mercer (2004), management credibility may be the most important to the formation of disclosure credibility.

The model developed herein is based on the long-term credibility assessments of investors in response to management's disclosure forthcomingness. Consistent with prior research, I define forthcomingness as the accuracy, completeness, and timeliness of disclosure (Mercer 2005). Each dimension has been shown to influence individual's assessment of management's trustworthiness and competence. For example, prior research has demonstrated that managers who provide more accurate information are rated as more credible (Tan et al. 2002). Hirst et al. (1999) found that forecast form affected investors' confidence in earnings forecasts, especially when managers were viewed as accurate in their prior forecasts. Moreover, prior research has shown that market and analyst reactions are stronger for firms that provide



more accurate forecasts (Baginski et al. 1993; Pownall et al. 1993; Bamber and Cheon 1998; Hutton and Stocken 2007; Ng, Tuna and Verdi 2008).

Completeness and timeliness are also critical components of perceived forthcomingness. For example, disclosures regarding earnings may be accurate but incomplete in terms of providing bolstering support for the reported numbers. A number of empirical studies have demonstrated that both analysts and investors are influenced by supporting information accompanying management forecasts (Hutton et al. 2003; Baginski et al. 2004; Baginski et al. 2008). Timeliness of disclosure may also influence investor assessments of management's competence and trustworthiness. For example, untimely disclosure may suggest that a manager is incompetent, untrustworthy, or both. Experimental studies have shown that managers who provide timely disclosure are rated as more credible than those who do not (Libby and Tan 1999; Mercer 2005).

There have been several studies which provide evidence concerning the relation between disclosure forthcomingness and management's reporting credibility in the short-term (Libby and Tan 1999; Tan et al. 2002, Mercer 2005). All of these studies have found evidence which suggests that managers who provide more forthcoming disclosures are rated as more credible than managers who are less forthcoming. For example, Libby and Tan (1999) find that investors' assessments of manager's integrity are higher when managers provide warnings about unexpected earnings. Similarly, Tan et al. (2002) find that in the short-term, managers who provide more accurate disclosures are regarded by analysts as more forthcoming, having greater integrity, and are regarded as more competent. Mercer (2005) found that in the short-term, managers who provided more forthcoming disclosure were rated by investors as more credible than those who did not.

These short-term results are consistent with attribution theory which predicts that individuals will attribute a manager's behavior to dispositional forces when they are at odds with situational forces (Kelley 1973; Fisk and Taylor 1991; Weiner 1992). In other words, attribution theory predicts that individuals recognize that a manager *could* choose to be less forthcoming and that managers have situational incentives to provide earnings guidance in their own self-interest (Nagar, Nanda, and Wysocki 2003). Accordingly, attribution theory predicts that when managers are forthcoming, particularly regarding information in conflict with their own self-interest, they are more likely to be perceived as credible. In sum, these studies demonstrate that



in the short-term investors appear to attribute forthcoming behavior to be reflective of dispositional characteristics of the manager. In other words, it appears that investors appear to attribute the decision to be forthcoming to be reflective of the manager's honesty, trustworthiness, and competence.

However, the positive relationship between forthcomingness and management reporting credibility is also impacted by the passage of time. For example, Mercer (2005) found that the short-term credibility assessments attributable to forthcomingness do not persist over time. Mercer predicted and found evidence which suggests that long-term investor reactions are driven primarily by their affective reactions to the news valence of disclosed news (positive or negative news) rather than forthcomingness. Mercer based this prediction on an affect-based model of financial decision-making proposed by Kida and Smith (1995). This model posits that when investors experience an event, both the event and overall affective reaction to the event are encoded in memory. The model predicts that affective reactions create stronger memory traces related to the specific events underlying those reactions. This means that short-term cognitive assessments will fade with time; however, investors' affective reactions will continue to be accessible.

Kida and Smith (1995) use the term affect to refer to the feelings underlying evaluative reactions (positive or negative reactions). This definition is consistent with the broader psychological definition of affect which means the specific quality of goodness or badness, which may be experienced with or without consciousness, demarcating the positive or negative quality of a stimulus (Slovic et al. 2005). Kida and Smith note that individuals could experience a broad range of emotions (i.e. happiness, sadness, etc.) in response to accounting information, however, these emotions are still associated with an overall valence (positive or negative). Kida and Smith propose that to the degree that specific types of emotions such as happiness, sadness, anger, etc., are associated with the positive or negative valence in memory structures, the propositions of their model will only be enhanced. This assertion is consistent with emotional memory research which demonstrates an increase in the quantity of remembered information (Kensinger and Schacter 2009), the quality of remembered information (Ochsner 2000), as well as enhanced feelings of remembering for emotional items (Sharot, Delgado, and Phelps 2004). Consistent with Kida and Smith (1995), I use the term affect to refer to the participant's overall evaluative reaction.



Mercer (2005) argued that investors experience affective reactions to both the news valence (positive or negative) and forthcomingness (forthcoming or not forthcoming). She posited that positive news and forthcomingness would result in positive affect while negative news and lack of forthcomingness would result in negative affect. In some conditions, the reactions would be in the same direction (positive news and forthcoming); in others, the two would be in conflict (negative news and forthcoming). Mercer concluded that the investors' overall reaction would depend on which affective reaction would be stronger (Damasio 1994).

Mercer predicted and found that investors' affective reaction to news valence was stronger than their affective reaction to management's forthcomingness. This prediction was based on Kasznik and Lev (1995) who found that news valence is a stronger predictor of stock market reactions than management forthcomingness as proxied by earnings warnings. Mercer's (2005) results support this conclusion. Specifically, managers releasing positive news are rated as more credible regardless of their perceived forthcomingness. Mercer (2005) provides evidence that the primary determinant of investors' long-term assessments of management reporting credibility is the investors' affective reaction to news valence. Overall, the results suggest that in contrast with the short-term, there are no long-term benefits to forthcoming disclosure. However, as discussed below it is unclear whether affective reactions to news valence and forthcomingness are homogenous among investors.

2.3 Investor Status

The long-term predictions noted above assume that investors are a homogenous group in terms of their sensitivity to and preferences for financial information. However, there is also evidence which suggests that investors' affective reactions may be stronger for forthcomingness than news valence. For example, research has shown that investors and analysts invest in and provide coverage of companies that are more forthcoming (Ajinkya, Bhojraj, and Sengupta 2005; Healy, Hutton, and Palepu 1999). One reason why investors may exhibit differential sensitivity to forthcomingness is that they differ in investor status (current investor versus prospective investor) at the time they encounter a forthcoming management disclosure. For example, Mercer (2005) examined participants' judgments of management reporting credibility from the

⁵ A current investor could include an individual who presently holds a long or a short position in a given stock. However, for expositional convenience and consistent with my experimental design I use the term current investor to denote an individual who currently holds a long position in a stock.



perspective of a current investor. Forthcomingness may be less important than news valence to a current investor because forthcomingness influences neither the decision to buy nor the value of the investment directly. Anecdotal evidence suggests that prospective investors may respond favorably to forthcoming negative earnings news because prospective investors can benefit from both upward and downward price adjustments.⁶ Recent research supports this intuition. Specifically, Harris and Jackson (2011) find that prospective investors' judgments were more sensitive to differences in news valence compared to current investors.

Probability assessments, particularly assessments of the likelihood of negative outcomes are central to investing decisions. Prior research in psychology suggests that individuals' probability assessments (a precursor to investment choice) are strongly influenced by control, especially for severe outcomes (Harris et al. 2009). Specifically, Harris et al. (2009) find that when there is no element of control individuals do not exhibit loss asymmetry. Loss asymmetry helps explain a wide variety of choice behavior including the equity premium, downward-sloping labor supply, asymmetric price elasticities, status quo bias, and insensitivity to bad income news (Camerer 2000). Harris et al. (2009) note that what needs to be "controlled" to elicit loss asymmetry in probability estimates is simply the possibility that a future decision will be based on an estimated outcome and the potential that these decisions can reduce associated costs. In an investing context, accurately assessing the forthcomingness of management's disclosure can reduce future costs associated with selecting an investment position (long or short position), but only for investors who plan to trade on the information. Accordingly, prospective investors may exhibit differential information processing due to loss asymmetry which may influence their investment position decision.

Also, accounting research has provided evidence which suggests that individuals assigned an investment position may develop differential directional preferences regarding investment performance (e.g. Hales 2007; Hales et al. 2010). These studies, which are based on the theory of motivated reasoning (Kunda 1990) suggest that individuals process information

⁷ According to Harris et al. (2009) not all states of nature need to be controlled. For example, loss asymmetry exists in meteorological forecasting and the weather itself is not subject to control. Rather, what is important is that a future decision will be based on the assessment and may reduce an associated cost. For example, carrying an umbrella on a rainy day.



⁶ For example, the recent financial crisis was blamed, in part, for excessive short selling of stocks in which investors would attempt to artificially drive down the value of stock (Johnson 2010). In such an environment negative earnings news valence may be viewed as positive by a prospective investor because they can trade on the information.

differently when they have clear directional preferences. Specifically, Hales (2007) found that participants assigned to long (short) positions had relatively high (low) expectations regarding future earnings. This result suggests that current owners taking a long position are biased to have high expectations regarding stock performance regardless of the forthcomingness of management disclosure.

Taken together, these studies suggest that: (1) prospective investors may systematically differ from current investors in their probability assessments of negative outcomes when future decisions are dependent on those assessments; (2) initial probability assessments may influence investment position decisions and consequently expectations; and (3) affective reactions are based on both news valence and forthcomingness. Accordingly, prospective investors may differ from current investors because forthcomingness can directly influence future investment decisions (control). In other words, a prospective investor's ex ante expectation regarding the forthcomingness of management disclosure (or lack thereof) has the ability to influence their investment position (short versus long), expectations, and subsequently their overall evaluative reaction (affective reaction).

Mercer (2005) predicted and found that in the long-term managers who reported positive news were rated as having higher credibility than those who reported negative earnings news, irrespective of forthcomingness. Mercer's long-term result may be driven by both perceived control and investment position. For example, to the extent that investors assigned a long position assumed that current assessments of forthcomingness were inconsequential to a future investment decision (lack of control) there may have been less cognitive effort. Moreover, consistent with Hales (2007), individuals assigned a long position in a stock should have developed a directional preference for news valence, but not for forthcomingness. The combined influence of control and investment position is an expectation that investors would devote less attention to forthcomingness cues and develop stronger preferences for positive earnings news. These expectations are consistent with Mercer's long-term findings.

Due to the fact that prospective investors differ from current investors in terms of perceived "control" it is reasonable to assume that they may experience differential information processing. In particular, prospective investors should devote greater cognitive effort when assessing cues (such as management forthcomingness) which may limit the prospective for future losses. Consistent with Harris et al. (2009) the influence of control on information



processing is most notable for negative outcomes (negative earnings news). Moreover, when investors accurately assess management's credibility regarding negative earnings news and select an investment position consistent with that guidance they should develop a directional preference that is also consistent with the guidance. Accordingly, in contrast with current investors, prospective investors may develop an expectation of, and positive affective reaction to negative earnings news. See Figure 1 for a graphical depiction of the proposed cognitive mechanism for a prospective investor. Accordingly, I propose the following hypotheses regarding investors' credibility assessments which can be seen graphically in Figure 2.

H1a: Prospective investor long-term assessments of management's reporting credibility will be higher for managers who are forthcoming about negative news than those who are not forthcoming.

Mercer (2005) found evidence which suggests that current investors' affective reaction to news valence drove their credibility assessments of managers. This finding is consistent with Hales (2007) who found evidence that investors accept preference-consistent information at face value and are inherently skeptical of preference-inconsistent information. Therefore, when current long investors receive negative earnings news which is inconsistent with their investment position, I anticipate their reaction will be negative. I propose the following hypothesis regarding current investor assessments of management's reporting credibility.

H1b: Current investor long-term assessments of management's reporting credibility will be negative for managers who report negative news irrespective of forthcomingness.

Lastly, Mercer's (2005) management reporting credibility model suggests that affective reactions drive investor assessments of manager's long-term credibility assessments. Mercer's (2005) findings are consistent with research in psychology which demonstrates that affect is central to information processing and rational action (Cameron and Leventhal 2003; Chaiken and Trope 1999; Damasio 1994; Sloman 1996; and Slovic et al. 2005). In particular, Mercer's (2005) model predicts that investors experience both affective reactions to news valence and forthcomingness. She found evidence which suggests that current investors' affective reaction to



news valence drove their credibility assessments of managers. However, given limitations in Mercer's experimental design, it is difficult to distinguish whether affective reactions were a response to news valence or differential expectations caused by assigning participants a long investment position. In other words, directional preferences are confounded with positive earnings news in Mercer (2005).

Consistent with Kida and Smith (1995) when investors experience an event associated with accounting information, both the event and overall affective reaction to the event are encoded in memory. Affective reactions create stronger memory traces that are more accessible over time. Thus, if consistent with H1a, prospective investors exhibit a differential sensitivity to forthcomingness, then forthcomingness may influence memory in two ways. First, prospective investors should spend more time evaluating management forthcomingness which should enhance their memory of specific details underlying the event. Particularly when confronted with negative earnings news, prospective investors should spend more time evaluating management forthcomingness because they can reduce the future costs associated with selecting an incorrect investment position in the firm (i.e. element of control).

Second, if management forthcomingness influences investment position, then investors should develop strong directional preferences for earnings news, which, in turn should drive their affective reactions. In other words, prospective investors differ from current investors in the sense that their directional preferences are not predetermined. Accordingly, prospective investors may develop directional preferences that are consistent with forthcoming disclosure regarding negative earnings news. I propose the following hypothesis regarding the evaluative reaction underlying investors' assessments of management's reporting credibility.

H1c: Prospective investors' long-term management credibility assessments will be positively influenced by affective reactions to forthcomingness.

2.4 Investing Experience

There has been an extensive stream of accounting literature regarding differences between professional (e.g., analysts) and non-professional investors. This research demonstrates that there are differences between professionals and non-professionals in how they process and



use financial information (Bouwman et al. 1987; Maines and McDaniel 2000; Fredrickson and Miller 2004; Elliott 2006). For example, Fredrickson and Miller (2004) find that non-professional investors were more likely to use heuristic-based valuation models relative to professional investors. The authors find that non-professionals were more likely perceive GAAP earnings disclosures with accompanying higher pro forma earnings more favorably and consequently assess a higher stock price. Similarly, Elliott (2006) finds that nonprofessional investors' judgments and decisions are influenced by management's emphasis on pro forma disclosures, and that this influence may be mitigated by the presence of a reconciliation. In contrast, Elliott (2006) finds the opposite for the judgments and decisions of analysts. In particular, Elliott (2006) finds that the presence of a reconciliation increased analysts' perceptions regarding the reliability of pro forma disclosure.

There is also reason to suspect that there are differences within investor classes (professional and non-professionals) and that these differences are due, in part, to investing experience. Prior research provides evidence which demonstrates experience-related differences within both professional and non-professional investors (Hunton and McEwen 1997; Elliott et al. 2008). These differences may be driven by experience because prior research has demonstrated that task-specific experience improves individuals' ability to identify and assimilate pertinent information (Bonner and Lewis 1990; Libby and Luft 1993; Libby 1995; Elliott et al. 2008). For example, Hodge and Pronk (2007) find that non-professional investors tend to rely more on filtered accounting information when making investment decisions. Elliott et al. (2008) find that less-experienced non-professional investors earn lower returns as unfiltered information increase. Moreover, the authors find that this relationship reverses for more-experienced non-professional investors.

Non-professional investors increasingly comprise a non-trivial portion of the securities market. However, there is a paucity of evidence of regarding differences within this investor class. Prior research has shown that non-professional investors have little understanding of the relations among or the relative importance of financial statement items (Maines and McDaniel 2000). Moreover, prior research suggests that investment judgments and decisions can be

⁸ There has been dramatic growth of mutual fund, bond and stock ownership in the U.S. over the past several decades. For example, the Securities Industry Association (2008) reports that 47 percent of U.S. households (54.5 million) owned equities and/or bonds. Moreover, ownership of individual stocks and bonds has increased by 50% (36.4 to 54.5 million) from 1989 to 2008 (Securities Industry Association 2008).

influenced indirectly by unintentional cognitive effects such as investing experience (Elliott 2006; Elliott et al. 2008). Overall, the research suggests that more-experienced non-professional investors ("investors" hereafter) may better at both identifying and using relevant information. Accordingly. I posit the following hypothesis:

H2: When management is forthcoming regarding negative news, more-experienced investor assessments of management's reporting credibility will be higher than the assessments of less-experienced investors.

2.5 Multi-Period Effects

Whenever there is more than one trading period in a repeated game scenario there exists the possibility of a reputation effect. In fact, according to theoretical economic models multiple periods are critical to the emergence of credible disclosure. For example, Stocken (2000) developed a model in which there is no disclosure in a single-period setting. In contrast, in a repeated game setting the manager will almost always truthfully reveal private information provided certain conditions are met. According to this model, a forecasting reputation emerges because investors can use the firm's audited earnings report to assess the credibility of the manager's voluntary disclosure. When investors perceive the manager's disclosure as credible they increase the manager's reputation index. In equilibrium the manager's disclosure is ignored when this reputation index is low. Alternatively, when a manager's reputation index is sufficiently high investors are presumed to impound the manager's forecast into stock price.

Stocken's theoretical predictions are consistent with the framework posited by Hirst et al. (2008) which suggests that a firm's reputation for forecasting accuracy in prior periods enhances reputation (a consequence), which, in turn, becomes an antecedent in the current period. This framework suggests that when investors have repeated interactions with the same firm an overall reporting reputation may develop. This is consistent with a large body of empirical evidence

The investor's reputation index is conceptually identical to the notion of the investor's assessment of management reporting credibility regarding the trustworthiness and competence of the manager.



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⁹ Specifically, Stocken (2000) demonstrated that a manager will almost always truthfully reveal private information provided the manager is sufficiently patient, the accounting report is sufficiently useful for assessing the truthfulness of the manager's voluntary disclosure, and the manager's disclosure performance is evaluated over a sufficiently long period.

supporting the existence and importance of reporting reputation (Williams 1996; Healy and Palepu 2001; Skinner 1994; Kasznik 1999; Stocken 2000; Atiase et al. 2005; Graham et al. 2005; Hutton and Stocken 2007).

In fact, prior research demonstrates that managers are very concerned with developing a favorable reporting reputation. For example, Graham et al. (2005) found that managers indicated that accuracy and transparency were important components motivating voluntary disclosure. Similarly, Kasznik (1999) finds that part of the reason managers engage in earnings management is to maintain a reputation for forecast accuracy. This is consistent with the framework posited by Hirst et al. (2008) regarding the cyclical nature of forecaster characteristics. Specifically, managers provide forthcoming disclosure because they have reputational concerns beyond the current reporting period.

It is important to note that the academic evidence for a positive influence of a manager's reporting reputation is not unequivocal. For example, both Kasznik and Lev (1995) and Tucker (2007) found that firms that provided earnings warnings fared worse than those who did not. The long-term results from Mercer (2005) suggest that the results from Kasznik and Lev (1995) and Tucker (2007) can be explained, in part, by memory limitations of investors. These results suggest that the desire by managers to develop reporting reputations may be misplaced. There are several reasons why the results of Kasznik and Lev (1995), Mercer (2005), and Tucker (2007) may not generalize to credibility formation of prospective investors. First, negative news valence may not be perceived as negative by all investors. This is due to the fact that prospective investors can benefit from downward as well as upward price adjustments. Second, Mercer (2005) examined a single-period setting where a reputation for forthcomingness may not materialize. As Stocken (2000) suggests, equilibrium behavior in a single-period setting may not generalize to a multiple period game.

Lastly, if memory limitations are the primary reason for investors' inaccurate assessments of managers' long-term credibility, then one alternative to improve the accuracy of investors' assessments is to allow for additional firm-specific experience. Specifically, additional periods of interaction with managers should enhance the accuracy of investor assessments of manager credibility when forthcomingness is consistent. Accordingly, the conclusions from Stocken's

¹¹Due to limitations in the scope of the dissertation in the subsequent hypotheses I focus exclusively on prospective investors.



(2000) model provide insight into the formation of management reporting credibility in Mercer (2005). Specifically, we would not expect a reputation for forthcoming disclosure to develop in a single-period setting. Thus, the long-term memory results of Mercer (2005) can be explained, in part, by an experimental design which employed only one trading period.

I propose the following cognitive explanation for firm reporting reputation for prospective investors. In the first period, prospective investors' make attributions regarding management's forthcomingness *and* experience an affective reaction related to the accuracy of those attributions. Consistent with Hirst et al. (2008), these affective reactions become forecast antecedents in the following period. This reporting reputation is driven by repeated interaction with management's financial reporting decisions, which, in turn strengthen the accuracy of investor's short-term attributions regarding management forthcomingness (i.e. forthcomingness becomes more salient). In other words, reporting reputation is impacted by affective reactions from prior experiences which are initially more salient and dominate investor's evaluation of management reporting credibility as well as subsequent investment decisions.

Presumably, when investors can directly benefit from forthcomingness (i.e. increase wealth), both current period attributions regarding forthcomingness, and affective reactions from prior periods will be accessed for current period investment decisions. Each investment interaction with the firm can be thought of as a test of both long-term memory (regarding affective reactions to prior forthcomingness) and current period attributions in which the investor receives feedback via current period earnings. The psychological research on spacing effects (Cepeda et al. 2006; Rohrer and Pashler 2007) and testing effects (Roediger and Karpicke 2006) suggest that intermittent testing and reinforcement should improve long-term memory regarding management reporting credibility over time. Accordingly, investors should be more willing to invest in accordance with management's guidance when management has demonstrated a propensity for forthcoming disclosure irrespective of news valence. This suggests the following hypotheses:

H3a: Prospective investors' assessment of management credibility will increase when forthcomingness is consistent between periods compared to when forthcomingness is inconsistent or nonexistent.



H3b: Prospective investors will rely more on subsequent disclosure when forthcomingness is consistent between periods compared to when forthcomingness is inconsistent or nonexistent.

Research in psychology suggests that affect impacts judgments and decisions because experienced affective reactions are used as information in the judgment and decision making process (Slovic et al. 2005). The reliance on affective reactions may influence judgments and decisions in one-stage of a dual-process system of information processing (Cameron and Leventhal 2003; Chaiken and Trope 1999; Sloman 1996; and Slovic et al. 2005). For example, Zajonc (1980) posited that affective reactions are often times the first reaction to stimuli, often occurring automatically and subsequently guiding subsequent information processing and judgment. That is, affective reactions provide an efficient and effective means of orienting judgments regarding stimuli. This mental shortcut has been termed "the affect heuristic" (Slovic et al. 2005, p.S35). Accordingly, if (as proposed by H2a) investors' assessments of management credibility are positively influenced by forthcomingness then affective reactions to forthcomingness should help facilitate the salience of these assessments. This leads to the following hypothesis:

H3c: Prospective investors' long-term management credibility assessments will be positively influenced by affective reactions to forthcomingness.

Hypotheses H1a, b, c, H2, H3a, b, and c assess differences between individuals' judgments regarding forthcomingness. In general, there is alignment between an individual's judgments and decisions. However, as Bonner (1999) points out, judgments reflect one's beliefs while decisions may reflect both beliefs and preferences. This may help explain, in part, why the positive short-term credibility effect noted in experimental research does not manifest in the natural occurring environment (Kasznik and Lev 1995; Tucker 2007). In other words, an individual may accurately assess (judge) management's credibility but be unwilling to invest (decision) based on the assessment. Decisions may also be influenced by past experience. For example, Stocken (2000) proposes that an investor's trust index regarding the manager coordinates their behavior over time and that this trust index is updated when the manager is credible. According to Stocken (2000), an investor's allocation of resources to the firm is directly



associated with a manager's prior reporting credibility. Therefore, current decisions should be influenced by prior experiences regarding manager credibility.

H4: Over multiple trading periods, prospective investors will (not) invest in accordance with management's disclosure guidance when managers are (not) forthcoming.

2.6 News Valence

Lastly, research on memory and emotions is mixed on the effects of memory for positive and negative news valence. Laboratory studies have found that negative events are remembered with a greater vividness than positive events (Ochsner 2000; Dewhurst and Parry 2000). However, autobiographical memory research has often supported that positive memories are more vivid than negative ones (D'Argembeau, Comblain, and Van der Linden 2003; Schaefer and Philippot 2005). There is evidence that stock market reactions are asymmetric in terms of (positive or negative) news valence (Kasznik and Lev 1995); specifically, there is a stronger market reaction to bad news than good news. This, in part, may be because bad news is seen as inherently credible (Hirst et al. 2008), whereas good news must be bolstered by additional support such as verifiable forward-looking information (Hutton, Miller, and Skinner 2003) or a reputation for reporting accuracy (Ng, Tuna, and Verdi 2006).

However, Kothari, Shu, and Wysocki (2005) suggested that asymmetric market reactions are not necessarily driven by news valence. The authors argued that good news will usually be disclosed much earlier than bad news and, therefore, be impounded into stock prices sooner. In contrast to Kasznik and Lev (1995), Kothari et al. (2005) argue that bad news tends to be more surprising to the market and it is this component (surprise) that the market reacts to and not news valence. Additionally, prior research has demonstrated that positive news forecasts have specific credibility challenges (Williams 1996; Rogers and Stocken 2005) associated with managerial incentives. Overall, this research suggests there may be asymmetric responses to negative news valence due to believability.

The credibility issues noted above are also consistent with attribution theory.

Specifically, attribution theory predicts that individuals will attribute a manager's behavior to dispositional forces when the behavior is at odds with situational forces. Accordingly,



individuals should recognize that a manager could choose to be less forthcoming (particularly about negative news) because managers have incentives to provide earnings guidance in their own self-interest. Accordingly, negative news managers may be regarded as more credible to investors than managers who disclose positive news. Taken as a whole, the research suggests that forthcomingness may be particularly important when disclosing negative news to prospective investors. This leads to the following hypothesis regarding prospective investors.

H5: Prospective investor assessments of management's reporting credibility will be highest when management is forthcoming regarding negative news in comparison with managers who are forthcoming regarding positive news or who are not forthcoming.

2.7 Chapter Summary

This chapter summarizes the relevant literature and develops the hypotheses examined in Chapter 3 and 4. Section 2.2 summarizes relevant literature of differences between short- and long-term investor assessments of management reporting credibility, specifically, the memory constraints related to forthcoming disclosure noted in Mercer (2005). Section 2.3 explores differences in investor reactions to management forthcomingness that may arise from Investor Status and a cognitive model that was developed based on the psychological concept of "control" (Harris et al. 2009). Based on this model, I predict the following: (1) prospective investor assessments of management's reporting credibility will be higher for managers who are forthcoming about negative news than those who are not forthcoming; (2) current investor assessments of management's reporting credibility will be negative for managers who report negative news irrespective of forthcomingness; and (3) prospective investors' long-term management credibility assessments will be positively influenced by affective reactions to forthcomingness.

In section 2.4, I examine the possible influence of investing experience. Based on a review of the literature I anticipate that when management is forthcoming regarding negative news, more-experienced investor assessments of management's reporting credibility will be higher than the assessments of less-experienced investors. The possible reputational effect from multiple periods is addressed in 2.5. In particular, economic and accounting research suggests



that there may be reputational advantages to forthcoming disclosure (Stocken 2000; Hutton and Stocken 2007; Hirst et al. 2008). Based on this research I anticipate: (1) prospective investors' assessment of management credibility will increase when forthcomingness is consistent between periods compared to when forthcomingness is inconsistent or nonexistent; (2) prospective investors will rely more on subsequent disclosure when forthcomingness is consistent between periods compared to when forthcomingness is inconsistent or nonexistent; and (3) over multiple trading periods, prospective investors will (not) invest in accordance with management's disclosure guidance when managers are (not) forthcoming.

Finally, prior research suggests that news valence dominates investors' long-term management credibility assessments (Kasznik and Lev 1995; Mercer 2005). Attribution theory suggests that when managers disclose information that is inconsistent with personal incentives (i.e. negative news), individuals are more likely to attribute enduring traits within the manager (Kelley 1973; Fisk and Taylor 1991; Weiner 1992). Based on both attribution theory and news valence research, I predict the following: Prospective investors' assessments of management's reporting credibility will be highest when management is forthcoming regarding negative news in comparison with managers who are forthcoming regarding positive news or who are not forthcoming.

CHAPTER THREE

EXPERIMENT ONE — INVESTOR STATUS

3.1 Chapter Organization

This chapter explores the design and analysis of Experiment One. Section 3.2 discusses and provides descriptive statistics regarding the experimental participants. Section 3.3 details the experimental instrument, which is designed to explore the influence of Investor Status on investors' assessments of management's reporting credibility. Section 3.4 and 3.5 summarize the dependent and process variables used in the statistical analyses. In section 3.6, I discuss the participants' responses to the manipulation checks in the post-experimental questionnaire. Section 3.7 presents the primary analysis of Experiment One designed to address H1a, b, c, and H2. Sensitivity analysis regarding the manipulation checks and various prospective covariates is shown in section 3.8. A summary of the Experiment One results is provided in section 3.9.

3.2 Participants

Table 1 summarizes the demographic information for Experiment One across experimental conditions. Analysis of Experiment One includes a total of 67 participants. Participants included 53 undergraduate and graduate business students from a large southeastern university. Additionally, analysis from Experiment One included 14 participants from a southeastern Rotary Club. The demographic information suggests that the participants were unsophisticated investors (i.e. not professional investors) with only 52% having prior investment experience, and an average of 18 investments made.¹²

3.3 Design and Task

Experiment One was designed to test hypotheses 1a, b, c, and hypothesis 2. Specifically, Experiment One examines whether investor status influences information processing and management credibility assessments of investors. The experiment is based on the experimental instrument used in Mercer (2005) with the addition of prospective investors who are not

¹² For both Experiment One and Two, in order to be included in the sample participants were required to successfully complete the knowledge test at the beginning of the experiment. This knowledge test examines participants understanding of gain/loss calculations for both long and short stock positions. Accordingly, it appears that participants possessed the appropriate requisite knowledge to be included in the sample.



endowed with ownership. Participants were randomly assigned an investor status in the firm. Investors either held a long position in the stock (current investor) or no Investor Status in the stock (prospective investor). ¹³ Additionally, I manipulated forthcomingness of disclosure as either present or absent. Accordingly, Experiment One employed a 2 x 2, between-subjects design (Investor Status x Forthcomingness). See Figure 3 for a graphical depiction of Experiment One. The full experimental instrument is attached in Appendix A.

Experiment One was divided into two sessions. In the first session, participants began by completing a short knowledge test regarding investments (see Appendix C). Specifically, participants were given examples of how to calculate profits for both long and short positions in a stock. Participants were then asked to calculate the profits for hypothetical long and short trades. After completion of the knowledge test, all participants were presented with financial information for a fictional dental supply company, DentRite, Inc. 14 In order to maintain consistency with prior research the qualitative and quantitative information presented to investors regarding DentRite is identical to the company information used in Mercer's (2005) experimental instrument.

After reviewing the financial information for DentRite participants were asked a short series of questions designed to elicit their initial impressions of management's reporting credibility. Immediately following the credibility assessment, participants in the high forthcomingness treatment also received a voluntary disclosure from management regarding upcoming negative earnings news. Subsequently, participants in the prospective investor treatment were asked to select an investment position in the firm (short, long, none). All participants were then provided with the actual negative earnings news. Specifically, the actual earnings news informed participants that the value of the stock decreased by \$0.80 per share across all experimental conditions. All participants were paid their earnings based on a predetermined schedule at the end of the first experimental session.

In the second session, two-weeks later, all participants returned and answered demographic, affective, cognitive, and management credibility assessment questions. Two-weeks

¹⁴ All participants who began the experiment were allowed to complete all of the experimental sessions, however, participants who failed the knowledge test (total of 5 and 9 in Experiments One and Two respectively) were excluded from the subsequent statistical analysis.



¹³ Specifically, in the experimental instrument, the current investors were informed that they already owned shares of stock while prospective investors were informed that they were contemplating an investment position in a company.

between experimental sessions was chosen to allow sufficient time for memory reconstruction and to maintain consistency with prior experimental studies (Mercer 2005). In order to motivate participants to complete both sessions, I used a \$500 cash lottery for Experiment One.

3.4 Dependent Variables

For Experiments One and Two, I assess credibility using six questions from two credibility scales (McCroskey 1966 and Leathers 1992). 15 Credibility scores are calculated by summing participants' responses to these six questions and calculating the difference pre- and post-test for each participant. Table 2 presents the six questions used to calculate credibility scores. To attenuate response bias, high credibility is indicated by both agreement (high responses) and disagreement (low responses). Prior to analysis, responses were recoded so that greater credibility corresponded with higher scores. Pre-test (Initial) investor assessments of management's reporting credibility is calculated by summing participants' initial responses to six management reporting credibility questions. Pre-test assessments were administered prior to earnings news and the experimental manipulations. Participant's provided post-test (Overall) assessments by answering the identical questions after a two-week delay. Change is computed by subtracting pre-test assessment from post-test assessment.

It could be argued that managers are more concerned with final credibility assessments. Accordingly, I also examine the results by using Overall (post-test) assessments regarding management reporting credibility as a dependent variable. Overall is computed by using the participant's post-test management credibility assessments. This analysis is similar to assuming that all investors began the experiment with neutral assessments regarding management's reporting credibility across conditions. Lastly, for comparability with Mercer (2005) I assess prospective consequences of a lack of forthcomingness. Specifically, I assess whether perceived reporting credibility affects participants' willingness to rely on subsequent management disclosures. Specifically, participants were shown a subsequent management earnings forecast and asked their willingness to rely on the disclosure.

3.5 Process Variables

¹⁵ This is the identical credibility scale used in Mercer (2005).



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The model also identifies a process through which prospective investors make assessments of management reporting credibility. In particular, my model suggests that long-term credibility assessments are driven by affective reactions to management's forthcomingness. Accordingly, I measure affective reactions to examine what role, if any, they play in explaining changes in investor assessments of management reporting credibility.

I measure participants' affective reactions to forthcomingness on a seven-point Likert scale. Participants' evaluated two statements, "The disclosure (or lack of disclosure) caused me to feel good", and "The disclosure (or lack of disclosure) caused me to feel bad." The endpoints for both questions were 1 = Strongly Disagree and 7 = Strongly Agree. The negative affect question was then rescaled to be consistent with the positive affect and the two numbers were combined to form a composite measure of affective reaction to forthcomingness.

Similarly, I measure participants' affective reactions to news valence on a seven-point Likert scale. Participants evaluated two statements, "The difference between actual earnings and the analyst consensus earnings forecast caused me to feel good", and "The difference between actual earnings and the analyst consensus earnings forecast caused me to feel bad." The endpoints for both questions were 1 = Strongly Disagree and 7 = Strongly Agree. The negative affect question was then rescaled to be consistent with the positive affect and the two numbers were combined to form a composite measure of affective reaction to news valence.

3.6 Manipulation Checks

In Experiment One, the responses to the manipulation check questions indicate that the manipulations were successful. Specifically, 91% of participants (61) correctly identified whether they were required to make an investment decision regarding DentRite stock (prospective investor) during the first experimental session. Similarly, 94% of participants (63) correctly indicated whether they received a warning about unexpected earnings (i.e., a forthcoming disclosure). Since an underlying purpose of the study is to examine how memory

¹⁶ In particular, to elicit participants' understanding of the Investor Status manipulation participants were asked: "At the beginning of the experiment did you already own the stock? (Circle one) Yes No". To examine participants understanding of the forthcomingness manipulation participants were asked: "Before announcing actual earnings, did DentRite management provide a disclosure informing investors that they expected actual earnings to differ from the analyst consensus earnings forecast? (Circle one) Yes No".



constraints impact investor judgment and decision-making no participants were excluded from the primary analysis based on their responses to the manipulation checks.¹⁷

3.7 Results and Analysis

Using these credibility scores from Table 2, I estimate a Chronbach's alpha of .84 which suggests that consistent with prior research these questions reliably capture one principal credibility construct. Consistent with Mercer (2005), I assess credibility in terms of changes. One statistical complication that may arise in the analysis of a change variable is that there may be differences across experimental conditions in the baseline (initial) measure. Table 3 presents the results of post hoc contrasts of initial credibility means across experimental conditions. In order to conduct this analysis, I first conducted Levene's Test of Equality of Error Variances, which tests the null hypothesis that error variance of the dependent variable (Initial Credibility) is equal across groups. The results of this test indicate that the null hypothesis regarding equal variances should not be rejected (F(3,63) = 2.156, two-tailed p = .102). As shown in Table 3, there are no statistically significant differences between conditions for Initial credibility using either Tukey's HSD (Panel A) or Dunnett's T3 (Panel B) methods. Accordingly, it appears that using changes in credibility is an appropriate measure capturing the effects of the manipulations on investors' assessments of management's reporting credibility.

Table 4 presents descriptive statistics on Change in Investors' Assessments of Management's Reporting Credibility (Change) as well as Overall Management Reporting Credibility (Overall) across experimental conditions. Experiment One examines the influence of investor status and forthcomingness on investor perception of management's reporting credibility. Specifically, Experiment One analyzes whether investor status influences information processing and consequently investors' assessments regarding management's reporting credibility. News valence was negative for all participants in Experiment One. Consistent with the cognitive model, H1a suggested that forthcomingness would have a positive impact for prospective investors. Consistent with prior research, H1b predicts that forthcomingness would have no impact on management credibility assessments of current investors. The prediction for H1 can be seen graphically in Figure 2.

¹⁷ Table 15 examines the results excluding participants who failed one or both manipulations and the results are quantitatively similar.



Table 5, details the results of a two-way ANOVA model with Forthcomingness and Investor Status as independent variables. Panel A examines the results using Change as the dependent measure. The ANOVA shows a statistically significant main effect of Investor Status (F(1, 63) = 5.603, two-tailed p = .021). Additionally, the results from Panel A indicate that there is a significant main effect for Forthcomingness on Change (F(1, 63) = 5.888, two-tailed p = .018).

H1a predicts that prospective investor assessments of management's reporting credibility will be higher for managers who are forthcoming about negative news than those who lack forthcomingness. Figure 4 presents a graphical depiction of the change in credibility for prospective investors. Consistent with H1a the simple slope is positive (8.966) and significant (F(1, 63) = 11.180), two-tailed p = .001). This result suggests that Forthcomingness has a positive effect for prospective investors. This finding is interesting because no prior experimental studies have found a positive intertemporal (long-term) effect for management forthcomingness regarding negative news. This result provides some support for the contention that managers can develop credibility for forthcoming disclosure even when the news is negative. Additionally, given the relatively inexperienced sample this result suggests that the positive psychological impact of forthcomingness on investor assessments of credibility may extend to a wide range of individuals.

H1b predicts that current investor assessments of management's reporting credibility will be negative for managers who report negative news irrespective of forthcomingness. As reported in Figure 4 and consistent with H1b, the change in management reporting credibility is negative for current investors irrespective of forthcomingness. The simple slope is close to zero (.360) and not statistically significant (F(1, 63) = 0.016, two-tailed p-value = .901). Taken together, H1a and H1b predict an interaction between Forthcomingness and Investor Status. Specifically, only prospective investors who receive forthcoming disclosures should exhibit increases in assessments regarding management credibility. The ANOVA model presented in Panel A, of Table 5 shows that the Forthcomingness x Investor Status interaction is significant at conventional levels (F(1, 63) = 4.771, two-tailed p = .033).

This result may, in part, be driven by differences in the pre-experimental assessments regarding manager reporting credibility across conditions. Accordingly, Panel B of Table 5 presents the identical analysis using Overall (post-test) scores as the dependent variable. I find



quantitatively similar results using Overall as the dependent measure. Specifically, I find a significant main effect for Forthcomingness (F(1, 63) = 5.509, two-tailed p = .022) and Investor Status (F(1,63) = 13.243, two-tailed p = .001). Consistent with H1a and H1b, I also find that the Forthcomingness x Investor Status interaction is significant (F(1, 63) = 4.679, two-tailed p = .034).

Table 6, presents the results of hierarchical regressions which estimate the impact of Forthcomingness, Investor Status and Forthcomingness x Investor Status on both Change (Panel A) and Overall (Panel B) scores. As shown in Table 6, Panel A (Panel B), Investor Status improves the R² by 7.3% (15.2%) which is a 98% (237.5%) improvement in the explanatory power of from the same model using only Forthcomingness and these differences are statistically significant (two-tailed p = .022 and .001) for Panels A and B respectively. Similarly, the adjusted R² increases by 6.1% (14.2%) which is a 101.7% (284.0%) improvement over the model using only Forthcomingness as a predictor. Lastly, the squared partial correlation for Investor Status is .083 (.171) in Panel A (Panel B) which indicates that Investor Status predicts 8.3% (17.1%) of the Change (Overall) independent of Forthcomingness and the interaction variables.

Overall, these results suggest that prospective investors differ from current investors in their assessments of management credibility. Specifically, consistent with predictions, prospective investors' exhibit incremental sensitivity to available information including management forthcomingness cues. H1c predicts that prospective investors' long-term management credibility assessments will be positively influenced by affective reactions to forthcomingness. However, differences in investors' credibility assessments may vary for several reasons. First, the additional cognitive effort required to select an investment position which immediately precedes participants' affective reactions to earnings news may impact the accessibility of memory traces. Second, simply exerting additional cognitive effort could lead to differences in memory. Lastly, the difference may be an artifact of the experimental design. In other words, in this investment setting prospective investors perform more steps which may lead to differences in credibility assessments.

To examine what role, if any, affective reactions played in explaining changes in credibility assessments I conducted a path analysis. Figure 5, presents the results of a path analysis designed to examine H1c. In order to conduct this analysis, I partition the data by



Investor Status and then regress Change scores on Forthcomingness, Affective Reaction to Forthcomingness (Affective), and Forthcomingness controlling for Affective. Consistent with H1a, I find that Forthcomingness predicts Change for prospective investors (β = .498, two-tailed p = .002). Consistent with H1c, I also find that participants' Affective scores predict Change for prospective investors (β = .519, two-tailed p = .001). As Figure 5 also demonstrates Affective partially mediates the relation between Forthcomingness and Change. The results from Figure 6, shows that inferentially identical results are obtained by performing the same analysis on overall credibility assessments.

In Figure 7, I conducted identical analysis using Affective Reaction to News Valence and found no statistically significant impact. However, it is important to note that this result may be driven by the fact that news valence is always negative in Experiment One. Finally, I examine the influence that Investor Status plays in affective reaction to Forthcomingness by performing identical analysis on current investors. Figure 8 displays the results of the process analysis. As Figure 8 demonstrates there is no relationship between Forthcomingness, Affective, and Change for current investors. Taken together these results lend credibility to the notion that Investor Status influences Affective via information processing.

H2 predicts that more experienced investor assessments of management's reporting credibility will be higher when management is forthcoming regarding negative news relative to less-experienced investors. To examine, what role experience played in investor assessments I first split the sample into experienced and inexperienced investors based on information from the post-experimental questionnaire. Investors were considered experienced investors if they had indicated that they had previously traded stock. Based on this dichotomy there were 35 experienced investors and 32 inexperienced investors. Demographic information suggests that the experienced investors had significantly higher levels of work experience (13.9 years) compared to the inexperienced investors (1.4 years).

Table 7 displays the average change in management's reporting credibility for experienced (Panel A) and inexperienced investors (Panel B). As Table 7 highlights, the general trend from the overall analysis holds for both experienced and inexperienced investors. Namely, consistent with H1a and H1b all conditions except the High Forthcomingness/Prospective

¹⁸ Specifically, Investing Experience is a dichotomous variable coded as 1 if the participant answered yes to one of the following two questions from the post-experimental questionnaire: "Have you ever made investments in the common stock of a company?" and "Have you ever made investments in a common stock mutual fund?"



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Investor condition show negative changes in credibility. One notable difference between these groups is that inexperienced prospective investors who received forthcoming disclosure had a higher Change (7.000) than the experienced prospective investors who received forthcoming disclosure (0.143). This result is inconsistent with H2 which predicts that management reporting credibility will be higher for experienced investors.

To examine what role initial credibility assessments may play in the analysis of experience I replicated the descriptive statistics of Table 7 looking at Overall (final) credibility scores in Table 8. The descriptive statistics in Tables 7 and 8 can be seen graphically in Figures 9 and 10. As Figures 9 and 10 show, the averages in Change appear to be driven, partially, by initial credibility assessments. Specifically, the pronounced difference (6.86) between the experienced/inexperienced investor groups in Change for experienced High Forthcomingness/ Prospective Investor condition is significantly attenuated (1.86) when the same comparison is made using Overall as the dependent variable.

Table 9 presents the results of a 2 x 2 x 2 ANOVA analysis examining the influence of Forthcomingness, Investor Status, and Investing Experience on Change (Panel A) and Overall (Panel B). As Table 9 illustrates there is no statistically significant influence of investing experience on either dependent variable. Regression analysis using identical models yields quantitatively identical results and slope coefficients on Investing Experience are negative (although insignificant). Overall these results indicate that there is no influence of Investing Experience on investor assessments of management's reporting credibility. To better understand the underlying causes behind the differences noted in Table 7, I examined various descriptive statistics between the experienced/inexperienced investor groups.

One possibility for differences in credibility assessments noted in Table 7 between experienced/inexperienced investors is investing success. Figure 11 displays the payouts for experienced/inexperienced investors by experimental condition. As Figure 11 illustrates, prospective inexperienced investors fared significantly better than their experienced counterparts in terms of overall payouts. Specifically, inexperienced prospective investors made an average profit of \$2.55 while experienced prospective investors on average lost (-\$2.64). This result suggests that inexperienced prospective investors may have benefited from heuristic trading

¹⁹ The current investor payouts are omitted from Figure 11 since they are always -\$8.00.



strategies such as following management earnings guidance when it was available. It may also demonstrate overconfidence in investing abilities on the part of experienced investors.

To examine what role profits played in the credibility assessments of prospective investors, I conducted ANOVA analysis with Forthcomingness, Profit (dichotomous), and Investing Experience as predictor variables and included all higher-order interactions. The results of this analysis are presented in Table 10. The results of Table 10 show that for prospective investors there is a significant three-way interaction between Forthcomingness, Profit, and Change (F (1, 28) = 6.867, two-tailed p= .014). The analysis from Table 10 can be seen graphically on Figure 12. There are a number of notable findings in Figure 12. First, forthcoming managers are consistently rated higher irrespective of experience or profit. Second, with one notable exception (High Forthcomingness/Inexperienced /No Profit); prospective investors have higher credibility assessments when they have earned a profit irrespective of news valence. Lastly, there is a large discrepancy between inexperienced prospective investors who earned no profit in the High and Low Forthcomingness conditions. This result suggests that inexperienced prospective investors who have suffered a loss are more likely to reward (punish) a manager when the manager is forthcoming (not forthcoming).

However, further examination shows that there are mixed results in terms of the role of Investing Experience on Change. Again, H2 predicts that when management is forthcoming regarding negative news, more-experienced investor assessments of management's reporting credibility will be higher than the assessments of less-experienced investors. However, as Figure 12 illustrates, given high Forthcomingness, Change is only higher for experienced prospective investors when they earn a profit and this difference not statistically significant. In fact, as Figure 12 shows the reverse seems to be occurring; prospective investors in the high Forthcomingness treatment who earned no profit and were inexperienced had numerically higher ratings than their experienced counterparts. In fact, as Figure 12 displays, inexperienced investor ratings are just as often higher than experienced investors (5 > 2, 7 > 2, 5 > 4, 5 > 6) as the reverse (2 > 1, 4 > 1, 6 > 1, 8 > 1). In fact, as Table 11 reports, holding forthcomingness constant, there are no statistically significant instances of higher Change in credibility for experienced investors over inexperienced investors. This is consistent with the results from the full sample in Table 9 which

²⁰ Similar to Figure 11, current investors are omitted from the analysis in Table 10 since they always incur negative profit. Quantitatively identical results are obtained using Overall as the dependent variable or substituting Profit with actual profit (loss) in dollars as a predictor variable.



show no effect from Investing Experience. Overall, the results from suggest that that credibility is not positively influenced by investing experience. Accordingly, H2 is not supported.

The cognitive model (see Figure 1) also suggests that the willingness to rely on subsequent disclosure may be predicted by changes in management credibility. Table 12 presents the results of analysis of the relationship between Willingness to Rely and Change (Panel A) as well as Overall (Panel B). Based on this analysis I find no evidence to support the contention that willingness to rely on subsequent disclosure is influenced by management credibility after one period. However, two important points should be noted in regards to willingness to rely on additional disclosure. First, in Experiment One earnings news was always negative which is necessarily confounded with poor performance. In other words, it is difficult to determine whether investors are unwilling to rely on subsequent disclosure because of credibility concerns, performance concerns, or both. Second, results that can be anticipated in a single period setting do not always generalize to multiple periods and vice versa (Stocken 2000). Therefore, in a single period setting it may be that investors do not have enough evidence regarding management credibility to base another decision. To address these issues I conduct Experiment Two which also varies news valence and extends the number of trading periods to two.

3.8 Sensitivity Analysis

Lastly, to examine the robustness of the results, I conducted additional analysis using alternative data screens as well as alternative specifications of the model. First, I examined the results of the analysis if only participants who correctly answered both manipulation checks were included in the statistical analysis. Table 13 presents the results of this analysis for Change (Panel A) and Overall (Panel B). The results are quantitatively similar to the results from the full sample in Table 5. Based on this analysis it appears that the results are not being driven by participants for whom the manipulations were not salient.

I also examined alternative specifications of the model controlling for other factors that may influence the assessments of management credibility. Table 14 examines the influence of the model controlling for the influence of Investing Experience (Model 1), Profit (Model 2), and Gender (Model 3). As Table 14 shows the results are robust to the inclusion of additional control

²¹ In unreported analysis, I also examine the influence of other variables on Willingness to Rely such as Forthcomingness, Profit, Investing Experience, and Affective Reaction and find that none statistically influence the Willingness to Rely variable.



variables. In (unreported) analysis which included multiple control variables as well as interaction effects between these variables. The results from these additional analyses are quantitatively similar to those reported in Table 14.

3.9 Chapter Summary

In sum, the results from Experiment One suggest that forthcomingness does have a positive influence on investors' assessments of management's credibility regarding negative news. However, consistent with the model, this positive influence is limited to prospective investors. The results also suggest that the influence of Forthcomingness on both Change and Overall is partially mediated by affective reactions to forthcomingness. I also find no influence of investing experience on investor credibility assessments nor on willingness to rely on subsequent forecasts. The results are robust to alternative data screens as well as alternative specifications of the model. These results indicate that for prospective investors' long-term assessments of management reporting credibility, forthcomingness *does* matter. Given that prospective investors differ from current investors, Experiment Two examines the influence of two factors on prospective investors' management credibility assessments: Reputation and News Valence.



CHAPTER FOUR

EXPERIMENT TWO — REPUTATION

4.1 Chapter Organization

This chapter explores the results of Experiment Two. Section 4.2 provides descriptive statistics regarding the experimental participants for Experiment Two. Section 4.3 explains the experimental instrument, which is designed to explore the determinants and influence of reputation on investors' assessments of management's reporting credibility. Section 4.4 and 4.5 summarize the dependent and process variables used in the subsequent statistical analyses. I discuss the participants' responses to the Experiment Two manipulation checks in section 4.6. In section 4.7 I present the primary analysis of Experiment Two. Section 4.8 shows the sensitivity analysis used to assess the robustness of the results. An overall summary of the Experiment Two results is provided in section 4.9.

4.2 Participants

Table 15 reports the demographic information for Experiment Two across experimental conditions. In Experiment 2, participants included 76 undergraduate and graduate business students from a large southeastern university. The demographic information suggests that the participants were inexperienced investors with only 34% having prior investment experience, and average of four investments made.

4.3 Design and Task

Experiment Two was designed to test hypotheses H3a, 3b, 3c, H4, and H5. H3a and H3b examine the influence of consistent forthcomingness (i.e. reputation) on investors' assessments regarding management reporting credibility and willingness to rely on subsequent disclosure.H3c examines the influence of affective reactions on investors' credibility assessments and subsequent willingness to rely on disclosure.H4 investigates the influence of consistent forthcomingness on actual investment decisions. H5 examines the influence of news valence on investor assessments' of management's reporting credibility and predicts that managers who warn about negative earnings news will be rated higher by prospective investors.



Experiment Two differs from Experiment One in that there are two reporting periods rather than only one *and* earnings news valence is manipulated between periods. Specifically, Experiment Two examines the influence of management reputation for forthcomingness on investors' assessments regarding management's reporting credibility and subsequent investment decisions. A different group of participants assumed the role of a prospective investor over two trading periods. I manipulated forthcomingness of disclosure as either present or absent. I also manipulated the consistency of forthcomingness in the second period to allow for a management reputation for consistent (high) or inconsistent (low) forthcomingness to develop. Lastly, I manipulated the order and magnitude of news valence in period 1 and 2 (positive-negative-positive). Experiment Two, therefore, employed a 2 x 2 x 2 between-subjects design whereby forthcomingness, news valence and reputation are between-subjects variables.

Experiment Two was divided into three sessions. Session one is identical to Experiment One except all investors are prospective investors and news valence is manipulated as negative or positive. Two-weeks later participants returned for the second session and answered questions relating to answer a number of demographic, affective reaction, and management credibility questions relating to their investment choice from session one. Participants then immediately began period two. Period two was identical to session one except that consistency of forthcomingness and the news valence of the voluntary disclosure are manipulated. Accordingly, participants either received consistently forthcoming disclosure, forthcoming disclosure in only one period (first or second period only), or no disclosure. See Figure 13 for a graphical depiction of timeline of events in Experiment Two. A copy of the experimental instrument is available in Appendix B.

4.4 Dependent Variables

Consistent with Experiment One, in Experiment Two I assess credibility using six questions from two credibility scales (McCroskey 1966; Leathers 1992). Table 2 presents the six questions used to calculate credibility scores. Credibility scores are calculated by summing participants' responses to these six questions and calculating the difference pre- and post-test for each participant. Consistent with Mercer (2005), I assess credibility in terms of changes.

However, as noted earlier, the absolute level of reporting credibility may be the focus of managers. Accordingly, I also examine the results by using Overall (post-test) assessments



regarding management reporting credibility as a dependent variable. This analysis is similar to assuming that all investors began the experiment with neutral assessments regarding management's reporting credibility across conditions.

Consistent with Mercer (2005) I assess whether perceived reporting credibility affects participants' willingness to rely on subsequent management disclosures. Participants were shown a subsequent management earnings forecast and asked their willingness to rely on the disclosure. Moreover, in Experiment Two I analyze changes in investment decision as a dependent measure because prior research suggests that judgments reflect only one's beliefs while decisions may reflect both beliefs and preferences (Bonner 1999).

4.5 Process Variables

The model also identifies a process through which prospective investors make assessments of management reporting credibility. In particular, my model suggests that long-term credibility assessments are driven by affective reactions to management's forthcomingness. Accordingly, I measure affective reactions to examine what role, if any, they play in explaining changes in investor assessments of management reporting credibility.

I measure participants' affective reactions to forthcomingness on a seven-point Likert scale. Participants evaluated two statements, "The disclosure (or lack of disclosure) caused me to feel good", and "The disclosure (or lack of disclosure) caused me to feel bad." The endpoints for both questions were 1 = Strongly Disagree and 7 = Strongly Agree. The negative affect question was then rescaled to be consistent with the positive affect and the two numbers were combined to form a composite measure of affective reaction to forthcomingness.

Similarly, I measure participants' affective reactions to news valence on a seven-point Likert scale. Participants evaluated two statements, "The difference between actual earnings and the analyst consensus earnings forecast caused me to feel good", and "The difference between actual earnings and the analyst consensus earnings forecast caused me to feel bad." The endpoints for both questions were 1 = Strongly Disagree and 7 = Strongly Agree. The negative affect question was then rescaled to be consistent with the positive affect and the two numbers were combined to form a composite measure of affective reaction to news valence.



4.6 Manipulation Checks

In Experiment Two the responses to the manipulation check questions indicate that the manipulations were successful.²² Specifically, 84% of participants correctly identified the news valence manipulation in the second period. Similarly, 89% of participants correctly indicated whether they received a warning about unexpected earnings in the second period. Consistent with Experiment One, because an underlying purpose of the study is to examine how memory constraints impact investor judgment and decision-making no participants were excluded from the primary analysis based on their responses to the manipulation checks.²³

4.7 Results and Analysis

Using these credibility scores from Table 2, I estimate a Chronbach's alpha of .84 which suggests that the credibility questions reliably capture the credibility concept. Similar to Experiment One, a prospective statistical complication that arises in the analysis of a change variable is that there may be differences across experimental conditions in the baseline (initial) measure. Table 16 presents the results of post hoc contrasts of initial credibility means across experimental conditions. I first conducted Levene's Test of Equality of Error Variances, which tests the null hypothesis that error variance of the dependent variable (Initial Credibility) is equal across groups. The results of this test indicate that the null hypothesis regarding equal variances should be rejected (F (7,68) = 2.568, two-tailed p = .021). Accordingly, homogeneity of variance (HOV) should not be assumed. According to Maxwell and Delaney (2004, p. 212), when assessing all pairwise comparisons for small sample sizes (i.e. smaller than 50 per group) Dunnett's T3 method is most appropriate. As shown in Table 16, there are no statistically significant differences between conditions for Initial credibility using Dunnett's T3 method. Accordingly, it appears that using changes in credibility is an appropriate measure capturing the effects of the manipulations on investors' assessments of management's reporting credibility.

²³ Tables 28 and 29 examine the results excluding participants who failed one or both manipulations and show that the overall results are quantitatively similar.



²² In particular, to elicit the salience of the news valence manipulation participants were asked: "Were DentRite earnings higher than or lower than the analyst consensus earnings forecast? (Circle one) Higher than the consensus forecast or Lower than the consensus forecast". To examine participants understanding of the forthcomingness manipulation participants were asked: "In the second quarter (second session), before announcing actual earnings, did DentRite management provide a disclosure informing investors that they expected actual earnings to differ from the analyst consensus earnings forecast? (Circle one)Yes No".

Table 17 presents descriptive statistics on Change in investors' assessments of management's reporting credibility across experimental conditions for periods one and two (Change 1 and Change 2 hereafter). Similarly, Table 18 presents descriptive statistics on Overall Investor Assessments of Management's Reporting Credibility across experimental conditions for periods one and two (Overall 1 and Overall 2 hereafter). Experiment Two is designed to test Hypotheses 3a, 3b, 3c, 4, and 5. Specifically, Experiment Two examines the influence of reputation regarding forthcomingness on investors' assessments of management reporting credibility assessments and investment decisions. To avoid confounding performance reputation with management reporting reputation the magnitude and valence of earnings news is also varied between-subjects.

H3a predicts that investors' assessment of management credibility will increase when forthcomingness is consistent between periods compared to when forthcomingness is inconsistent or nonexistent. To examine H3a, I first examined the relation between the average changes in investor assessments of management credibility between experimental conditions. Also, consistent with Experiment One, throughout my analysis of Experiment Two I present Overall Management Reporting Credibility Assessments (Overall 1 and Overall 2 hereafter) as dependent measures.

Figure 14 provides a graphical depiction of the results of Total Change in Credibility as a function of Forthcomingness in periods 1 and 2. As Figure 14 illustrates, on average, Total Change in management's reporting credibility is highest when forthcomingness when is consistent across periods. This finding is consistent with H3a. However, a deeper examination of the data suggests that total change is not always the highest when forthcomingness is consistent across periods. Table 19 shows the contrasts of the Average Total Change as a function of Forthcomingness in periods 1 and 2. High/High Forthcomingness (4) is statistically significantly higher than Low/Low (1) (6.118, p = .001), and High/Low (3) Forthcomingness (3.939, p = .091). However, there is no statistical difference between High/High and Low/High (.987, p = .340).²⁴ This result is inconsistent with H3a.

To better understand the underlying cause of the Total Change, I graphed Average Total Change by experimental condition. Figure 15 details the results of this analysis. It appears that

Levene's Test for Equality of Variances indicated that the null hypothesis regarding the equality of variances should not be rejected F (3,72) = .177, two-tailed p = .911). Accordingly, all pairwise comparisons are made using Tukey's HSD method.



the overall pattern of the data is due to significant differences between experimental conditions in Forthcomingness in period 2. All conditions who received forthcoming disclosure in period 2 showed an overall positive Overall Change in reporting credibility. Moreover, the highest Overall Change actually occurred in the Low Forthcomingness (Positive News) /High Forthcomingness (Negative News) condition. This condition translates to a manager who only provides guidance regarding negative earnings news. This result suggests that as predicted in H5 managers should benefit more from disclosing negative earnings news.

Table 20 presents contrasts of the Average Total Change by experimental condition. The results from Table 20 are consistent with the graphical depiction from Figure 15. H3a predicts that conditions 1 and 8, the High/High Forthcomingness conditions in Experiment Two should have the highest average Total Change. As Table 20 shows, these differences are not statistically significant in most cases. What does become evident from review of Table 20 is the development of a negative reporting reputation. Specifically, condition 1 (Low Forthcomingness (Negative News) /Low Forthcomingness (Positive News)) is statistically significantly lower than both conditions 4 (-8.059, p = .010) and 8 (-8.372, p = .012). However, there is not a similar pattern for participants in condition 5 (Low Forthcomingness (Positive News) /Low Forthcomingness (Negative News)). This result suggests that a consistent lack of forthcomingness may be amplified by initial negative earnings news.

The results from Table 20 provide little support for H3a. However, H3a predicts that on average consistent forthcomingness will be higher than inconsistent or nonexistent forthcomingness. In other words, H3a predicts that irrespective of news valence, consistent forthcomingness will result in higher credibility ratings than the average alternative reporting strategies. To specifically assess the validity of H3a, in Table 21, I compare consistent forthcomingness with all other treatments for both Total Change (Panel A) and Overall (Panel B). The results from Table 21 are displayed graphically on Figure 16. Consistent with H3a, average Total Change is significantly higher (3.952) when managers are consistently forthcoming than when forthcomingness is inconsistent or nonexistent (F(1, 74) = 8.038, two-tailed p = .006). Similarly, Overall is significantly higher (5.225) when managers are consistently forthcoming than when forthcomingness is inconsistent or nonexistent (F(1, 74) = 11.454, two-tailed p = .001). In sum, the results suggest that consistent forthcoming disclosure results in positive increases in credibility irrespective of news valence. On the other hand, nonexistent



forthcomingness appears to be the riskiest reporting strategy for managers, particularly when initial earnings news is negative. Overall, H3a appears to be supported.

H3b posits that investors will exhibit an increased willingness to rely on subsequent disclosure when forthcomingness is consistent between periods compared to when forthcomingness is inconsistent or nonexistent. Table 22, presents the results of a regression model which estimates Willingness to Rely on Consistent Forthcomingness. The coefficient on the consistency predictor supports H3b, specifically the coefficient is positive and statistically significant (β = .323, two-tailed p = .004). Recall that there was no evidence in Experiment One that forthcomingness influenced willingness to rely on subsequent disclosure. Taken together, the results from Experiment One and Table 22 suggests that it may take multiple periods for management to build enough credibility for investors to rely on subsequent disclosure. Reporting reputation, or lack thereof, may help account for why there was no evidence of willingness to rely on subsequent disclosure by participants in Experiment One.

Lastly, the cognitive model provides predictions regarding the process used by prospective investors to make credibility assessments. Specifically, H3c predicts that prospective investors' long-term management credibility assessments will be positively influenced by Affective Reactions to Forthcomingness in period two (Affective 2 hereafter). Consistent with Experiment One, I conducted a path analysis to examine what role, if any, affective reactions have on Change and Overall credibility. Figures 17 and 18 presents the results of the path analysis for Change 2 and Overall.

Consistent with H3a, and shown on Figure 17, I find that Forthcomingness 2 predicts Change 2 (β = .492, two-tailed p < .001). Consistent with H3c, I also find that participants' Affective 2 score predicts Change 2 (β = .477, two-tailed p < .001). As Figure 17 depicts Affective 2 partially attenuates the relationship between Forthcomingness 2 and Change 2 (β = .356, two-tailed p = .002). Lastly, Change 2 also positively predicts Willingness to Rely on subsequent disclosure (β = .424, two-tailed p < .001).

Similarly, as depicted in Figure 18, I also find that participants' Affective 2 score predicts Overall (β = .517, two-tailed p < .001). Moreover, as Figure 18 illustrates Affective 2 partially

²⁵ In unreported analysis, consistent with Experiment One, I also examine the influence of other variables on Willingness to Rely such Forthcomingness, Profit, Investing Experience, and Affective Reaction and find that none statistically influence the Willingness to Rely variable.



mediates the relationship between Forthcomingness 2 and Overall (β = .240, two-tailed p = .035). Lastly, Overall positively influences Willingness to Rely on subsequent disclosure (β = .498, two-tailed p < .001). Taken together, Figures 17 and 18 suggest that H3c is supported. This result lends credibility to notion that Investor Status influences affective reactions via information processing. These results are quantitatively similar to Experiment One. Also, consistent with Experiment One I found no influence of affective reaction to news valence on Change 2, Overall, or Willingness to Rely. This result is consistent with the broad pattern from the sample which indicated a large main effect for forthcomingness in the second period. This suggests that news valence may lose predictive power as reputation becomes more salient to investors. This is consistent with the general pattern for the influence of news valence which is explored below.

H4 predicts that over multiple trading periods management begins to develop a reputation for forthcomingness and investors will (not) invest in accordance with management's disclosure guidance when managers are (not) forthcoming. H4 examines changes in investment decisions between periods rather than judgments which is an important distinction because judgments do not always correspond with decisions. As the results of Table 23 illustrate, H4 is only partially supported. To analyze participants' willingness to invest in accordance with management guidance, I compare the proportion of investors who invest in accordance with management guidance, average agreement, number of shares traded, and the absolute value of shares invested in period 2. Panel A of Table 23 shows that a higher proportion of the investors who received no guidance in period 1 followed guidance in period two compared with those who received guidance in period 1. This finding is not consistent with H4. Specifically, the proportion of investors who received guidance in period 1 and invested in accordance with management guidance in period two was only 55%. Meanwhile, the proportion who received no guidance in period 1 and invested in accordance with management guidance in period 2 was 75%. This result may be driven by the fact that news valence always changed between periods. Accordingly, it is impossible to disentangle reputation for forthcomingness and inconsistent company performance. However, this result is consistent with prior experimental studies who find a split between experimental participant judgments and decisions (Libby and Tan 1999).

Panel B of Table 23 presents the analysis of investment decisions of participants given that the investor followed the guidance in period two. In order to assess the existence of a



reputations effect, I calculate the average agreement between management guidance and investor decision. The average agreement is higher for participants who received guidance in period 1 (89%) compared to those who received no guidance in period 1 (76%). Panel B also examines the number of shares traded given that investors followed earnings guidance, which can be seen as a measure of confidence in management forthcomingness. Consistent with H2, I find that participants who received guidance in period 1 traded 8.91 shares compared to 7.58 for those who received no period 1 guidance. These results provide partial support for the assertion that individuals who receive consistent forthcoming disclosure are more willing to invest in accordance with earnings guidance which is broadly consistent with reputation formation.

In order to further evaluate H2, I also examine the absolute number of shares invested in by participants. If reputation positively influences investment decisions investors should invest more shares when management is consistently forthcoming. I conducted regression analysis to examine this assertion. I regressed the Absolute Number of Shares Invested (Absolute) in period two on Consistent Forthcomingness. Panel C of Table 23 shows the results of this analysis. I find that Consistent Forthcomingness is a significant predictor of the absolute number of shares invested is ($\beta = .267$, two-tailed p = .020), which is consistent with the results noted above. Overall, the results summarized in Table 23 provide limited support for the contention that reporting reputation increases willingness to invest in accordance with subsequent disclosure.

H5 predicts that investors' assessments of management credibility will be higher when management is forthcoming and news valence is negative than when news valence is positive. To test this hypothesis I first conduct ANOVA analysis with Management Forthcomingness and News Valence as predictor variables in both period 1 and period 2. Table 24, Panel A (Panel B), presents the results of the ANOVA analysis with Change 1 (Overall 1) as the dependent variable. I find that, consistent with Mercer (2005), negative news has a negative impact on investors' credibility assessments in period 1. Table 24 demonstrates that, at least initially, negative news has a deleterious overall impact on investor assessments of management credibility even when investors can directly profit from the bad news. Specifically, the mean Change 1 was significantly lower (t = -3.020, two-tailed p = .003) when participants received negative news in period 1. Similarly, Overall 1 was lower when earnings news was negative (t = -3.465, two-tailed p = .001).



Additionally, Table 24 shows that consistent with the results from Experiment One, Forthcomingness 1 positively influences Change 1 (F (1,72) = 7.156, two-tailed p = .009). Further, Table 24 shows an interaction between Forthcomingness 1 and News Valence 1, although it is only significant at conventional levels with Overall as the dependent variable. To examine this interaction I graphed the average Overall score between Forthcomingness 1 and News Valence 1 and used regression analysis to examine the simple slopes. The results of this analysis is presented in Figure 19. Consistent with Mercer (2005), in period 1, positive managers are consistently rated high, irrespective of forthcomingness (t = -0.336, two-tailed p = .738). Consistent with Experiment One, when earnings news is negative, forthcomingness positively predicts Overall credibility (t = 3.462, two-tailed p = .001). This result highlights the importance of forthcomingness, particularly when earnings news is negative.

Table 25 presents ANCOVA analysis which examines the influence of News Valence 2, Forthcomingness 2, and Profit on both Change 2 (Panel A) and Overall 2 (Panel B). Consistent with the results from the tests of H3a and H3b, as management begins to develop a reporting reputation the explanatory power of News Valence 2 diminishes and is replaced by Forthcomingness 2. In fact, I find that only Forthcomingness 2 reliably predicts Change 2 and Overall 2. I find that Change 2 is significantly higher (t = 4.520, two-tailed p < .001) when participants received forthcoming earnings guidance in period 2.

These findings are consistent with Panel B of Table 25 which presents an ANCOVA model with Forthcomingness 2, News Valence 2 and Profit as predictor variables and Overall 2 as the dependent variable. Note that using Profit as a control variable captures investor's directional preferences and provides some insight into why news valence decreased in significance between periods. Specifically, this result suggests that investors became less fixated on negative earnings news as a measure of management performance and more as a cue for selecting an appropriate trading strategy.

H5 predicts that prospective investors' assessment of management's reporting credibility will be highest when management is forthcoming regarding negative news. This prediction is based on attribution theory which predicts that individuals should recognize that a manager could choose to be less forthcoming about negative news because managers have incentives to provide earnings guidance in their own self-interest. To examine H5, I examined the differences between

²⁶ Given that the interaction term is significant, I omit interpretation of the main effects.



those who received forthcoming disclosure regarding negative news in comparison with all other treatments in Period 1 and 2. Figures 20 and 21 present a graphical depiction of this analysis.

Figure 20 presents the average Change (Neutral Change) in Management Reporting Credibility in period 1.²⁷ As Table 26 shows there is a significant positive impact due to forthcoming disclosure (compared to low forthcomingness) regarding negative earnings news for both Change (6.750, p < .001) and Neutral Change (6.342, p < .001) in period 1. Further analysis of Table 26 shows that average Change and Neutral Change were not statistically different across conditions in the first period. This result indicates that positive news valence in period 1 obfuscates the beneficial impact of forthcomingness on investors' assessments of management reporting credibility. Overall the results suggest that in the first period, H5 holds only when earnings news is negative.

Table 27 presents the average Change (Neutral Change) in Management Reporting Credibility in period 2. H5 suggests that managers who disclose negative earnings should earn higher credibility ratings than other managers. Specifically, H5 predicts that contrasts of credibility should be higher for condition 1 (high Forthcomingness/ Negative News) than all other conditions in Period 2. As Table 27 shows partial support for this contention. In particular, Panel B shows that condition 1 is statistically significantly bigger than both 2 and 4 (Low Forthcomingness/ Negative and positive News). However, condition 1 is not statistically different than the High Forthcomingness/ Positive News condition for either Change or Neutral Change. Figure 21 displays the results of Table 27 graphically. As Figure 21 illustrates, the largest overall credibility in period 2 is for managers who are forthcoming regarding negative earnings news. Likewise, the most extreme negative credibility assessments were of managers who lacked forthcomingness regarding negative earnings news. These results again highlight the importance of forthcomingness, particularly when earnings news is negative. Taken together, the analysis from Tables 26 and 27 provide partial support for H5.²⁸

²⁸ Levene's test on the equality of means were statistically significant for all dependent variables in Tables 26 and 27. Accordingly, all pairwise comparisons are made using Dunnett's T3 method.



²⁷ To examine the overall influence of Forthcomingness in the first period, I include in this analysis the data for prospective investors from Experiment One. Quantitatively similar results are found if I only include the data from Experiment Two. Moreover, Neutral Change is transformed version of Overall used so that the graphical results are on a comparable scale.

4.8 Sensitivity Analysis

Lastly, to examine the robustness of the results I conducted additional analysis using alternative data screens as well as alternative specifications of the model. First, I examined the results of the analysis if only participants who correctly answered both manipulation checks were included in the statistical analysis. Tables 28 and 29 present the results of the analysis for Change (Panel A) and Overall (Panel B) in periods 1 and 2. The results are quantitatively similar to the results from the full sample found in Tables 24 and 25, respectively. Based on this analysis it appears that the results are not being driven by participants for whom the manipulations were not salient.

I also examined alternative specifications of the models in period 1 and 2 controlling for other factors that may influence the assessments of management credibility. Tables 30 and 31 examine the influence of the models controlling for the influence of Work Experience (Model 1), Investing Experience (Model 2), and Gender (Model 3) in periods 1 and 2, respectively. As Tables 30 and 31demonstrate the results are robust to the inclusion of additional control variables. In unreported analysis I also conducted analysis which included multiple control variables as well as interaction effects between these variables. The results from these additional analyses are quantitatively similar to those reported in Tables 24 and 25.

4.9 Chapter Summary

Consistent with H3a, the results suggest that consistent forthcoming disclosure results in positive increases in credibility irrespective of news valence. I also find that consistent with H3b, over multiple periods investors exhibit an increased willingness to rely on subsequent disclosure when forthcomingness is consistent between periods compared to when forthcomingness is inconsistent or nonexistent. As predicted by H3c, I find that these results are driven by prospective investors' long-term affective reactions to forthcomingness. However, I only find partial support for the contention that investors are more willing to invest in accordance with management guidance (H4). These results are consistent with the model and broadly consistent with reputation formation.

However, what may be the most significant and practical finding of Experiment Two is the influence of News Valence on manager's reporting credibility. In particular, the results from Experiment Two highlight both the large benefits and risks associated with disclosure, especially



when earnings news is negative. A consistent finding is that in failing to provide forthcoming guidance regarding negative earnings news managers suffer substantial credibility losses, irrespective of prior forthcomingness. Lastly, and consistent with Attribution Theory and H5, I find partial support for the prediction that negative news managers who provide warnings are rated higher than managers who provide either inconsistent guidance or no guidance at all, irrespective of news valence.



CHAPTER FIVE

SUMMARY AND DISCUSSION

5.1 Chapter Introduction

This chapter presents the overall conclusion of the dissertation. Section 5.2 details the overarching research questions addressed in the study. Section 5.3 discusses the methodology employed to answer the research question. In section 5.4, I provide a synopsis of the results from Experiments One and Two. Section 5.5 provides a detailed discussion of the overall implications of the findings. A synopsis of possible research extensions to the current study are explored in the final section.

5.2 Research Problem

This study examines the determinants of management credibility for prospective investors. Specifically, I develop and test a causal theory which predicts that forthcomingness affects investor assessments of manager reporting credibility over time. Prior research has shown that forthcomingness does not improve manager reporting credibility in the long-term (Mercer 2005). The current study investigates three factors that may influence investor sensitivity to management reporting credibility. Specifically, I assess the influence of investor status, forthcomingness, and ability to build reputation in terms of investors' long-term credibility judgments.

Prior research in psychology and accounting suggest that prospective investors may process information differently than current investors. Specifically, prospective investors differ from current investors in that they can readily profit from forthcoming disclosure. In other words, prospective investors can gain from both positive and negative stock price adjustments. Accordingly, I posit that forthcomingness will be positively associated with manager credibility assessments and investment decisions for prospective investors and consistent with prior research not influence the assessments of current investors.

Additionally, I examine the influence of reputation in the development of management credibility. I develop a cognitive model which suggests that forthcomingness differentially influences the management credibility assessments and investment decisions of prospective



investors over multiple periods. The results provide insight to the general voluntary disclosure literature as to why managers try to develop a reputation.

5.3 Review of Methodology

I conducted two experiments which vary Investor Status, Forthcomingness, News Valence, and Reputation for Forthcomingness. Experiment One examines the influence of investor status and forthcomingness on investors' management credibility assessments. In particular, In Experiment One participants were either assigned a long position (current investor) or are endowed with cash to invest (prospective investor) in a fictional company, DentRite. In the experiment all participants were provided with financial information for the company and asked to make an initial assessment of management reporting credibility.

After providing their initial credibility assessment, participants in the high forthcomingness treatment were then provided with a voluntary disclosure regarding future earnings from management. Prospective investors were then asked to select an investment position in the firm (short, long, none) and all participants are provided with the actual earnings news which fell below consensus analyst forecast. Finally, all participants were paid based on the actual value of their investment. After a two-week delay, participants returned to complete the post-experimental questionnaire which included their final assessments of management's reporting credibility and willingness to rely on subsequent disclosures.

Experiment Two was identical to Experiment One with three notable exceptions. First, Experiment Two only includes analysis of prospective investors. Second, I expand the number of trading periods from one period to two periods. Lastly, I vary the direction of the actual earnings news between periods as above or below consensus analyst forecast. The Experiment Two investing scenario is expanded from one to two periods to evaluate the impact of consistent forthcoming disclosure (or lack thereof) over multiple periods.

Similar to Experiment One participants were first provided financial information and voluntary disclosure from management that was either forthcoming (present) or not (absent). Participants were then allowed to select an investment position in the firm (long, none, or short) and were then paid based on the actual value of their investment. Participants returned two-weeks later and answered credibility assessment questions and immediately began the second trading period. In the second investment period forthcomingness manipulated again.



Accordingly, forthcomingness was either high (consistent) or low (inconsistent or nonexistent). Again all participants were allowed to select an investment position in the firm (long, none, or short) and were then paid based on the actual value of their investment. After another two-week delay, participants completed the post-experimental questionnaire including manipulation checks, final credibility assessments, process variable assessments, and willingness to rely measures.

There are several prospective limitations to this dissertation. First, the current study does not assess important market effects such as liquidity on investor's investment strategy. In the current study it is assumed that there always exists someone who is willing to trade with the investor making the decision. In other words, there are no market effects to the disclosure, such as decreased liquidity which may alter investment strategy by investors. Moreover, the experiment ignores the impact of trading costs, margin requirements, and the real-world threat of downside risk for short positions. Specifically, participants assuming short positions cannot lose "out of pocket" money. Accordingly, participants may exhibit increased risk seeking behavior.

However, I believe that the experimental setting provides an accurate depiction of how prospective investors are influenced by and respond to forthcomingness. There are several advantages to using an experiment to answer the hypotheses rather than using an empirical methodology. First, as Stocken (2000) noted there are several conditions that must be met in order for a manager to provide credible reports. In a large cross-sectional sample it is unlikely that all these conditions will be met by all firm managers. Second, the current study attempts to examine the impact of forthcomingness on prospective investors. It would be difficult, if not impossible, to isolate the impact of forthcomingness on prospective investors using an empirical test due to data limitations. Using an experiment allows me to hold important factors such as manager/firm specific motivations and macroeconomic concerns constant while varying only forthcomingness, Investor Status, and reputation. Therefore, an experiment allows me to make inferences regarding causality that are not possible using empirical archival methods.

5.4 Summary of Results

The results from Experiment One suggest that forthcomingness has a positive influence on investors' assessments of management's credibility regarding negative earnings news.

Consistent with the model, as well as prior research, this positive influence is limited to



prospective investors. The results from Experiment One also suggest that the influence of Forthcomingness on both Change and Overall is partially mediated by affective reactions to forthcomingness. However, inconsistent with expectations I find no influence of investing experience on investor credibility assessments. I find that the results from Experiment One are robust to alternative data screens as well as alternative specifications of the model.

In Experiment Two, I find that consistent forthcoming disclosure results in positive increases in credibility irrespective of news valence. Moreover, I find that over multiple periods investors exhibit an increased willingness to rely on subsequent disclosure when forthcomingness is consistent between periods compared to when forthcomingness is inconsistent or nonexistent. As predicted by the cognitive model I find that the credibility results are driven by prospective investors' long-term affective reactions to forthcomingness.

I also find that news valence influences credibility in Experiment Two. Specifically, I find substantial increases to management's reporting credibility, especially when earnings news is negative. Throughout the analysis of Experiment Two I find that managers who fail to provide forthcoming guidance regarding negative earnings news suffer significant declines in credibility, irrespective of prior forthcomingness. In the second period I find large credibility gains for negative news managers who provide warnings. This finding is consistent with attribution theory.

5.5 Discussion of Results

Taken together, the results from Experiments One and Two indicate that in regards to prospective investors' long-term management credibility assessments, forthcomingness *does* matter. Specifically, I find strong evidence that current investors systematically differ from prospective investors in their sensitivity to forthcoming disclosure to negative earnings news. This finding is consistent with Mercer (2005), whereby she noted that current investor' assessments of management's reporting credibility was unaffected by forthcomingness in the long-term. The result is also consistent with recent research examining the influence of investors' status which note differential sensitivity to information based on investor type (Harris and Jackson 2011; Cianci and Falsetta 2008). I find that these credibility differences between current and prospective investors are facilitated by affective reactions to forthcoming disclosure.



In Experiment Two I find that over multiple periods, managers develop a reporting reputation for forthcoming disclosure and investors exhibit an increased willingness to rely on subsequent earnings guidance. The results provide evidence that initially managers who report negative news are rated as having lower reporting credibility than those who report positive news. This result is consistent with Mercer (2005), who found that after one period, the direction of news valence dominates investor assessments regarding management's reporting credibility. However, in the second period the predictive power of news valence diminishes (relative to forthcomingness) with respect to investors' credibility assessments. In fact, I find that in the second period only forthcomingness reliably predicts changes in investors' assessments of management credibility. Overall, the results suggest that forthcomingness has a positive impact on manager reporting credibility and this effect is greater for prospective investors over multiple periods. The findings also suggest that this long-term impact of forthcomingness on credibility is partially mediated by investors' affective reactions to forthcomingness but not news valence.

The results from Experiment Two are consistent with both academic and anecdotal evidence regarding firm reporting reputation. Interestingly, I find that this reputation is particularly sensitive (in both directions) when earnings news is negative. This finding may be especially useful to managers who issue earnings guidance and want to maximize the effectiveness of their guidance. These results suggest that managers face the greatest benefits (risks) regarding the voluntary disclosure of negative earnings news. The results should provide additional insight to the general voluntary disclosure literature as to the importance of voluntary disclosures for negative earnings news.

In sum, the results from Experiment One and Two suggest that the effects of management forthcomingness are not fleeting, and in fact, appear to strengthen with firm-specific experience. I find evidence which suggests that investors' status has an incremental impact on potential investors' long-term assessments regarding management reporting credibility. In particular, this study attempts to examine the impact of investor status on investors' judgments and decisions over time. Accordingly, the results also contribute to the growing stream of research examining investor status in investment settings (Cianci 2008; Cianci and Falsetta 2008; Harris and Jackson 2011).



5.6 Future Research

I believe that there are several extensions of the existing research including evaluation of forthcomingness in a multi-firm setting. It is possible that memory limitations inhibit individuals from effectively assessing management forthcomingness with multiple firms. Additionally, it may be of interest to examine what personal characteristics most strongly influence investor/manager investment/reporting decisions. These personal characteristics may include but are not limited to IQ, cognitive moral development, risk aversion, locus of control, and religiosity. Also, because forthcomingness has several dimensions (i.e. timeliness, accuracy, and completeness) exploring the impact of forthcomingness form may be informative. In other words, future research may examine the influence of subcomponents of forthcomingness on investor credibility assessments. For example, what influence does timeliness have on investor perceptions of manager credibility? Lastly, I believe that given the reputation effects presumed herein it would be interesting to examine when and how managers choose to be forthcoming.



TABLE 1
Experiment 1—Investor Status
Demographic Information across Experimental Treatments

| | Treatments | | | _ | |
|---------------------------------|----------------|----------------|----------------|----------------|-----------------|
| | 1 | <u>2</u> | <u>3</u> | <u>4</u> | <u>Total</u> |
| Gender Male | 10 | 14 | 13 | 11 | 48 |
| Female | | | 13 <u>3</u> | | |
| Total | <u>5</u> 15 | <u>5</u> 19 | <u>3</u> 16 | <u>6</u> 17 | <u>19</u> 67 |
| Total | 13 | 17 | 10 | 1 / | 07 |
| Participant Type | | | | | |
| Undergraduate | 3 | 9 | 6 | 7 | 25 |
| Accounting | 0 | 0 | 0 | 0 | 0 |
| Finance | 0 | 4 | 1 | 1 | 6 |
| Business | 3 | 5 | 5 | 6 | 19 |
| | | | | | |
| Graduate | 7 | 7 | 7 | 7 | 28 |
| Accounting | 5 | 3 | 6 | 3 | 17 |
| Finance | 0 | 1 | 1 | 1 | 3 |
| Business | 2 | 3 | 0 | 3 | 8 |
| Rotary Club | 5 | 3 | 3 | 3 | 14 |
| Accounting | 0 | 0 | 1 | 0 | 1 |
| Finance | 0 | 0 | 0 | 1 | 1 |
| Business | 2 | 2 | 1 | 0 | 5 |
| Other | 3 | 1 | 1 | 2 | 7 |
| Other | 5 | 1 | 1 | 2 | , |
| | | | | | Weighted |
| Experience Questions | | | | | Average |
| Average Investing Experience | 60% | 68% | 38% | 41% | 52% |
| Average Number of Trades | 12 | 22 | 15 | 21 | 18 |
| Average work experience (years) | 12.3 | 6.2 | 8.3 | 5.7 | 7.9 |

Table 1 presents demographic information across experimental conditions. Participant type refers to whether the participant was an undergraduate student, graduate student, or Rotary Club member. For undergraduate and graduate students Accounting, Finance, and Business correspond with the participants' major area of study. For Rotary Club members Accounting, Finance, Business, and Other correspond with the participants' profession. Average investing experience is calculated by averaging the participants' response to the following question from the post-experimental questionnaire: "Have you ever made investments in the common stock of a company?" Average number of trades is the average response to a follow-up question from the post-experimental questionnaire: "If yes, approximately how many times?" Average work experience is the average response (in years) to the following question from the post-experimental questionnaire: "Do you have any prior business work experience? If yes, approximately how many years?"



TABLE 2 Management Reporting Credibility Questions

- 1. I believe that DentRite management is very competent at providing financial disclosures.
- 2. I believe that DentRite management has little knowledge of the factors involved in providing useful disclosures.
- 3. I believe that few people are as qualified as DentRite management to provide useful financial disclosures about DentRite.
- 4. I believe that DentRite management is very trustworthy.
- 5. I believe that DentRite management is very honest.
- 6. I believe that DentRite management may not be truthful in their financial disclosures.



Table 2 presents the credibility questions which combine to create the credibility index. Participants responded to each statement on a seven-point Likert scale from 1 = Strongly Disagree to 7 = Strongly Agree. To attenuate response bias, high credibility is indicated by both agreement (high responses) and disagreement (low responses). Prior to analysis responses were recoded so that greater credibility corresponded with higher scores. Pre-test investor assessments of management's reporting credibility is calculated by summing participants' initial responses to six management reporting credibility questions. Pre-test assessments were administered prior to earnings news and the experimental manipulations. Participant's provided post-test assessments by answering the identical questions after a two-week delay. Change is computed by subtracting pre-test assessment from post-test assessment. Overall is computed by using the participant's post-test management credibility assessments.

Experiment 1—Investor Status Contrasts of Mean Initial Management Reporting Credibility across Experimental Conditions

Panel A: Contrasts of Initial Management Reporting Credibility

95% Confidence Interval

| | | | IIICI vai | | |
|---------------------------|-----------------|-------------|-----------|--------|-------|
| Contrast | Estimate | S.E. | p-value | Lower | Upper |
| Conditions 1 and 2 | 2.063 | 1.474 | .504 | -5.953 | 1.827 |
| Conditions 1 and 3 | 0.044 | 1.534 | 1.000 | -4.004 | 4.091 |
| Conditions 1 and 4 | 0.859 | 1.512 | .941 | -4.848 | 3.131 |
| Conditions 2 and 3 | 2.107 | 1.448 | .471 | -1.714 | 5.928 |
| Conditions 2 and 4 | 1.204 | 1.425 | .833 | -2.555 | 4.964 |
| Conditions 3 and 4 | 0.903 | 1.486 | .929 | -4.825 | 3.020 |

Panel B: Contrasts of Initial Management Reporting Credibility

95% Confidence

| | | | | Interva | al |
|--------------------|-----------------|-------------|---------|---------|--------------|
| Contrast | Estimate | S.E. | p-value | Lower | <u>Upper</u> |
| Conditions 1 and 2 | 2.063 | 1.179 | .417 | -5.385 | 1.259 |
| Conditions 1 and 3 | 0.044 | 1.360 | 1.000 | -3.869 | 3.957 |
| Conditions 1 and 4 | 0.859 | 1.287 | .983 | -4.533 | 2.815 |
| Conditions 2 and 3 | 2.107 | 1.596 | .711 | -2.364 | 6.577 |
| Conditions 2 and 4 | 1.204 | 1.535 | .964 | -3.076 | 5.485 |
| Conditions 3 and 4 | 0.903 | 1.678 | .995 | -5.602 | 3.797 |

Table 3 presents the mean difference estimate, standard error, statistical significance, and 95% confidence intervals for post hoc contrasts of participant's initial credibility assessment across experimental conditions using Tukey's HSD (Panel A) and Dunnett's T3 (Panel B) method.

Initial is the participants response to credibility statements on a seven-point Likert scale from 1 = Strongly Disagree to 7 = Strongly Agree. To attenuate response bias, high credibility is indicated by both agreement (high responses) and disagreement (low responses). Prior to analysis responses were recoded so that greater credibility corresponded with higher scores. Pre-test investor assessments of management's reporting credibility is calculated by summing participants' initial responses to six management reporting credibility questions. Pre-test assessments were administered prior to earnings news and the experimental manipulations. Additionally, Table 3 reports the contrasts of the average initial credibility assessments across experimental conditions along with the associated statistical significance (in parentheses).

Condition 1 includes participant's responses in the Low Forthcomingness/ Current Investor condition. Condition 2 includes participant's responses in the Low Forthcomingness/ Prospective Investor condition. Condition 3 includes participant's responses in the High Forthcomingness/ Current Investor condition. Condition 4 includes participant's responses in the High Forthcomingness/ Prospective Investor condition.

***, **, * Denote two-tailed significance at the .01, .05, and .10 levels respectively.



Experiment 1—Investor Status Changes in Investors' Assessment of Management's Reporting Credibility across Experimental Conditions

Panel A: Mean (Standard Deviation) Changes in Management's Reporting Credibility

| | Current | Prospective | |
|-----------------|-----------------|--------------------|----------|
| | Investor | Investor | |
| Low | -5.267 | -4.789 | -5.000 |
| Management | (6.928) | (6.826) | (6.770) |
| Forthcomingness | n = 15 | n = 19 | n = 34 |
| High | -4.906 | 4.176 | -0.227 |
| Management | (8.963) | (9.180) | (10.052) |
| Forthcomingness | n = 16 | n = 17 | n = 33 |
| | -5.081 | -0.556 | |
| | (7.912) | (9.116) | |
| | n = 31 | n = 36 | |

Panel B: Mean (Standard Deviation) Overall Management's Reporting Credibility

| - | Current | Prospective | |
|-----------------|-----------------------------|-----------------------------|---------|
| | <u>Investor</u> | Investor | |
| Low | 19.933 | 22.474 | 21.353 |
| Management | (7.206) | (4.926) | (6.075) |
| Forthcomingness | n = 15 | n = 19 | n = 34 |
| High | 20.250 | 30.235 | 25.394 |
| Management | (6.981) | (8.686) | (9.287) |
| Forthcomingness | n = 16 | n = 17 | n = 33 |
| | 20.097 (6.973) n = 31 | 26.139 (7.900) n = 36 | |

Table 4 presents the mean and standard deviation (in parentheses) for the dependent variables Change and Overall.

Overall is computed by using only the participants post-test management credibility assessments



Change in investor assessments of management's reporting credibility is calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment.

Management's Reporting Credibility as a Function of Management Forthcomingness and Investor Status

Panel A: ANOVA Results of Change in Management's Reporting Credibility

| <u>Variable</u> | <u>df</u> | MSE | F-Statistic | p-value |
|------------------------|-----------|------------|-------------|---------|
| Forthcomingness | 1 | 361.484 | 5.603 | .021** |
| Investor Status | 1 | 379.816 | 5.888 | .018** |
| Forthcomingness x | | | | |
| Investor Status | 1 | 307.766 | 4.771 | .033** |
| | | | | |

Adjusted R² .170 **N** 67

Panel B: ANOVA Results of Overall Management Reporting Credibility

| <u>Variable</u> | | <u>df</u> | MSE | F-Statistic | p-value |
|-------------------------|------|-----------|------------|-------------|---------|
| Forthcomingness | | 1 | 271.208 | 5.509 | .022** |
| Investor Status | | 1 | 652.027 | 13.243 | .001*** |
| Forthcomingness x | | | | | |
| Investor Status | | 1 | 230.350 | 4.679 | .034** |
| • | | | | | |
| Adjusted R ² | .236 | | | | |
| \mathbf{N} | 67 | | | | |

Table 5 presents the ANOVA analysis of Management's Reporting Credibility as a function of Forthcomingness, Investor Status and Forthcomingness x Investor Status.

Change is the change in investor assessments of management's reporting credibility. Change is calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment.

Overall are the investors' final assessments of management's reporting credibility. Overall is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations.

Forthcomingness is a dummy variable, 1 if management provided disclosure and 0 otherwise. **Investor Status** is a dummy variable, 1 if investor is a prospective investor and 0 if a current investor.

Forthcomingness x Investor Status is an interaction term between Forthcomingness and Investor Status.

***, **, * Denote two-tailed significance at the .01, .05, and .10 levels respectively.



Incremental Analysis of Management's Reporting Credibility as a Function of Management Forthcomingness and Investor Status

Panel A: Change = $\alpha_0 + \beta_1$ Forthcomingness + β_2 Investor Status + β_3 Forthcomingness x Investor Status

| | | Adjusted | \mathbb{R}^2 | Partial | |
|------------------------|----------------|----------------|----------------|-------------|--------|
| Variable | \mathbb{R}^2 | \mathbb{R}^2 | Change | Correlation | Prob. |
| Forthcomingness | .074 | .060 | .074 | .304 | .026** |
| Investor Status | .147 | .121 | .073 | .289 | .022** |
| Forthcomingness x | | | | | |
| Investor Status | .207 | .170 | .060 | .265 | .033** |
| N | 67 | | | | |

Panel B: Overall = $\alpha_0 + \beta_1$ Forthcomingness + β_2 Investor Status + β_3 Forthcomingness x Investor Status

| | | Adjusted | \mathbb{R}^2 | Partial | |
|------------------------|----------------|----------------|----------------|-------------|---------|
| Variable | \mathbb{R}^2 | \mathbb{R}^2 | Change | Correlation | Prob. |
| Forthcomingness | .064 | .050 | .064 | .302 | .038** |
| Investor Status | .216 | .192 | .152 | .414 | .001*** |
| Forthcomingness x | | | | | |
| Investor Status | .270 | .236 | .054 | .263 | .034** |
| N | 67 | | | | |

Table 6 shows the hierarchical regression analysis of Management's Reporting Credibility as a function of Forthcomingness, Investor Status and Forthcomingness x Investor Status.

Change is the change in investor assessments of management's reporting credibility. Change is calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test

Overall is the investors' final assessment of management's reporting credibility. Post is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations.

Forthcomingness is a dummy variable, 1 if management provided disclosure and 0 otherwise. **Investor Status** is a dummy variable, 1 if investor is a prospective investor and 0 if a current investor.

Forthcomingness x Investor Status is an interaction term between Forthcomingness and Investor Status.

***, **, * Denote two-tailed significance at the .01, .05, and .10 levels respectively.



assessment.

Experiment 1—Investor Status Changes in Investors' Assessment of Management's Reporting Credibility by Investing Experience

Panel A: Mean (Standard Deviation) Changes in Management's Reporting Credibility for Experienced Investors

| | Current | Prospective | |
|-----------------|-----------------|--------------------|----------|
| | Investor | Investor | |
| Low | -4.556 | -4.500 | -4.523 |
| Management | (6.039) | (6.185) | (5.979) |
| Forthcomingness | n = 9 | n = 13 | n = 22 |
| High | -7.167 | 0.143 | -3.231 |
| Management | (11.92) | (8.474) | (10.465) |
| Forthcomingness | n = 6 | n = 7 | n = 13 |
| | -5.600 | -2.875 | |
| | (8.565) | (7.211) | |
| | n = 15 | n = 20 | |

Panel B: Mean (Standard Deviation) Changes in Management's Reporting Credibility for Inexperienced Investors

| | Current | Prospective | |
|-----------------|-----------------------------|-----------------------------|---------|
| | Investor | Investor | |
| Low | -6.333 | -5.417 | -5.875 |
| Management | (8.589) | (8.674) | (8.244) |
| Forthcomingness | n = 6 | n = 6 | n = 12 |
| High | -3.550 | 7.000 | 1.725 |
| Management | (7.033) | (8.969) | (9.609) |
| Forthcomingness | n = 10 | n = 10 | n = 20 |
| | -4.594 (7.497) n = 16 | 2.344 (10.578) n = 16 | |

Table 7 presents the mean and standard deviation (in parentheses) for the dependent variable Change for experienced (Panel A) and inexperienced investors (Panel B).

Investing Experience is a dummy variable coded as 1 if the participant answered yes to one of the following two questions from the post-experimental questionnaire: "Have you ever made investments in the common stock of a company?" and "Have you ever made investments in a common stock mutual fund?"



Change in investor assessments of management's reporting credibility is calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment.

Experiment 1—Investor Status Overall Assessment of Management's Reporting Credibility by Investing Experience

Panel A: Mean (Standard Deviation) in Overall Management Reporting Credibility for Experienced Investors

| | Current | Prospective | |
|-----------------|-----------------|--------------------|---------|
| | Investor | Investor | |
| Low | 20.778 | 22.231 | 21.636 |
| Management | (6.016) | (4.850) | (5.269) |
| Forthcomingness | n = 9 | n = 13 | n = 22 |
| High | 21.000 | 29.143 | 25.385 |
| Management | (10.12) | (7.358) | (9.359) |
| Forthcomingness | n = 6 | n = 7 | n = 13 |
| | 20.867 | 24.650 | |
| | (7.567) | (6.588) | |
| | n = 15 | n = 20 | |

Panel B: Mean (Standard Deviation) in Overall Management Reporting Credibility for Inexperienced Investors

| | Current | Prospective | |
|-----------------|-----------------------------|-----------------------------|---------|
| | Investor | Investor | |
| Low | 18.667 | 23.000 | 20.833 |
| Management | (9.180) | (5.514) | (7.566) |
| Forthcomingness | n = 6 | n = 6 | n = 12 |
| High | 19.800 | 31.000 | 25.400 |
| Management | (4.872) | (9.821) | (9.545) |
| Forthcomingness | n = 10 | n = 10 | n = 20 |
| | 19.375 (6.531) n = 16 | 28.000 (9.165) n = 16 | |

Table 8 presents the mean and standard deviation (in parentheses) for the dependent variable Overall for experienced (Panel A) and inexperienced investors (Panel B).

Overall is computed by using the participant's post-test management credibility assessments. **Investing Experience** is a dummy variable coded as 1 if the participant answered yes to one of the following two questions from the post-experimental questionnaire: "Have you ever made investments in the common stock of a company?" and "Have you ever made investments in a common stock mutual fund?"



Management's Reporting Credibility as a Function of Management Forthcomingness, Investor Status, and Investing Experience

Panel A: ANOVA Results of Change in Management's Reporting Credibility

| <u>Variable</u> | <u>df</u> | MSE | F-Statistic | p-value |
|--------------------------|-----------|------------|--------------------|---------|
| Forthcomingness | 1 | 288.035 | 4.464 | .039** |
| Investor Status | 1 | 344.008 | 5.332 | .024** |
| Investing Experience | 1 | 58.705 | 0.910 | .344 |
| Forthcomingness x | | | | |
| Investor Status | 1 | 276.635 | 4.288 | .043** |
| Forthcomingness x | | | | |
| Investing Experience | 1 | 168.207 | 2.607 | .112 |
| Investor Status x | | | | |
| Investing Experience | 1 | 16.319 | 0.253 | .617 |
| Forthcomingness x | | | | |
| Investor Status x | | | | |
| Investing Experience | 1 | 5.492 | 0.085 | .772 |

Panel B: ANOVA Results of Overall Management Reporting Credibility

| <u>Variable</u> | <u>df</u> | MSE | F-Statistic | p-value |
|-----------------------------|-----------|------------|-------------|---------|
| Forthcomingness | 1 | 256.706 | 4.944 | .030** |
| Investor Status | 1 | 612.553 | 11.797 | .001*** |
| Investing Experience | 1 | 0.455 | 0.009 | .926 |
| Forthcomingness x | | | | |
| Investor Status | 1 | 178.272 | 3.433 | .069* |
| Forthcomingness x | | | | |
| Investing Experience | 1 | 3.876 | 0.075 | .786 |
| Investor Status x | | | | |
| Investing Experience | 1 | 34.197 | 0.659 | .420 |
| Forthcomingness x | | | | |
| Investor Status x | | | | |
| Investing Experience | 1 | 0.030 | 0.001 | .981 |

Table 9 presents the ANOVA analysis of Management's Reporting Credibility as a function of Forthcomingness, Investor Status, Investing Experience, Forthcomingness x Investor Status, Forthcomingness x Investing Experience, Investor Status x Investing Experience, and Forthcomingness x Investor Status x Investing Experience.

Table 9 is continued on the next page.



TABLE 9- Continued

Management's Reporting Credibility as a Function of Management Forthcomingness, Investor Status, and Investing Experience

Table 9 presents the ANOVA analysis of Management's Reporting Credibility as a function of Forthcomingness, Investor Status, Investing Experience, Forthcomingness x Investor Status, Forthcomingness x Investing Experience, Investor Status x Investing Experience, and Forthcomingness x Investor Status x Investing Experience.

Change is the change in investor assessments of management's reporting credibility. Change is calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment.

Overall are the investors' final assessments of management's reporting credibility. Overall is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations.

Forthcomingness is a dummy variable, 1 if management provided disclosure and 0 otherwise. **Investor Status** is a dummy variable, 1 if investor is a prospective investor and 0 if a current investor

Investing Experience is a dummy variable coded as 1 if the participant answered yes to one of the following two questions from the post-experimental questionnaire: "Have you ever made investments in the common stock of a company?" and "Have you ever made investments in a common stock mutual fund?"

Forthcomingness x Investor Status is an interaction term between Forthcomingness and Investor Status.

Forthcomingness x Investing Experience is an interaction term between Forthcomingness and Investing Experience.

Investor Status x Investing Experience is an interaction term between Investor Status and Investing Experience.

Forthcomingness x Investor Status x Investing Experience is an interaction term between Forthcomingness, Investor Status, and Investing Experience.



Change in Prospective Investors' Management Reporting Credibility as a Function of Forthcomingness, Profit, and Investing Experience

ANOVA Results of Change in Management's Reporting Credibility

| <u>Variable</u> | <u>df</u> | MSE | F-Statistic | <u>p-value</u> |
|-----------------------------|-----------|------------|-------------|----------------|
| Forthcomingness | 1 | 752.497 | 14.425 | .001*** |
| Profit | 1 | 157.321 | 3.016 | .093* |
| Investing Experience | 1 | 16.672 | 0.320 | .576 |
| Forthcomingness x | | | | |
| Profit | 1 | 101.230 | 1.940 | .175 |
| Forthcomingness x | | | | |
| Investing Experience | 1 | 214.352 | 4.109 | .052* |
| Profit x | | | | |
| Investing Experience | 1 | 2.565 | 0.049 | .826 |
| Forthcomingness x | | | | |
| Profit x Investing | | | | |
| Experience | 1 | 358.230 | 6.867 | .014** |

Table 10 presents the ANOVA analysis of Change in Prospective Investor Management Reporting Credibility as a function of Forthcomingness, Profit, Investing Experience and all higher order interactions.

Change is the change in investor assessments of management's reporting credibility. Change is calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment.

Forthcomingness is a dummy variable, 1 if management provided disclosure and 0 otherwise. **Profit** is a dichotomous variable, coded as 1 if the investor earned a profit and 0 otherwise. **Investing Experience** is a dummy variable coded as 1 if the participant answered yes to one of the following two questions from the post-experimental questionnaire: "Have you ever made investments in the common stock of a company?" and "Have you ever made investments in a common stock mutual fund?"

Forthcomingness x Profit is an interaction term between Forthcomingness and Profit. **Forthcomingness x Investing Experience** is an interaction term between Forthcomingness and Investing Experience.

Profit x Investing Experience is an interaction term between Profit and Investing Experience. **Forthcomingness x Profit x Investing Experience** is an interaction term between Forthcomingness, Profit, and Investing Experience.



Contrasts of Prospective Investors' Change in Management's Reporting Credibility by Forthcomingness, Profit, and Investing Experience

| Contrast | Estimate | <u>S.E.</u> | <u>p-value</u> |
|-----------------|-----------------|-------------|----------------|
| 1 and 5 | 26.250 | 6.255 | .005*** |
| 1 and 7 | 19.583 | 5.897 | .045** |
| 1 and 8 | 20.250 | 6.593 | .077* |
| 2 and 5 | 15.950 | 4.273 | .017** |

Table 11 presents the post hoc contrasts of Change in Management's Reporting Credibility for prospective investors categorized by Forthcomingness, Profit, and Investing Experience using Tukey's HSD method. All pairwise comparisons were made but only significant differences are presented.

Change is the change in investor assessments of management's reporting credibility. Change is calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment.

Forthcomingness is a dummy variable, 1 if management provided disclosure and 0 otherwise. **Profit** is a dichotomous variable, coded as 1 if the investor earned a profit and 0 otherwise. **Investing Experience** is a dummy variable coded as 1 if the participant answered yes to one of the following two questions from the post-experimental questionnaire: "Have you ever made investments in the common stock of a company?" and "Have you ever made investments in a common stock mutual fund?"

- 1 includes participants in the low Forthcomingness with no Profit and no Investing Experience
- 2 includes participants in the low Forthcomingness with no Profit and Investing Experience
- 3 includes participants in the low Forthcomingness with Profit and no Investing Experience
- 4 includes participants in the low Forthcomingness with Profit and Investing Experience
- 5 includes participants in the high Forthcomingness with no Profit and no Investing Experience
- ${f 6}$ includes participants in the high Forthcomingness with no Profit and Investing Experience
- 7 includes participants in the high Forthcomingness with Profit and no Investing Experience
- 8 includes participants in the high Forthcomingness with Profit and Investing Experience ***, **, * Denote two-tailed significance at the .01, .05, and .10 levels respectively.



TABLE 12 Willingness to Rely on Subsequent Disclosure

Panel A: Willingness to Rely = $\alpha_0 + \beta_1$ Change

| | Predicted | | | | | |
|-------------------------|-----------|--------|-------|------|--------|----------|
| Variable | Sign | В | S.E. | Beta | t | Prob. |
| Intercept | | 3.746 | 0.177 | | 21.11 | <.001*** |
| Change | + | -0.001 | 0.020 | 007 | -0.058 | 0.954 |
| Adjusted R ² | 015 | | | | | |
| N | 67 | | | | | |

Panel B: Willingness to Rely = $\alpha_0 + \beta_1$ Overall

| | Predicted | | | | | |
|------------------------------|-----------|-------|-------|-------|-------|-----------|
| Variable | Sign | В | S.E. | Beta | t | Prob. |
| Intercept | | 3.746 | 0.176 | | 21.26 | < .001*** |
| Overall | + | 0.021 | 0.022 | 0.118 | 0.960 | 0.340 |
| Adjusted R ² N | 001 67 | | | | | |

Table 12 shows the results of regression analysis used to examine the relationship between Willingness to Rely and Change (Panel A) as well as Overall (Panel B).

Willingness to Rely is measured as the response to a post-experimental questionnaire. At the end of the experiment all participants were provided with another voluntary disclosure from management and asked to indicate their willingness to rely on that disclosure.

Change is the change in investor assessments of management's reporting credibility. Change is calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment.

Overall are the investors' final assessments of management's reporting credibility. Overall is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations.



Management's Reporting Credibility as a Function of Management Forthcomingness and Investor Status Excluding Unsuccessful Manipulations

Panel A: ANOVA Results of Change in Management's Reporting Credibility

| <u>Variable</u> | <u>df</u> | MSE | F-Statistic | p-value |
|------------------------|-----------|------------|-------------|---------|
| Forthcomingness | 1 | 389.658 | 6.504 | .014** |
| Investor Status | 1 | 281.332 | 4.697 | .035** |
| Forthcomingness x | | | | |
| Investor Status | 1 | 250.804 | 4.187 | .046** |

Adjusted R² .199 **N** .57

Panel B: ANOVA Results of Overall Management Reporting Credibility

| <u>Variable</u> | | <u>df</u> | MSE | F-Statistic | <u>p-value</u> |
|-------------------------|------|-----------|----------------------|-------------|----------------|
| Forthcomingness | | 1 | $1\overline{99.134}$ | 4.266 | .044** |
| Investor Status | | 1 | 532.828 | 11.414 | .001*** |
| Forthcomingness x | | | | | |
| Investor Status | | 1 | 201.853 | 4.324 | .042** |
| Adjusted R ² | .246 | | | | |
| N | 57 | | | | |

Table 13 presents the ANOVA analysis of Management's Reporting Credibility as a function of Forthcomingness, Investor Status and Forthcomingness x Investor Status excluding all participants (10 total) who did not successfully answer both manipulation check questions. **Change** is the change in investor assessments of management's reporting credibility. Change is calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment.

Overall are the investors' final assessments of management's reporting credibility. Overall is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations.

Forthcomingness is a dummy variable, 1 if management provided disclosure and 0 otherwise. **Investor Status** is a dummy variable, 1 if investor is a prospective investor and 0 if a current investor.

Forthcomingness x Investor Status is an interaction term between Forthcomingness and Investor Status.



Alternative Models of Change in Management's Reporting Credibility

Model 1: Change = $\alpha_0 + \beta_1$ Forthcomingness + β_2 Investor Status + β_3 Forthcomingness x Investor Status + β_4 Work Experience

Model 2: Change = $\alpha_0 + \beta_1$ Forthcomingness + β_2 Investor Status + β_3 Forthcomingness x Investor Status + β_4 Profit

Model 2: Change = $\alpha_0 + \beta_1$ Forthcomingness + β_2 Investor Status + β_3 Forthcomingness x Investor Status + β_4 Gender

| Variable | Model 1 | Model 2 | Model 3 | |
|-------------------------|----------|----------|----------|--|
| Intercept | -2.554** | -2.561** | -2.572** | |
| Forthcomingness | 4.767** | 4.725** | 5.037** | |
| Investor Status | 4.354** | 3.374 | 4.590** | |
| Forthcomingness x | 8.680** | 8.123** | 7.962** | |
| Investor Status | | | | |
| Work Experience | -0.065 | | | |
| Profit | | 2.996 | | |
| Gender | | | -2.732 | |
| Adjusted R ² | .166 | .172 | .177 | |

Table 14 shows the results of regression analysis used to examine the relationship between Change as a function of the experimental manipulations controlling for Work Experience (Model 1), Profit (Model 2), and Gender (Model 3).

Change is the change in investor assessments of management's reporting credibility. Change is calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment.

Forthcomingness is a dummy variable, 1 if management provided disclosure and 0 otherwise. **Investor Status** is a dummy variable, 1 if investor is a prospective investor and 0 if a current investor.

Forthcomingness x Investor Status is an interaction term between Forthcomingness and Investor Status.

Work Experience is the participants answer to the following questions from the post-experimental questionnaire: "Do you have any prior business work experience?" and "If yes, approximately how many years?"

Profit is the dollar profit (loss) for participants restricted between (\$8) and \$8.

Gender is a dummy variable coded as 1 for males and 0 for females.



TABLE 15
Experiment 2—Reputation
Demographic Information across Experimental Conditions

| | Experimental Condition | | | | |
|---|-------------------------------|---------------|---------------|---------------|--------------|
| | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | Total |
| Gender Male | 4 | 3 | 4 | 3 | 14 |
| Female | <u>6</u> | <u>6</u> | <u>6</u> | <u>8</u> | <u>26</u> |
| Total | 10 | 9 | 10 | 11 | 40 |
| Participant Type | | | | | |
| Undergraduate | 5 | 3 | 3 | 6 | 17 |
| Accounting | 0 | 1 | 0 | 0 | 1 |
| Finance | 1 | 0 | 0 | 1 | 2 |
| Business | 4 | 2 | 3 | 5 | 14 |
| Graduate | 5 | 6 | 7 | 5 | 23 |
| Accounting | 3 | 3 | 4 | 2 | 12 |
| Finance | 0 | 2 | 1 | 1 | 4 |
| Business | 2 | 1 | 2 | 2 | 7 |
| | | Experime | ntal Condi | tion | <u></u> |
| | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | Total |
| <u>Gender</u> | 7 | 4 | (| 7 | 22 |
| Male | 5 | 4 | 6 | 7 | 22 |
| Female | <u>7</u> 12 | <u>3</u> 7 | <u>2</u> 8 | <u>2</u> 9 | 14 36 |
| Total | 12 | 1 | 8 | 9 | 36 |
| Participant Type | | | | | |
| Undergraduate | 7 | 3 | 4 | 6 | 20 |
| Accounting | 0 | 0 | 0 | 0 | 0 |
| Finance | 0 | 0 | 0 | 0 | 0 |
| Business | 7 | 3 | 4 | 6 | 20 |
| Graduate | 5 | 4 | 4 | 3 | 16 |
| Accounting | 2 | 1 | 2 | 2 | 7 |
| Finance | 0 | 0 | 0 | 0 | 0 |
| Business | 3 | 3 | 2 | 1 | 9 |
| Table 15 is continued on the next page. | | | | | |



TABLE 15 - Continued Experiment 2—Reputation Demographic Information across Experimental Treatments

| Experience Questions | <u>1</u> | <u>2</u> | <u>3</u> | <u>4</u> | Weighted Average |
|---|-----------------|-----------------------|-----------------|--------------|---------------------|
| Average Investing Experience | 20% | 56% | 60% | 9% | 35% |
| Average Number of Trades | 1 | 2 | 2 | 0 | 1 |
| Average work experience (years) | 1.7 | 4.1 | 2.7 | 1.4 | 2.4 |
| | | | | | |
| | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | |
| Experience Questions | <u>5</u> | <u>6</u> | <u>7</u> | <u>8</u> | |
| Experience Questions Average Investing Experience | <u>5</u> 33% | <u>6</u> 57% | <u>7</u> 13% | 8 33% | 33% |
| | _ | <u>6</u> 57% 1 | 7 13% 13 | _ | 33% 7 |

Table 15 presents demographic information across experimental conditions.

Experimental conditions are as follows:

Condition 1: Negative News/ Low Management Forthcomingness in Period 1 and Positive News/ Low Management Forthcomingness in Period 2.

Condition 2: Negative News/ Low Management Forthcomingness in Period 1 and Positive News/ High Management Forthcomingness in Period 2.

Condition 3: Negative News/ High Management Forthcomingness in Period 1 and Positive News/ Low Management Forthcomingness in Period 2.

Condition 4: Negative News/ High Management Forthcomingness in Period 1 and Positive News/ High Management Forthcomingness in Period 2.

Condition 5: Positive News/ Low Management Forthcomingness in Period 1 and Negative News/ Low Management Forthcomingness in Period 2.

Condition 6: Positive News/ Low Management Forthcomingness in Period 1 and Negative News/ High Management Forthcomingness in Period 2.

Condition 7: Positive News/ High Management Forthcomingness in Period 1 and Negative News/ Low Management Forthcomingness in Period 2.

Condition 8: Positive News/ High Management Forthcomingness in Period 1 and Negative News/ High Management Forthcomingness in Period 2.

Participant type refers to whether the participant was an undergraduate student or graduate student. For undergraduate and graduate students Accounting, Finance, and Business correspond with the participants' major area of study. Average investing experience is calculated by averaging the participants' response to the following question from the post-experimental questionnaire: "Have you ever made investments in the common stock of a company?" Average number of trades is the average response to a follow-up question from the post-experimental questionnaire: "If yes, approximately how many times?" Average work experience is the average response (in years) to the following question from the post-experimental questionnaire: "Do you have any prior business work experience? If yes, approximately how many years?"



Contrasts of Initial Assessments Regarding Management's Reporting Credibility across Experimental Conditions

Contrasts of Initial Management Reporting Credibility

95% Confidence Interval

| | | | | Interva | <u>ll</u> |
|--------------------|-----------------|-------------|---------|---------|--------------|
| Contrast | Estimate | <u>S.E.</u> | p-value | Lower | Upper |
| Conditions 1 and 2 | 1.911 | 2.040 | 1.000 | -6.143 | 9.965 |
| Conditions 1 and 3 | 2.050 | 1.501 | .978 | -3.511 | 7.611 |
| Conditions 1 and 4 | 0.836 | 1.468 | 1.000 | -6.179 | 4.507 |
| Conditions 1 and 5 | 0.325 | 1.568 | 1.000 | -6.001 | 5.351 |
| Conditions 1 and 6 | 0.914 | 0.897 | .999 | -4.242 | 2.413 |
| Conditions 1 and 7 | 1.988 | 1.657 | .992 | -4.542 | 8.517 |
| Conditions 1 and 8 | 0.089 | 1.322 | 1.000 | -4.980 | 4.802 |
| Conditions 2 and 3 | 0.139 | 2.298 | 1.000 | -8.377 | 8.655 |
| Conditions 2 and 4 | 2.747 | 2.277 | .994 | -11.190 | 5.694 |
| Conditions 2 and 5 | 2.236 | 2.342 | 1.000 | -10.815 | 6.343 |
| Conditions 2 and 6 | 2.825 | 1.958 | .952 | -10.842 | 5.192 |
| Conditions 2 and 7 | 0.076 | 2.403 | 1.000 | -8.818 | 8.971 |
| Conditions 2 and 8 | 2.000 | 2.185 | 1.000 | -10.282 | 6.282 |
| Conditions 3 and 4 | 2.886 | 1.809 | .929 | -9.327 | 3.554 |
| Conditions 3 and 5 | 2.375 | 1.891 | .993 | -9.060 | 4.310 |
| Conditions 3 and 6 | 2.964 | 1.386 | .620 | -8.339 | 2.411 |
| Conditions 3 and 7 | 0.063 | 1.965 | 1.000 | -7.298 | 7.173 |
| Conditions 3 and 8 | 2.139 | 1.692 | .991 | -8.264 | 3.986 |
| Conditions 4 and 5 | 0.511 | 1.865 | 1.000 | -6.042 | 7.065 |
| Conditions 4 and 6 | 0.078 | 1.350 | 1.000 | -5.196 | 5.040 |
| Conditions 4 and 7 | 2.824 | 1.940 | .963 | -4.302 | 9.950 |
| Conditions 4 and 8 | 0.747 | 1.663 | 1.000 | -5.213 | 6.708 |
| Conditions 5 and 6 | 0.589 | 1.458 | 1.000 | -6.055 | 4.877 |
| Conditions 5 and 7 | 2.313 | 2.017 | .997 | -5.005 | 9.630 |
| Conditions 5 and 8 | 0.236 | 1.752 | 1.000 | -6.001 | 6.474 |
| Conditions 6 and 7 | 2.902 | 1.554 | .777 | -3.571 | 9.375 |
| Conditions 6 and 8 | 0.825 | 1.190 | 1.000 | -3.826 | 5.477 |
| Conditions 7 and 8 | 2.076 | 1.832 | .997 | -8.971 | 4.818 |

Table 16 is continued on the next page.



^{***, **, *} Denote two-tailed significance at the .01, .05, and .10 levels respectively.

TABLE 16- Continued

Contrasts of Initial Assessments of Management's Reporting Credibility across Experimental Conditions

Table 16 presents the post hoc contrasts of participants' initial assessment of Management's Reporting Credibility across experimental conditions using Dunnett's T3 method.

Participants responded to credibility statements on a seven-point Likert scale from 1 = Strongly Disagree to 7 = Strongly Agree. To attenuate response bias, high credibility is indicated by both agreement (high responses) and disagreement (low responses). Prior to analysis responses were recoded so that greater credibility corresponded with higher scores. Pre-test investor assessments of management's reporting credibility is calculated by summing participants' initial responses to six management reporting credibility questions. Pre-test assessments were administered prior to earnings news and the experimental manipulations.

Condition 1: Negative News/ Low Management Forthcomingness in Period 1 and Positive News/ Low Management Forthcomingness in Period 2.

Condition 2: Negative News/ Low Management Forthcomingness in Period 1 and Positive News/ High Management Forthcomingness in Period 2.

Condition 3: Negative News/ High Management Forthcomingness in Period 1 and Positive News/ Low Management Forthcomingness in Period 2.

Condition 4: Negative News/ High Management Forthcomingness in Period 1 and Positive News/ High Management Forthcomingness in Period 2.

Condition 5: Positive News/ Low Management Forthcomingness in Period 1 and Negative News/ Low Management Forthcomingness in Period 2.

Condition 6: Positive News/ Low Management Forthcomingness in Period 1 and Negative News/ High Management Forthcomingness in Period 2.

Condition 7: Positive News/ High Management Forthcomingness in Period 1 and Negative News/ Low Management Forthcomingness in Period 2.

Condition 8: Positive News/ High Management Forthcomingness in Period 1 and Negative News/ High Management Forthcomingness in Period 2.



Experiment 2—Reputation

Changes in Investors' Assessment of Management's Reporting Credibility across Experimental Conditions

Panel A: Mean (Standard Deviation) Changes in Management's Reporting Credibility in Period 1

| | | News Valence | | | | | |
|---------------------------------|---|--------------------------------------|--------------------|------------------------|--|--|--|
| | 0 | Negative News Valence in Period 1 | | ews Valence eriod 1 | | | |
| | LMF ^a in Period 2 | HMF ^b in Period 2 | LMF in Period 2 | HMF in Period 2 | | | |
| LMF ^a in Period 1 | -3.50 (4.51) | -3.67 (5.10) | 1.29 (4.69) | 2.21 (3.98) | | | |
| 1 ci iou i | n = 10 | n = 9 | n = 12 | n = 7 | | | |
| HMF ^b in | 1.75 | 0.82 | 3.81 | 1.39 | | | |
| Period 1 | $ \begin{array}{l} (5.85) \\ n = 10 \end{array} $ | (4.14) n = 11 | (3.68) n = 8 | (5.36) n = 9 | | | |

Panel B: Mean (Standard Deviation) Changes in Management's Reporting Credibility in Period 2

| | | News Valence | | | | |
|----------|-------------|--------------|------------------------------|----------|--|--|
| | Positive Ne | ws Valence | Negative News Valence | | | |
| | in Per | riod 2 | in Po | eriod 2 | | |
| | LMF in | HMF in | LMF in | HMF in | | |
| | Period 2 | Period 2 | Period 2 | Period 2 | | |
| LMF in | -1.15 | 4.17 | -2.13 | 3.00 | | |
| Period 1 | (5.71) | (4.15) | (4.62) | (2.72) | | |
| | n = 10 | n = 9 | n = 12 | n = 7 | | |
| HMF in | -2.30 | 2.59 | -4.00 | 2.33 | | |
| Period 1 | (6.25) | (4.18) | (5.32) | (2.96) | | |
| | n = 10 | n = 11 | n = 8 | n = 9 | | |

Change 1 is the change in investors' assessments of management's reporting credibility in period 1. Change 1 is calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change in period one is computed by subtracting pre-test assessment from post-test assessment.

Change 2 is the change in investors' assessment of management's reporting credibility in period 2. Change 2 is calculated by summing participants' final responses to six management reporting credibility questions. These questions were administered subsequent to earnings news and the experimental manipulations during the post-experimental questionnaire. Change in period two is computed by subtracting post-test assessment from period 1 from post-test assessment from period 2.

^a**LMF:** Low Management Forthcomingness. ^b**HMF:** High Management Forthcomingness.



Experiment 2—Reputation Overall Investor Assessment of Management Reporting

Credibility across Experimental Conditions

Panel A: Mean (Standard Deviation) Overall Management Reporting **Credibility in Period 1**

News Valence Negative News Valence Positive News Valence in Period 1 in Period 1 HMF^b in LMF^a in LMF in **HMF** in Period 2 Period 2 Period 2 Period 2 LMF^a in 23.30 21.22 28.42 29.93 (5.93)(5.45)(3.14)Period 1 (4.83)n = 10n = 9n = 12n = 7HMF^b in 26.50 28.45 28.63 28.28 (4.90)(4.50)Period 1 (2.07)(5.56)n = 10n = 11n = 8n = 9

Panel B: Mean (Standard Deviation) Overall Management Reporting **Credibility in Period 2**

| · | | News Valence | | | | | |
|----------|----------|--------------------------------------|----------|----------------------|--|--|--|
| | | Positive News Valence in Period 2 | | News Valence eriod 2 | | | |
| | LMF in | HMF in | LMF in | HMF in | | | |
| | Period 2 | Period 2 | Period 2 | Period 2 | | | |
| LMF in | 22.15 | 25.39 | 26.29 | 32.93 | | | |
| Period 1 | (4.68) | (6.77) | (5.89) | (4.90) | | | |
| | n = 10 | n = 9 | n = 12 | n = 7 | | | |
| HMF in | 24.20 | 31.05 | 24.63 | 30.61 | | | |
| Period 1 | (3.33) | (6.84) | (5.85) | (4.64) | | | |
| | n = 10 | n = 11 | n = 8 | n = 9 | | | |

Overall 1 is the investors' final assessment of management's reporting credibility in period 1. Overall 1 is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations in the first period.

Overall 2 is the investors' final assessment of management's reporting credibility in period 2. Overall 2 is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations in the second period.

^aLMF: Low Management Forthcomingness. **bHMF:** High Management Forthcomingness.



Contrasts of Average Total Change in Management's Reporting Credibility by Forthcomingness

Contrasts of Total Change in Management's Reporting Credibility

95% Confidence Interval

| Contrast | Estimate | S.E. | p-value | Lower | Upper |
|-----------------|-----------------|-------------|---------|---------|--------|
| 1 and 2 | 5.131 | 1.677 | .016** | -9.540 | -0.721 |
| 1 and 3 | 2.179 | 1.622 | .538 | -6.445 | 2.086 |
| 1 and 4 | 6.118 | 1.577 | .001*** | -10.265 | -1.972 |
| 2 and 3 | 2.951 | 1.753 | .340 | -1.660 | 7.563 |
| 2 and 4 | 0.988 | 1.712 | .939 | -5.489 | 3.514 |
| 3 and 4 | 3.939 | 1.658 | .091* | -8.299 | 0.421 |

Table 19 presents the post hoc contrasts of Total Change in Management's Reporting Credibility for prospective investors categorized by Forthcomingness using Tukey's HSD method.

Initial investor assessments of management's reporting credibility is calculated by summing participants' initial responses to six management reporting credibility questions. Pre-test assessments were administered prior to earnings news and the experimental manipulations.

Overall 2 is the investors' final assessment of management's reporting credibility in period 2.

Overall 2 is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations in the second period.



Total Change is the total change in investor assessments of management's reporting credibility (Overall 2 less Initial).

¹ includes participants in the Low/Low Forthcomingness conditions

² includes participants in the Low/High Forthcomingness conditions

³ includes participants in the High/Low Forthcomingness conditions

⁴ includes participants in the High/High Forthcomingness conditions

^{***, **, *} Denote two-tailed significance at the .01, .05, and .10 levels respectively.

Contrasts of Average Total Change in Management's Reporting Credibility across Experimental Conditions

Contrasts of Total Management Reporting Credibility

95% Confidence

| | | | | Interva | .1 |
|--------------------|-----------------|-------------|---------|---------|--------------|
| Contrast | Estimate | <u>S.E.</u> | p-value | Lower | <u>Upper</u> |
| Conditions 1 and 2 | 5.150 | 2.302 | .343 | -12.349 | 2.049 |
| Conditions 1 and 3 | 4.100 | 2.241 | .602 | -11.107 | 2.907 |
| Conditions 1 and 4 | 8.059 | 2.189 | .010*** | -14.905 | -1.214 |
| Conditions 1 and 5 | 3.187 | 2.145 | .636 | -10.525 | 2.892 |
| Conditions 1 and 6 | 9.864 | 2.469 | .004*** | -17.585 | -2.143 |
| Conditions 1 and 7 | 4.462 | 2.376 | .571 | -11.894 | 2.969 |
| Conditions 1 and 8 | 8.372 | 2.302 | .012** | -15.571 | -1.174 |
| Conditions 2 and 3 | 1.050 | 2.302 | 1.000 | -6.149 | 8.249 |
| Conditions 2 and 4 | 2.909 | 2.252 | .899 | -9.951 | 4.133 |
| Conditions 2 and 5 | 1.333 | 2.209 | .999 | -5.575 | 8.242 |
| Conditions 2 and 6 | 4.714 | 2.525 | .578 | -12.610 | 3.181 |
| Conditions 2 and 7 | 0.687 | 2.434 | 1.000 | -6.926 | 8.301 |
| Conditions 2 and 8 | 3.222 | 2.362 | .870 | -10.608 | 4.163 |
| Conditions 3 and 4 | 3.959 | 2.189 | .617 | -10.805 | 2.887 |
| Conditions 3 and 5 | 0.283 | 2.145 | 1.000 | -6.425 | 6.992 |
| Conditions 3 and 6 | 5.764 | 2.469 | .291 | -13.485 | 1.957 |
| Conditions 3 and 7 | 0.362 | 2.376 | 1.000 | -7.794 | 7.069 |
| Conditions 3 and 8 | 4.272 | 2.302 | .585 | -11.471 | 2.926 |
| Conditions 4 and 5 | 4.242 | 2.091 | .471 | -2.298 | 10.782 |
| Conditions 4 and 6 | 1.805 | 2.422 | .995 | -9.380 | 5.767 |
| Conditions 4 and 7 | 3.597 | 2.328 | .780 | -3.683 | 10.877 |
| Conditions 4 and 8 | 0.313 | 2.252 | 1.000 | -7.355 | 6.729 |
| Conditions 5 and 6 | 6.048 | 2.383 | .198 | -13.499 | 1.404 |
| Conditions 5 and 7 | 0.646 | 2.287 | 1.000 | -7.797 | 6.505 |
| Conditions 5 and 8 | 4.556 | 2.209 | .449 | -11.464 | 2.353 |
| Conditions 6 and 7 | 5.402 | 2.593 | .436 | -2.707 | 13.510 |
| Conditions 6 and 8 | 1.492 | 2.525 | .999 | -6.404 | 9.388 |
| Conditions 7 and 8 | 3.910 | 2.434 | .745 | -11.523 | 3.703 |

Table 20 is continued on the next page.



^{***, **, *} Denote two-tailed significance at the .01, .05, and .10 levels respectively.

TABLE 20- Continued

Contrasts of Average Total Change in Management's Reporting Credibility across Experimental Conditions

Table 20 presents the post hoc contrasts of participants' average Total Change in Management's Reporting Credibility across experimental conditions using Tukey's HSD method.

Initial investor assessments of management's reporting credibility is calculated by summing participants' initial responses to six management reporting credibility questions. Pre-test assessments were administered prior to earnings news and the experimental manipulations. **Overall 2** is the investors' final assessment of management's reporting credibility in period 2. Overall 2 is calculated by summing participants' overall responses to six management reporting

Overall 2 is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations in the second period.

Total Change is the total change in investor assessments of management's reporting credibility (Overall 2 less Initial).

Condition 1: Negative News/ Low Management Forthcomingness in Period 1 and Positive News/ Low Management Forthcomingness in Period 2.

Condition 2: Negative News/ Low Management Forthcomingness in Period 1 and Positive News/ High Management Forthcomingness in Period 2.

Condition 3: Negative News/ High Management Forthcomingness in Period 1 and Positive News/ Low Management Forthcomingness in Period 2.

Condition 4: Negative News/ High Management Forthcomingness in Period 1 and Positive News/ High Management Forthcomingness in Period 2.

Condition 5: Positive News/ Low Management Forthcomingness in Period 1 and Negative News/ Low Management Forthcomingness in Period 2.

Condition 6: Positive News/ Low Management Forthcomingness in Period 1 and Negative News/ High Management Forthcomingness in Period 2.

Condition 7: Positive News/ High Management Forthcomingness in Period 1 and Negative News/ Low Management Forthcomingness in Period 2.

Condition 8: Positive News/ High Management Forthcomingness in Period 1 and Negative News/ High Management Forthcomingness in Period 2.



Contrast of Overall and Average Total Change in Management's Reporting Credibility by Consistent Forthcomingness

Panel A: Mean (Standard Deviation) Changes in Management's Reporting Credibility in Period 1

| Contrast | Estimate | <u>S.E.</u> | F-Statistic | <u>p-value</u> |
|-----------------|-----------------|-------------|-------------|----------------|
| 1 and 2 | 3.952 | 1.394 | 8.038 | .006*** |

95% Confidence Interval

| <u>Lower</u> | <u>Upper</u> |
|--------------|--------------|
| 1.175 | 6.729 |

Panel B: Mean (Standard Deviation) Overall Management Reporting Credibility in Period 2

| <u>Contrast</u> | <u>Estimate</u> | <u>S.E.</u> | <u>F-Statistic</u> | <u>p-value</u> |
|-----------------|-----------------|-------------|--------------------|----------------|
| 1 and 2 | 5.225 | 1.544 | 11.454 | .001*** |

95% Confidence Interval

| Lower | <u>Upper</u> |
|-------|--------------|
| 8.301 | 2.149 |

Table 21 presents the post hoc contrasts of Average Total Change (Panel A) in Management's Reporting Credibility as well as Overall Credibility (Panel B) for prospective investors categorized by Consistent Forthcomingness.



Initial investor assessments of management's reporting credibility is calculated by summing participants' initial responses to six management reporting credibility questions. Pre-test assessments were administered prior to earnings news and the experimental manipulations. Overall is the investors' final assessment of management's reporting credibility in period 2. Overall is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations in the second period.

Total Change is the total change in investor assessments of management's reporting credibility (Overall less Initial).

 $^{1\} includes\ participants\ in\ the\ Low/Low\ Forthcomingness,\ Low/High\ Forthcomingness,\ and\ High/Low\ Forthcomingness\ conditions$

² includes participants in the High/High Forthcomingness conditions

^{***, **, *} Denote two-tailed significance at the .01, .05, and .10 levels respectively.

TABLE 22 Willingness to Rely on Subsequent Disclosure

Model: Willingness to Rely = $\alpha_0 + \beta_1$ Consistent Forthcomingness

| Variable | Predicted Sign | В | S.E. | Beta | t | Prob. |
|-------------------------------|-------------------|-------|-------|-------|-------|----------|
| Intercept | | 4.789 | 0.139 | | 34.34 | .000*** |
| Consistent Forthcomingness | + | 0.930 | 0.317 | 0.323 | 2.938 | 0.004*** |
| Adjusted R ² N | .092 76 | | | | | |

Table 22 presents regression analysis examining the influence of Consistent Forthcomingness on Willingness to Rely disclosure.



Willingness to Rely is measured as the response to a post-experimental questionnaire. At the end of the experiment all participants were provided with another voluntary disclosure from management and asked to indicate their willingness to rely on that disclosure.

Consistent Forthcomingness is a dummy variable, 1 if management provided disclosure in both periods 1 and 2, and 0 otherwise.

^{***, **, *} Denote two-tailed significance at the .01, .05, and .10 levels respectively.

TABLE 23 Analysis of Investment Decisions in Period 2

Panel A: Consistent Investment Decisions in Period 2

| | Received no guidance in period 1 | Received guidance in period 1 |
|-----------------|----------------------------------|-------------------------------|
| Invested in | | |
| accordance with | | |
| guidance | 12 | 11 |
| N | 16 | 20 |
| Proportion | 75% | 55% |

Panel B: Investment Decisions in Period 2 given Followed Guidance

| | Received no guidance in period 1 | Received guidance in period 1 | Difference |
|--|----------------------------------|-------------------------------|------------|
| Average agreement in period 2 ^a | 76% | 89% | 13% |
| Average number of shares traded given followed guidance ^b | 7.58 | 8.91 | 1.33 |

Panel C: Absolute Number of Shares Invested in Period 2

Model: Absolute = $\alpha_0 + \beta_1$ Consistent Forthcomingness

| | Predicted | | | | | |
|-------------------------|-----------|-------|------|-------|-------|---------|
| Variable | Sign | В | S.E. | Beta | t | Prob. |
| Intercept | | 7.066 | .347 | | 20.37 | .000*** |
| Consistent | | | | | | |
| Forthcomingness | + | 1.879 | .788 | 0.267 | 2.385 | .020** |
| Adjusted R ² | .059 | | | | | |
| N | 76 | | | | | |

Absolute is the absolute number of shares invested.

^{***, **, *} Denote two-tailed significance at the .01, .05, and .10 levels respectively.



Consistent Forthcomingness is a dummy variable, 1 if management provided disclosure in both periods, and 0 otherwise.

^aAgreement is calculated by taking the number of shares invested in accordance with guidance from -10 to 10, where higher numbers indicate greater agreement, adding 10 and dividing by 20. ^bAverage number of shares is calculated by averaging the number of shares invested in accordance with earnings guidance from 1 to 10, where positive numbers indicate greater agreement with the earnings guidance.

Management's Reporting Credibility as a Function of Management Forthcomingness and News Valence in Period 1

Panel A: ANOVA Results for Change in Management Reporting Credibility

| <u>Variable</u> | <u>df</u> | MSE | F-Statistic | p-value |
|---------------------|-----------|------------|-------------|---------|
| Forthcomingness 1 | 1 | 155.558 | 7.156 | .009*** |
| News Valence 1 | 1 | 198.223 | 9.119 | .003*** |
| Forthcomingness 1 x | | | | |
| News Valence 1 | 1 | 73.439 | 3.378 | .070* |
| | | | | |

Adjusted R² .180 **N** .76

Panel B: ANOVA Results for Overall Management Reporting Credibility

| <u>Variable</u> | | <u>df</u> | MSE | F-Statistic | p-value |
|-------------------------|------|-----------|------------|-------------|---------|
| Forthcomingness 1 | | 1 | 103.258 | 4.574 | .036** |
| News Valence 1 | | 1 | 271.058 | 12.006 | .001*** |
| Forthcomingness 1 x | | | | | |
| News Valence 1 | | 1 | 155.658 | 6.895 | .011** |
| 2 | | | | | |
| Adjusted R ² | .214 | | | | |
| \mathbf{N} | 76 | | | | |

Table 24 presents the ANOVA analysis of Management's Reporting Credibility as a function of Forthcomingness 1, News Valence 1 and Forthcomingness 1 x News Valence1 interaction.

Change 1 is the change in investor assessments of management's reporting credibility. Change is calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment.

Overall 1 is the investors' final assessments of management's reporting credibility. Overall is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations.

Forthcomingness 1 is a dummy variable, 1 if management provided disclosure in period 1 and 0 otherwise.

News Valence 1 is a dummy variable, 1 if earnings news was negative in period 1 and 0 if positive.

Forthcomingness 1 x News Valence 1 is an interaction term between Forthcomingness and News Valence in period 1.



Management's Reporting Credibility as a Function of Management Forthcomingness, News Valence and Profit in Period 2

Panel A: ANCOVA Results for Change in Management Reporting Credibility

| <u>Variable</u> | <u>df</u> | MSE | F-Statistic | <u>p-value</u> |
|-----------------------|-----------|------------|--------------------|----------------|
| Forthcomingness 2 | 1 | 432.397 | 20.700 | .000*** |
| News Valence 2 | 1 | 32.064 | 1.535 | .219 |
| Profit | 1 | 59.514 | 2.849 | .096* |
| Forthcomingness 2 x | | | | |
| News Valence 2 | 1 | 5.966 | 0.286 | .595 |

Adjusted R^2 .251

Panel B: ANCOVA Results for Overall Management Reporting Credibility

| <u>Variable</u> | <u>df</u> | MSE | F-Statistic | <u>p-value</u> |
|-----------------------|-----------|------------|-------------|----------------|
| Forthcomingness 2 | 1 | 514.073 | 16.315 | .000*** |
| News Valence 2 | 1 | 102.988 | 3.268 | .075* |
| Profit | 1 | 46.629 | 1.480 | .228 |
| Forthcomingness 2 x | | | | |
| News Valence 2 | 1 | 7.315 | 0.232 | .631 |

Adjusted R^2 .213

Table 25 presents the ANCOVA analysis of Management's Reporting Credibility as a function of Forthcomingness 2, News Valence 2, Profit and Forthcomingness 2 x News Valence 2 interaction term

Change 2 in the investors' second period change in investors' assessments of management's reporting credibility. Change 2 is calculated by summing participants' final responses to six management reporting credibility questions at the end of period 1. These questions were administered two-weeks after the earnings news and the experimental manipulations in period 1. Two-weeks later all participants provided post-test assessments by answering the identical questions in the post-experimental questionnaire. Similarly, these questions were administered two-weeks after the earnings news and the experimental manipulations in period 2. Change is computed by subtracting the period 1 assessments from the period 2 assessments.

Overall 2 is the investors' final assessments of management's reporting credibility. Overall 2 is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations.

Forthcomingness 2 is a dummy variable, 1 if management provided disclosure in period 2 and 0 otherwise.

News Valence 2 is a dummy variable, 1 if earnings news was negative in period 2 and 0 if positive.

Forthcomingness 2 x News Valence 2 is an interaction term between Forthcomingness and News Valence in period 2.

Profit is the participant's profit (loss) in dollars in period 2.



Contrasts of Average Total Change in Management's Reporting Credibility by Forthcomingness and News Valence in Period 1

Panel A: Contrasts for Change in Management Reporting Credibility in Period 1

95% Confidence Interval

| | | | | Interval | |
|-----------------|-----------------|-------------|----------------|----------|--------------|
| Contrast | Estimate | S.E. | <u>p-value</u> | Lower | <u>Upper</u> |
| 1 and 2 | 6.750 | 1.498 | .000*** | 2.701 | 10.799 |
| 1 and 3 | 0.036 | 1.627 | 1.000 | -4.426 | 4.499 |
| 1 and 4 | 0.934 | 1.535 | .990 | -3.252 | 5.121 |
| 2 and 3 | 6.714 | 1.473 | .000*** | -10.791 | -2.636 |
| 2 and 4 | 5.816 | 1.371 | .001*** | -9.575 | -2.057 |
| 3 and 4 | 0.898 | 1.510 | .991 | -3.315 | 5.110 |

Panel B: Contrasts for Neutral Change in Management Reporting Credibility in Period 1

95% Confidence Interval

| | | | | 111001 | 7 661 |
|-----------------|-----------------|-------------|----------------|---------|--------|
| Contrast | Estimate | S.E. | <u>p-value</u> | Lower | Upper |
| 1 and 2 | 6.342 | 1.377 | .000*** | 2.618 | 10.067 |
| 1 and 3 | 0.296 | 1.497 | 1.000 | -3.805 | 4.396 |
| 1 and 4 | 0.237 | 1.542 | 1.000 | -4.455 | 3.981 |
| 2 and 3 | 6.046 | 1.303 | .000*** | -9.655 | -2.438 |
| 2 and 4 | 6.579 | 1.354 | .000*** | -10.322 | -2.836 |
| 3 and 4 | 0.533 | 1.477 | .999 | -4.643 | 3.578 |

Table 26 presents the contrasts of Change in Management's Reporting Credibility (Panel A) as well as Neutral Change (Panel B) for prospective investors as a function of Forthcomingness and News Valence in Period 1 using Dunnett's T3 method.

Neutral Change was calculated using an average neutral score for each of the six-credibility questions (score of 24).

- 1 includes participants in the High Forthcomingness/ Negative News condition.
- 2 includes participants in the Low Forthcomingness/ Negative News condition.
- 3 includes participants in the High Forthcomingness/ Positive News condition.
- 4 includes participants in the Low Forthcomingness/ Positive News condition.
- ***, **, * Denote two-tailed significance at the .01, .05, and .10 levels respectively.



Change is the average total change in investor assessments of management's reporting credibility. Average Change is calculated averaging participant's period 1 change in assessment regarding management reporting credibility. Period 1 change is computed by taking participants' initial responses to six management reporting credibility questions in period 1. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change in period 1 is computed by subtracting pre-test assessment from post-test assessment.

Contrasts of Average Total Change in Management's Reporting Credibility by Forthcomingness and News Valence in Period 2

Panel A: Contrasts for Change in Management Reporting Credibility in Period 2

95% Confidence Interval

| | | | | IIItti vai | |
|----------|-----------------|-------------|---------|------------|--------------|
| Contrast | Estimate | S.E. | p-value | Lower | <u>Upper</u> |
| 1 and 2 | 5.500 | 1.292 | .001*** | 1.886 | 9.115 |
| 1 and 3 | 0.675 | 1.157 | .992 | -3.901 | 2.551 |
| 1 and 4 | 4.350 | 1.483 | .038** | 0.175 | 8.525 |
| 2 and 3 | 6.175 | 1.428 | .001*** | -10.131 | -2.219 |
| 2 and 4 | 1.150 | 1.703 | .983 | -5.869 | 3.569 |
| 3 and 4 | 5.025 | 1.603 | .021** | 0.5641 | 9.486 |

Panel B: Contrasts for Neutral Change in Management Reporting Credibility in Period 2

95% Confidence

| | | | | Interv | 'ai |
|-----------------|-----------------|-------------|---------|--------|--------------|
| Contrast | Estimate | <u>S.E.</u> | p-value | Lower | Upper |
| 1 and 2 | 6.000 | 1.754 | .010*** | 1.117 | 10.884 |
| 1 and 3 | 3.125 | 2.005 | .544 | -2.467 | 8.717 |
| 1 and 4 | 8.450 | 1.497 | .000*** | 4.250 | 12.651 |
| 2 and 3 | 2.875 | 2.070 | .664 | -8.618 | 2.868 |
| 2 and 4 | 2.450 | 1.584 | .552 | -1.957 | 6.857 |
| 3 and 4 | 5.325 | 1.858 | .043** | 0.115 | 10.535 |

Table 27 presents the contrasts of Change in Management's Reporting Credibility (Panel A) as well as Neutral Change (Panel B) for prospective investors as a function of Forthcomingness and News Valence in Period 2 using Dunnett's T3 method.

Neutral Change was calculated using an average neutral score for each of the six-credibility questions (score of 24).

- 1 includes participants in the High Forthcomingness/ Negative News condition.
- 2 includes participants in the Low Forthcomingness/ Negative News condition.
- 3 includes participants in the High Forthcomingness/ Positive News condition.
- 4 includes participants in the Low Forthcomingness/ Positive News condition.
- ***, **, * Denote two-tailed significance at the .01, .05, and .10 levels respectively.



Change is the average total change in investor assessments of management's reporting credibility. Average Change is calculated averaging participant's period 2 change in assessments regarding management reporting credibility. Change in the second period is calculated by summing participants' final responses to six management reporting credibility questions. These questions were administered subsequent to earnings news and the experimental manipulations during the post-experimental questionnaire. Change in period two is computed by subtracting post-test assessment from period 1 from post-test assessment from period 2.

Management's Reporting Credibility as a Function of Management Forthcomingness and News Valence in Period 1 Excluding Unsuccessful Manipulations

Panel A: ANOVA Results of Change in Management's Reporting Credibility

| <u>Variable</u> | <u>df</u> | MSE | F-Statistic | p-value |
|---------------------|-----------|------------|-------------|---------|
| Forthcomingness 1 | 1 | 151.032 | 7.036 | .011** |
| News Valence 1 | 1 | 206.408 | 9.615 | .003*** |
| Forthcomingness 1 x | | | | |
| News Valence 1 | 1 | 59.023 | 2.750 | .103 |

Adjusted R^2 .233

Panel B: ANOVA Results of Overall Management Reporting Credibility

| <u>Variable</u> | <u>df</u> | MSE | F-Statistic | <u>p-value</u> |
|---------------------|-----------|------------|-------------|----------------|
| Forthcomingness 1 | 1 | 129.886 | 6.065 | .017** |
| News Valence 1 | 1 | 263.660 | 12.312 | .001*** |
| Forthcomingness 1 x | | | | |
| News Valence 1 | 1 | 216.981 | 10.132 | .002*** |

Adjusted R² .320

Table 28 presents the ANOVA analysis of Management's Reporting Credibility as a function of Forthcomingness 1, News Valence 1 and Forthcomingness 1 x News Valence 1 interaction, excluding participants who did not successfully answer both manipulation checks in the post-experimental questionnaire.

Change 1 is the change in investor assessments of management's reporting credibility. Change is calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment

Overall 1 is the investors' final assessments of management's reporting credibility. Overall is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations.

Forthcomingness 1 is a dummy variable, 1 if management provided disclosure in period 1 and 0 otherwise

News Valence 1 is a dummy variable, 1 if earnings news was negative in period 1 and 0 if positive.

Forthcomingness 1 x News Valence 1 is an interaction term between Forthcomingness and News Valence in period 1.



Management's Reporting Credibility as a Function of Management Forthcomingness and News Valence in Period 2 Excluding Unsuccessful Manipulations

Panel A: ANOVA Results of Change in Management's Reporting Credibility

| <u>Variable</u> | <u>df</u> | MSE | F-Statistic | p-value |
|---------------------|-----------|---------|-------------|---------|
| Forthcomingness 2 | 1 | 414.987 | 18.099 | .000*** |
| News Valence 2 | 1 | 20.480 | 0.893 | .349 |
| Profit | 1 | 48.616 | 2.120 | .151 |
| Forthcomingness 2 x | | | | |
| News Valence 2 | 1 | 0.021 | 0.001 | .976 |

Adjusted R^2 .285

Panel B: ANOVA Results of Overall Management Reporting Credibility

| Variable | <u>df</u> | MSE | F-Statistic | p-value |
|---------------------|-----------|---------|-------------|---------|
| Forthcomingness 2 | 1 | 439.816 | 11.678 | .001** |
| News Valence 2 | 1 | 126.768 | 3.366 | .072* |
| Profit | 1 | 45.848 | 1.217 | .275 |
| Forthcomingness 2 x | | | | |
| News Valence 2 | 1 | 12.806 | 0.340 | .562 |

Adjusted R^2 .184

Table 29 presents the ANCOVA analysis of Management's Reporting Credibility as a function of Forthcomingness 2, News Valence 2, Profit and Forthcomingness 2 x News Valence 2 interaction term, excluding participants who did not successfully answer both manipulation checks in the post-experimental questionnaire.

Change 2 in the investors' second period change in investors' assessments of management's reporting credibility. Change 2 is calculated by summing participants' final responses to six management reporting credibility questions at the end of period 1. These questions were administered two-weeks after the earnings news and the experimental manipulations in period 1. Two-weeks later all participants provided post-test assessments by answering the identical questions in the post-experimental questionnaire. Similarly, these questions were administered two-weeks after the earnings news and the experimental manipulations in period 2. Change is computed by subtracting the period 1 assessments from the period 2 assessments.

Overall 2 is the investors' final assessments of management's reporting credibility. Overall 2 is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations.

Forthcomingness 2 is a dummy variable, 1 if management provided disclosure in period 2 and 0 otherwise.

News Valence 2 is a dummy variable, 1 if earnings news was negative in period 2 and 0 if positive.

Forthcomingness 2 x News Valence 2 is an interaction term between Forthcomingness and News Valence in period 2.

Profit is the participant's profit (loss) in dollars in period 2.



Alternative Models of Change in Management's Reporting Credibility in Period 1

Model 1: Change $1 = \alpha_0 + \beta_1$ Forthcomingness $1 + \beta_2$ News Valence $1 + \beta_3$ Forthcomingness $1 \times N$ ews Valence $1 + \beta_4$ Work Experience Model 2: Change $1 = \alpha_0 + \beta_1$ Forthcomingness $1 + \beta_2$ News Valence $1 + \beta_3$ Forthcomingness $1 \times N$ ews Valence $1 + \beta_4$ Investing Experience Model 2: Change $1 = \alpha_0 + \beta_1$ Forthcomingness $+ \beta_2$ News Valence $1 + \beta_3$ Forthcomingness $+ \beta_2$ News Valence $+ \beta_3$ Forthcomingness $+ \beta_4$ Gender

| Variable | Model 1 | Model 2 | Model 3 | |
|-------------------------|-----------|-----------|----------|--|
| Intercept | 0.386 | 0.381 | 0.368 | |
| Forthcomingness 1 | 2.896*** | 3.268*** | 2.763** | |
| News Valence 1 | -3.151*** | -3.302*** | -2.768** | |
| Forthcomingness 1 x | 3.975* | 3.525* | 4.516** | |
| News Valence 1 | | | | |
| Work Experience | 1.380 | | | |
| Investing Experience | | 2.774*** | | |
| Gender | | | 1.756 | |
| 2 | | | | |
| Adjusted R ² | .187 | .237 | .196 | |

Table 30 shows the results of regression analysis used to examine the relationship between Change as a function of the experimental manipulations controlling for Work Experience (Model 1), Profit (Model 2), and Gender (Model 3).

Change 1 is the change in investor assessments of management's reporting credibility. Change is calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment.

Forthcomingness 1 is a dummy variable, 1 if management provided disclosure in period 1 and 0 otherwise

News Valence 1 is a dummy variable, 1 if earnings news was negative in period 1 and 0 if positive.

Forthcomingness 1 x News Valence 1 is an interaction term between Forthcomingness and News Valence in period 1.

Work Experience is the participants answer to the following questions from the post-experimental questionnaire: "Do you have any prior business work experience?" and "If yes, approximately how many years?"

Investing Experience investing experience is a dummy variable capturing the participants' response to the following question from the post-experimental questionnaire: "Have you ever made investments in the common stock of a company?"

Profit is the dollar profit (loss) for participants restricted between (\$8) and \$8.

Gender is a dummy variable coded as 1 for males and 0 for females.



Alternative Models of Change in Management's Reporting Credibility in Period 2

Model 1: Change $2 = \alpha_0 + \beta_1$ Forthcomingness $2 + \beta_2$ News Valence $2 + \beta_3$ Forthcomingness $2 \times N$ ews Valence $2 + \beta_4$ Work Experience Model 2: Change $2 = \alpha_0 + \beta_1$ Forthcomingness $2 + \beta_2$ News Valence $2 + \beta_3$ Forthcomingness $2 \times N$ ews Valence $2 + \beta_4$ Investing Experience Model 2: Change $2 = \alpha_0 + \beta_1$ Forthcomingness $2 + \beta_2$ News Valence $2 + \beta_3$ Forthcomingness $2 \times N$ ews Valence $2 + \beta_4$ Gender

| Variable | Model 1 | Model 2 | Model 3 | |
|-------------------------|----------|----------|----------|--|
| Intercept | 0.213 | 0.220 | 0.220 | |
| Forthcomingness 2 | 5.385*** | 5.279*** | 5.262*** | |
| News Valence 2 | -0.869 | -0.936 | -0.680 | |
| Forthcomingness 2 x | 0.594 | 0.708 | 0.697 | |
| News Valence 2 | | | | |
| Work Experience | -0.792 | | | |
| Profit | | -0.809 | | |
| Gender | | | -0.935 | |
| | | | | |
| Adjusted R ² | .227 | .227 | .229 | |

Table 31 shows the results of regression analysis used to examine the relationship between Change as a function of the experimental manipulations controlling for Work Experience (Model 1), Profit (Model 2), and Gender (Model 3).

Change 2 in the investors' second period change in investors' assessments of management's reporting credibility. Change 2 is calculated by summing participants' final responses to six management reporting credibility questions at the end of period 1. These questions were administered two-weeks after the earnings news and the experimental manipulations in period 1. Two-weeks later all participants provided post-test assessments by answering the identical questions in the post-experimental questionnaire. Similarly, these questions were administered two-weeks after the earnings news and the experimental manipulations in period 2. Change is computed by subtracting the period 1 assessments from the period 2 assessments.

Forthcomingness 2 is a dummy variable, 1 if management provided disclosure in period 2 and 0 otherwise.

News Valence 2 is a dummy variable, 1 if earnings news was negative in period 2 and 0 if positive.

Forthcomingness 2 x News Valence 2 is an interaction term between Forthcomingness and News Valence in period 2.

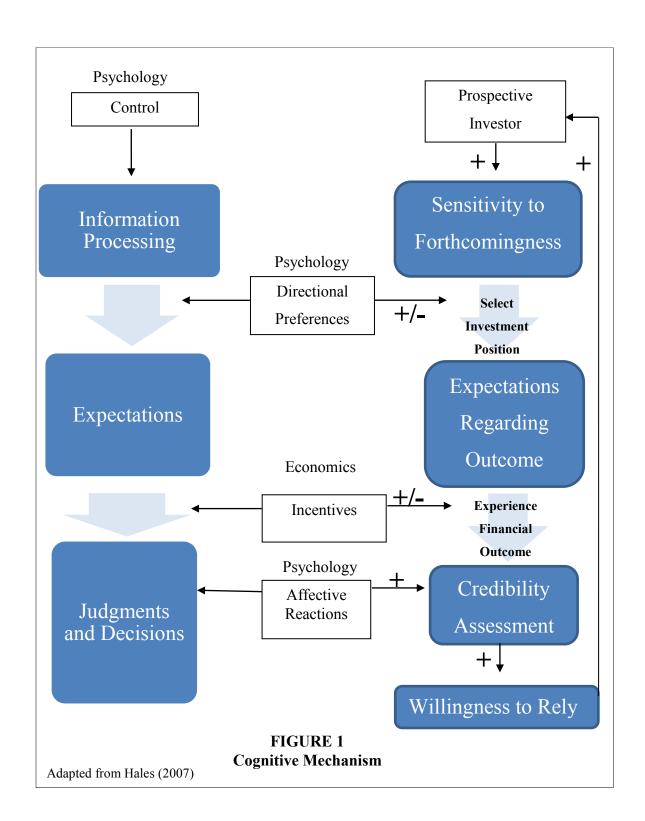
Work Experience is the participants answer to the following questions from the post-experimental questionnaire: "Do you have any prior business work experience?" and "If yes, approximately how many years?"

Investing Experience investing experience is a dummy variable capturing the participants' response to the following question from the post-experimental questionnaire: "Have you ever made investments in the common stock of a company?"

Profit is the dollar profit (loss) for participants restricted between (\$8) and \$8.

Gender is a dummy variable coded as 1 for males and 0 for females.







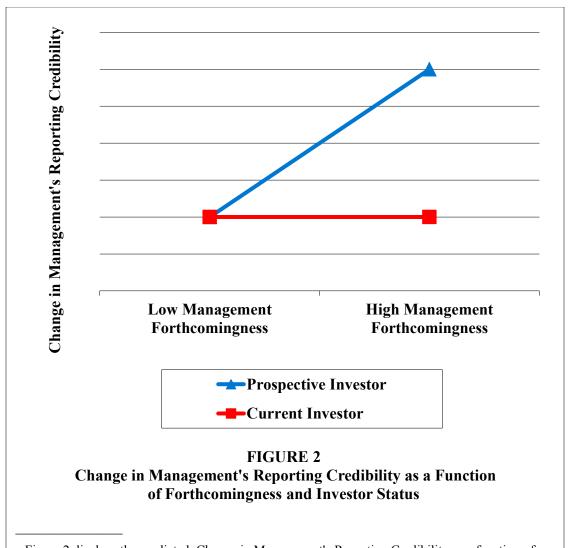
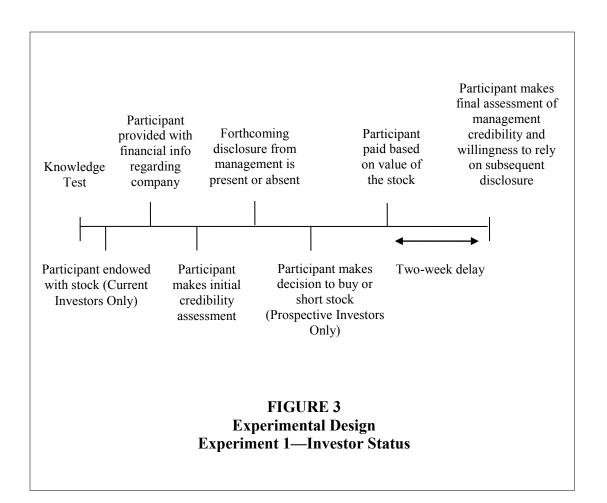


Figure 2 displays the predicted Change in Management's Reporting Credibility as a function of Forthcomingness and Investor Status. Higher values suggest increases in reporting credibility.



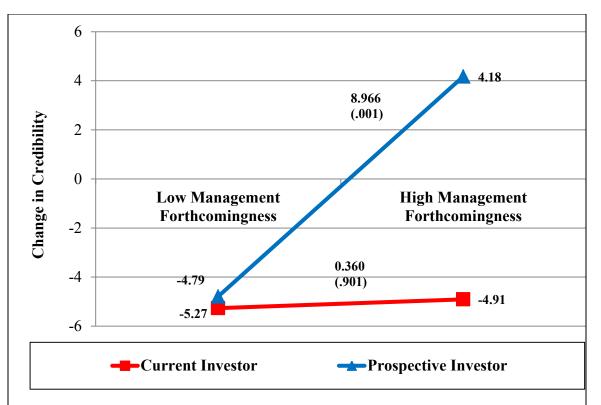


Figure 4
Change in Management's Reporting Credibility as a Function of Forthcomingness and Investor Status

Figure 4 displays the mean Change in Management's Reporting Credibility as a function of Forthcomingness and Investor Status. Figure 4 also shows the simple slopes and related statistical significance (in parentheses). Higher values suggest increases in reporting credibility. **Change** is the change in investor assessments of management's reporting credibility; calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment. **Forthcomingness** is a dummy variable, 1 if management provided disclosure and 0 otherwise. **Investor Status** is a dummy variable, 1 if investor is a prospective investor and 0 if a current investor.



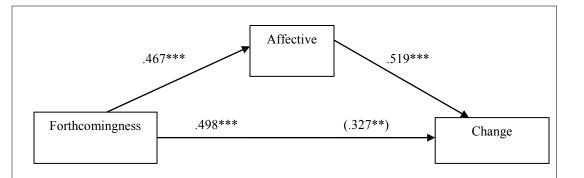


FIGURE 5

Process Analysis—Determinants of Change in Prospective Investors' Assessments of Management's Reporting Credibility

Figure 5 reports the standardized regression coefficients for a path analysis examining the determinants of changes in managements' reporting credibility for prospective investors. Parentheses are used to report the standardized regression coefficient of changes in credibility regressed on forthcomingness after controlling for affective reaction.

Change is the change in investor assessments of management's reporting credibility; calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment. Forthcomingness is a dummy variable, 1 if management provided disclosure and 0 otherwise. Affective is the participants' affective reaction to forthcomingness; computed by asking participants to indicate the direction and magnitude of their feelings towards the presence or absence of voluntary disclosure by management; values were recoded so that higher values indicate positive affect.



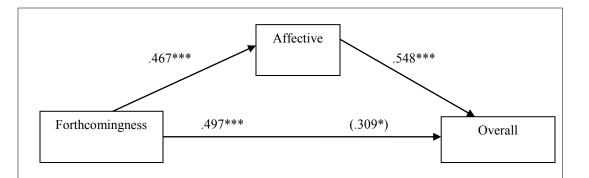


FIGURE 6

Process Analysis—Determinants of Overall Management Reporting Credibility for Prospective Investors

Figure 6 reports the standardized regression coefficients for a path analysis examining the determinants of overall management reporting credibility. Parentheses are used to report the standardized regression coefficient of changes in credibility regressed on forthcomingness after controlling for affective reaction.

Overall is the investors' final assessment of management's reporting credibility. Post is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations.

Forthcomingness is a dummy variable, 1 if management provided disclosure and 0 otherwise. **Affective** is the participants' affective reaction to forthcomingness; computed by asking participants to indicate the direction and magnitude of their feelings towards the presence or absence of voluntary disclosure by management; values were recoded so that higher values indicate positive affect.



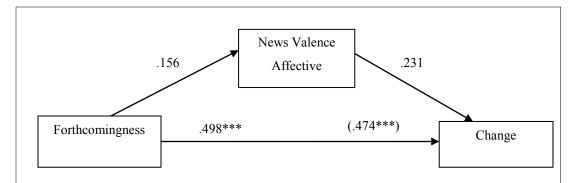


FIGURE 7

Process Analysis—Determinants of Changes in Prospective Investors' Assessments of Management Reporting Credibility

Figure 7 reports the standardized regression coefficients for a path analysis examining the determinants of changes in managements' reporting credibility for prospective investors. Parentheses are used to report the standardized regression coefficient of changes in credibility regressed on forthcomingness after controlling for affective reaction to news valence.

Change is the change in investor assessments of management's reporting credibility; calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment.

Forthcomingness is a dummy variable, 1 if management provided disclosure and 0 otherwise.

News Valence Affective is the participants' affective reaction to forthcomingness; computed by asking participants to indicate the direction and magnitude of their feelings towards the difference between actual earnings and the analyst consensus earnings forecast; values were recoded so that higher values indicate positive affect.



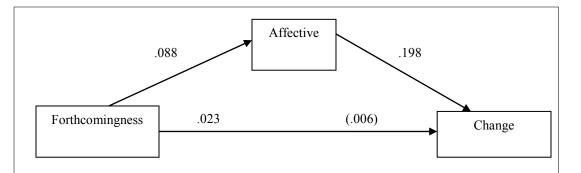


FIGURE 8

Process Analysis—Determinants of Changes in Current Investors' Assessments of Management Reporting Credibility

Figure 8 reports the standardized regression coefficients for a path analysis examining the determinants of changes in managements' reporting credibility for current investors. Parentheses are used to report the standardized regression coefficient of changes in credibility regressed on forthcomingness after controlling for affective reaction.

Change is the change in investor assessments of management's reporting credibility; calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment. Forthcomingness is a dummy variable, 1 if management provided disclosure and 0 otherwise. Affective is the participants' affective reaction to forthcomingness; computed by asking participants to indicate the direction and magnitude of their feelings towards the presence or absence of voluntary disclosure by management; values were recoded so that higher values indicate positive affect.



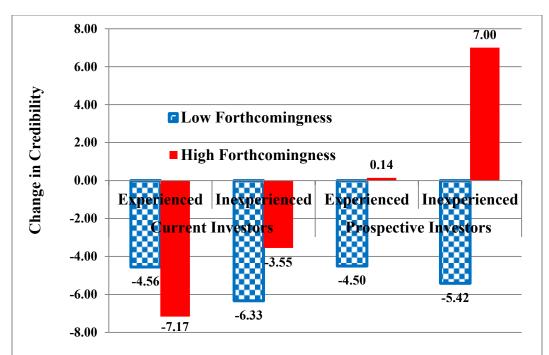


Figure 9
Changes in Management's Reporting Credibility as a Function of Forthcomingness, Investor Status, and Investing Experience

Figure 9 displays the mean Change in Management's Reporting Credibility as a function of Forthcomingness, Investor Status, and Investing Experience. Higher values suggest increases in reporting credibility. **Change** is the change in investor assessments of management's reporting credibility; calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment. **Forthcomingness** is a dummy variable, 1 if management provided disclosure and 0 otherwise. **Investor Status** is a dummy variable, 1 if investor is a prospective investor and 0 if a current investor. **Investing Experience** is a dichotomous variable coded as 1 if the participant answered yes to one of the following two questions from the post-experimental questionnaire: "Have you ever made investments in the common stock of a company?" and "Have you ever made investments in a common stock mutual fund?"



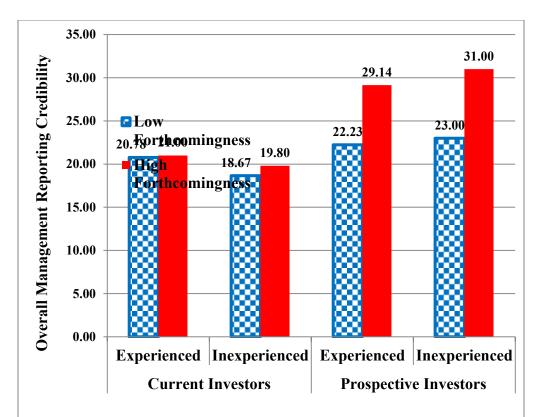


Figure 10 Overall Management Reporting Credibility as a Function of Forthcomingness, Investor Status, and Investing Experience

Figure 10 displays the mean Overall Management'Reporting Credibility as a function of Forthcomingness, Investor Status, and Investing Experience. Higher values suggest higher reporting credibility. **Overall** is computed by using the participants post-test management credibility assessments. **Forthcomingness** is a dummy variable, 1 if management provided disclosure and 0 otherwise. **Investor Status** is a dummy variable, 1 if investor is a prospective investor and 0 if a current investor. **Investing Experience** is a dichotomous variable coded as 1 if the participant answered yes to one of the following two questions from the post-experimental questionnaire: "Have you ever made investments in the common stock of a company?" and "Have you ever made investments in a common stock mutual fund?"



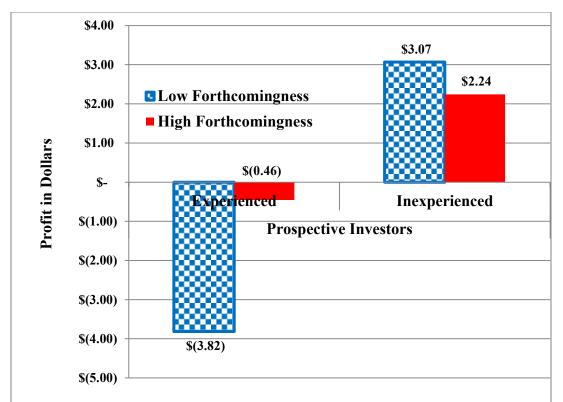


Figure 11
Prospective Investor Profits as a Function of Forthcomingness and Investing Experience

Figure 11 displays the mean Profit (in dollars) for prospective investors conditioned on Investing Experience. Current investors were omitted because all current investors lose \$8, irrespective of Investing Experience. Forthcomingness is a dummy variable, 1 if management provided disclosure and 0 otherwise. Investor Status is a dummy variable, 1 if investor is a prospective investor and 0 if a current investor. Investing Experience is a dichotomous variable coded as 1 if the participant answered yes to one of the following two questions from the post-experimental questionnaire: "Have you ever made investments in the common stock of a company?" and "Have you ever made investments in a common stock mutual fund?"



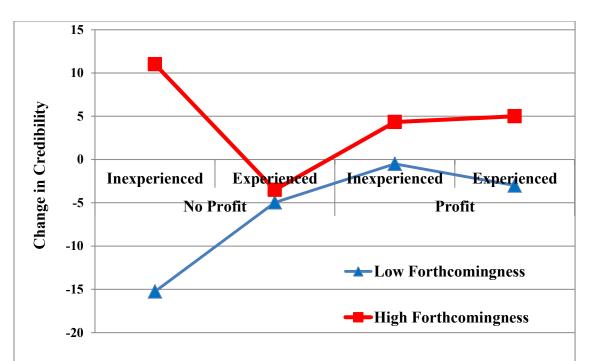
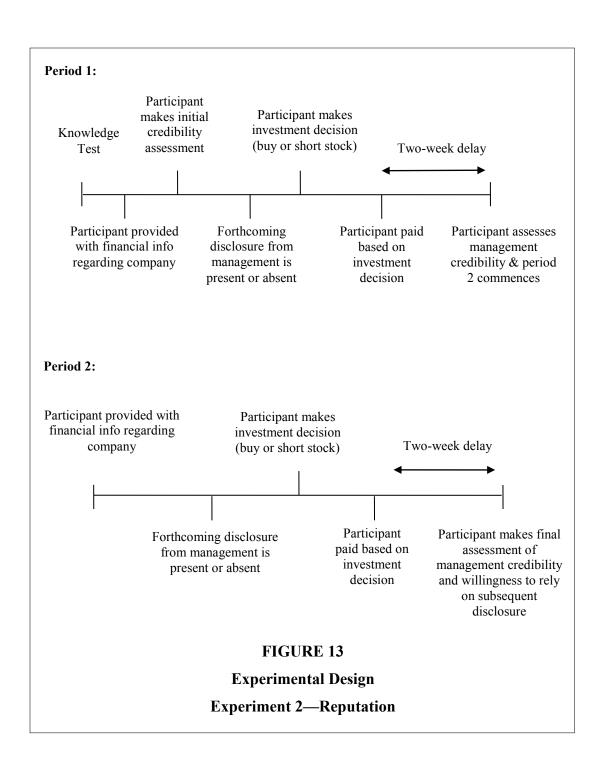


Figure 12
Prospective Investor Change in Management's Reporting Credibility as a Function of Forthcomingness, Profit, and Investing Experience

Figure 12 displays the mean Change in Management's Reporting Credibility as a function of Forthcomingness, Profit, and Investing Experience for prospective investors. Higher values suggest increases in reporting credibility. **Change** is the change in investor assessments of management's reporting credibility; calculated by summing participants' initial responses to six management reporting credibility questions. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change is computed by subtracting pre-test assessment from post-test assessment. **Forthcomingness** is a dummy variable, 1 if management provided disclosure and 0 otherwise. **Profit** is a dichotomous variable, coded as 1 if the investor earned a profit and 0 otherwise. **Investing Experience** is a dichotomous variable coded as 1 if the participant answered yes to one of the following two questions from the post-experimental questionnaire: "Have you ever made investments in the common stock of a company?" and "Have you ever made investments in a common stock mutual fund?"

- 1 includes participants in the low Forthcomingness with no Profit and no Investing Experience
- 2 includes participants in the low Forthcomingness with no Profit and Investing Experience
- 3 includes participants in the low Forthcomingness with Profit and no Investing Experience
- 4 includes participants in the low Forthcomingness with Profit and Investing Experience
- 5 includes participants in the high Forthcomingness with no Profit and no Investing Experience
- 6 includes participants in the high Forthcomingness with no Profit and Investing Experience
- 7 includes participants in the high Forthcomingness with Profit and no Investing Experience
- 8 includes participants in the high Forthcomingness with Profit and Investing Experience







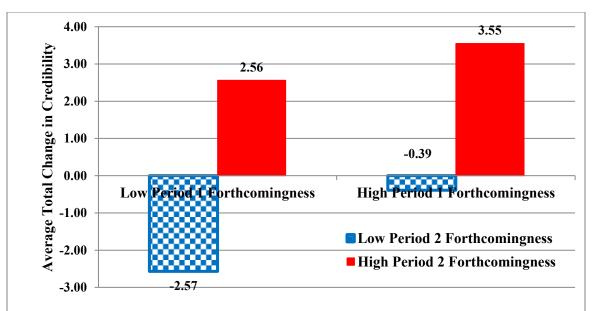


FIGURE 14 Average Total Change in Management's Reporting Credibility as a Function of Forthcomingness

Figure 14 displays the mean Total Change in Management's Reporting Credibility as a function of Forthcomingness in Period 1 and Period 2. Higher values suggest larger average change in reporting credibility.

Total Change is the average total change in investor assessments of management's reporting credibility. Total Change is calculated by averaging participant's period 1 and period 2 change in assessment regarding management reporting credibility. Period 1 change is computed by taking participants' initial responses to six management reporting credibility questions in period 1. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change in period 1 is computed by subtracting pre-test assessment from post-test assessment. Period 2 change is calculated by summing participants' final responses to six management reporting credibility questions at the end of period 1. These questions were administered two-weeks after the earnings news and the experimental manipulations in period 1. Two-weeks later all participants provided post-test assessments by answering the identical questions in the post-experimental questionnaire. Similarly, these questions were administered two-weeks after the earnings news and the experimental manipulations in period 2. Change is computed by subtracting the period 1 assessments from the period 2 assessments.



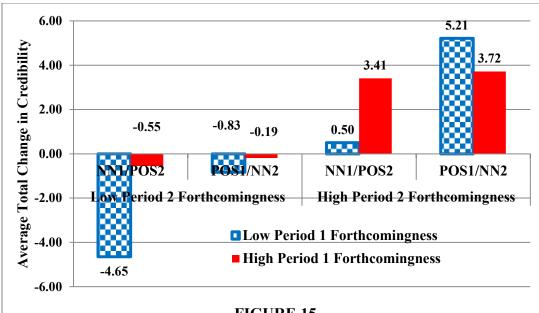


FIGURE 15 Average Change in Management's Reporting Credibility by Experimental Condition

Figure 15 displays the mean Total Change in Management's Reporting Credibility as a function of Forthcomingness and News Valence. Higher values suggest larger average change in reporting credibility.

Total Change is the average total change in investor assessments of management's reporting credibility. Total Change is calculated averaging participant's period 1 and period 2 change in assessment regarding management reporting credibility. Period 1 change is computed by taking participants' initial responses to six management reporting credibility questions in period 1. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change in period 1 is computed by subtracting pre-test assessment from post-test assessment. Period 2 change is calculated by summing participants' final responses to six management reporting credibility questions at the end of period 1. These questions were administered two-weeks after the earnings news and the experimental manipulations in period 1. Two-weeks later all participants provided post-test assessments by answering the identical questions in the post-experimental questionnaire. Similarly, these questions were administered two-weeks after the earnings news and the experimental manipulations in period 2. Change is computed by subtracting the period 1 assessments from the period 2 assessments.

NN1 (2) indicates participants received negative earnings news in period 1 (2).

POS1 (2) indicates participants received positive earnings news in period 1 (2).



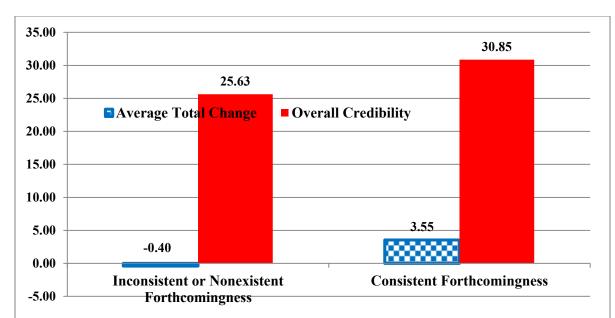


FIGURE 16 Average Overall and Total Change in Management's Reporting Credibility

Figure 16 displays the mean Total Change in Management's Reporting Credibility as well as Overall Credibility as a function of Consistent Forthcomingness. Higher values suggest higher credibility.

Total Change is the average total change in investor assessments of management's reporting credibility. Total Change is calculated by averaging participant's period 1 and period 2 change in assessment regarding management reporting credibility. Period 1 change is computed by taking participants' initial responses to six management reporting credibility questions in period 1. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessment from post-test assessment. Period 2 change is calculated by summing participants' final responses to six management reporting credibility questions at the end of period 1. These questions were administered two-weeks after the earnings news and the experimental manipulations in period 1. Two-weeks later all participants provided post-test assessments by answering the identical questions in the post-experimental questionnaire. Similarly, these questions were administered two-weeks after the earnings news and the experimental manipulations in period 2. Change is computed by subtracting the period 1 assessments from the period 2 assessments. Overall is computed by using the participants final post-test management credibility assessments from the post-experimental questionnaire.



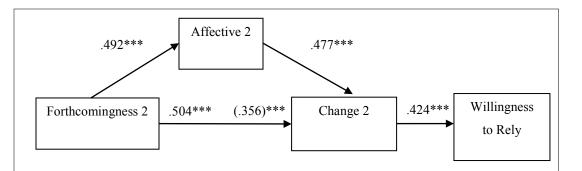


FIGURE 17

Process Analysis—Determinants of Change in Investors' Assessments Regarding Management's Reporting Credibility and Willingness to Rely on Subsequent Disclosure

Figure 17 reports the standardized regression coefficients for a path analysis examining the determinants of changes in managements' reporting credibility and its influence on willingness to rely on subsequent disclosure. Parentheses are used to report the standardized regression coefficient of changes in credibility regressed on forthcomingness in period 2, after controlling for affective reaction.

Willingness to Rely is measured as the response to a post-experimental questionnaire. At the end of the experiment all participants were provided with another voluntary disclosure from management and asked to indicate their willingness to rely on that disclosure.

Change 2 is the investors' second period assessments of management's reporting credibility is calculated by summing participants' final responses to six management reporting credibility questions at the end of period 1. These questions were administered two-weeks after the earnings news and the experimental manipulations in period 1. Two-weeks later all participants provided post-test assessments by answering the identical questions in the post-experimental questionnaire. Similarly, these questions were administered two-weeks after the earnings news and the experimental manipulations in period 2. Change is computed by subtracting the period lassessments from the period 2 assessments.

Forthcomingness 2 is a dummy variable, 1 if management provided disclosure in period 2 and 0 otherwise.

Affective 2 is the participant's affective reaction to forthcomingness, which is computed by asking participants to indicate the direction and magnitude of their feelings towards the presence or absence of voluntary disclosure by management; values were recoded so that higher values indicate positive affect.

***, **, * Denote two-tailed significance at the .01, .05, and .10 levels respectively.



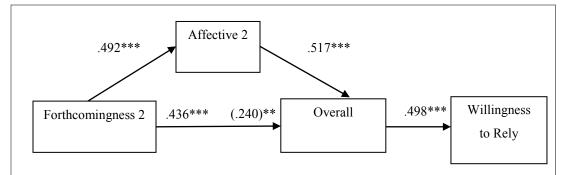


FIGURE 18
Process Analysis—Determinants of Overall Management Reporting
Credibility and Willingness to Rely on Subsequent Disclosure

Figure 18 reports the standardized regression coefficients for a path analysis examining the determinants of Overall management reporting credibility and its influence on willingness to rely on subsequent disclosure. Parentheses are used to report the standardized regression coefficient of changes in credibility regressed on forthcomingness in period 2, after controlling for affective reaction.

Willingness to Rely is measured as the response to a post-experimental questionnaire. At the end of the experiment all participants were provided with another voluntary disclosure from management and asked to indicate their willingness to rely on that disclosure.

Overall is computed by using the participant's final post-test management credibility assessments from the post-experimental questionnaire.

Forthcomingness 2 is a dummy variable, 1 if management provided disclosure in period 2 and 0 otherwise.

Affective 2 is the participant's affective reaction to forthcomingness, which is computed by asking participants to indicate the direction and magnitude of their feelings towards the presence or absence of voluntary disclosure by management; values were recoded so that higher values indicate positive affect.

***, **, * Denote two-tailed significance at the .01, .05, and .10 levels respectively.



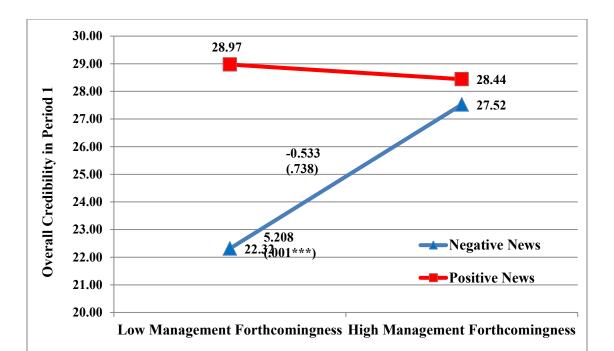


FIGURE 19 Overall Management Reporting Credibility as a Function of Forthcomingness and News Valence in Period 1

Figure 19 displays the mean Overall Management Reporting Credibility in period 1 as a function of Forthcomingness 1 and News Valence 1. Figure 19 also shows the unstandardized simple slopes and related statistical significance (in parentheses).

Overall is the investors' final assessments of management's reporting credibility. Overall is calculated by summing participants' overall responses to six management reporting credibility questions. These questions were administered two-weeks subsequent to earnings news and the experimental manipulations.

Forthcomingness 1 is a dummy variable, 1 if management provided disclosure in period 1 and 0 otherwise.

News Valence 1 is a dummy variable, 1 if earnings news was negative in period 1 and 0 if positive. ***, ** Denote two-tailed significance at the .01, .05, and .10 levels respectively.



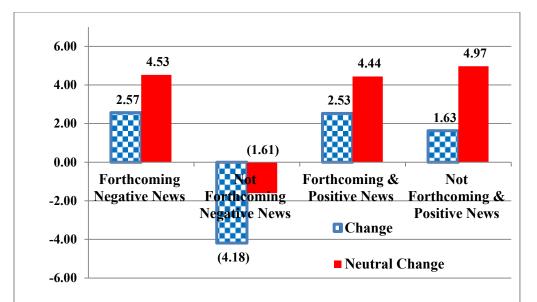


Figure 20
Average Change in Management Reporting Credibility
for Period 1

Figure 20 displays the mean Change and Neutral Change in Management's Reporting Credibility as a function of Forthcomingness and News Valence in Period 1. Higher values suggest larger average change in reporting credibility in period 1.

Change is the average total change in investor assessments of management's reporting credibility. Average Change is calculated averaging participant's period 1 change in assessment regarding management reporting credibility. Period 1 change is computed by taking participants' initial responses to six management reporting credibility questions in period 1. These questions were administered prior to earnings news and the experimental manipulations. Two-weeks later all participants provided post-test assessments by answering the identical questions. Change in period 1 is computed by subtracting pre-test assessment from post-test assessment.

Neutral Change was calculated using an average neutral score for each of the six-credibility questions (score of 24).



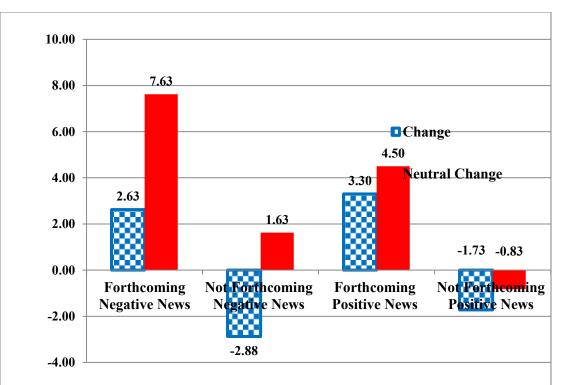


Figure 21
Average Change in Management Reporting Credibility in Period 2

Figure 21 displays the mean Change and Neutral Change in Management's Reporting Credibility as a function of Forthcomingness and News Valence in Period 2. Higher values suggest larger average change in reporting credibility in period 2.

Change is the average total change in investor assessments of management's reporting credibility. Average Change is calculated averaging participant's period 2 change in assessments regarding management reporting credibility. Change in the second period is calculated by summing participants' final responses to six management reporting credibility questions. These questions were administered subsequent to earnings news and the experimental manipulations during the post-experimental questionnaire. Change in period two is computed by subtracting post-test assessment from period 1 from post-test assessment from period 2.

Neutral Change was calculated using an average neutral score for each of the six-credibility questions (score of 24).



APPENDICES

APPENDIX A

6.1 Experiment One—Experimental Instrument

Each of the following pages was provided to all participants unless indicated otherwise at the top of the page.

Note: Page numbers have been added to aid in the review process; the materials used in the experiment did not contain page numbers.



GENERAL INSTRUCTIONS

Thank you for participating in this study. The purpose of the study is to investigate how investors make judgments and decisions. Your participation today should take approximately 25-35 minutes. At the conclusion of the session, you will receive cash based on the value of an investment which is expected to range between \$0 and \$20. There is a second part of this study that will take place in two weeks. The second part will require only 15-20 minutes to complete. Those people who participate in **BOTH** parts of the study will be entered into a \$500 cash lottery.

Should you have any questions during the study, please do not hesitate to ask. However, please do not discuss this study with other students until both parts of the study have been completed. Discussing the study with others before Part 2 is completed may invalidate the results of the study.

Your input is very important to this study. Thanks again for your participation.



SPECIFIC INSTRUCTIONS

For purposes of this study, you are asked to *consider making an investment in* (assume that you are an investor that currently owns) the common stock of DentRite, Inc., a dental supply company. (Specifically, you own ten DentRite shares that you purchased for \$10). You will be provided with background information and selected financial information about DentRite. Based on this information, you will be asked to provide several judgments and decisions about DentRite and its management. The case information is not intended to include all the information that would be available if you were evaluating the common stock of DentRite, Inc. However, for purposes of this study, base your judgments and decisions on the information provided. At the end of this session you will be paid based on your investment decision and the market price of DentRite shares at that time.

The case materials contain several sets of instructions detailing how to proceed during the study. The instructions will be shaded. Please read these instructions carefully.



BACKGROUND INFORMATION

Below is the company's most recent annual report. Some background information and financial data from that annual report are shown on the following two pages. Please review this information before moving on to the next part of the case.

DentRite, Inc.

Company Background

DentRite, Inc. is a Missouri-based company that develops and manufactures equipment used by dentists and dental hygienists. The Company's primary products include prophylaxis products (used in teeth cleaning and polishing procedures) and dental X-ray equipment. The Company markets its products to dental professionals using a network of medical and dental distributors. The products are sold in North America, as well as several key international markets, including Europe, South America, Central America, and the Pacific Rim.

Products

The Company's engineers and chemists are focused on developing innovative professional dental products and are actively involved in improving the Company's manufacturing processes. Frequently, these products are designed and developed in response to needs articulated to the Company by dental professionals.

Prophylaxis angles, cups, and brushes. Prophy products consist of two components – an angle that extends from a dental handpiece and a rubber cup or brush which is attached to the angle and performs the cleaning function. During the prophylaxis process, the cup or brush is filled with abrasive paste, which is applied to the teeth as it rotates. The Company produces and markets a number of different disposable prophy angles, cups and brushes.

X-ray equipment. The company manufactures and markets a line of dental X-ray equipment under the Panorama brand name. This equipment is used by dentists and orthodontists to locate and predict the movement of teeth in order to fit braces and other orthodontia. The products also are used by oral surgeons to detect pathology and to determine bone and teeth alignment before and after surgery.



BACKGROUND INFORMATION (continued)

DentRite, Inc. - Annual Financial Information

| | Fiscal Ye | Fiscal Year Ended December 31 | | |
|---|-----------|-------------------------------|----------|--|
| | 2009 | 2008 | 2007 | |
| Net Sales | \$42,712 | \$36,595 | \$24,986 | |
| Cost of Goods Sold | 18,825 | 16,467 | 10,129 | |
| Gross profit | 23,887 | 20,128 | 14,857 | |
| Selling, general, and administrative expenses | 12,195 | 10,623 | 7,333 | |
| Income from operations | 11,692 | 9,505 | 7,524 | |
| Interest expense and other, net | (32) | (326) | 876 | |
| Provision for income taxes | 4,572 | 3,782 | 2,538 | |
| Net income | \$ 7,152 | \$ 6,049 | \$ 4,110 | |
| Earnings per Share | \$1.88 | \$1.64 | \$1.28 | |

| | As of December 31 | |
|--|-------------------|----------|
| | 2009 | 2008 |
| Assets | | |
| Total current assets | \$14,438 | \$14,486 |
| Long term assets | 45,898 | 40,258 |
| Total assets | \$60,336 | \$54,744 |
| Liabilities and Stockholders' Equity | | |
| Current liabilities | \$ 5,000 | \$ 4,686 |
| Long term debt | 3,199 | 1,857 |
| Stockholders' equity | 52,137 | 48,201 |
| Total liabilities and stockholders' equity | \$60,336 | \$54,744 |



BACKGROUND INFORMATION (continued)

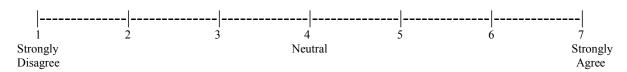
After reviewing the information previously shown, you decided to do some more searching. Specifically, you obtained the following information about DentRite from an online financial database.

- There are currently seven Wall Street analysts covering DentRite. The consensus analyst earnings forecast for DentRite for the first quarter of 2010 is \$0.52.
- <u>Before actual earnings are announced</u>, companies sometimes inform investors that they expect actual earnings to differ from the consensus analyst earnings forecast. In the dental supply industry, such disclosures about unexpected earnings are provided approximately 50% of the time.

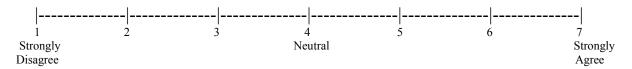


Indicate the degree to which you agree or disagree with each of the following statements by placing a slash mark (/) on the scales. Questions 1 through 3 concern your beliefs and feelings about DentRite management's **competence in managing DentRite**.

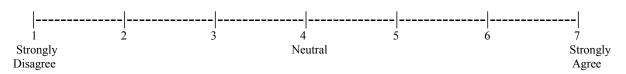
1. I believe that DentRite management is very competent at running the company.



2. I believe that DentRite management is expert at running their company.

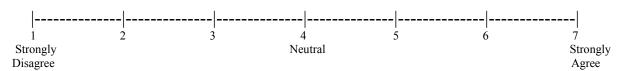


3. I believe that DentRite management is very intelligent.

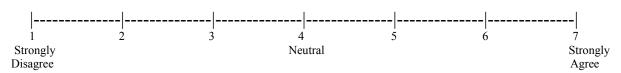


Questions 4 through 6 concern your beliefs and feelings about DentRite management's **financial forecasting competence.**

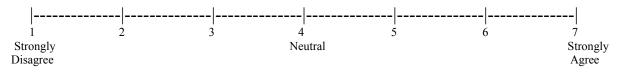
4. I believe that DentRite management is very competent at providing financial disclosures.



5. I believe that DentRite management has little knowledge of the factors involved in providing useful disclosures.



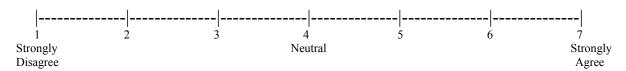
6. I believe that few people are as qualified as DentRite management to provide useful financial disclosures about DentRite.



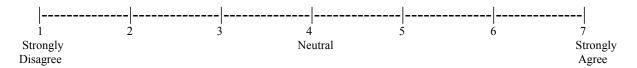


Questions 7 through 10 concern your beliefs and feelings about DentRite management's **trustworthiness**.

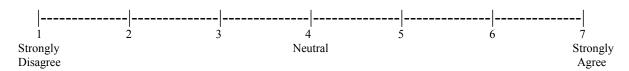
7. I believe that DentRite management is very trustworthy.



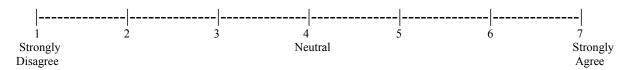
8. I believe that DentRite management is very honest.



9. I believe that DentRite management may not be truthful in their financial disclosures.



10. I would feel safe having my dentist order his or her dental supplies from DentRite.



Press Release

Additionally, DentRite management voluntarily issued the following press release:

For immediate release:

DENTRITE, INC. EXPECTS EARNINGS OF \$0.44 FOR THE FIRST QUARTER OF 2010

St. Louis, Missouri—In a presentation to industry analysts today, DentRite, Inc. CEO Murray Levine indicated that the company currently expects earnings per share will be **\$0.44** for the first quarter of 2010. This estimate is \$0.08 below the current consensus analyst forecast of \$0.52.

DentRite, Inc. is a leader in the design and manufacture of prophylaxis products and dental X-ray equipment used by dentists and dental hygenists.

For more information, contact the DentRite, Inc. investor relations department at 1-800-345-4127.



For participants in the Investment Control condition only

Below you need to make your decision to purchase or short sell stock in DentRite, Inc., based exclusively on the information you reviewed in the case. After making your decision and sealing it in the attached envelope you will begin phase two of the experiment where you will learn of the actual performance and value of the DentRite, Inc. stock and you will then receive your cash profits.

You have been endowed with \$10.00 from the experimenter to make your investment decision in DentRite. One share of DentRite, Inc. stock currently sells for \$1.00 in the market. You have the option of either buying or short selling the stock the stock at the current market price. After the experimental materials are collected you will be paid based on your investment decision in accordance with actual company performance and current stock price. Whatever amount you decide not to invest you will receive in cash. For example, if you decide not to invest or short sell the stock you will receive \$10. Please indicate the number of shares (maximum 10 total shares) that you would like to either buy or short sell below.

| I would like to buy | shares of DentRite, Inc. stock. | | |
|----------------------------|---------------------------------|--|--|
| | | | |
| I would like to short sell | shares of DentRite Inc. stock | | |



I would like to gather some background information about you in order to better understand why your responses may differ from those of other study participants. Please answer each of the following questions.

| 1. Have you ever made investments in the common stock of a company? Yes No | |
|--|-----|
| If yes, approximately how many times? times | |
| 2. Have you ever made investments in a common stock mutual fund? Yes No | |
| 3. Do you plan to invest in the common stock of a company at some time in the future? No | Yes |
| 4. How many Accounting courses have you completed? | |
| Undergraduate Graduate | |
| 5. How many Finance courses have you completed? | |
| Undergraduate Graduate | |
| 6. Do you have any prior business work experience? Yes No | |
| If yes, approximately how many years? years | |
| 7. Do you have any prior work experience in financial analysis? Yes No | |
| If yes, approximately how many years? years | |
| 8. Do you plan to work in financial analysis upon graduation? Yes No | |
| 9. Please indicate the following: Male Female | |
| 10. Please list your major: | |

Directions: Place all your experimental materials in the envelope provided and raise your hand to receive second part of the experimental materials.



[For participants in the High Management Forthcomingness condition only]

Press Release

As required by the SEC, DentRite reported its quarterly earnings. In conjunction with this, DentRite management issued the following press release:

For immediate release:

DENTRITE, INC. REPORTS EARNINGS OF \$0.44 FOR THE FIRST QUARTER OF 2010

St. Louis, Missouri—DentRite, Inc. today reported financial results for the first quarter. The company reported earnings per share of **\$0.44** on sales of \$10.1 million for the first quarter of 2010. These results are below the consensus analyst forecast of \$0.52, but consistent with management's previous disclosure.

DentRite, Inc. is a leader in the design and manufacture of prophylaxis products and dental X-ray equipment used by dentists and dental hygenists.

For more information, contact the DentRite, Inc. investor relations department at 1-800-345-4127.

Following the press release the value of DentRite stock decreased from \$1.00 to \$.20 per share.

Directions: You have now completed part 1 of the study see the experimenter for payment instructions.



Press Release

<u>As required by the SEC</u>, DentRite reported its quarterly earnings. In conjunction with this, DentRite management issued the following press release:

For immediate release:

DENTRITE, INC. REPORTS EARNINGS OF \$0.44 FOR THE FIRST QUARTER OF 2010

St. Louis, Missouri—DentRite, Inc. today reported financial results for the first quarter of 2010. The company reported earnings per share of **\$0.44** on sales of \$10.1 million for the quarter. These results are \$0.08 below the consensus analyst forecast of \$0.52.

DentRite, Inc. is a leader in the design and manufacture of prophylaxis products and dental X-ray equipment used by dentists and dental hygenists.

For more information, contact the DentRite, Inc. investor relations department at 1-800-345-4127.

Following the press release the value of DentRite stock declined from \$1.00 to \$.20 per share.

Directions: You have now completed part 1 of the study. Please place all your experimental materials in the envelope provided and raise your hand.



GENERAL INSTRUCTIONS

Thank you for participating in the final part of this study. The purpose of the study is to investigate how investors make judgments and decisions. Your participation today should take approximately 15-20 minutes. Thanks to your participation in ALL parts of the study you will be entered into a \$500 cash lottery.

Should you have any questions during the study, please do not hesitate to ask. However, please do not discuss this study with other students even after ALL parts of the study have been completed. Discussing the study with others before the study is completed may invalidate the results of the study.

Your input is very important to this study. Thanks again for your participation.



Please answer the following questions in the order presented.

• At the beginning of the experiment did you already own the stock? (Circle one)

Yes No

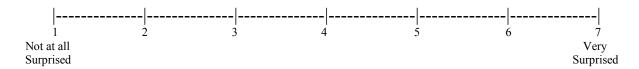
• Which of the following statements apply to your investment in DentRite? (Circle one)

I earned I sustained neither I incurred a profit a profit nor a loss a loss

• Were DentRite earnings higher than or lower than the analyst consensus earnings forecast? (Circle one)

Higher than Lower than the consensus forecast forecast

How surprised were you by the difference between actual earnings and the analyst consensus earnings forecast?



How much time did you spend thinking about the reasons for the difference between actual earnings and the analyst consensus earnings forecast?



The difference between actual earnings and the analyst consensus earnings forecast caused me to feel good.



The difference between actual earnings and the analyst consensus earnings forecast caused me to feel bad.



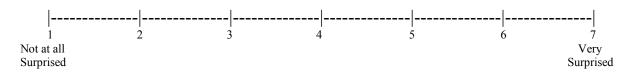


Please answer the following questions in the order presented.

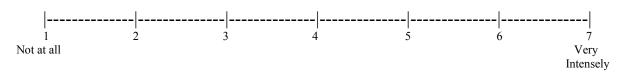
 Before announcing actual earnings, did DentRite management provide a disclosure informing investors that they expected actual earnings to differ from the analyst consensus earnings forecast? (Circle one)

Yes No

How surprised were you by this disclosure (or lack of disclosure)?



How intensely did you think about the reasons for this disclosure (or lack of disclosure)?



The disclosure (or lack of disclosure) caused me to feel good.

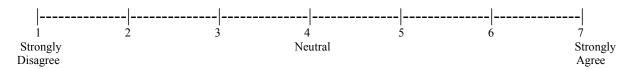


The disclosure (or lack of disclosure) caused me to feel bad.

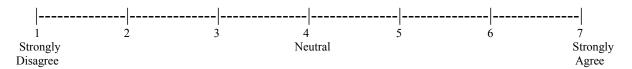


Based on the information you have been provided, indicate your updated beliefs about each of the following statements regarding DentRite management's **competence in managing DentRite.**

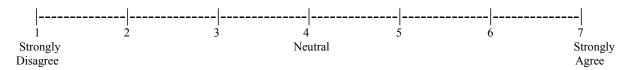
1. I believe that DentRite management is very competent at running the company.



2. I believe that DentRite management is expert at running their company.

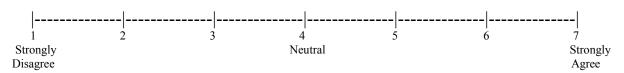


3. I believe that DentRite management is very intelligent.

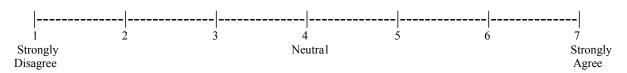


Based on the information you have been provided, indicate your updated beliefs about each of the following statements regarding DentRite management's **financial forecasting competence.**

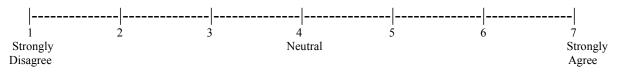
4. I believe that DentRite management is very competent at providing financial disclosures.



5. I believe that DentRite management has little knowledge of the factors involved in providing useful disclosures.



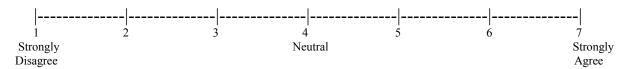
6. I believe that few people are as qualified as DentRite management to provide useful financial disclosures about DentRite.



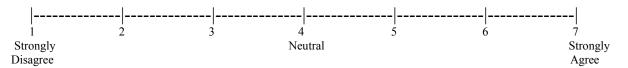


Based on the information you have been provided, indicate your updated beliefs about each of the following statements regarding DentRite management's **trustworthiness**.

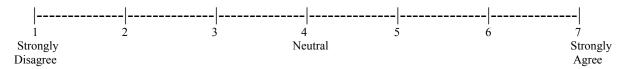
7. I believe that DentRite management is very trustworthy.



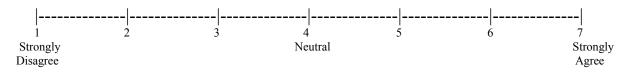
8. I believe that DentRite management is very honest.



9. I believe that DentRite management may not be truthful in their financial disclosures.

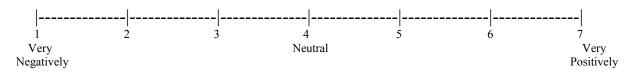


10. I would feel safe having my dentist order his or her dental supplies from DentRite.

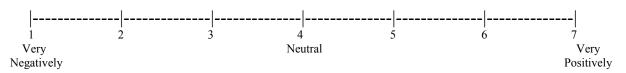


Based on the information you have been provided, indicate your **overall feelings** about DentRite and its management.

11. Overall, how do you feel about DentRite's management?



12. Aside from its management, how do you feel about DentRite?





DentRite management is planning a conference call tomorrow and has provided a list of six topics that may be addressed in that conference call. **Please rank these prospective topics in from '1' to '6,'** where '1' is the item that you are most interested in hearing discussed and '6' is the item that you are least interesting in hearing discussed.

| Future changes in DentRite's credit terms with vendors. |
|--|
| DentRite management's recent financial disclosure policies. |
| The effects of recent interest rates changes on DentRite's interest expense. |
| DentRite's operating results for the first quarter of 2010. |
| An update on the implementation of DentRite's new computer system. |
| Expected future changes in administrative expenses. |



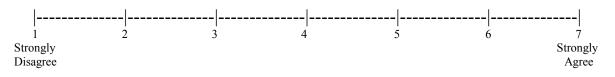
Below is a listing of six possible factors that may have caused DentRite management's voluntary disclosure of the unexpected earnings prior to the actual earnings announcement date. **Please rank these factors from '1' to '6,'** where '1' is the factor that you think is the *most likely* cause of DentRite's disclosure and '6' is the factor that you believe to be the *least likely* cause of DentRite's disclosure.

DentRite management probably disclosed unexpected earnings prior to the actual earnings announcement because:

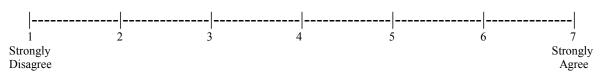
| There was pressure from analysts and investors. |
|--|
| DentRite management is self-interested. |
| DentRite management is honest. |
| DentRite's earnings could be predicted accurately before the actual earnings release date. |
| DentRite management wanted DentRite's stock price to be consistent with economic reality. |
| DentRite management had concerns about legal liability. |

QUESTION

• DentRite management deserves credit for providing an early voluntary disclosure about unexpected earnings.



 Providing an early voluntary disclosure about unexpected earnings increased my respect for DentRite management.





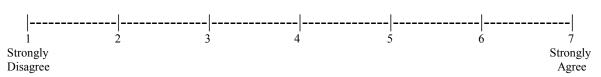
Below is a listing of six possible factors that may have caused DentRite management's lack of voluntary disclosure of the unexpected earnings prior to the actual earnings announcement date. **Please rank these factors from '1' to '6,'** where '1' is the factor that you think is the *most likely* cause of DentRite's lack of disclosure and '6' is the factor that you believe to be the *least likely* cause of DentRite's lack of disclosure.

DentRite management probably did not disclose unexpected earnings prior to the actual earnings announcement because:

| There was a lack of pressure from analysts and investors. |
|--|
| DentRite management is self-interested. |
| DentRite management is dishonest. |
| DentRite's earnings could not be predicted accurately before the actual earnings release date. |
| DentRite management wanted DentRite's stock price to be inconsistent with economic reality. |
| DentRite management had concerns about legal liability. |

QUESTION

• DentRite management deserves blame for not providing an early voluntary disclosure about unexpected earnings.



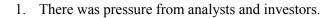
• Failing to provide an early voluntary disclosure about unexpected earnings decreased my respect for DentRite management.

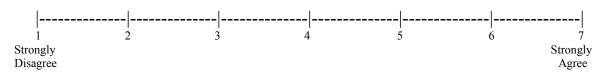




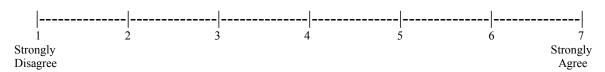
Listed below are six possible reasons for DentRite management's early disclosure that were rated on the previous page. Please indicate your level of agreement or disagreement with each of the following statements.

DentRite management probably disclosed unexpected earnings prior to the actual earnings announcement because:

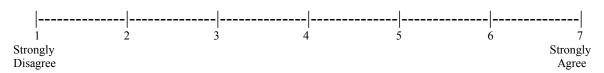




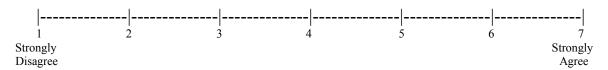
2. DentRite management is self-interested.



3. DentRite management is honest.



4. DentRite's earnings could be predicted accurately before the actual earnings release date.



5. DentRite management wanted DentRite's stock price to be consistent with economic reality.



6. DentRite management had concerns about legal liability.



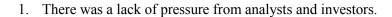


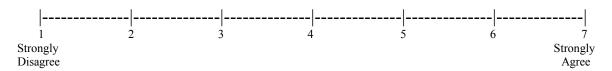
[For participants in the Low Management Forthcomingness conditions only]

QUESTIONS

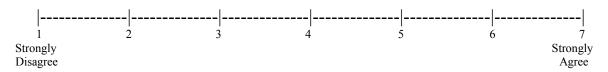
Listed below are six possible reasons for DentRite management's lack of early disclosure that were rated on the previous page. Please indicate your level of agreement or disagreement with each of the following statements.

DentRite management probably did not disclose unexpected earnings prior to the actual earnings announcement because:

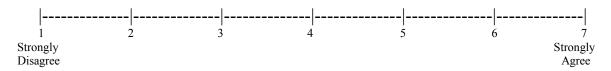




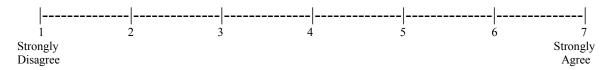
2. DentRite management is self-interested.



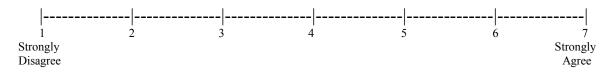
3. DentRite management is dishonest.



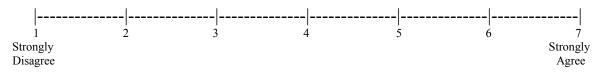
4. DentRite's earnings could not be predicted accurately before the actual earnings release date.



5. DentRite management wanted DentRite's stock price to be inconsistent with economic reality.



6. DentRite management had concerns about legal liability.





Press Release

In the second quarter of 2010, DentRite management voluntarily issued the following press release:

For immediate release:

DENTRITE, INC. EXPECTS EARNINGS OF \$0.65 FOR THE SECOND QUARTER OF 2010

St. Louis, Missouri—In a presentation to industry analysts today, DentRite, Inc. CEO Murray Levine indicated that the company currently expects earnings per share will be **\$0.65** for the second quarter of 2010. This estimate is \$0.12 above the current consensus analyst forecast of \$0.53.

DentRite, Inc. is a leader in the design and manufacture of prophylaxis products and dental X-ray equipment used by dentists and dental hygenists.

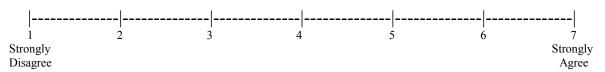
For more information, contact DentRite, Inc. investor relations department at 1-800-345-4127.

QUESTION

• I would rely on the above management disclosure in forming an earnings forecast for DentRite.



• I would form an investment decision based exclusively on the above disclosure from DentRite management.





GENERAL QUESTION

The following question does not relate to DentRite, but rather to companies in general.

| Assume that <u>Company A</u> reported actual earnings that were above the analyst consensus forecast and management did not provide an early disclosure about the unexpected earnings. |
|--|
| Assume that <u>Company B</u> reported actual earnings that were below the analyst consensus forecast and management did provide an early disclosure about the unexpected earnings. |
| Based on the information provided above, I would feel more negatively about the <i>management</i> of (Check one) |
| Company A Company B |
| |
| EXPERIMENTAL QUESTIONS The following questions relate to the experiment itself. |
| |
| Did you notice any errors, problems, omissions, or inconsistencies with the experimental materials? |
| |
| |
| Do you know what the experiment was about? Briefly describe. |



APPENDICES

APPENDIX B

6.2 Experiment Two—Experimental Instrument

Each of the following pages will be provided to all participants unless indicated otherwise at the top of the page.

Note: Although page numbers are present the actual instrument will not contain page numbers.



GENERAL INSTRUCTIONS

Thank you for participating in this study. The purpose of the study is to investigate how investors make judgments and decisions. Your participation today should take approximately 25-35 minutes. At the conclusion of the session, you will receive cash based on the value of an investment which is expected to range between \$0 and \$20. The second and third parts of this study will take place in two weeks and one month respectively. Each part will require approximately 15-20 minutes to complete. Those individuals who participate in ALL parts of the study will be entered into a \$500 cash lottery.

Should you have any questions during the study, please do not hesitate to ask. However, please do not discuss this study with other students until ALL parts of the study have been completed. Discussing the study with others before the study is completed may invalidate the results of the study.

Your input is very important to this study. Thanks again for your participation.



SPECIFIC INSTRUCTIONS

For purposes of this study, you are asked to consider making an investment in the common stock of DentRite, Inc., a dental supply company. You will be provided with background information and selected financial information about DentRite. Based on this information, you will be asked to provide several judgments and decisions about DentRite and its management. The case information is not intended to include all the information that would be available if you were evaluating the common stock of DentRite, Inc. However, for purposes of this study, base your judgments and decisions on the information provided. At the end of this session you will be paid based on your investment decision and the market price of DentRite shares at that time.

The case materials contain several sets of instructions detailing how to proceed during the study. The instructions will be shaded. Please read these instructions carefully.



BACKGROUND INFORMATION

Below is the company's most recent annual report. Some background information and financial data from that annual report are shown on the following two pages. Please review this information before moving on to the next part of the case.

DentRite, Inc.

Company Background

DentRite, Inc. is a Missouri-based company that develops and manufactures equipment used by dentists and dental hygienists. The Company's primary products include prophylaxis products (used in teeth cleaning and polishing procedures) and dental X-ray equipment. The Company markets its products to dental professionals using a network of medical and dental distributors. The products are sold in North America, as well as several key international markets, including Europe, South America, Central America, and the Pacific Rim.

Products

The Company's engineers and chemists are focused on developing innovative professional dental products and are actively involved in improving the Company's manufacturing processes. Frequently, these products are designed and developed in response to needs articulated to the Company by dental professionals.

Prophylaxis angles, cups, and brushes. Prophy products consist of two components – an angle that extends from a dental handpiece and a rubber cup or brush which is attached to the angle and performs the cleaning function. During the prophylaxis process, the cup or brush is filled with abrasive paste, which is applied to the teeth as it rotates. The Company produces and markets a number of different disposable prophy angles, cups and brushes.

X-ray equipment. The company manufactures and markets a line of dental X-ray equipment under the Panorama brand name. This equipment is used by dentists and orthodontists to locate and predict the movement of teeth in order to fit braces and other orthodontia. The products also are used by oral surgeons to detect pathology and to determine bone and teeth alignment before and after surgery.



BACKGROUND INFORMATION (continued)

DentRite, Inc. - Annual Financial Information

| | Fiscal Ye | Fiscal Year Ended December 31 | | |
|---|-----------|-------------------------------|----------|--|
| | 2009 | 2008 | 2007 | |
| Net Sales | \$42,712 | \$36,595 | \$24,986 | |
| Cost of Goods Sold | 18,825 | 16,467 | 10,129 | |
| Gross profit | 23,887 | 20,128 | 14,857 | |
| Selling, general, and administrative expenses | 12,195 | 10,623 | 7,333 | |
| Income from operations | 11,692 | 9,505 | 7,524 | |
| Interest expense and other, net | (32) | (326) | 876 | |
| Provision for income taxes | 4,572 | 3,782 | 2,538 | |
| Net income | \$ 7,152 | \$ 6,049 | \$ 4,110 | |
| Earnings per Share | \$1.88 | \$1.64 | \$1.28 | |

| ance Sheet (in thousands) | | |
|--|-------------------|----------|
| | As of December 31 | |
| | 2009 | 2008 |
| Assets | | |
| Total current assets | \$14,438 | \$14,486 |
| Long term assets | 45,898 | 40,258 |
| Total assets | \$60,336 | \$54,744 |
| Liabilities and Stockholders' Equity | | |
| Current liabilities | \$ 5,000 | \$ 4,686 |
| Long term debt | 3,199 | 1,857 |
| Stockholders' equity | 52,137 | 48,201 |
| Total liabilities and stockholders' equity | \$60,336 | \$54,744 |



BACKGROUND INFORMATION (continued)

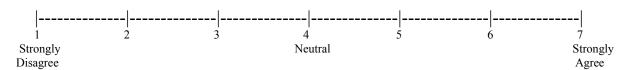
After reviewing the information previously shown, you decided to do some more searching. Specifically, you obtained the following information about DentRite from an online financial database.

- There are currently seven Wall Street analysts covering DentRite. The consensus analyst earnings forecast for DentRite for the first quarter of 2010 is \$0.52.
- <u>Before actual earnings are announced</u>, companies sometimes inform investors that they expect actual earnings to differ from the consensus analyst earnings forecast. In the dental supply industry, such disclosures about unexpected earnings are provided approximately 50% of the time.

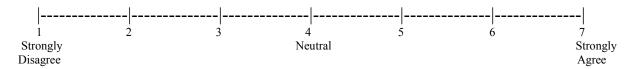


Indicate the degree to which you agree or disagree with each of the following statements by placing a slash mark (/) on the scales. Questions 1 through 3 concern your beliefs and feelings about DentRite management's **competence in managing DentRite**.

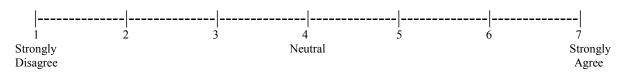
1. I believe that DentRite management is very competent at running the company.



2. I believe that DentRite management is expert at running their company.

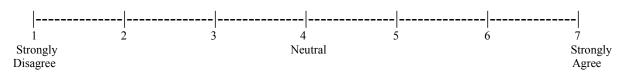


3. I believe that DentRite management is very intelligent.

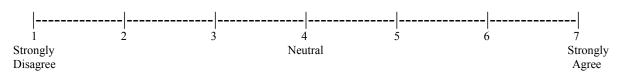


Questions 4 through 6 concern your beliefs and feelings about DentRite management's **financial forecasting competence**.

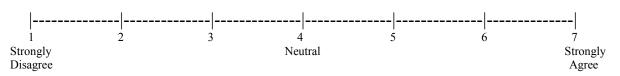
4. I believe that DentRite management is very competent at providing financial disclosures.



5. I believe that DentRite management has little knowledge of the factors involved in providing useful disclosures.



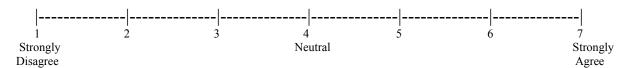
6. I believe that few people are as qualified as DentRite management to provide useful financial disclosures about DentRite.



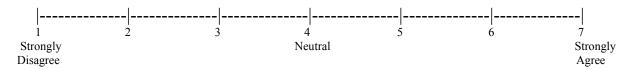


Questions 7 through 10 concern your beliefs and feelings about DentRite management's **trustworthiness**.

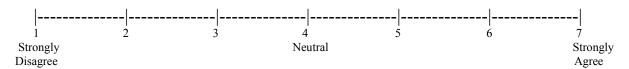
7. I believe that DentRite management is very trustworthy.



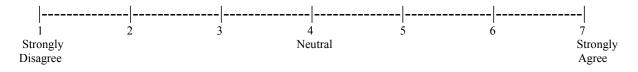
8. I believe that DentRite management is very honest.



9. I believe that DentRite management may not be truthful in their financial disclosures.



10. I would feel safe having my dentist order his or her dental supplies from DentRite.



Press Release

Additionally, DentRite management <u>voluntarily</u> issued the following press release:

For immediate release:

DENTRITE, INC. EXPECTS EARNINGS OF \$0.44 (\$0.60) FOR THE FIRST QUARTER OF 2010

St. Louis, Missouri—In a presentation to industry analysts today, DentRite, Inc. CEO Murray Levine indicated that the company currently expects earnings per share will be **\$0.44** (**\$0.60**) for the first quarter of 2010. This estimate is \$0.08 below (above) the current consensus analyst forecast of \$0.52.

DentRite, Inc. is a leader in the design and manufacture of prophylaxis products and dental X-ray equipment used by dentists and dental hygienists.

For more information, contact the DentRite, Inc. investor relations department at 1-800-345-4127.



Below you need to make your decision to purchase or short sell stock in DentRite, Inc., based exclusively on the information you reviewed in the case. After making your decision and sealing it in the attached envelope you will begin phase two of the experiment where you will learn of the actual performance and value of the DentRite, Inc. stock and you will receive your cash profits.

You have been endowed with \$10.00 from the experimenter to make your investment decision in DentRite. One share of DentRite, Inc. stock currently sells for \$1.00 in the market. You have the option of either buying or short selling the stock the stock at the current market price. After the experimental materials are collected you will be paid based on your investment decision in accordance with actual company performance. Whatever amount you decide not to invest you will receive in cash. For example, if you decide not to invest or short sell the stock you will receive \$10. Please indicate the number of shares (maximum 10 total shares) that you would like to either buy or short sell below.

| I would like to buy | shares of DentRite, Inc. stock. | |
|----------------------------|---------------------------------|--|
| | | |
| I would like to short sell | shares of DentRite, Inc. stock. | |



I would like to gather some background information about you in order to better understand why your responses may differ from those of other study participants. Please answer each of the following questions.

| 11. Have you ever made investments in the common stock of a company? Yes No |
|---|
| If yes, approximately how many times? times |
| 12. Have you ever made investments in a common stock mutual fund? Yes No |
| 13. Do you plan to invest in the common stock of a company at some time in the future? Yes No |
| 14. How many Accounting courses have you completed? |
| Undergraduate Graduate |
| 15. How many Finance courses have you completed? |
| Undergraduate Graduate |
| 16. Do you have any prior business work experience? Yes No |
| If yes, approximately how many years? years |
| 17. Do you have any prior work experience in financial analysis? Yes No |
| If yes, approximately how many years? years |
| 18. Do you plan to work in financial analysis upon graduation? Yes No |
| 19. Please indicate the following: Male Female |
| 20. Please list your major: |

Directions: Place all your experimental materials in the envelope provided and raise your hand to receive second part of the experimental materials.



Press Release

<u>As required by the SEC</u>, DentRite reported its quarterly earnings. In conjunction with this, DentRite management issued the following press release:

For immediate release:

DENTRITE, INC. REPORTS EARNINGS OF \$0.44 (\$.60) FOR THE FIRST QUARTER OF 2010

St. Louis, Missouri—DentRite, Inc. today reported financial results for the first quarter. The company reported earnings per share of **\$0.44** (**\$.60**) on sales of \$10.1 (\$13.8) million for the quarter. These results are \$.08 below (above) the consensus analyst forecast of \$0.52, and consistent with management's previous disclosure.

DentRite, Inc. is a leader in the design and manufacture of prophylaxis products and dental X-ray equipment used by dentists and dental hygienists.

For more information, contact the DentRite, Inc. investor relations department at 1-800-345-4127.

Following the press release the value of DentRite stock decreased (increased) from \$1.00 to \$.20 (\$1.80) per share.

Directions: You have now completed part 1 of the study see the experimenter for payment instructions.



Press Release

<u>As required by the SEC</u>, DentRite reported its quarterly earnings. In conjunction with this, DentRite management issued the following press release:

For immediate release:

DENTRITE, INC. REPORTS EARNINGS OF \$0.44 (\$0.60) FOR THE FIRST QUARTER OF 2010

St. Louis, Missouri—DentRite, Inc. today reported financial results for the first quarter. The company reported earnings per share of **\$0.44** (**\$0.60**) on sales of \$10.1 (**\$13.8**) million for the quarter. These results are \$0.08 below (above) the consensus analyst forecast of \$0.52.

DentRite, Inc. is a leader in the design and manufacture of prophylaxis products and dental X-ray equipment used by dentists and dental hygenists.

For more information, contact the DentRite, Inc. investor relations department at 1-800-345-4127.

Following the press release the value of DentRite stock declined (increased) from \$1.00 to \$.20 (\$1.80) per share.

Directions: You have now completed part 1 of the study see the experimenter for payment instructions.



GENERAL INSTRUCTIONS

Thank you for participating in the second part of this study. The purpose of the study is to investigate how investors make judgments and decisions. Your participation today should take approximately 15-20 minutes. At the conclusion of the study, you will receive cash based on an investing decision which is expected to range between \$0 and \$20. The third and final part of this study will take place in two weeks. The final part will require only 15-20 minutes to complete. Those individuals who participate in ALL parts of the study will be entered into a \$500 cash lottery.

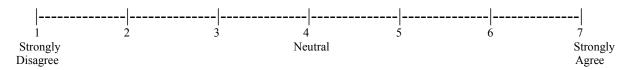
Should you have any questions during the study, please do not hesitate to ask. However, please do not discuss this study with other students until ALL parts of the study have been completed. Discussing the study with others before the study is completed may invalidate the results of the study.

Your input is very important to this study. Thanks again for your participation.

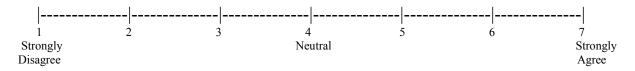


Based on the information you have been provided, indicate your updated beliefs about each of the following statements regarding DentRite management's **competence in managing DentRite.**

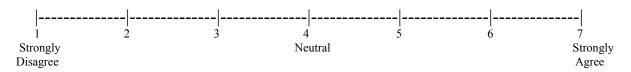
1. I believe that DentRite management is very competent at running the company.



2. I believe that DentRite management is expert at running their company.

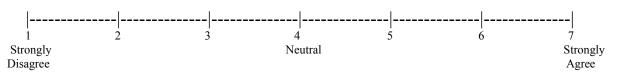


3. I believe that DentRite management is very intelligent.

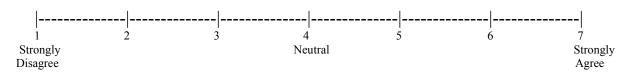


Based on the information you have been provided, indicate your updated beliefs about each of the following statements regarding DentRite management's **financial forecasting competence.**

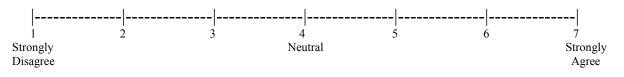
4. I believe that DentRite management is very competent at providing financial disclosures.



5. I believe that DentRite management has little knowledge of the factors involved in providing useful disclosures.



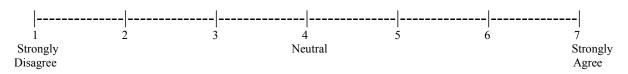
6. I believe that few people are as qualified as DentRite management to provide useful financial disclosures about DentRite.



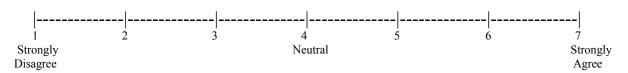


Based on the information you have been provided, indicate your updated beliefs about each of the following statements regarding DentRite management's **trustworthiness**.

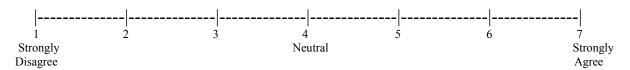
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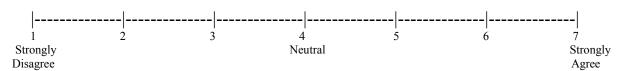
8. I believe that DentRite management is very honest.



9. I believe that DentRite management may not be truthful in their financial disclosures.

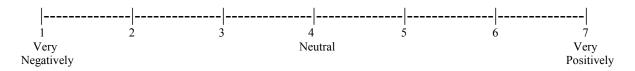


10. I would feel safe having my dentist order his or her dental supplies from DentRite.

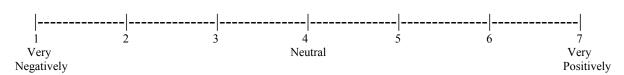


Based on the information you have been provided, indicate your **overall feelings** about DentRite and its management.

11. Overall, how do you feel about DentRite's management?



12. Aside from its management, how do you feel about DentRite?



Directions: Place all your experimental materials in the envelope provided and raise your hand to receive second part of the experimental materials.



SPECIFIC INSTRUCTIONS

For the second part of this study, you are asked again to consider the investment in the common stock of DentRite, Inc., a dental supply company. You will be provided with background information and selected financial information about DentRite. Based on this information, you will be asked to provide several investment judgments and decisions about DentRite and its management. The case information is not intended to include all the information that would be available if you were evaluating the common stock of DentRite, Inc. However, for purposes of this study, base your judgments and decisions exclusively on the information provided. At the end of this session you will be paid based on your investment decision and the market price of DentRite shares at that time.

The case materials contain several sets of instructions detailing how to proceed during the study. The instructions will be shaded. Please read these instructions carefully.



BACKGROUND INFORMATION

Below is the company's most recent annual report. Some background information and financial data from that annual report are shown on the following two pages. Please review this information before moving on to the next part of the case.

DentRite, Inc.

Company Background

DentRite, Inc. is a Missouri-based company that develops and manufactures equipment used by dentists and dental hygienists. The Company's primary products include prophylaxis products (used in teeth cleaning and polishing procedures) and dental X-ray equipment. The Company markets its products to dental professionals using a network of medical and dental distributors. The products are sold in North America, as well as several key international markets, including Europe, South America, Central America, and the Pacific Rim.

Products

The Company's engineers and chemists are focused on developing innovative professional dental products and are actively involved in improving the Company's manufacturing processes. Frequently, these products are designed and developed in response to needs articulated to the Company by dental professionals.

Prophylaxis angles, cups, and brushes. Prophy products consist of two components – an angle that extends from a dental handpiece and a rubber cup or brush which is attached to the angle and performs the cleaning function. During the prophylaxis process, the cup or brush is filled with abrasive paste, which is applied to the teeth as it rotates. The Company produces and markets a number of different disposable prophy angles, cups and brushes.

X-ray equipment. The company manufactures and markets a line of dental X-ray equipment under the Panorama brand name. This equipment is used by dentists and orthodontists to locate and predict the movement of teeth in order to fit braces and other orthodontia. The products also are used by oral surgeons to detect pathology and to determine bone and teeth alignment before and after surgery.



BACKGROUND INFORMATION (continued)

DentRite, Inc. - Annual Financial Information

| | Fiscal Ye | Fiscal Year Ended December 31 | | |
|---|-----------|-------------------------------|----------|--|
| | 2009 | 2008 | 2007 | |
| Net Sales | \$42,712 | \$36,595 | \$24,986 | |
| Cost of Goods Sold | 18,825 | 16,467 | 10,129 | |
| Gross profit | 23,887 | 20,128 | 14,857 | |
| Selling, general, and administrative expenses | 12,195 | 10,623 | 7,333 | |
| Income from operations | 11,692 | 9,505 | 7,524 | |
| Interest expense and other, net | (32) | (326) | 876 | |
| Provision for income taxes | 4,572 | 3,782 | 2,538 | |
| Net income | \$ 7,152 | \$ 6,049 | \$ 4,110 | |
| Earnings per Share | \$1.88 | \$1.64 | \$1.28 | |

| nce Sheet (in thousands) | As of Dece | ember 31 |
|--|------------|----------|
| | 2009 | 2008 |
| Assets | | |
| Total current assets | \$14,438 | \$14,486 |
| Long term assets | 45,898 | 40,258 |
| Total assets | \$60,336 | \$54,744 |
| Liabilities and Stockholders' Equity | | |
| Current liabilities | \$ 5,000 | \$ 4,686 |
| Long term debt | 3,199 | 1,857 |
| Stockholders' equity | 52,137 | 48,201 |
| Total liabilities and stockholders' equity | \$60,336 | \$54,744 |



BACKGROUND INFORMATION (continued)

After reviewing the information previously shown, you decided to do some more searching. Specifically, you obtained the following information about DentRite from an online financial database.

- DentRite reported earnings of \$0.44 (\$0.60) for the first quarter of 2010.
- There are currently seven Wall Street analysts covering DentRite. The consensus analyst earnings forecast for DentRite for the second quarter of 2010 is \$0.39.
- <u>Before actual earnings are announced</u>, companies sometimes inform investors that they expect actual earnings to differ from the consensus analyst earnings forecast. In the dental supply industry, such disclosures about unexpected earnings are provided approximately 50% of the time.



Press Release

Additionally, DentRite management <u>voluntarily</u> issued the following press release:

For immediate release:

DENTRITE, INC. EXPECTS EARNINGS OF \$0.45 (\$0.33) FOR THE SECOND QUARTER OF 2010

St. Louis, Missouri—In a presentation to industry analysts today, DentRite, Inc. CEO Murray Levine indicated that the company currently expects earnings per share will be **\$0.45** (**\$0.33**) for the second quarter of 2010. This estimate is \$0.06 above (below) the current consensus analyst forecast of \$0.39.

DentRite, Inc. is a leader in the design and manufacture of prophylaxis products and dental X-ray equipment used by dentists and dental hygienists.

For more information, contact the DentRite, Inc. investor relations department at 1-800-345-4127.



Below you need to make your decision to purchase or short sell stock in DentRite, Inc., based exclusively on the information you reviewed in the case. After making your decision and sealing it in the attached envelope you will begin phase two of the experiment where you will learn of the actual performance and value of the DentRite, Inc. stock and you will receive your cash profits.

You have been endowed with \$7.50 from the experimenter to make your investment decision in DentRite. One share of DentRite, Inc. stock currently sells for \$0.75 in the market. You have the option of either buying the stock at the current market price or short selling the stock. After the experimental materials are collected you will be paid based on your investment decision in accordance with actual company performance. Whatever amount you decide not to invest you will receive in cash. For example, if you decide not to invest or short sell the stock you will receive \$7.50. Please indicate the number of shares (maximum 10 total shares) that you would like to either buy or short sell below.

| I would like to buy | shares of DentRite, Inc. stock. | | |
|----------------------------|---------------------------------|--|--|
| | | | |
| I would like to short sell | shares of DentRite Inc. stock | | |

Directions: Place all your experimental materials in the envelope provided and raise your hand to receive second part of the experimental materials.



Press Release

<u>As required by the SEC</u>, DentRite reported its quarterly earnings. In conjunction with this, DentRite management issued the following press release:

For immediate release:

DENTRITE, INC. REPORTS EARNINGS OF \$0.45 (\$0.33) FOR THE SECOND QUARTER OF 2010

St. Louis, Missouri—DentRite, Inc. today reported financial results for the second quarter. The company reported earnings per share of **\$0.45** (**\$0.33**) on sales of \$10.4 (\$7.6) million for the quarter. These results are \$0.06 above (below) the consensus analyst forecast of \$0.39, and consistent with management's previous disclosure.

DentRite, Inc. is a leader in the design and manufacture of prophylaxis products and dental X-ray equipment used by dentists and dental hygienists.

For more information, contact the DentRite, Inc. investor relations department at 1-800-345-4127.

Following the press release the value of DentRite stock increased (decreased) from \$0.75 to \$1.20 (\$0.30) per share.

Directions: You have now completed part 2 of the study see the experimenter for payment instructions.



Press Release

<u>As required by the SEC</u>, DentRite reported its quarterly earnings. In conjunction with this, DentRite management issued the following press release:

For immediate release:

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Following the press release the value of DentRite stock increased (decreased) from \$0.75 to \$1.20 (\$0.30) per share.

Directions: You have now completed part 2 of the study see the experimenter for payment instructions.



GENERAL INSTRUCTIONS

Thank you for participating in the final part of this study. The purpose of the study is to investigate how investors make judgments and decisions. Your participation today should take approximately 15-20 minutes. Thanks to your participation in ALL parts of the study you will be entered into a \$500 cash lottery.

Should you have any questions during the study, please do not hesitate to ask. However, please do not discuss this study with other students even after ALL parts of the study have been completed. Discussing the study with others before the study is completed may invalidate the results of the study.

Your input is very important to this study. Thanks again for your participation.



Please answer the following questions in the order presented.

• Which of the following statements apply to your investment in DentRite in second session? (Circle one)

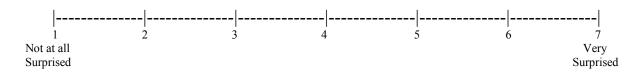
I earned I sustained neither I incurred a profit a profit nor a loss a loss

• Were DentRite earnings higher than or lower than the analyst consensus earnings forecast? (Circle one)

Higher than the consensus forecast

Lower than the consensus forecast

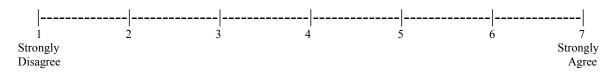
How surprised were you by the difference between actual earnings and the analyst consensus earnings forecast?



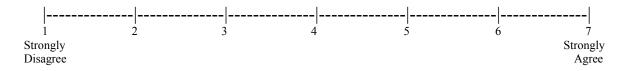
How much time did you spend thinking about the reasons for the difference between actual earnings and the analyst consensus earnings forecast?



The difference between actual earnings and the analyst consensus earnings forecast caused me to feel good.



The difference between actual earnings and the analyst consensus earnings forecast caused me to feel bad.



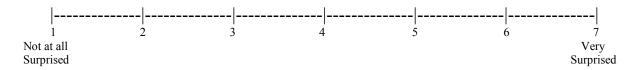


Please answer the following questions in the order presented.

• In the **second quarter (second session)**, <u>before announcing actual earnings</u>, did DentRite management provide a disclosure informing investors that they expected actual earnings to differ from the analyst consensus earnings forecast? (Circle one)

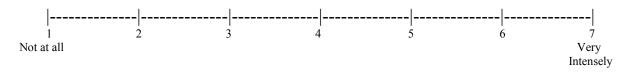
Yes

How surprised were you by this disclosure (or lack of disclosure)?



No

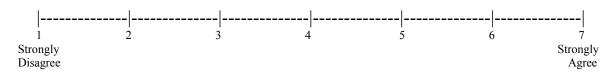
How intensely did you think about the reasons for this disclosure (or lack of disclosure)?



The disclosure (or lack of disclosure) caused me to feel good.



The disclosure (or lack of disclosure) caused me to feel bad.



N

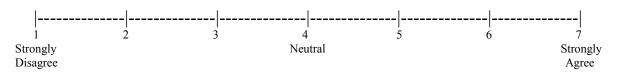
• In the **first quarter (first session)**, before announcing actual earnings, did DentRite management provide a disclosure informing investors that they expected actual earnings to differ from the analyst consensus earnings forecast? (Circle one)



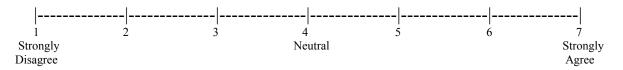
Yes

Based on the information you have been provided, indicate your updated beliefs about each of the following statements regarding DentRite management's **competence in managing DentRite.**

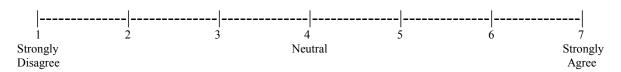
1. I believe that DentRite management is very competent at running the company.



2. I believe that DentRite management is expert at running their company.

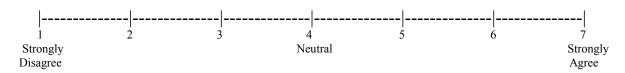


3. I believe that DentRite management is very intelligent.

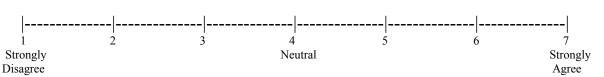


Based on the information you have been provided, indicate your updated beliefs about each of the following statements regarding DentRite management's **financial forecasting competence.**

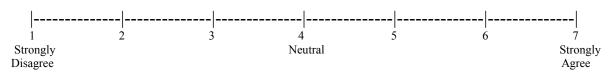
4. I believe that DentRite management is very competent at providing financial disclosures.



5. I believe that DentRite management has little knowledge of the factors involved in providing useful disclosures.

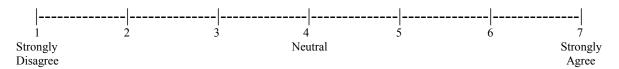


6. I believe that few people are as qualified as DentRite management to provide useful financial disclosures about DentRite.

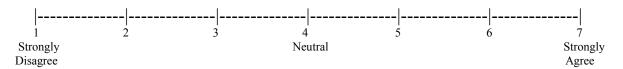


Based on the information you have been provided, indicate your updated beliefs about each of the following statements regarding DentRite management's **trustworthiness**.

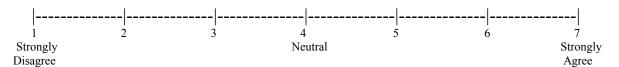
7. I believe that DentRite management is very trustworthy.



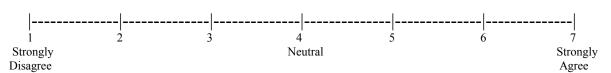
8. I believe that DentRite management is very honest.



9. I believe that DentRite management may not be truthful in their financial disclosures.

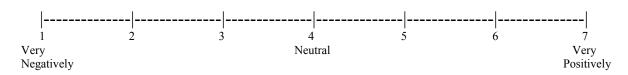


10. I would feel safe having my dentist order his or her dental supplies from DentRite.

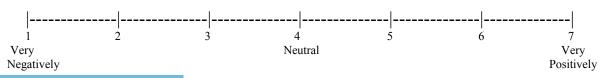


Based on the information you have been provided, indicate your **overall feelings** about DentRite and its management.

11. Overall, how do you feel about DentRite's management?



12. Aside from its management, how do you feel about DentRite?





DentRite management is planning a conference call tomorrow and has provided a list of six topics that may be addressed in that conference call. **Please rank these prospective topics in from '1' to '6,'** where '1' is the item that you are most interested in hearing discussed and '6' is the item that you are least interesting in hearing discussed.

| Future changes in DentRite's credit terms with vendors. |
|--|
| DentRite management's recent financial disclosure policies. |
| The effects of recent interest rates changes on DentRite's interest expense. |
| DentRite's operating results for the second quarter of 2010. |
| An update on the implementation of DentRite's new computer system. |
| Expected future changes in administrative expenses. |



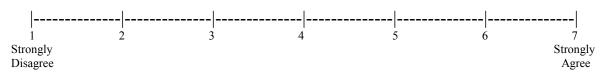
Below is a listing of six possible factors that may have caused DentRite management's voluntary disclosure of the unexpected earnings prior to the actual earnings announcement date. **Please rank these factors from '1' to '6,'** where '1' is the factor that you think is the *most likely* cause of DentRite's disclosure and '6' is the factor that you believe to be the *least likely* cause of DentRite's disclosure.

DentRite management probably disclosed unexpected earnings prior to the actual earnings announcement because:

| There was pressure from analysts and investors. |
|--|
| DentRite management is self-interested. |
| DentRite management is honest. |
| DentRite's earnings could be predicted accurately before the actual earnings release date. |
| DentRite management wanted DentRite's stock price to be consistent with economic reality |
| DentRite management had concerns about legal liability. |

QUESTION

• DentRite management deserves credit for providing an early voluntary disclosure about unexpected earnings.



 Providing an early voluntary disclosure about unexpected earnings increased my respect for DentRite management.





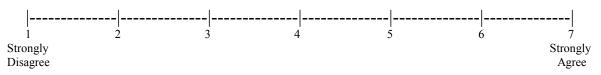
Below is a listing of six possible factors that may have caused DentRite management's lack of voluntary disclosure of the unexpected earnings prior to the actual earnings announcement date. **Please rank these factors from '1' to '6,'** where '1' is the factor that you think is the *most likely* cause of DentRite's lack of disclosure and '6' is the factor that you believe to be the *least likely* cause of DentRite's lack of disclosure.

DentRite management probably did not disclose unexpected earnings prior to the actual earnings announcement because:

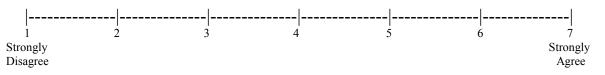
| There was a lack of pressure from analysts and investors. |
|--|
| DentRite management is self-interested. |
| DentRite management is dishonest. |
| DentRite's earnings could not be predicted accurately before the actual earnings release date. |
| DentRite management wanted DentRite's stock price to be inconsistent with economic reality. |
| DentRite management had concerns about legal liability. |

QUESTION

 DentRite management deserves blame for not providing an early voluntary disclosure about unexpected earnings.



• Failing to provide an early voluntary disclosure about unexpected earnings decreased my respect for DentRite management.

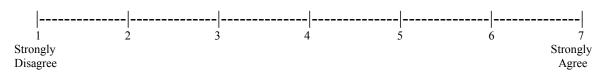




Listed below are six possible reasons for DentRite management's early disclosure that were rated on the previous page. Please indicate your level of agreement or disagreement with each of the following statements

DentRite management probably disclosed unexpected earnings prior to the actual earnings announcement because:

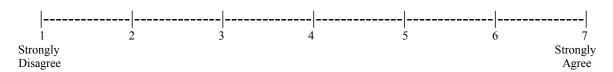
7. There was pressure from analysts and investors.



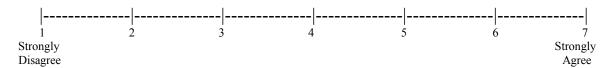
8. DentRite management is self-interested.



9. DentRite management is honest.



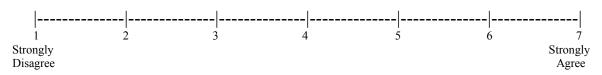
10. DentRite's earnings could be predicted accurately before the actual earnings release date.



11. DentRite management wanted DentRite's stock price to be consistent with economic reality.



12. DentRite management had concerns about legal liability.





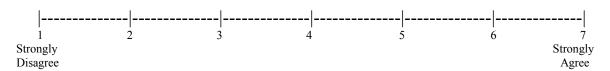
[For participants in the Low Management Forthcomingness conditions only]

QUESTIONS

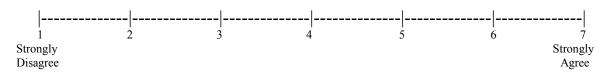
Listed below are six possible reasons for DentRite management's lack of early disclosure that were rated on the previous page. Please indicate your level of agreement or disagreement with each of the following statements.

DentRite management probably did not disclose unexpected earnings prior to the actual earnings announcement because:

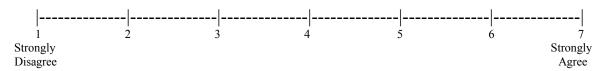
11. There was a lack of pressure from analysts and investors.



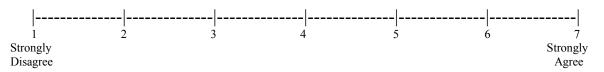
12. DentRite management is self-interested.



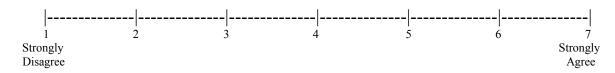
13. DentRite management is dishonest.



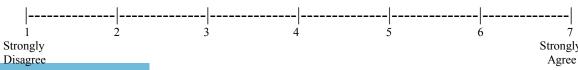
14. DentRite's earnings could not be predicted accurately before the actual earnings release date.



15. DentRite management wanted DentRite's stock price to be inconsistent with economic reality.



16. DentRite management had concerns about legal liability.





Press Release

In the third quarter of 2010, DentRite management voluntarily issued the following press release:

For immediate release:

DENTRITE, INC. EXPECTS EARNINGS OF \$0.65 FOR THE THIRD QUARTER ENDING OF 2010

St. Louis, Missouri—In a presentation to industry analysts today, DentRite, Inc. CEO Murray Levine indicated that the company currently expects earnings per share will be **\$0.65** for the third quarter of 2010. This estimate is \$0.12 above the current consensus analyst forecast of \$0.53.

DentRite, Inc. is a leader in the design and manufacture of prophylaxis products and dental X-ray equipment used by dentists and dental hygenists.

For more information, contact DentRite, Inc. investor relations department at 1-800-345-4127.

QUESTION

• I would rely on the above management disclosure in forming an earnings forecast for DentRite.



 I would form an investment decision based exclusively on the above disclosure from DentRite management.





GENERAL QUESTION

The following question does not relate to DentRite, but rather to companies in general.

Assume that <u>Company A</u> reported actual earnings that were **above** the analyst consensus forecast and management **did not** provide an early disclosure about the unexpected earnings.

Assume that <u>Company B</u> reported actual earnings that were **below** the analyst consensus forecast and management **did** provide an early disclosure about the unexpected earnings.

| management of (Check | one) |
|----------------------|-----------|
| Company A | Company B |

EXPERIMENTAL QUESTIONS

The following questions relate to the experiment itself.

Did you notice any errors, problems, omissions, or inconsistencies with the experimental materials?

Do you know what the experiment was about? Briefly describe.



APPENDICES

APPENDIX C

6.3 Knowledge Test

Below are two investing scenarios involving long and short investments. Please complete both calculations before moving on to the experiment. When you have completed both scenarios please raise your hand and the experimenter will bring you the experimental materials.

Scenario 1

You have taken a **short position** in E&G stock. When you entered into the short position you borrowed and sold 100 shares of stock for \$10 per share. **If the current market price is \$5 per share, what is your dollar gain or loss on the short position?**

| \$ | | Gair | |
|----|--|------|--|
| | | | |

\$_____ Loss

Scenario 2

You have taken a **long position** in E&G stock. When you entered into the position you purchased 100 shares of stock for \$10 per share. **If the current market price is \$15 per share, what is your dollar gain or loss on the long position?**

\$ Loss



APPENDICES

APPENDIX D

6.4 Human Subjects Approval Memorandum

Office of the Vice President For Research Human Subjects Committee Tallahassee, Florida 32306-2742 (850) 644-8673, FAX (850) 644-4392

RE-APPROVAL MEMORANDUM

Date: 12/5/2011

To: Eric Gooden

Dept.: ACCOUNTING

From: Thomas L. Jacobson, Chair

Re: Re-approval of Use of Human subjects in Research

Can Forthcomingness Enhance Managers Long-Term Reporting Credibility? Exploring the Influence of Ownership Position and Reputation

Your request to continue the research project listed above involving human subjects has been approved by the Human Subjects Committee. If your project has not been completed by 11/30/2012, you are must request renewed approval by the Committee.

If you submitted a proposed consent form with your renewal request, the approved stamped consent form is attached to this re-approval notice. Only the stamped version of the consent form may be used in recruiting of research subjects. You are reminded that any change



in protocol for this project must be reviewed and approved by the Committee prior to implementation of the proposed change in the protocol. A protocol change/amendment form is required to be submitted for approval by the Committee. In addition, federal regulations require that the Principal Investigator promptly report in writing, any unanticipated problems or adverse events involving risks to research subjects or others.

By copy of this memorandum, the Chair of your department and/or your major professor are reminded of their responsibility for being informed concerning research projects involving human subjects in their department. They are advised to review the protocols as often as necessary to insure that the project is being conducted in compliance with our institution and with DHHS regulations.

Cc: Greg Gerard, Advisor [ggerard@fsu.edu]

HSC No. 2011.7379



APPENDICES

APPENDIX E

6.5 Informed Consent Form

INFORMED CONSENT

Thank you for agreeing to participate in this research project that has just been described to you verbally. The purpose of this project is to gain knowledge about the judgment and decision-making process of market participants. Therefore, you will be asked to render judgments and decisions pertaining to an investment scenario presented throughout the experiment. You do not have to answer any questions you do not wish to answer. The experiment consists of either two or three sessions. On the front cover of your experimental materials you will be informed whether you have been randomly selected to participate in one or two additional sessions.

The first session (today) will take approximately 25-35 minutes for all participants and all participants will be paid between \$0 and \$20 for participation in the first session. Each additional session will take approximately 15-20 minutes to complete. Participants who are randomly assigned to the version with three sessions will also be paid between \$0 and \$20 for the second session. Participants will not be paid for the final session. Instead your instructor has agreed to provide extra/class credit for participating in all parts of the study. Each session will be spaced two-weeks apart (two and four weeks from today respectively) and participants who complete all parts of the study will be eligible for a \$500 cash lottery. All participants who complete the study will have an equal chance of winning the lottery. Participants who withdraw early during individual sessions will not be eligible for cash payments. Similarly, participants who do not complete ALL of the experimental materials will not be eligible for the cash lottery.

This experiment considers decision-making in an investment setting. In this experiment, you will be assigned the role of an investor. You have been randomly assigned to one of several test conditions. Your task is to render decisions based on your role to the best of your ability. Given the subjective nature of market decisions there are no right or wrong answers. Accordingly, participants are urged to simply answer each question to the best of their ability assuming the role they have been assigned and given the information provided in the experimental materials.

Your participation is completely voluntary. You will be compensated for your participation. However, there is not any requirement for you to participate. There are no known risks or benefits to you of participating in this project. You may withdraw your consent and discontinue participation at any time without consequence. By signing below, you agree to participate in the project, and acknowledge receiving a copy of this description. Your answers will be confidential to the extent allowed by law. At the conclusion of the experiment your name and any other identifying personal information (such as e-mail address) will be removed from all responses after the cash lottery has been completed. All these items will be either shredded or deleted and will not be stored by the experimenter.



| Thank you, | |
|---|---|
| Eric Gooden | |
| Doctoral student | |
| Florida State University | |
| | |
| If you have any questions, you may contact me. You can also contact | et my supervising instructor Dr. Greg Gerard by |
| phone at 644-9115 or via e-mail at ggerard@cob.fsu.edu . To particip | ate in this project, please sign below. If you |
| have any questions or concerns regarding this experiment feel free to | contact the Florida State University Office of |
| Research Human Subjects Committee by phone at 644-7900. | |
| | |
| | |
| "I have read the above and consent to participate in this study." | |
| | |
| | |
| Signature | Date |
| | |
| | |
| | |
| Printed Name | Date |
| | |

Florida State University Human Subjects Office 850-644-7900



REFERENCES

- Ajinkya, B.B., S. Bhojraj, and P. Sengupta. 2005. The association between outside directors, institutional investors and the properties of management earnings forecasts. *Journal of Accounting Research* 43 (3): 343–376.
- Atiase, R.K., S. Supattarakul, and S. Tse. 2005. Price and volume reaction to management earnings forecasts: The incremental effect of managements' prior forecasting reputation. *Working paper, The University of Texas at Austin.*
- Baginski, S.P., E.J. Conrad, and J.M. Hassell. 1993. The effects of management forecast precision on equity pricing and on the assessment of earnings uncertainty. *The Accounting Review* 88 (4): 913-927.
- ——, J.M. Hassell, and M.D. Kimbrough. 2004. Why do managers explain their earnings forecasts? *Journal of Accounting Research* 42 (1): 1-10.
- ——, and ——. 2008. Macro information environment change and the quality of management earnings forecasts. *Review of Quantitative Finance and Accounting* 31 (3): 312-330.
- Bamber, L., and Y.S. Cheon. 1998. Discretionary management earnings forecast disclosures: Antecedents and outcomes associated with forecast venue and forecast specificity choices. *Journal of Accounting Research* 36 (2): 167-190.
- Bonner, S. E.1999. Judgment and decision-making research in accounting. *Accounting Horizons* 13: 385–398.
- ——, and B. Lewis. 1990. Determinants of auditor expertise. *The Journal of Accounting Research* 28 (Supplement): 1-20.



- Bouwman, M.P., P. Frishkoff, and P. Frishkoff. 1987. How do financial analysts make decisions? A process model of the investment screening decision. *Accounting, Organizations and Society* 12 91): 1-29.
- Camerer, C. 2000. Prospect theory in the wild Evidence from the field. In D. Kahneman & A. Tversky (Eds.), *Choices, Values and Frames* (288-300). New York, NY: Cambridge University Press.
- Cameron, L.D., and H. Leventhal. 2003. *The self-regulation of health and illness behavior*. New York: Routledge.
- Cepeda, N. J., H. Pashler, E. Vul, J.T. Wixted, & D. Rohrer. 2006. Distributed practice on verbal recall tasks: A review and quantitative synthesis. *Psychological Bulletin* 132: 354-380.
- CFA Institute. 2006. *Breaking the short-term cycle*. Available at http://www.cfapubs.org/doi/pdf/10.2469/ccb.v2006.n1.4194.
- Chaiken, S., and Y. Trope. 1999. *Dual-process theories in social psychology*. New York: Guilford Press.
- Cianci, A.M. 2008. The impact of investor status on their evaluation of negative and positive, separate and combined information. *The Journal of Behavioral Finance* 9: 117-131.
- ——, and D. Falsetta. 2008. Impact of investors' status on their evaluation of positive and negative, and past and future information. *Accounting and Finance* 48: 719-739.
- Damasio, A. 1994. Descartes' Error: Emotion, Reason, and the Human Brain. New York, NY: Avon.



- D'Argembeau, A., C. Comblain, and M. Van der Linden. 2003. Phenomenal characteristics of autobiographical memories for positive, negative, and neutral events. *Applied Cognitive Psychology* 17: 281-294.
- Dewhurst, S.A., and L.A. Parry. 2000. Emotionality, distinctiveness, and recollective experience. *European Journal of Cognitive* Psychology 12: 541-551.
- Elliott, W.B. 2006. Are investors influenced by pro forma emphasis and reconciliations in earnings announcements? *The Accounting Review* 81 (1): 113-133.
- ——, F. Hodge, and K.E. Jackson. 2008. The association between non-professional investors' information choices and their portfolio returns: The importance of investing experience. *Contemporary Account Research* 25: 473-498.
- Fisk, S., and S. Taylor. 1991. Social Cognition. New York, NY. McGraw-Hill.
- Fredrickson, J.R., and J.S. Miller. 2004. The effect of pro forma earnings disclosures on analysts' and nonprofessional investors' equity valuation judgments. *The Accounting Review* 79 (3): 667-686.
- Graham, J., C. R. Harvey, and S. Rajgopal. 2005. The economic implications of corporate financial reporting. *Journal of Accounting and Economics* 40: 3–73.
- Hales, J. 2007. Directional Preferences, Information Processing, and Investors' Forecasts of Earnings, *Journal of Accounting Research* 45 (3), 607-628.
- ——, X. Kuang, and S. Venkataraman. 2010. Who Believes the Hype? An Experimental Examination of How Language Affects Investor Judgments. *Journal of Accounting Research* 49 (1), 223-255.



- Han, J., and H.T. Tan. 2010. Investors' Reactions to Management Earnings Guidance: The Joint Effect of Investment Position, News Valence, and Guidance Form. *Journal of Accounting Research* 48(1): 123-146.
- Harris, A.J.L., A. Corner, and U. Hahn. 2009. Estimating the probability of negative events. *Cognition* 110: 51-64.
- Harris, L., and K.E. Jackson. 2011. Investor status and the influence of distant outlook disclosures on investor judgments'. *Working paper, University of South Carolina and University of Illinois at Urbana-Champaign*.
- Healy, P., A. Hutton, and K. Palepu. 1999. Stock performance and intermediation changes surrounding sustained increases in disclosure. *Contemporary Accounting Research* 16 (3): 485–520.
- ——, and K. Palepu. 2001. Information asymmetry, corporate disclosure, and the capital markets: A review of the empirical disclosure literature. *Journal of Accounting and Economics* 31: 405–440.
- Hirst, D.E., L. Koonce, and J. Miller. 1999. The joint effect of management's prior forecast accuracy and the form of its financial forecasts on investor judgments. Journal of Accounting Research 37 (Supplement): 1-24.
- ——, and S. Venkataram. 2008. Management earnings forecasts: A review and framework. *Accounting Horizons* 22: 315-338.
- Hodge, F., and Pronk, M. 2007. The impact of expertise and investment familiarity on investors' use of online financial reporting information. *Journal of Accounting, Auditing and Finance*: 267-292.



- Hughes, J.S., and S. Pae. 2004. Voluntary disclosure of precision information. *Journal of Accounting and Economics* 37: 261-289.
- Hunton, J.E., and R.A. McEwen. 1997. An assessment of the relation between analysts' earnings forecast accuracy, motivational incentives, and cognitive information search strategy. *The Accounting Review* 72 (4): 497-516.
- Hutton, A. P., G. S. Miller, and D. J. Skinner. 2003. The role of supplementary statements with management earnings forecasts. *Journal of Accounting Research* 41 (5): 867–890.
- ———, and P. C. Stocken. 2007. Effect of reputation on the credibility of management forecasts. *Working paper, Boston College and Dartmouth College.*
- Johnson, F. 2010. In 3-2 Vote, SEC Limits Short Sales. Available at http://www.wsj.com.
- Kasznik, R. 1999. On the association between voluntary disclosure and earnings management. Journal of Accounting Research (Spring): 57-82.
- ——, and B. Lev. 1995. To warn or not to warn: Management disclosures in the face of an earnings surprise. *The Accounting Review* 70 (1): 113–134.
- Kelley, Harold H. 1973. The processes of causal attribution. *American Psychologist* 28(2): 107-128.
- Kensinger, E.A., and D.L. Schacter. 2009. *Handbook of Emotion*. Chapter 37, 3rd edition. New York, NY: Guilford Press.
- Kida, T., and J. Smith. 1995. The encoding and retrieval of numerical data for decision making in accounting contexts: Model development. *Accounting, Organizations and Society* 20 (7 / 8): 585–610.



- Kothari, S. P., S. Shu, and P. Wysocki. 2005. Do managers withhold bad news? *Working paper, MIT Sloan School of Management*.
- Kunda, Z. 1990. The Case for Motivated Reasoning. *Psychological Bulletin* 108: 480–98.
- Leathers, D. 1992. Successful Nonverbal Communications: Principles and Applications. New York, NY: MacMillan.
- Libby, R.1995. The role of knowledge and memory in audit judgment. In Judgment and Decision Making Research in Accounting and Auditing, eds. R. Ashton and A. Ashton, 176-206. Cambridge, MA: Cambridge University Press.
- ——, and H. T. Tan. 1999. Analysts' reactions to warnings of negative earnings surprises. *Journal of Accounting Research* 37 (2): 415–435.
- ——, and J. Luft. 1993. Determinants of judgment performance in accounting settings: Ability, knowledge, motivation and environment. *Accounting, Organizations and Society* 18 (5): 425-450.
- Maines, L.A. and L.S. McDaniel. 2000. Effects of comprehensive income characteristics on nonprofessional investors' judgments: The role of financial-statement presentation format. *The Accounting Review* 75 (2): 179-207.
- Maxwell, S., and H.D. Delaney. 2004. *Designing Experiments and Analyzing Data: A Model Comparison Perspective* (2nd ed.). Mahwah, New Jersey: Lawrence Erlbaum Associates.
- McCroskey, J. 1966. Scales for the measurement of ethos. *Speech Monographs* 33: 65–72.
- Mercer, M. 2004. How do investors assess the credibility of management disclosures? *Accounting Horizons* 18 (September): 185-196.



- ——. 2005. The fleeting effects of disclosure forthcomingness on management's reporting credibility. *The Accounting Review* 80 (2): 723–744.
- Miller, G.S. 2009. Should managers provide forecasts of earnings? A review of the empirical literature and normative policy recommendations. Retrieved from http://www.capmktsreg.org/pdfs/09-Sept-15 CCMR-Miller Study on Earnings Guidance.pdf
- Nagar, V., D. Nanda, and P. Wysocki. 2003. Discretionary disclosure and stock-based incentives. *Journal of Accounting and Economics* 34: 283–309.
- Ng, J., A.I. Tuna, and R. Verdi. 2006. Management forecasts, disclosure quality, and market efficiency. *Working paper, The Wharton School, University of Pennsylvania*.
- ——, A.I. Tuna, and R.S. Verdi. 2008. Management forecast credibility and underreaction to news. *AAA* 2007 Financial Accounting and Reporting Section (FARS) Meeting Paper.
- Ochsner, K.N. 2000. Are affective events richly "remembered" or simply familiar? The experience and process of recognizing feelings past. *Journal of Experimental Psychology: General* 129: 242-261.
- Pownall, G., C. Wasley, and G. Waymire. 1993. The stock price effects of alternative types of management earnings forecasts. *The Accounting Review* 88 (4): 896-912.
- Roediger, H.L., III, & Karpicke, J.D. 2006. Test enhanced learning: Taking memory tests improves long-term retention. *Psychological Science* 17: 249–255.
- Rogers, J.L., and P.C. Stocken. 2005. Credibility of management forecasts. *The Accounting Review* 80 (4): 1233-1260.
- Rohrer, D., and H. Pashler. 2007. Increasing retention without increasing study time. *Current Directions in Psychological Science* 16: 183-186.



- Schaefer, A., and P. Philippot (2005). Selective effects of emotion on the phenomenal characteristics of autobiographical memories. *Memory* 13: 148-160.
- Securities Industry Association. 2008. Equity and Bond Ownership in America.
- Sharot, T., M.R. Delgado, and E.A. Phelps. 2004. How emotion enhances the feeling of remembering. *Nature Neuroscience* 12: 1376-1380.
- Skinner, D. 1994. Why firms voluntarily disclose bad news. *Journal of Accounting Research* 32: 38–60.
- Sloman, S.A. 1996. The empirical case for two systems of reasoning. *Psychological Bulletin* 119, 3-22.
- Slovic, P., Peters, E., Finucane, M. L., and D.G. MacGregor. (2005). Affect, risk, and decision making. *Health Psychology* 24 (Suppl.), S35–S40.
- Stocken, P. C. 2000. Credibility of voluntary disclosure. *The Rand Journal of Economics* 31 (2): 359–374.
- Tan, H., R. Libby, and J. Hunton. 2002. Analysts' reactions to earnings preannouncement strategies. *Journal of Accounting Research* 40 (1): 223–246.
- Tucker, J. X. 2007. Is Openness Penalized? Stock Returns around Earnings Warnings. *The Accounting Review* 82 (4): 1055-1087.
- U.S. Chamber of Commerce. 2007. Commission on the regulation of U.S. capital markets in the 21st century: Report and recommendations. Available at http://www.uschamber.com/publications/reports/ 0703capmarkets comm.htm.



- Weiner, B. 1992. *Human Motivation: Metaphors, Theories, and Research*. Thousand Oaks, CA. Sage Publications.
- Williams, P. A. 1996. The relation between a prior earnings forecast by management and analyst response to a current management forecast. *The Accounting Review* 71 (1): 103–115.
- Zajonc, R.B. 1980. Feeling and thinking: Preferences need no inferences. *American Psychologist* 35: 151-175.



BIOGRAPHICAL SKETCH

Eric Sheldon Gooden was born in Idaho in the fall of 1977. Mr. Gooden graduated from Nampa High School in the spring of 1995. He later enrolled at Boise State University where he earned his Bachelor in Business Administration with a major in Accountancy in 2003. Mr. Gooden continued his education at Boise State where he earned his Masters of Science in Accountancy in the spring of 2004. Upon graduation he worked as a staff auditor for KPMG LLP. In 2007 Mr. Gooden enrolled in the accounting doctoral program at Florida State University. There he focused on accounting research employing experimental-behavioral methodology. Mr. Gooden will graduate with his PhD. degree in Accounting in the summer of 2012. Mr. Gooden will begin his academic career at Virginia Commonwealth University.

