ETHICAL CONTROL ON REPAIRING A USER'S TRUST BASED ACCOUNTING BELIEFS

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A DISSERTATION

Submitted to
Michigan State University
in partial fulfillment of the requirements
for the degree of

Business Administration – Doctor of Philosophy

2014

ABSTRACT

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Organizations rely on controls to minimize distortions of accounting information. Nonetheless, users of accounting information often encounter preparer distortions from a lack of preparer knowledge and/or objectivity. This study examines the process to repair a user's damaged beliefs following an encounter with preparer bias or preparer error. Users' beliefs are examined in the context of trust to understand assessments of accounting information as a subjective rather than objective judgment. The effects of an organization's control response to error (bias) discovery on repairing a user's damaged beliefs about accounting information are investigated. In general, the research question examines whether a user's trust based accounting beliefs are shaped only through one's direct experience with an information preparer, or indirectly by controls governing preparer behavior. Based on experimental data from 159 participants, an organization's ethical control response repairs a user's damaged beliefs following preparer bias less effectively than a non ethical control response following preparer error. Controls governing preparer behavior are found to shape a user's beliefs about accounting information in some scenarios, while in others only his or her direct experience with the information preparer matters. Overall, findings from this study demonstrate economically equivalent distortions of accounting information have psychologically different sequences

on a user’s beliefs about accounting information.

ACKNOWLEDGMENTS

I would like to express my gratitude to both my committee co-chairs, Professor Susan Haka and Professor Ranjani Krishan. I am truly inspired by their dedication to the profession and passion for helping students succeed. Without their guidance and endless support this dissertation would not have been possible.

I would also like to thank my committee members, Professor Harrison McKnight and Professor Timothy Pleskac, whose expertise was a tremendous contribution. I am grateful for the wonderful colleagues who have helped to shape and personalize my PhD experience. Thank you Dara Marshall, Eric Marinich and all of the MSU doctoral students for cheering me on. Financial support was generously provided by the Department of Accounting and Information Systems at Michigan State University.

I am so fortunate and appreciative for finding such an incredible network of friends. Thank you for a lifetime of joyful memories, laughter and tears with Chau Nyguen, Alda Pires, Joyce Samuel, friends of Spartan Village and East Lansing; “How lucky I am to have something that makes saying goodbye so hard” – A.A. Milne, Winnie the Pooh.

Lastly, I offer my sincerest and deepest gratitude to my family. Together you make an irreplaceable base camp support team; without your help, no way, no how! Thank you to SR for opening a world beyond my world. My dad told me once, when you set off to climb a mountain sometimes you realize what you are searching for is what you left behind – he was right.

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INTRODUCTION

Distortions of accounting information can violate expectations and damage a user's beliefs about accounting information. The purpose of this paper is to investigate the effectiveness of ethical control on repairing a user's damaged beliefs about accounting information. Management accounting research grounded in agency theory has traditionally focused on agency controls such as incentives, performance evaluation, monitoring, and decision rights to minimize agent behaviors against the firm such as self-interested preparer distortions (Christensen and Feltham 2005). Yet a growing body of research acknowledges the boundaries of agency theory (e.g., Noreen 1988; Fehr and Schmidt 2006; Salterio and Webb 2006), and examines alternative mechanisms to control agent behavior (Booth and Schulz 2004; Rowe 2004).

Organizations increasingly rely upon ethical climate[1] in addition to or in lieu of traditional agency controls to govern managerial actions when managerial actions are perceived to be unethical and/or incongruent with the goals of the firm (Booth and Schulz 2004). Considering ethical climate (i.e., ethical control) on a user's beliefs about accounting information is important for at least two reasons. First, the effectiveness of ethical control depends not only on its ability to govern agent behavior such as mitigating preparer distortions and promoting a preparer's communication honesty, but also on how it influences a user's beliefs about agent behavior and the characteristics of accounting information. A user that distrusts accounting information will choose not to rely on the information as a basis for decision making regardless of its inherent accuracy or objectivity

[1] Ethical climate refers to the shared assumptions about normative and acceptable behavior, and how an organization responds to ethical issues (Victor and Cullen 1988). Ethical climate can take many forms, including the specific control mechanisms such as formal ethics training, codes of conduct, periodic reviews, and reporting systems (Sims 1992).

(King 1996; Rowe, Shields, Birnberg 2012). Second, organizations are investing increasing resources to communicate details of ethical climate (i.e., corporate social responsibility reporting), therefore understanding how such programs affects a user's beliefs about accounting information is both relevant and important to organizations. This study examines whether ethical control governing preparer behavior influences a user's beliefs about accounting information. The research question asks - can knowledge of a preparer's ethics training repair a user's damaged beliefs about accounting information? While a user's beliefs about accounting information can be easily damaged by encountering self-interested preparer distortions (King 1999), a user's beliefs can also be damaged by encountering a lack of preparer knowledge and/or experience limitations[2] (Luft and Shields 2001; Gronewold, Gold, Salterio 2012). A natural question then arises – does the nature of a preparer distortion affect controls governing preparer behavior on repairing a user's damaged beliefs about accounting information?

Drawing on implicit theory (Dweck, Chiu, and Hong 1995) and evidence from psychology I predict the process to repair a user's damaged beliefs about accounting information depends not only on type of control governing preparer behavior, but also on the nature of preparer distortion. Based on experimental evidence, I find users are more responsive to controls governing preparer behavior following preparer distortions of error relative to preparer distortions of bias. Specifically, I find a non-ethical control more effectively repairs a user's damaged beliefs following preparer error than an ethical control following preparer bias. Results from the current study provide evidence that in some scenarios a user's beliefs about accounting information are influenced only by his or her

[2] Although various heuristics and cognitive biases can give rise to preparer errors, in this paper preparer bias refers to the objectivity (i.e., self-interest) of the information preparer.

direct experience with the preparer and/or information while in other scenarios a user's beliefs are shaped by the controls governing preparer behavior.

A 2x3x(4) mixed factorial design is used to test the hypotheses. I manipulate two levels of preparer distortion preparer bias or preparer error. I also manipulate three levels of control (none, ethical, and non-ethical). Participants' beliefs about accounting information are measured prior to and post manipulation. Participant choice behavior and attitudes are also observed in a post distortion and control period.

The current study adds to a nascent but growing literature that examines belief revision strategies following preparer distortions of accounting information. The current study extends extant research on verbal and written strategies (e.g., Elliot, Hodge and Sedor 2012) to investigate ethical control on repairing a user's damaged beliefs about accounting information. In this study, preparer errors are shown to have psychologically different consequences than preparer biases on a user's beliefs about accounting information. Findings from this study demonstrate the consequences of those psychological differences on the effectiveness of ethical control on repairing a user's damaged beliefs about accounting information. Overall, this study yields important insights on how individuals process accounting information involving subjective judgments. Moreover, this study offers an alternative perspective by examining the effects of ethical control governing preparer behavior from the perspective of an information user.

The remainder of this paper is organized as follows. Section 2 reviews literature and develops the hypotheses. Section 3 describes the research design. Section 4 summarizes results. Section 5 concludes the paper and offers a discussion of future research.

LITERATURE REVIEW & HYPOTHESES DEVELOPMENT

Ethical control on accounting beliefs

Accounting research grounded in agency theory traditionally focuses on formal controls such as incentives, performance evaluation, and monitoring to mitigate self-interested behavior such as dishonest communication of private information. Yet organizations also invest considerable resources to promote honesty, integrity, and trust to mitigate agent behaviors against the firm (Dekker 2004; Emsely and Kidon 2007; Booth and Schulz 2004; Webb and Salterio 2006). Ethical controls are often prescribed as an alternative to or in lieu of traditional agency controls to govern managerial behavior. As an example, The Sarbanes-Oxley Act of 2002 (SOX) requires public companies to disclose whether they have (or not) adopted a code of ethics. The Federal Acquisition Regulations (FAR) also requires companies doing business with the United States federal government to provide periodic ethics training to all employees.

While prior research examines the influence of ethical control on ethical behavior (e.g., Ponemon 1990; Booth and Schultz 2004), a nascent but growing area has begun to consider how ethical controls influence beliefs about accounting information (e.g., Gronewold, Gold, Salterio 2013). In an experimental audit setting, Gronewold et al. (2013) examine how ethical control alters perceptions about the willingness of auditors to self-report preparer errors. Importantly, Gronewold et al. (2013) find auditors' beliefs about accounting information depend on how organizations respond to the discovery of preparer errors. In their study, when organizations embrace errors as a cause for learning and improvement (rather than punishment such as blame or sanctions), accounting information

is believed to be of better quality. Prior research finds ethical controls not only have a significant effect on shaping the ethical behavior of agents, but also on beliefs about agent behavior such as preparers' willingness to communicate errors.

Gronewold et al. (2013) findings support the importance of how an organization chooses to respond to error discovery. In practice, organizations often adopt formal training programs to mitigate preparer distortions caused by both errors and biases. Tangible skills training can be used to minimize preparer distortions caused by lack of experience and/or knowledge. In contrast, many organizations rely on intangible skills training such as formal ethics programs as a means to minimize deliberate preparer distortions (Delaney and Sockell 1992). As an illustration, the formal ethics training program of The Walt Disney Co. focuses not only on mitigating intentional preparer distortions affecting external reporting but also internal accounting records such as such as time cards, expense reports, invoices, performance evaluation and payroll (See Table 1 for additional examples).

Extant studies on ethical training focus on the content, delivery and outcomes on ethical behavior (Delaney and Sockell 1992). Delaney and Sockell (1992), for example, find evidence to support a positive association between corporate ethics training and ethical behavior by managers. Indeed, a primary objective of managerial accounting systems is to facilitate learning and to improve decision making (Atkinson, Banker, Kaplan 1997; Sprinkle 2000). While management accounting systems (e.g., The Balanced Scorecard) capture metrics such as employee participation rates, and dollars invested, the conditions that make ethical training an effective control mechanism (or not) remains relatively under explored. In particular, ethical training on beliefs about accounting

information is not well understood. A recent study of Fortune 500 companies reports 96% of CEOs surveyed believe the impact of spending on programs such as ethics training is important, however only 8% of CEOs report having an adequate understanding of this investment (Phillips and Phillips 2009).

Assessment of Accounting Information as a Subjective Judgment

Accounting information is often assumed to be objective, precise, and reliable. An important characteristic of accounting information is being reasonably free from preparer error and preparer bias. When economic reality is routine and straightforward, characteristics of accounting information can be easily verified (audited). However, many types of accounting information lack an underlying basis for comparison are therefore hard to verify[3] (Rowe et al. 2012). Finding an underlying basis to assess management's opinion for example, can be costly or non-existent. When information is hard to verify, users often form subjective beliefs about accounting information based on expectations about the information and/or the information preparer (Hirst 1994; Kadous et al. 2012; Rowe et al. 2012). Specifically, users form beliefs based on expectations that information is reasonably free of preparer errors and/or preparer biases[4].

Importantly, decision makers often rely on their subjective beliefs about accounting information rather than seeking methods to objectively assess the information (Rowe et al. 2012). Rowe et al. (2012) find when comparability of accounting information is low (lacks standardization, uses technical language) managers trust the information has been

[3] The IASB and FASB recognize that many types of information (e.g., management's opinions) are considered useful for decision making, but may not be directly or indirectly verifiable. As such, verifiability is no longer included as an underlying characteristic of accounting information.
[4] Although various heuristics and cognitive biases can also give rise to preparer errors, in this paper preparer bias refers to the objectivity (i.e., self-interest) of the information preparer.

competently prepared by an expert with appropriate knowledge of accounting rather than seeking methods to verify the contents for correctness. A manager who distrusts the information will simply ignore the information as a basis for decision making (Rowe et al. 2012). That is, a user's beliefs can have significant influence on whether information is deemed useful, regardless of the inherent characteristics (e.g., accuracy, consistency, verifiability) of the information.

Subjective Judgment of Accounting Information as a Trust Based Judgment

Relying on subjective beliefs about accounting information can expose the user to unintentional and/or intentional distortions of accounting information by the information preparer. Accounting based decisions involving subjective beliefs requires a willingness of a user to be vulnerable to the information preparer based on positive expectations that the information supplied is reasonably free from preparer errors and/or preparer biases. This notion is consistent with trust - defined as the willingness of a party to be vulnerable to the action of another party based on the expectation that the other party will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party (Mayer, Davis, and Schoorman 1995; Rousseau, Sitkin, Burt and Camerer 1998; Mayer and Davis 1999). As an illustration, a subsidiary manager enters into an exchange relationship for goods and labor based on hard to verify cost estimates supplied by another manager. To the extent the cost estimates are constructed based on asymmetric information (e.g., customized product features, delivery scheduling, inside market knowledge) the subsidiary manager risks being intentionally or unintentionally exploited by the other manager's information advantage. A manager choosing to continue in this relationship notwithstanding the risk of being exploited reveals his or her expectations

about errors and/or bias embedded within the accounting information. The current study draws upon the trust literature to better understand users' beliefs about accounting information as a subjective (trust-based) judgment.

Trust is a history dependent variable (Rotter 1980; Kramer 1999). Over time, as one's expectations are confirmed trust is strengthened (e.g., Coletti, Sedatole, Towry 2005). Individuals often demonstrate high levels of initial trust provided no reason to do otherwise (Berg, Dickhaut, and McCabe 1995; Mcknight, Cummings, Chervany 1998). This phenomenon is attributed to positive social expectations such as fairness, reciprocity and honesty (Berg et al. 1995; McKnight et al. 1998; Colquitt, Scott, Lepine 2007). Similarly, subjective beliefs about accounting information are also reinforced when positive expectations of an information preparer and/or the information are confirmed. Moreover, research finds information users demonstrate relatively positive beliefs about accounting information even with limited or no prior experience with an information preparer (Rowe et al. 2012).

Despite high levels of initial trust, trust can be easily damaged and is often hard to re-establish once expectations are unmet or violated (Lewicki and Wiethoff 2000; Dirks and Ferrin 2002; Kim, Ferrin, Cooper, and Dirks 2004; Emsley and Kidon 2007; Elliot, Hodge, Sedor 2012). Similarly, users' beliefs about accounting information are easily damaged when expectations about the information and/or information preparer are violated (King 1996). As an example, King (1996) finds buyers remain reluctant to rely upon a seller's accounting information after a single encounter with misreported costs even when a seller is honest in subsequent interactions.

Accounting information beliefs are sensitive to users' expectations about the information preparer (Hirst 1994; King 1996; Maines and Wahlen 2006; Kadous et al. 2012). Kadous et al. (2012) find that investors view information with greater relevance when it is received from a highly competent source rather than a less competent source. Hirst (1994) finds auditors' beliefs about an inventory valuation report depends on the likelihood that the information preparer reports truthfully and accurately. As expectations about the preparer's objectivity to report truthfully and competence to measure inventory accurately diminish, so too does the inferential value of accounting information. Hirst (1994) also provides evidence that auditor judgments of audit information quality to be unaffected by the degree of its verifiability. Findings from these studies suggest that users' subjective beliefs about accounting information are sensitive to expectations of competence and/or integrity of an information preparer. In addition, subjective judgments about accounting information can differ from the actual characteristics inherent in the information itself.

Repairing Damaged Trust-Based Accounting Beliefs

Accounting information users frequently encounter preparer errors and/or biases that violate their expectations causing damage to beliefs as many factors such as economic incentives (Healy and Wahlen 1999), knowledge limitations (Kadous et al. 2012), mechanical or calculation error (Gronewold et al. 2013), and cognitive processes (Luft and Shields 2001) cause preparer distortions of accounting information. For example, Luft and Shields (2001) find cost-estimates are inherently less reliable (e.g., less accurate, more inconsistent) when intangibles are expensed rather than capitalized because the choice of accounting method affects how well managers are able to learn cost-profit relations. To

the extent preparer errors and biases distort accounting information from economic reality, users' expectations about information and/or the preparer can be violated. As such, users' beliefs about accounting are easily damaged following encounters with preparer distortions embedded within accounting information.

Maintaining positive beliefs about accounting information reduces transaction costs (e.g., Dyer and Chu 2003), aids decision making (e.g., Zand 1972), and facilitates ongoing relationships both within and across the firm (e.g., Kramer and Tyler 1996). Despite the importance of a user's positive beliefs about accounting information, beliefs can be easily damaged. In particular, users' beliefs can be easily damaged from encounters with preparer distortions embedded within accounting information.

Devising strategies to repair a user's damaged accounting information beliefs are both relevant and important to organizations. However, repairing damaged beliefs can prove more challenging than establishing initial positive beliefs about accounting information. Repairing damaged beliefs differs from establishing initial beliefs as one must not only (re-)establish positive expectations but also overcome any negative expectations following an expectation violation (Kim et al. 2004). Assuming the process to repair a user's damaged beliefs requires a user to overcome negative expectations from preparer distortions, the effectiveness of ethical control is predicted to depend on whether concerns of subsequent preparer distortions can be alleviated.

A growing area of research investigates strategies to repair damaged trust. Extant research investigates verbal responses on trust repair following an expectation violation (Kim et al. 2004; Kim, Dirks, Cooper, Ferrin 2006; Elliot et al. 2012). Elliott et al. (2012) examine a CEO's verbal response to attribute the underlying cause for an unexpected

earnings misstatement. In their study, they find investors' willingness to trust and perceptions of management's trustworthiness depends upon whether a CEO offers an internal (i.e., personal) or external (i.e., situational) explanation for the underlying cause of the earnings restatement. Although extant research focuses on verbal response as a belief revision strategy, organizations also invest considerable resources on ethical controls to manage expectations. The extent to which ethical control can be used to repair user's beliefs about accounting information following an expectation violation from preparer distortion has yet to be fully examined.

Implicit Theory

Research on interpersonal evaluative and judgment processes in psychology offers theory and evidence to predict the process to repair users' beliefs about accounting information depends not only on ethical controls, but also on the nature of preparer distortion. Implicit theory describes a system of beliefs which guides how individuals interpret and evaluate their social environment (Dweck et al. 1995). Hence, it is relevant for understanding how preparer distortions and ethical control affect a user's beliefs about accounting information (Pedersen 1965; Dweck et al. 1995; Chiu, Hong, Dweck 1997). Two assumptions about the personal attributes of others are central to the theory. According to implicit theory individual attributes such as a person's intelligence are either assumed to be fixed and cannot be changed, or malleable - developed and changed with effort and training over time (Dweck et al. 1995, Dweck 2008). Importantly, assumptions about the malleability or fixedness of individual attributes are not mutually exclusive but domain specific according to implicit theory. That is, a user may believe preparer

attributes (e.g., competence) to be malleable in one domain, while fixed in another (e.g., integrity) (Dweck et al. 1995).

When users assume the underlying cause of preparer distortions are caused by fixed rather than malleable preparer attributes, then users will expect future preparer distortions to re-occur with more certainty across time and context (Hong, Chiu, Dweck and Sacks 1997). Importantly, prior research suggests individuals tend to be more certain of future preparer distortions related to integrity than competence (Reeder and Brewer 1979; Snyder and Stukas 1999). As an illustration, King (1996) finds that once a user encounters a single intentional preparer error he or she will anticipate subsequent dishonest communication regardless of the level of honesty demonstrated by the preparer in subsequent interaction periods. In contrast, preparer errors related to competence provide less certainty about a manager's future competence and the likelihood of subsequent errors because even a very competent manager can perform poorly at times (Reeder and Brewer 1979; Snyder and Stuaks 1999).

Based on the foregoing, two conditions are necessary to alleviate a user's concerns of subsequent preparer distortions and repair a user's damaged beliefs. First, a user must believe preparer distortions are the result of a malleable (rather than fixed) preparer attribute. To the extent a user believes the underlying cause of preparer distortions are the result of fixed preparer attributes, ethical control will have little effect on repairing a user's beliefs. Users are predicted to be less responsive to ethical control following preparer distortions caused by integrity based attributes (i.e., preparer bias) relative to competence based attributes (i.e., preparer error).

Second, a user must believe the response used to govern preparer behavior will adequately address the underlying cause of preparer distortion. As such, an ethical control that does little to mitigate a user's concerns of future preparer distortions is predicted to be less effective on repairing a user's beliefs than one that does. Given research that suggests distortions of self-interest (i.e., integrity) provide more certainty of future distortions than distortions of error (i.e., competence), an ethical control can exacerbate a user's subjective beliefs following preparer error by introducing concerns of agency problems than preparer bias. In contrast, a non-ethical control that mitigates concerns of future preparer errors is more likely to repair beliefs following preparer error than preparer bias. Taken together, the formal hypothesis follows.

> H: Ethical control on a user's beliefs about accounting information depends on the type of preparer distortion

Accounting based decisions involving subjective beliefs exposes the user to potential distortions of information by the preparer, and thus reveals a user's expectation that the information has been prepared with appropriate objectivity and/or knowledge. As previously stated, this notion is consistent with a common definition of trust[5]. Das and Teng (2004) further clarify the definition of trust by differentiating the trust construct into the following three components (1) subjective trust (2) trust antecedents, and (3) behavioral trust. In this study, a user's subjective beliefs about accounting information are viewed in parallel with subjective trust. Subjective trust refers to a psychological state "a

[5] Trust research in the accounting literature follows two streams. Some assume a substitutive relationship between trust and control, and view trust as an informal control mechanism (e.g., Dekker 2004). Others assume a complementary relationship between trust and control. Though the focus of this study is not to reconcile these two perspectives, this study assumes trust and control to be related but distinct concepts. Whereas control refers to explicit routines and procedures managers use to maintain or alter patterns in organizational activities (Simons 1995), trust refers to expectations and interpersonal beliefs about others (Mcknight et al. 1998). For the purpose of this study, trust is viewed as an important component of a management control system, but is not in itself a control mechanism (Das and Teng 1998).

belief, attitude, or expectation concerning the likelihood that the actions or outcomes of another individual, group, or organization will be acceptable or will serve the actor's interests" (Sitkin and Roth 1993, p368). Thus, a user's subjective beliefs about accounting information are considered as a psychological expectation that information is reasonably free from preparer distortions. Behavioral trust refers to the actions or outcomes of subjective trust such as the action to rely (or not) on one's expectations of information as a basis for decision making. In this study, a user's decision to rely on information in a subsequent period (behavioral trust) is predicted to be greatest following preparer error and a non-ethical control relative to other combinations of ethical control and preparer distortion. While it is possible to observe subjective trust in absence of behavioral trust and vice versa, it is the simultaneous combination of subjective trust and behavioral trust that constitutes trust (Kee and Knox, 1970; Das and Teng 2004). Analogously, it is the simultaneous presence of a user's positive beliefs about accounting information and a willingness to base decisions upon those beliefs that indicates a user's damaged beliefs about accounting information have been repaired. Lastly, trust antecedents are the situational and personal attributes which affect subjective trust.

To summarize, the current study examines how ethical control and preparer distortions (trust antecedents) influence subjective beliefs about accounting information (subjective trust), and the use of accounting information (or not) as a basis for decision making (behavioral trust). Based on the foregoing, the formal hypotheses are stated as follows:

> H2: Following preparer error and a non-ethical control, users are more willing to rely upon accounting information in a post-distortion period relative to all other combinations of preparer distortion and control (behavioral trust).

H3: Subjective beliefs mediate the relation between controls, preparer distortion and subjective accounting based decisions.

METHOD

Experimental design

A 2x3x(4) mixed factorial design is used to test the hypotheses. Participants are randomly assigned to one of six experimental conditions. Two levels of preparer distortion are manipulated (preparer bias or preparer error), and three levels of control initiatives are manipulated (no control, ethical, and non-ethical). Participants complete four periods of decision making. Participants' beliefs about accounting information are measured via a multi-item self-report Likert scale. Participants' choice behavior is also captured in a post distortion and control initiative period.

Participants

One hundred and fifty-nine students enrolled in a graduate level accounting course from a large state university in the Mid-Western United States participated. Seventy percent of the participants were male and the average age was 26. The average full-time, professional work experience was more than two years. All experimental materials were accessed online via laboratory computers. Eight participants ended the experimental sessions prior to the final decision round, and were not included in the overall analysis. Participants were informed that their compensation would be based on the outcome of their decision for a randomly selected decision period. However, participants were not told how many periods they might encounter. Participants were told that each decision period was an independent from all other periods. Thus, the outcome of one decision period had no effect on the outcome or decisions of any other decision period. At the end of the study, one of the participant's decision period was chosen at random by the computer to

determine his or her final compensation. Based on the outcome of the participant's randomly chosen decision period, participants could earn up to $10.

Procedures

At the beginning of each experimental session, participants are given a brief introduction including an informed research ethics consent package, and guarantees for anonymity. After signing the consent form, participants are provided further background information about their role in the study. Participants are asked to assume the role of a division manager for a large eye wear manufacturer. As division manager, participants are tasked with the decision to manufacture a standard or custom order for sunglasses. The custom order requires the purchase of a specialty lens produced by another division within the company. Participants are told that the specialty lens is unique and has no outside market price. As such, a transfer price for the lens must be agreed upon in order to manufacture the custom order. While transferring the specialty lens at the highest possible price is most profitable for the lens supplier, transferring lenses at the lowest possible price is most profitable to the participant's division. However, it is also described to participants that finding a transfer price that distributes profits equitably between both divisions is important because bonuses are based on divisional profits. Before proceeding, participants respond to a series of questions to assess whether he or she understands the background information presented.

At the beginning of each decision period, participants are provided with information that details both the standard and custom order. The standard sunglass order is described as an individual divisional project that consistently meets divisional profit targets and guarantees a cash bonus of $5 at the end of each period. The custom project is

described as having the potential to generate a cash bonus up to $10 at the end of the period if divisional profit targets are met (or no bonus if divisional profit targets are unmet). The custom project requires the division manager to purchase custom lenses from the internal lens division by accepting a proposed transfer price equal to *variable cost per unit of custom lens produced plus a 30% markup*. Each period, participants receive the Lens Division manager's expected average variable costs of custom lens produced. The expected average variable cost per unit of custom lens produced reported by the lens division is described as being normally distributed with a standard deviation of $0.50/unit. The participant also receives the proposed transfer price between divisions, and the expected profits for each division. Based on the expected average variable cost per unit of custom lens reported by the lens division, the proposed transfer price splits expected profits equally between both divisions. The standard and custom orders differ in variance but are equivalent in payoffs (see Appendix A for excerpt from experimental materials). Participants are tasked with the decision to accept the proposed transfer price and manufacture the custom order, or reject the proposed transfer price and manufacture the standard order. At the end of each period, participants receive feedback on the outcomes of their decision including the bonus earned (if any) based on his or her decision.

Overall, period 1 serves as a practice round for participants to familiarize themselves with the study and task on hand. Since the focus of the current study is on the repair of a user's subjective beliefs about accounting information, period 1 also serves to assess participant's attitudes and expectations (e.g., fairness) on the proposed transfer price. Period 2 serves to introduce the preparer distortion manipulation, the ethical control initiative manipulation, and measure a user's subjective beliefs about accounting

information. Period 3 and 4 provide a post preparer distortion period and enables the measurement of behavioral trust.

Experimental treatments

Preparer Distortion

Following period 1, participants are informed of the start of period 2. In period 2, participants encounter a preparer distortion when it is revealed that actual outcomes differ from expected outcomes[6]. Specifically, the actual variable costs of custom lens produced are greater than variable costs of custom lens produced initially reported by the Lens Division manager. As a consequence, the actual transfer price is greater than the proposed transfer price, and an inequitable split of profits arise between divisions. The preparer distortion is either described to participants as the result of the Lens Division manager being aware of additional material costs at the time of negotiations but deliberately withholding this information for personal reasons (preparer bias), or the Lens Division manager being unaware of additional material costs due to a lack of competence and experience with estimating variable costs (preparer error). This manipulation is consistent with the finding that a single encounter with a preparer distortion can be adequate to damage a user's subjective beliefs about accounting information (King 1999). Moreover, prior research finds trust is easily damaged when social expectations such as fairness and honesty are violated. Participants' attitudes towards the consistency, expectations and fairness of the expected and actual transfer price outcomes are also assessed via a Likert self-report questions both prior and subsequent exposure to the preparer distortion manipulation in period 2.

[6] Participants who reject the proposed transfer price are not subject to a preparer distortion.

Ethical Control

At the beginning of period 3, participants are informed of one of two control initiatives adopted by top management subsequent to the distortion discovery. The ethical control condition is described to participants as a mandatory 6 hour in-classroom training course on ethical conduct focused on keeping honest books and records. The non-ethical control condition is described as a mandatory 6 hour in in-classroom training course on cost estimation focused on keeping accurate books and records. Participants are also told that the course has been added to the schedule of continuous learning and development training to be received by all divisional managers in each subsequent year. A third condition in which no control initiative is introduced provides a baseline for comparison.

Dependent Variable

In period 3, after responding to the decision of whether to accept or reject the transfer price, but prior to receiving feedback on the outcome of the participant's decision, participants complete a multi item questionnaire to assess subjective beliefs about accounting information. Participants were asked to report the extent to which they agreed or disagreed with the following statement "I believe the information reported by the Lens Division Manager to be reliable". Participants were also asked to respond to statements based on properties of accounting information such as accuracy ("I believe the variable costs per unit of custom lens produced reported by the Lens Division Manager are accurate"), truthfulness ("I believe the variable costs per unit of custom lens produced reported by the Lens Division Manager to be true"), and faithful representation ("I am confident the Lens Division Manager would not intentionally lie to me"). Participants also responded to the following statements, "The Lens Division Manager lacks integrity" and "The Lens Division Manager is trustworthy". Participants responded to each statement

using a seven point Likert scale. After responding to the multi-item questionnaire, participants receive outcome feedback based on their decision to accept or reject the transfer price at the end of period 3. Next, participants complete period 4 by submitting their decision to either accept or reject the transfer price. Participants respond to a final questionnaire and receive feedback on their final round of decision making.

RESULTS

Sample

The following analyses are conducted based on the following sample. Of the 159 participants, 43 participants rejected the transfer price in period 2 and did not encounter an expectation violation, and are therefore not included in the following analyses. The remaining108 participants accepted the transfer price in period 2 and subsequently encountered the preparer distortion manipulation (error or bias). Of the 108 participants, 36 participants were randomly assigned to the baseline condition, while 72 participants were either assigned to the strong ethical control condition or weak ethical control condition. Eight participants ended their experimental sessions prematurely and were excluded from the final analyses.

Manipulation checks

The literature on trust finds violations of social expectations such as honesty and fairness (i.e., equity) damages trust between parties (Das and Teng 1998). Similarly, expectation violations arising from preparer distortions are expected to damage a user's subjective beliefs. To assess the effectiveness of the preparer distortion manipulation, several measures were analyzed to establish whether 1) participants experienced an expectation violation due to preparer distortion and 2) participants weighed the violation equally across conditions. Results are reported in Table 3. While participants agreed the initial transfer price proposed by the Lens manager to be equitable (Bias: $\mu = 2.20$; Error: $\mu = 2.51$) across preparer distortion conditions, participants found the actual outcomes of the transfer price to be highly inequitable in period 2 (Bias: $\mu = 6.00$; Error: $\mu = 5.48$) (Table 3,

Panel A). In addition, results reveal that actual variable cost reported by the Lens manager was highly inconsistent with the expected variable cost of participants for both types of preparer distortion (Bias: $\mu = 5.85$; Error $\mu = 5.50$). Taken together, these results indicate participants experienced a similar expectation violation of equity and consistency following both types preparer distortion. Moreover, when no control initiative was introduced there was no significant differences found between subjective beliefs across preparer distortion conditions (Bias: $\mu = 0.175$; Error: $\mu = 0.022$; $F = .126$, $p = .73$). The preparer distortion manipulation appears to have been effective and consistent across both preparer distortion conditions.

To assess the ethical control manipulation, participants were asked to identify the type of training received by the Lens division manager (Table 3, Panel B). As expected, participants in the ethical control condition correctly responded that the Lens Division manager had received ethics training, but not cost training. In contrast, participants in the non-ethical control condition responded correctly that the Lens Division manager had received cost training, but not ethics training. Thus, it appears that both the control and preparer distortion manipulations were successful.

Tests of Hypotheses

Subjective Beliefs

As discussed in Section III, subjective beliefs were measured based on six Likert-scale questions. Descriptive statistics are reported on Table 3, Panel C. All six items correlate significantly ($p < 0.05$, two-tailed) with all other items, with correlation coefficients of at least .4 suggesting reasonable factorability (Table 4). The measurement model with six measures provides a reasonably good fit with a minimum discrepancy χ^2

=16.81(df.=9, p > 0.05), a Root Mean Square Error of Approximation (RMSEA) of 0.07, Comparative Fit Index (CFI) of 0.99, and a Tucker-Lewis Index (TLI) of 0.98[7]. Table 5 presents the factor analysis results. Panel A describes the set of six questions. Panel B summarizes factor loadings and communalities. As shown in Panel C, the factor analysis yields a single factor that accounts for 68 percent of the cumulative variation. The factor loading is consistent with expectations, and represents subjective beliefs. Participants' factor score measures subjective beliefs and is used to test the hypotheses.

Hypotheses

H1 predicts an interaction between ethical control and preparer distortion on subjective beliefs. Figure 3 illustrates the pattern of results for the hypotheses. As shown, there is a cross over interaction between controls and preparer distortion. Table 6 presents the analysis of variance (ANOVA) model with subjective beliefs as the dependent variable. Table 6, Panel A reports cell sizes, means and standard errors for subjective beliefs. Results on Table 6, Panel B reveal a significant interaction between controls and preparer distortion on subjective beliefs ($F = 4.792$, $p<0.05$, two-tailed).

A Post Hoc analysis was performed. As predicted, users' responsiveness to ethical control was found to be greater following preparer distortions from error than bias. Furthermore, non-ethical control had a more positive effect on subjective beliefs following preparer error than ethical control ($F(1,68) = 5.61$, $p < 0.05$). No significant difference was found between either ethical or non-ethical control condition following a preparer distortion of bias ($F(1,68) = 0.58$, $p = .45$). Additional analyses (untabulated) were performed using the baseline condition (no control). In absence of an ethical control

[7] As a rule of thumb, a model may be considered to have a reasonably good fit when RMSEA values are close to 0.06, CFI and TLI are .95 or greater (Hu and Bentler 1999; Albright and Park, 2009).

initiative, no significant difference ($F(1,34) = 1.26$, $p = .725$) was found across preparer distortion condition (error $\mu = 0.022$ versus bias $\mu = 0.175$) for subjective beliefs. These findings provide support for the conclusion that the effectiveness of controls governing preparer behavior on repairing a user's subjective beliefs about accounting information depends on the nature of preparer distortion.

H2 predicts repair of behavioral trust will be greatest given a non-ethical control following preparer error relative to all other combinations of preparer distortion and preparer control. As illustrated in Figure 4 panel A, the percentage of participants who rejected the proposed transfer price in the post-distortion period did not differ across control conditions following a distortion of preparer bias χ^2 (2, N = 45) = 1.13, $p = 0.570$. This sample included 11 participants in the no control manipulation, 15 in the ethical training condition and 19 participants in the non-ethical training condition. The percentage of participants that rejected the proposed transfer price in the post-distortion period following distortion of preparer error differs significantly across control conditions χ^2 (2, N = 63) = 14.22, $p > 0.01$. As can be seen by the frequencies cross tabulated in Figure 4 panel A, the percentage of participants who rejected the proposed transfer price was significantly less following the non-ethical control relative to no control initiative condition. Following a distortion of preparer error 48% of participants rejected the proposed transfer price in the post distortion period when no control initiative was introduced compared with 13% of participants rejecting the proposed transfer price following the introduction of the non-ethical control initiative. Results from H2 provides evidence that the effectiveness of control initiatives on repairing behavioral trust depends on the nature of preparer distortion. While an ethical control initiative has little effect on repairing behavioral trust

following a distortion of preparer bias, a non ethical control repairs behavioral trust following a distortion of preparer error. Overall, support for H2 is found.

H3 predicts a mediating effect of subjective beliefs on the relationship between controls, preparer distortion and the decision to accept or reject a proposed transfer price in a post-distortion period. The mediation analysis was conducted in AMOS. As a pre-condition for mediation the direct effect between control, preparer distortion and transfer price decision was tested. A significant direct effect was found between preparer distortion and transfer price decision ($p < 0.05$, two-tailed), but not controls ($p = 0.23$, two-tailed). Thus, the mediation analysis was conducted on preparer distortion and transfer price decision. As recommended for small samples, a nonparametric bootstrapping analysis was used (Preacher and Hayes 2004). Results based on 1,000 bootstrapped samples indicate that whilst controlling for variable cost knowledge of the Lens Division Manager, the total effect of preparer distortion on transfer price decision is marginally significant (TE =.152, SE = .119, $p = 0.059$), the direct effect is not ($p = .152$), and the indirect effect is marginally significant ($p = 0.08$). Thus, subjective beliefs mediates the relationship between preparer distortion and transfer price decision controlling for knowledge of variable costs (IE lower 95% CI = -.004, upper 95% CI=.188). Based on results of the mediation, given an ethical control a negative relationship was found between subjective beliefs and the decision to accept the transfer price in a post-distortion period. Figure 4 summarizes the results.

Overall, findings in this study provide evidence that ethical control less effectively repairs a user's accounting beliefs following preparer bias than non-ethical control following preparer error. While non-ethical control was found to repair both a user's

subjective beliefs and behavioral trust relative to no control, ethical control had little effect on repairing a user's subjective trust or behavioral trust. As Rousseau, Sitkin, Burt and Camerer (1988) argue "trust is not a behavior or a choice (e.g., taking a risk), but an underlying psychological condition that can cause or result from such actions" (p 395). In other words, it is the simultaneous presence of both subjective trust (e.g., positive subjective beliefs about accounting information) and behavioral trust (e.g., decision to rely on accounting information) that constitutes trust repair. Findings from this study reveal ethical controls were less likely to repair damaged beliefs following distortion of preparer bias compared to preparer error. Repairing a user's damaged beliefs about accounting information depends not only on re-establishing positive expectations about the objectivity and accuracy of accounting information, but also on observing a user's willingness to rely on accounting information in a post distortion period. In this study, repairing a user's damaged beliefs about accounting information depends on both the nature of preparer distortion, and also on the type of ethical control.

CONCLUSIONS

Organizations rely upon controls to mitigate distortions of accounting information from economic reality. Distortions can lead to expectation violations and damage a user's beliefs about accounting information. The following study examines whether ethical controls governing behavior of a preparer can influence a user's beliefs about accounting information, or whether a user's beliefs are only affected by their direct experiences and interactions with a preparer. Results from this study demonstrate the effectiveness of controls on repairing a user's damaged beliefs about accounting information depends on the nature of control and type of preparer distortion. Following a distortion arising from preparer error, a non-ethical control repairs a user's beliefs more effectively than an ethical control following preparer bias. Results support the conclusion that while in some situations ethical control affects a user's beliefs about accounting information, in other situations only a user's direct experience with accounting information and interactions with a preparer affect those beliefs.

Findings in this study provide important insights for both practitioners and scholars. First, I demonstrate distortions of information arising from preparer bias to have psychologically different implications than distortions arising from preparer error. I find the conditions conducive for non-ethical control are not parallel to the conditions conducive for ethical control on repairing a user's damaged beliefs about accounting information. Implementing a non-ethical control governing preparer behavior was found to be an effective strategy to repair damaged beliefs following distortions due to preparer error. In contrast, an ethical control governing preparer behavior was found to be an ineffective strategy to repair damaged beliefs following distortions due to preparer bias.

Practically speaking, results from this study provide important insights for understanding the conditions of using ethical and non-ethical controls as a strategy to repair a user's damaged beliefs about accounting information.

Second, results from this study contribute to a deeper understanding of assessments of accounting information as a subjective judgment. Prior research in accounting focuses either on preparer incentives to distort accounting information, or controls used to mitigate preparer distortions of accounting information. Results from my study add to extant research by examining controls from the perspective of the information user. Moreover, objective assessments of accounting information can often be difficult to ascertain in practice. By examining a user's subjective beliefs about accounting information in the context of trust, I provide a framework to better understand assessments of accounting information as a subjective judgment.

Findings in the current study also provide insights on corporate social responsibility efforts. Prior research documents numerous benefits associated with ethics training. In addition, an increasing trend by companies to report on their ethical initiatives exists. As organizations seek to increase the visibility of their ethics programs, the current study identifies conditions that exacerbate their effectiveness. Findings from this study provide some insight on policy decisions aimed to improve corporate ethics (e.g., Sarbanes Oxley) from the perspective of the accounting information user. Specifically, a user's beliefs may not reflect whether a control actually achieves desirable behavior from an information preparer.

Several streams of future research exist. The current study examines specific forms of controls, preparer distortions, and accounting based decisions. Future studies can

investigate how different variations of these variables can affect assessments of accounting information. For example, under what conditions are ethical controls versus traditional agency controls more or less effective on mitigating agency concerns? What are the implications of implementing ethical controls following various internal or external audit deficiencies? Are ethical controls more or less effective as a reactive versus preventative control strategy?

While the current study focuses on beliefs from the perspective of the information user, future research could also examine the social interactions between the information user and preparer to examine accounting in a dyadic, or multi-party (rather than individual) setting. This could bring together two streams of literature that focus on verbal communication by the preparer (e.g., cheap talk) and formal controls on belief revision strategies following an expectation violation. A comprehensive model that includes not only a user's beliefs about the information preparer, but also individual attributes of the information user (e.g., risk preferences, trust propensity, optimism), and contextual variables (e.g., gain/loss frame, interaction history, incentives) could be useful for expanding the current understanding of factors affecting subjective beliefs involving accounting information.

APPENDICES

TABLE 1
Examples of Corporate Ethics Training and Development Programs

Company	**Industry**	**Excerpts from Corporate Ethics Training Programs** (extracted from company's website)
The Walt Disney Co.	Mass Media	Compliance training, including training regarding the Company's Standards of Business Conduct and ethics, is provided to employees and Cast Members worldwide through the Company's learning management system known as Disney Development Connection. It is the Company's intent, through its compliance training, to ensure that all of its employees and Cast Members have the knowledge and training to act ethically and legally, in compliance with the Company's Standards of Business Conduct. Accurate and complete record keeping is essential to the successful operation of our company, as well as our ability to meet our legal and regulatory obligations. You have the responsibility to be accurate, complete, and honest in what you report, and record to meet regulatory requirements, as well as in all Company documents including accounting records, time cards, expense reports, invoices, payroll records, business records, performance evaluations etc…
The Coca-Cola Co.	Beverage	To ensure an ongoing commitment to and understanding of our *Code of Business Conduct*, we offer online training to all associates with Company-provided computers discussing topics related to ethics and compliance. All newly hired associates receive the training upon hire and all others receive the training at least once every three years. In 2010, approximately 22,000 employees (management and non-management) certified their compliance with the *Code of Business Conduct* and the Company's anti-bribery requirements. In addition to a number of optional training courses on various topics, associates are requested to participate in ethics training on an annual basis, resulting in an average of 60 minutes of ethics training per associate per year.

TABLE 1 (cont'd)
Examples of Corporate Ethics Training and Development Programs

Company	**Industry**	**Excerpts from Corporate Ethics Training Programs** (extracted from company's website)
Boeing	Aerospace and Defense	The Boeing Company is committed to fostering an environment where integrity is valued and forms the foundation for every decision. Although maintaining ethical behavior is woven throughout our daily communications and activities, the company conducts three mandatory and educational activities annually as reminders about our commitment to ethics and business conduct standards at Boeing. Annual activities include Recommitment to Ethics, Code of Conduct and the Ethics Challenge. The Boeing Code of Conduct certification occurs annually. Employees certify once a year that they will adhere to the Code of Conduct, which outlines the ethical business conduct required of employees in the performance of their company responsibilities. Individuals certify that they will not engage in conduct or activity that may raise questions as to the company's honesty, impartiality or reputation or otherwise cause embarrassment to the company, among other things. The annual Ethics Challenge training educates employees about situations they might face in daily business using specific case scenarios. Participants answer questions about ethical dilemmas; then learn which is the best answer and why. This training, which is administered by managers, is typically completed in a group setting.

APPENDIX A

Excerpt from Experimental Materials

This period, your division can manufacture custom sunglasses that can be sold to retailers for $26.00 per unit. The Lens Division manager proposes to transfer custom lenses to your division at a price equal to: *variable cost per unit of custom lens produced plus a 30% markup*. It is up to you whether you choose to accept or reject this transfer price. (Note: Profits for the custom sunglasses will be shown to you at the end of each period regardless of your decision.)

If you reject the proposed transfer price for custom lenses, then your division will manufacture standard sunglasses, and you will earn a bonus of $5.00 at the end of this period.

If you accept the proposed transfer price for custom lenses, then your division will manufacture custom sunglasses. You will earn a bonus of $10.00 if your division's profit per unit is $3.00 or more at the end of this period. If, however your division's profit per unit is less than $3.00, then you will earn a bonus of $0.

The Lens Division manager reports an average variable cost per unit of custom lens produced of $10.00 to you. The costs are normally distributed with a standard deviation of $0.50/unit. Profits for the custom order are summarized below for both divisions:

TABLE 2
Experimental Transfer Price Data

Panel A: Expected outcome shown to participant

Sunglasses Division Custom Order	Expected $ per unit	Lens Division Custom Order	Expected $ per unit
Selling price of sunglasses to retailer	$18.00	Transfer price of lens to Sunglasses Division (Variable cost per unit plus 30% markup)	$13.00
Minus: Transfer price of lens from Lens Division Other costs	 13.00 2.00	Minus: Variable cost per unit of custom lens produced	 10.00
Profit Sunglasses Division	**$3.00**	**Profit Lens Division**	**$3.00**

Panel B: Actual outcome shown to participant accepting proposed transfer price

Sunglasses Division Custom Order	Actual $ per unit	Lens Division Custom Order	Actual $ per unit
Selling price of sunglasses to retailers	$18.00	Transfer price of lens to Sunglasses Division (variable cost per unit plus 30% markup)	$15.60
Minus: Transfer price of lens from Lens Division Other costs	 15.60 2.00	Minus: Variable cost per unit of custom lens produced	 12.00
Profit Sunglasses Division	**$0.40**	**Profit Lens Division**	**$3.60**
Your Bonus this period	**$0**	**Lens Division Manager's bonus this period**	**$10.00**

FIGURE 1
Hypothesized Relations Among Control, Preparer Distortion, Subjective Beliefs and Transfer Price Decisions

Panel A: Predicted relations of Preparer Distortion by Control Condition on Subjective Beliefs

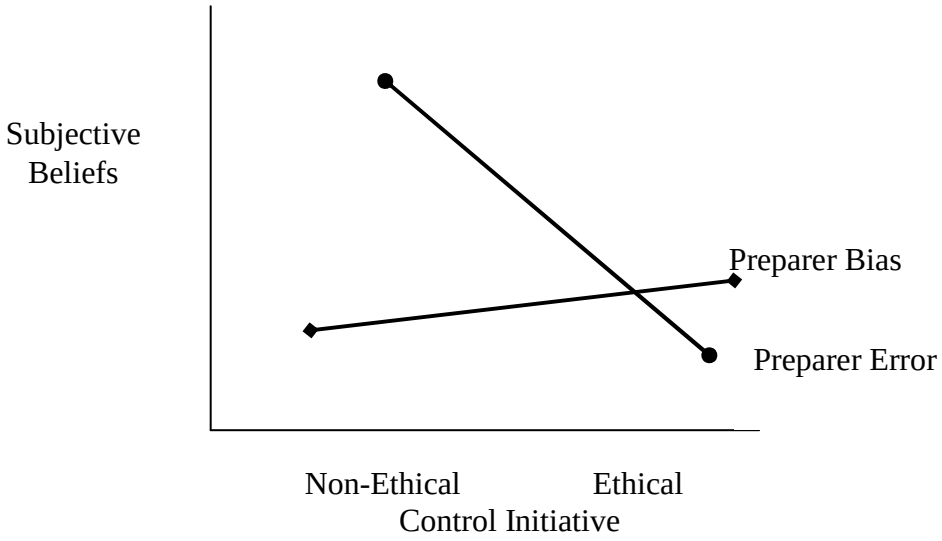
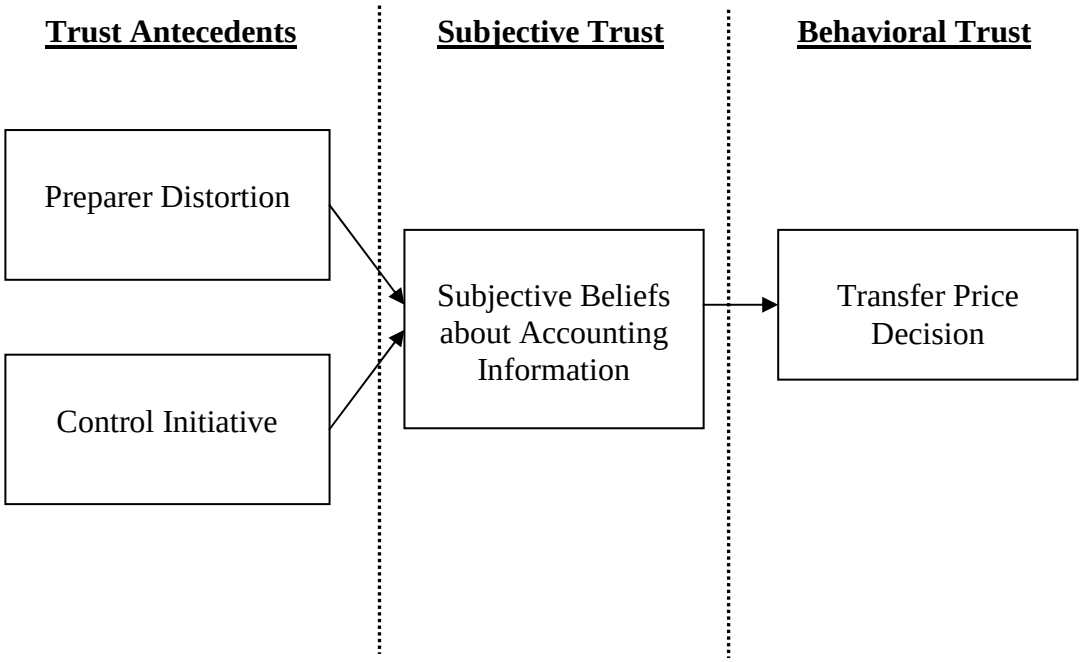


FIGURE 2
Framework of Subjective Accounting Information Beliefs as a Subjective Trust Judgment

Panel A: Subjective Beliefs as a subjective trust judgment



Panel B: Subjective accounting beliefs (subjective trust) are measured based on the following six items:

1. I believe the variable costs per unit of custom lens produced reported by the Lens Division Manager to be true.
2. I am confident the Lens Division Manager would not intentionally lie to me
3. I believe the variable costs per unit of custom lens produced reported by the Lens Division Manager are accurate
4. I believe the information reported by the Lens Division Manager to be reliable.
5. The Lens Division Manager lacks integrity
6. The Lens Division Manager is trustworthy

Panel C: Transfer price decision (behavioral trust) is measured based on the following item:

1. Accept proposed transfer price or Reject proposed transfer price

TABLE 3
Manipulation Checks

	Mean **Bias** n = 45	Mean **Error** n = 63
Panel A: Preparer Distortion Manipulation Check		
Pre-preparer distortion based on initial costs reported by the Lens Division Manager		
Q: Profits are equitably split between my division and the Lens Division	2.20	2.51 (t = -.986, p = .33*)
Post-preparer distortion based on actual costs reported by the Lens Division Manager		
Q: Profits are equitably split between my division and the Lens Division	6.00	5.48 (t = 1.68, p = 0.10*)
Q: Actual variable costs of custom lens produced are consistent with initial costs reported by the Lens Division Manager	5.85	5.50 (t = 1.01, p = .32*)

	Ethical n= 30	**Non-Ethical** n= 42
Panel B: Control Manipulation Check		
Q: The Lens Division Manager received cost training	4.43	2.86 (F = 8.47, p < 0.05*)
Q: The Lens Division Manager received ethics training	2.07	4.07 (F = 16.06, p < 0.05*)

Panel C: Descriptive Statistics for Subjective Beliefs of participants who choose to accept the transfer price in Period 2

		Ethical Control		
		None	Ethical	Non-Ethical
Preparer Distortion	Error	0.022 n=25	-.320 n=15	0.369 n=23
	Bias	0.175 n=11	-0.052 n=15	-0.282 n=19

*two-tailed equivalent.

TABLE 4
Subjective Belief Scale Correlations (N = 72)

	Item 1	Item 2	Item 3	Item 4	Item 5	Item 6
Item 1	-					
Item 2	0.597*	-				
Item 3	0.689*	0.724*	-			
Item 4	0.667*	0.725*	0.826*	-		
Item 5	-0.440*	-0.486*	-0.494*	-0.537*	-	
Item 6	0.496*	0.627*	0.603*	0.652*	-0.57*	-

See Figure 2 Panel B for item descriptions

*****$p < 0.05$, Two-tailed equivalent.

TABLE 5
Factor Analysis of Subjective Belief Dimensions (N = 72)

Panel A: Descriptive Statistics (Mean and Standard Deviation)

Question item	**Mean**	**Std. Deviation**
I believe the variable costs per unit of custom lens produced reported by the Lens Division Manager to be true	4.69	1.47
I am confident the Lens Manager would not intentionally lie to me	4.49	1.56
I believe the variable costs per unit of custom lens produced reported by the Lens Division manager are accurate	4.60	1.33
I believe the information reported by the Lens Division Manager to be reliable	4.48	1.42
The Lens Division manager lacks integrity.	3.92	1.50
The Lens Division manager is trustworthy	4.16	1.43

Panel B: Factor Loadings and Communalities

Question item	**Reliability Belief Factor**	**Communality**
I believe the variable costs per unit of custom lens produced reported by the Lens Division Manager to be true	0.62	0.79
I am confident the Lens Manager would not intentionally lie to me	0.72	0.85

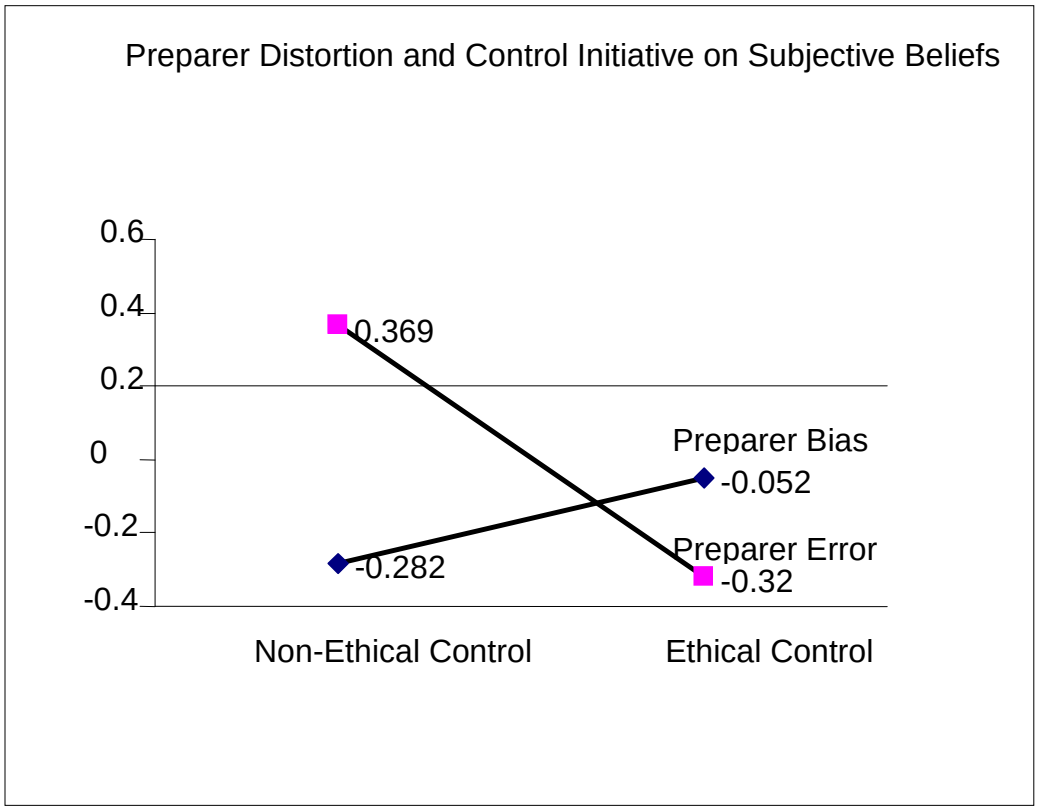
TABLE 5 (cont'd)
Factor Analysis of Subjective Belief Dimensions (N = 72)

Question item	Reliability Belief Factor	Communality
I believe the variable costs per unit of custom lens produced reported by the Lens Division manager are accurate	0.79	0.89
I believe the information reported by the Lens Division Manager to be reliable	0.81	0.90
The Lens Division manager lacks integrity.	0.49	-0.70
The Lens Division manager is trustworthy	0.64	0.80

Panel C: Principal Component Factors

Question item	Eigenvalue	Explained Variance	Cumulative Explained Variance (%)
I believe the variable costs per unit of custom lens produced reported by the Lens Division Manager to be true	4.07	67.82	67.82
I am confident the Lens Manager would not intentionally lie to me	0.66	11.07	78.89
I believe the variable costs per unit of custom lens produced reported by the Lens Division manager are accurate	0.46	7.63	86.52
I believe the information reported by the Lens Division Manager to be reliable	0.34	5.75	92.27
The Lens Division manager lacks integrity.	0.29	4.91	97.18
The Lens Division manager is trustworthy	0.17	2.82	100.00

FIGURE 3
Post Hoc Analysis
Test of H1[a] (N = 72)



[a]Variables described in Table 3

TABLE 6
How Preparer Distortions and Control Initiative Affect Subjective Beliefs
Test of H1

Panel A: Subjective Beliefs Factor, Mean [Standard Error], n = 72

Control Condition	Preparer Distortion Condition	n	Subjective Belief Factor
Ethical Control	Bias	15	-0.052
			[.980]
	Error	15	-0.320
			[.807]
Non-ethical control	Bias	19	-0.282
			[.985]
	Error	23	0.369
			[.744]

Panel B: ANOVA Model of Subjective Beliefs

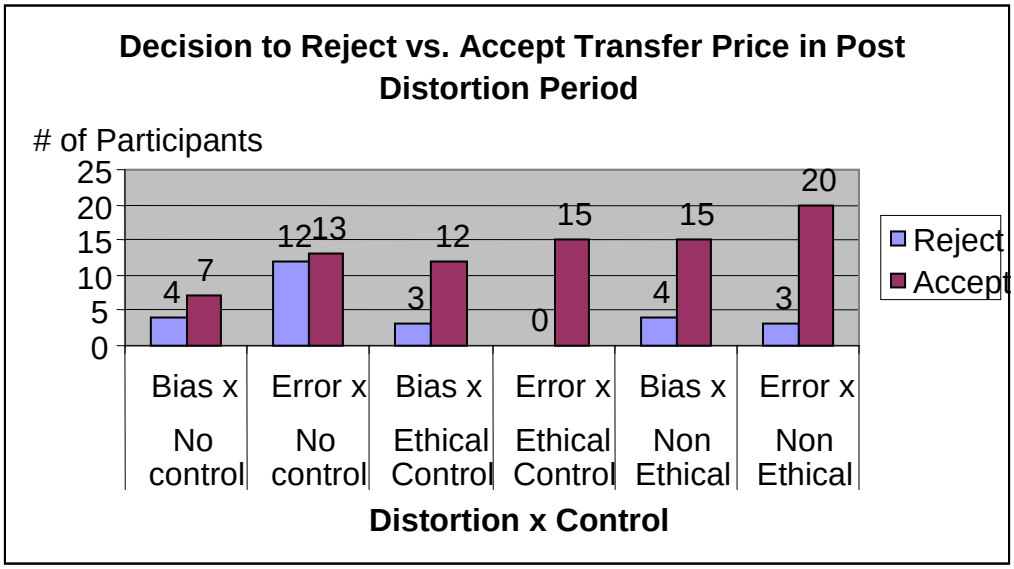
Source of Variation	SS	df	MS	F-statistic	p-value
Intercept	0.357	1	0.357	0.465	0.498
Controls	0.917	1	0.917	1.194	0.278
Preparer Distortion	0.639	1	0.639	0.832	0.365
Controls X Preparer Distortion	3.679	1	3.679	4.792	p <.05*
Error	52.21	68	0.768		

* Two-tailed equivalent.

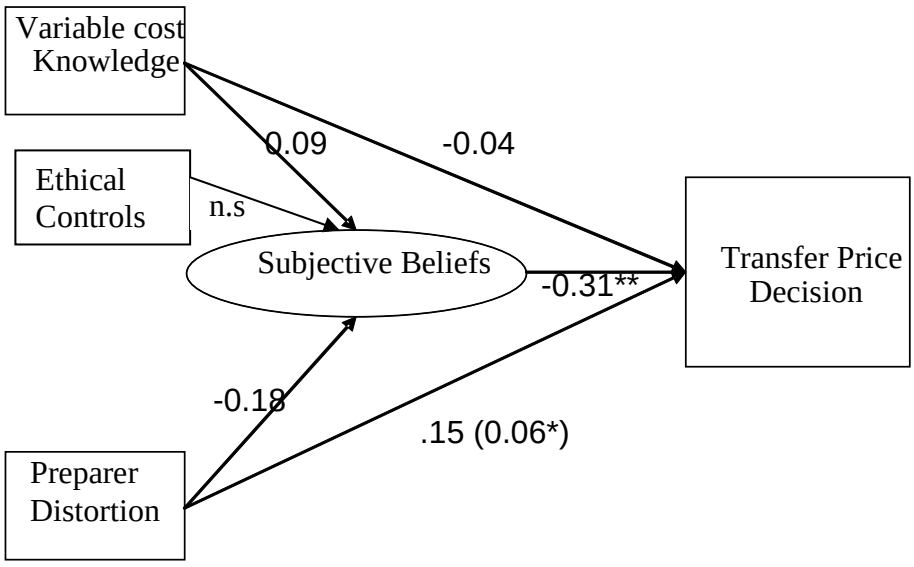
This table reports the results for tests of H1 using the factor score from a principal component analysis of the six questions resented in Table 3 Panel A as the dependent variable.

FIGURE 4
Tests of H2 and H3

Panel A: Participants' Decision to Accept vs. Reject Proposed Transfer price in Post-Distortion Period (H2 Behavioral Trust) (N = 108)



Panel B: Observed relations of Preparer Distortion, Ethical Controls, Subjective Beliefs on Transfer Price Decision in a Post Distortion Period (N = 72)



* One-tailed significance at less than 0.05

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