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Hubris and Unethical Decision Making: The Tragedy of the Uncommon

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Abstract The research theorizes how hubris impacts ethical decision making and develops empirical evidence that earnings manipulation is more likely at firms led by CEOs influenced by hubris. The theory posits that hubris impairs moral awareness by causing decision makers to ignore external factors that otherwise drive such awareness. Additionally, these individuals apply a flawed subjective assessment of the decision they face which further impairs moral awareness. The predicted result is that hubris leads managers to invoke an amoral decision process which causes a higher incidence of unethical behavior among these individuals. An empirical study investigates the relationship between CEO hubris and the unethical practice of earnings manipulation. This study finds a significant correlation between CEO hubris and earnings manipulation at the firms they lead, an outcome broadly consistent with the theory developed.

Keywords Earnings manipulation · Entrepreneurial decision making · Ethical decision making · Hubris · Moral awareness · Upper Echelon perspective

Introduction

In 2003 the Office of Federal Housing Enterprise Oversight ("OFHEO") initiated an investigation into the accounting practices at mortgage giant Fannie Mae (Hagerty and McKinnon 2004). In October of the following year, OFHEO alleged Fannie had overstated its earnings by roughly $9 billion (Blackwell 2004). Fannie Mae's CEO Franklin Raines vehemently denied that his company had violated accounting rules and demanded that the Securities Exchange Commission ("SEC") initiate an independent investigation (McClean and Nocera 2010). This occurred, and in December of 2004 the SEC determined that Fannie's financial statements failed to comply with generally accepted accounting principles ("GAAP"). As a result, the company restated $6.3 billion in earnings, paid a $400 million fine, and Raines was forced to resign (Dash 2006; U.S. Securities and Exchange Commission 2006). Raines also paid a $2 million personal fine and forfeited roughly $22.7 million in out-of-the-money options to settle the matter with regulators (Huslin 2008).

Between 1998 and 2003 Franklin Raines received $90 million in compensation, of which roughly $52 million was tied to meeting earnings targets (Dash 2006). In light of this, the classic explanation of Raines' behavior is that he manipulated Fannie's earnings to achieve earnings targets and enrich himself through performance-based compensation (Greve et al. 2010). Under this rationale, managers intentionally adopt unethical behavior after making a rational calculation of the costs and benefits of this behavior (Jensen and Meckling 1976; Becker 1968). However, the characterization of Raines' actions as calculated and completely self-interested fails to account for some important considerations as the accounting issues at Fannie unfolded.

First, Raines demanded that the SEC follow up on OFHEO's initial allegations through an independent review of Fannie's accounting. It goes without saying that it is highly unusual for a CEO to formally request that the SEC investigate his or her own company. The demand creates the inference that Raines truly believed the SEC "would side with the company" (McClean and Nocera 2010,

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p. 179). Raines raised the stakes further by publicly stating that he should be held accountable if the SEC determined a restatement was warranted (Crutsinger 2004). While the typical CEO's job is in jeopardy when accounting issues arise, Raines stood on firmer ground than most. Specifically, he enjoyed broad support from both Congressional leaders and Fannie's board due to the politicization of the OFHEO investigation. Many of these key stakeholders held the perception that OFHEO had exceeded the bounds of normal regulatory behavior "seeking to embarrass" Fannie and Raines (McClean and Nocera 2010, p. 178). Through his demand for an investigation and strong statement about accountability, Raines ensured that an adverse decision by the SEC would likely lead to his termination as CEO. Taking things a step further, Raines also testified in a Congressional hearing that Fannie's disclosures were appropriate and that he had no knowledge that bonus considerations influenced the accounting treatments adopted (Hilzenrath 2008). If untrue, this testimony exposed Raines to criminal liability for perjury as well. While it is impossible to truly know the mind of someone like Franklin Raines, a rational model of wrongdoing fails to adequately explain some aspects of his behavior.

The premise advanced here is that limitations on human attention and cognitive processing coupled with the impact of predictable judgment biases impact decision making and help explain some instances of wrongdoing (Simon 1947; Kahneman 2011). In the present research, the focus is on hubris. Hubris is a judgment bias that causes individuals to exhibit excessive pride, overconfidence, and an elevated sense of self-importance (Hayward and Hambrick 1997; Judge et al. 2009). Prior research has demonstrated that hubris negatively impacts many types of organizational decisions including managers' decision to overpay for acquisitions (Hayward and Hambrick 1997) or take on more dangerous levels of risk (Li and Tang 2010; Chatterjee and Hambrick 2007). This study investigates whether unethical behavior is another negative outcome that results due to managerial hubris. In this regard, the paper theorizes how hubris can lead individuals to fail to achieve moral awareness within their decision making (Rest 1986). This, in turn, leads them to engage in unethical behavior as a result of an amoral decision process where relevant ethical considerations fail to enter the decision calculus (Tenbrunsel and Smith-Crowe 2008). The practice of earnings manipulation at public firms represents the empirical context used to examine the relationship between CEO hubris and unethical behavior. The findings provide evidence that CEO hubris is associated with a higher observed incidence of earnings manipulation at the firms they run.

This study contributes to the existing literature through linking insights from research on ethical decision making and moral awareness with research on hubris and top managers. Specifically, this paper theorizes how hubris can impair moral awareness and trigger unethical behavior on the part of a key members of the top management team such as the CEO. It also adds to the literature on earnings manipulation by demonstrating that hubris on the part of the CEO is significantly correlated with manipulations. Finally, the paper also contributes to entrepreneurship research through the finding that the CEO's status as a firm founder is marginally associated with heightened levels of earning manipulation.

The paper is structured as follows. First, the literature on ethical decision making and hubris is discussed. An important focal point within this section involves how individuals at times exhibit flawed or biased forms of decision making through a lack of moral awareness. Next, the theoretical model that outlines the impact of hubris on ethical decision making and subsequent behavior is developed. Thereafter data from serious earnings manipulations is utilized to empirically examine whether managerial hubris is associated with unethical behavior. Finally, the findings and how they contribute to the growing literatures on ethical decision making, earnings manipulation, hubris, and entrepreneurship are discussed. This final section also discusses the study's limitations, implications for managers, and directions for future research.

Ethical Decision Making & Moral Awareness

Ethical decision making involves issues that implicate ethical considerations that potentially influence the search for facts and alternatives, cognitive processing about these options, and the choice that results (Tenbrunsel and Smith-Crowe 2008). Here, an ethical decision is defined as "a decision that is both legally and morally acceptable to the larger community" while an unethical decision "is either illegal or morally unacceptable" to this same group (Jones 1991, p. 367). Under this definition, legal requirements and broad social acceptance determine whether decisions are appropriately characterized as ethical or unethical choices. However, several factors make this definition somewhat imprecise. First, individual decision making is often nested within varied and conflicting social roles. In addition, the definition implicitly assumes that the legal and moral obligations will not themselves conflict within a given community. Finally, communities' views about acceptable and unacceptable behavior evolve over time. Thus, behavior that was characterized as ethical (unethical) at one point may be characterized as unethical (ethical) by the very same community at a later point in time (Palmer 2012). Despite these limitations, it remains important to explicitly define unethical behavior within ethical decision making research (Tenbrunsel and Smith-Crowe 2008). In

recognition of the definition's limitations, in this empirical study an unethical decision is operationalized through behavior that is both morally objectionable and clearly prohibited by U.S. securities laws.

One of the most influential process models of ethical decision making is Rest's (1986) four stage approach. This model posits that an ethical decision results when individuals attain awareness that an ethical issue exists, apply moral reasoning to the problem, formulate the intent to act in a moral fashion, and translate this intent into appropriate action. Here, the focus is on the first stage of this decision making process, moral awareness. Moral awareness involves an individual's "determination that a situation contains moral content and can legitimately be considered from a moral point of view" (Reynolds 2006, p. 233). Awareness is typically influenced by situational factors that make the ethical dimension of a decision more or less intense (Jones 1991; Butterfield et al. 2000). Some relevant factors that drive intensity include the probability that specific consequences will result, the magnitude of these consequences, how quickly these consequences follow in time, and whether a broad social consensus exists that a particular choice is ethical or unethical (Jones 1991).

Awareness is also influenced by individual factors (Sparks and Hunt 1998; Reynolds 2006, 2008). Notably, cognitive limitations and biases can impede moral awareness in ways that impact an individual's ethical decision making (Messick and Bazerman 1996; Chugh et al. 2005; Tenbrunsel and Smith-Crowe 2008). In this regard, individuals are boundedly rational actors that face meaningful limitations on their perceptual and processing capabilities (Simon 1947; March and Simon 1958; Tversky and Kahneman 1974). Attention also represents a limited resource for most people (March 1994; Reynolds 2008). Decisions that carry ethical implications can be very complex and include a variety of relevant considerations (Trevino 1986). Given this, it is challenging for boundedly rational decision makers to both identify and appropriately consider the ethical dimensions of some decisions they encounter (Bazerman 2006). With respect to ethical questions, individuals also exhibit a subtle but motivated form of bounded decision making. In this regard, Chugh et al. (2005) argue "ethicality is bounded in systematic ways that unconsciously favor a particular vision of the self in our judgments" (p. 9). Individuals need to see the self as ethical which subconsciously motivates them to filter information and structure decision making in ways that preserve a positive ethical self-concept (Chugh et al. 2005; Tenbrunsel 1998; Messick and Bazerman 1996).

A failure to attain moral awareness leads individuals to frame the decisions they face in ways that do not incorporate ethical considerations. March (1994) argues that individual decision making is governed by a logic of appropriateness. This means that individuals identify the type of decision they face, consider aspects of their then-relevant identities, and ask "[w]hat does a person such as I, or an organization such as this, do in a situation such as this?" (p. 58). In answering these questions, individuals select and apply frames to structure their decision making. Thus framing reflects how individuals code or categorize the type of decision they believe they face (Tenbrunsel and Messick 2004). Specific and subtle cues influence frame selection (Messick 1999). Relevant factors include the order in which choices are presented, labels or metaphors applied, and the temporal relationship between a decision and its effects (Tenbrunsel and Messick 2004; Tenbrunsel and Smith-Crowe 2008). Individuals typically select from an ethical, legal, or business frame when making decisions within organizational contexts (Tenbrunsel and Smith-Crowe 2008). As a specific frame is accessed with regularity, its application in the future to similar situations takes on the characteristics of an automatic response (Bargh and Pratto 1986). Morally unaware decision makers fail to activate the ethical frame. This leads to an amoral decision making process that often generates poor decisions in situations where ethical considerations are relevant. (Tenbrunsel and Smith-Crowe 2008).

Managerial Hubris

The upper echelons perspective examines how top managers' values, cognitive profiles, and biases influence organizational strategies, decisions, and outcomes (Hambrick and Mason 1984; Hiller and Hambrick 2005). The premise of this research is that key senior managers like the CEO influence decision making at their firms in significant ways (Hayward and Hambrick 1997). In particular, this perspective posits that top managers' cognitive processing impacts the decisions they make in predictable, and at times biased ways (Hambrick 2007; Li and Tang 2010). Given the influence top managers wield at their firms, organizational decision making processes and outcomes reflect the biases these key individuals exhibit (Hambrick and Mason 1984). Put another way, the upper echelons perspective asserts that the discrete biases that influence top managers' individual decision making processes also impact the decision making calculus and subsequent actions observed at the organizational level.

Managerial hubris represents one specific cognitive bias that upper echelons research has examined extensively. Hubris involves "exaggerated pride or self-confidence, often resulting in retribution" (Hayward and Hambrick 1997, p. 106, citing *Webster's Dictionary*). It is a cognitive state that causes individuals to develop excessive confidence and pride in their own talent, judgment, and ability to obtain positive outcomes (Judge et al. 2009; Bodolica

and Spraggon 2011). Hubris leads individuals to see themselves as exceptional relative to peers and believe that normal societal conventions do not apply to them (Petit and Bollaert 2012). Individuals influenced by hubris exhibit extreme overconfidence in assessing their probability of success in risky endeavors and attribute any success they experience to their own abilities and efforts (Picone et al. 2014). They ignore the meaningful contributions of others or the influence that external factors like luck had on positive outcomes (Moore and Healy 2008). In this way, hubris represents a cognitive bias that systematically affects individuals' decision making (Li and Tang 2010; Kahneman et al. 1982).

A great deal of existing hubris research focuses on CEOs. CEOs have unique power within organizational decision making. These individuals also appear to be particularly susceptible to the influence of hubris due to their prior successes and achievements (Goel and Thackor 2008; Hiller and Hambrick 2005). This research stream indicates that hubris-influenced CEOs engage in less comprehensive analyses of external conditions, strategic alternatives, and potential risks. Instead, these individuals emphasize "non-comprehensive and fast decision making" that does not involve extensive deliberation (Haynes et al. 2010, p. 3). Managerial hubris has been shown to affect decision making in a variety of contexts including corporate acquisitions (Hayward and Hambrick 1997; Roll 1986) founding new ventures (Hayward et al. 2006; Simon and Shrader 2012), financing decisions (Malmendier et al. 2011), the degree of risk firms assume (Li and Tang 2010; Chatterjee and Hambrick 2007), and innovation efforts (Tang et al. 2015).

CEO Hubris, Moral Awareness & Unethical Behavior

The argument advanced here is that hubris impairs moral awareness for individual decision makers. This increases the possibility that these individuals will ignore ethical considerations within their decision making. A flawed decision process results which leads to a higher incidence of unethical behavior. This is the case because moral awareness represents a precursor to the development of moral judgment that then translates to ethical behavior (Rest 1986; Trevino et al. 2006). That said, it is still possible that morally unaware individuals will act ethically. However, even in those cases, the individual applies an amoral decision process and fails to frame the problem as an ethical question (Tenbrunsel and Smith-Crowe 2008).

Moral awareness is influenced by cognitive factors that drive attention toward or away from specific features of a decision (Reynolds 2006). The theory advanced here asserts that hubris is one such factor that systematically drives attention away from the ethical dimensions of a decision. This occurs in multiple ways. First, hubris directly influences how individuals allocate attention within their decision making (Tang et al. 2015; Peng and Xiong 2006). As noted previously, hubris-infected individuals place inordinate faith in their own knowledge, talent, and skills (Hayward and Hambrick 1997; Moore and Healy 2008). This leads these individuals to focus on internal factors and excessively discount contextual considerations within decision making (Picone et al. 2014; Hayward et al. 2006). Such an approach impairs moral awareness because situational factors are critical drivers of the moral intensity of the issue under consideration (Jones 1991). In this way, hubristic decision makers exhibit a strong internal locus of control that causes individual factors to dominate situational factors in regard to how these individuals allocate their attention and frame decisions (Tang et al. 2015). Relevant external factors that typically drive issue intensity and lead decision makers to be more sensitive to ethical dimensions of a problem fade from the decision calculus (Tenbrunsel and Messick 2004)[1]. In this way, hubris impairs moral awareness for problems where situational factors would typically cause the intensity of the issue to be highly salient or vivid (Fiske and Taylor 1984; Jones 1991).

Hubris also impairs moral awareness through its direct effects on individuals' ethical attentiveness. Reynolds (2006, 2008) demonstrates that some individuals are naturally more attentive to moral concerns than others. In addition, many of us exhibit predispositions toward either utilitarian or formalistic logic within our decision making. These individual predispositions moderate the relationship between moral intensity and moral awareness, with formalistic reasoning more likely to generate awareness relative to utilitarian logic (Reynolds 2006). The argument set forth here is that hubris causes individuals to favor an overconfident utilitarian approach that restricts ethical attentiveness and further limits moral awareness. Hubristic overconfidence and excessive self-pride cause decision makers to minimize the relevancy of formalistic rules and societal constraints (Petit and Bollaert 2012). Thus, hubristic decision makers often fail to attend to these considerations. Attention shifts instead to utilitarian concerns and the potential for distinct favorable outcomes, decreasing awareness relative to situations where formalistic rules are otherwise typically accessible (Reynolds 2006).

At the same time, the utilitarian logic hubris fosters is problematic in its own right due to the effects that hubris-

[1] Tenbrunsel and Messick (2004) theorize that self-interest triggers self-deception and enables ethical fading. Under the approach set forth here, hubris rather than pure self-interest triggers the fading process.

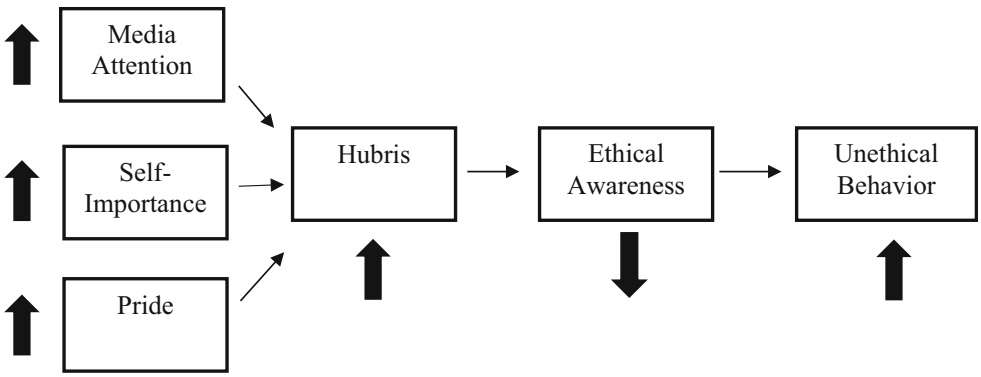

Fig. 1 Model of hubris-driven unethical behavior

driven overconfidence and pride have on an individual's performance expectations. Simply put, hubris-infected decision makers expect that their superior knowledge and skills will allow them to generate positive outcomes even where this is objectively unlikely (Picone et al. 2014; Moore and Healy 2008; Hayward and Hambrick 1997). As a result, attention grows myopic and individuals attend to utilitarian considerations that support the conclusion that a desired positive outcome will follow. This is acutely problematic for ethical decision making as individuals are already subconsciously inclined to structure decision making and view problems in ways that help them maintain a positive ethical self-concept (Chugh et al. 2005; Tenbrunsel 1998; Messick and Bazerman 1996).

The net result is that moral awareness is much less likely for decision makers under the influence of hubris (See Fig. 1). Rather than accessing an ethical frame, these individuals become much more likely to frame decisions as business issues that they believe they will work through successfully. Over time, these effects of hubris can grow more pronounced. This is the case because individuals influenced by hubris do not reflect deeply on the decisions they face. Instead these decision makers exhibit increasing levels of automaticity as time passes (Haynes et al. 2010). They ignore negative feedback about their prior decisions and stay committed to an existing course of action despite mounting evidence that their prior decisions were misguided or riskier than they contemplated (Picone et al. 2014). In this way, these individuals come to rely upon "chronically accessible frameworks" that "shape the attention they pay to stimuli" which lead them to habitually fail to incorporate moral dimensions into their decision making (Reynolds 2008, p. 1029; Fiske and Taylor 1984).

Earnings Manipulation & Hubris

The paper utilizes the specific practice of earnings manipulation to empirically examine whether hubris is associated with unethical behavior. As an initial point, the model will test whether there is an association between hubris and a specific outcome (manipulation), but will not directly examine whether moral awareness developed at the individual level. This relationship is consistent with the theory, but observes the outcome rather than the underlying cognitive processes that drive the decision. This limits some of the conclusions we can draw from the study. In addition, there is an important distinction between earnings management and earnings manipulation. Earnings management involves a variety of practices firms employ to influence the timing and volatility of the earnings they report (Burgstahler and Eames 2003; Healy and Whalen 1999; Degeorge et al. 1999). While controversial, firms manage earnings based upon the belief that shareholders, creditors and other stakeholders view more stable earnings in a positive light (Gordon 1964; Healy and Whalen 1999). Under this logic, earnings management signals management's private and superior information about the firm's future earnings prospects (Tucker and Zarowin 2006; Spence 1973; Ronen and Sadan 1981).

In contrast, earnings manipulation involves actions that bring about a desired level of earnings in ways that circumvent GAAP (Dechow et al. 1996).[2] Manipulation represents some form of financial engineering designed to generate financial reporting effects that artificially reduce the variability of a firm's income (Imhoff 1981). From a legal perspective, U.S. public firms must meet stringent disclosure requirements that include an independent audit that complies with GAAP (Securities and Exchange Commission 2015). Failure to adhere to these legal

[2] Clearly an argument exists that any type of earnings management activity is misleading and therefore inappropriate. However, some researchers maintain that earnings management actually improves the quality of publicly available information about a firm over the long term given the asymmetric information managers possess (Tucker and Zarowin 2006). While both these perspectives present interesting and cogent arguments, this paper will avoid this broader debate about the overall appropriateness of earnings management and focus instead on instances of manipulation. That said, hubris is envisioned to impact managerial decision making in ways that can cause individuals that subjectively believe that they are managing earnings to adopt a course of action that objectively constitutes manipulation.

requirements can result in various sanctions that include imprisonment, fines and penalties, civil judgments, and reputational damage (Karpoff et al. 2009). Upon the discovery of earnings manipulation, firms must also restate the financial information they reported in previous periods (Agrawal and Chadha 2005). As a result, earnings manipulation violates established legal requirements, bringing this activity squarely within the definition of unethical behavior developed previously (Harris and Bromiley 2007).

Earnings manipulation provides an interesting context to examine the theorized relationship between hubris and unethical decision making due to certain characteristics of the behavior itself. Namely, GAAP often requires considerable judgment and discretion in arriving at proper accounting treatments (Ghosh and Olsen 2009; Dye and Verrecchia 1995). Hubris creates the risk that managers will interpret negative performance feedback as an aberration. They will inaccurately believe they are uniquely qualified to overcome even extremely challenging circumstances. This can cause them to manipulate reported earnings in the near term under the misguided belief that the manipulation accurately signals their firm's true long term intrinsic value (Tucker and Zarowin 2006). They ignore relevant contextual considerations, including the possibility that the disclosures they contemplate are so objectively aggressive they amount to manipulation. In this manner, it is theorized that hubris-driven manipulation occurs without these individuals attaining moral awareness. They frame the decision purely as a business problem about how to bring performance in line with their subjective expectations, rather than framing the decision of the appropriate level of reported earnings as an ethical or legal question (Tenbrunsel and Messick 2004).

Proxies for CEO Hubris

The process of financial disclosure is complex and involves many individuals inside and outside the firm. An assumption prevalent within the upper echelon perspective is that CEOs retain the ability to substantially influence decision making at the companies they lead (Hayward and Hambrick 1997). Consistent with this assumption, research has shown that CEOs exhibit considerable influence over strategy, risk taking, and performance at their firms (Geletkanycz and Boyd 2011; Mackey 2008; Crossland and Hambrick 2007; Chatterjee and Hambrick 2007; Caprenter et al. 2001). The empirical approach employed here is consistent with this upper echelon perspective. It assumes that CEOs are uniquely positioned with "the power to exert significant influence over the myriad policies that underlie the financial accounting language and financial statements of their companies" (Amernic and Craig 2010, p. 81; Zahra et al. 2005). As a result, CEOs can influence the level of earnings their firms report. The focus within the study that follows is therefore on CEO hubris and its relationship to earnings manipulation at the firm he or she oversees.

Hayward and Hambrick (1997) observe that it is extremely difficult to directly measure CEO hubris. Others who have examined related characteristics such as narcissism have made the same observation (Rijsenbilt and Commandeur 2013). However, hubris research identifies a number of observable factors that indicate that the firm's CEO suffers from the influence of hubris. Two of these factors are the recent media attention paid to the CEO and the degree of self-importance the CEO exhibits as evidenced by the level of differential compensation at his or her firm (Picone et al. 2014; Hayward and Hambrick 1997). In addition, previous success and noteworthy accomplishments are expected to drive up hubris among decision makers (Bodolica and Spraggon 2011; Chatterjee and Hambrick 2011). These three factors will be employed within the present study as proxies for CEO hubris. Finally, it is posited that CEOs who were founding members of their firms are also susceptible to hubris and its corresponding effects on decision making. The basis in the literature and full logic supporting these proxies is developed in the sections that follow.

Media Attention for the CEO

CEOs often attain exalted status in the media. They receive much of the credit for a firm's favorable performance regardless of their true causal role in the outcome (Meindl et al. 1985). High volumes of media coverage serve to enhance a CEO's reputation and standing (Francis et al. 2008). Media attention also supports the positive self-image of the CEO and enhances his or her overall positive self-perception (Rijsenbilt and Commandeur 2013; Hayward et al. 2004). It can inflate CEO confidence levels to unrealistically high levels (Lawrence et al. 2011; Hiller and Hambrick 2005). In this way, media attention "serves to reinforce the CEO's confidence, increasing the likelihood that the CEO will be infected with hubris" (Hayward and Hambrick 1997, p. 108; Malmendier and Tate 2009; Hayward et al. 2006). Media attention also helps build the celebrity status of a CEO which heightens these individuals' internal locus of control and makes it difficult for a CEO "to reject the notion that she controls the firm's performance" (Hayward et al. 2004, p. 645). In light of the relationship expected between hubris and earnings manipulation, the following hypothesis results:

H1 The greater the recent media attention for the company's CEO, the more likely it is that the CEO's firm will experience earnings manipulation.

CEO Self-importance

Higher subjective beliefs regarding self-importance and capabilities represent an additional indication that individuals suffer from the effects of hubris (Hayward and Hambrick 1997). CEOs have significant influence over the compensation structure at their firms (Tosi and Gomez-Mejia 1989). CEOs that retain an elevated sense of their capabilities and importance express this belief through the relative compensation structure at their firms (Rijsenbilt and Commandeur 2013; Frank 1985). They impose a structure where the difference between what they receive and what the next highest paid person at their firm receives is much larger relative to firms where the CEO lacks an elevated sense of self-importance (Chatterjee and Hambrick 2011, 2007). Given this, the following relationship is expected:

H2 The larger the CEOs level of self-importance as reflected in relative compensation between the CEO and next highest paid individual at the firm, the more likely it is that the CEO's firm will experience earnings manipulation.

CEO Accomplishments

Managerial hubris is a decision making bias "induced by some combination of confidence buoying stimuli." (Li and Tang 2013, p. 86). It develops as prior accomplishments lead to unrealistic pride and arrogance culminating in the belief that the individual can "make events conform to their will in spite of contrary external evidence" (Kroll et al. 2000, p. 122). As a result, excessive pride that individuals exhibit offers an important indicia of hubris (Hayward and Hambrick 1997). In light of this, CEO communications with the public offer an opportunity to indirectly examine whether a specific CEO exhibits hubristic characteristics (Craig and Amernic 2014; Chatterjee and Hambrick 2011). While corporate communications are often vetted and edited by a number of individuals, CEOs retain substantial control over information the corporation disseminates about them or on their behalf (Amernic and Craig 2010). Biographical information is a specific type of communication where CEOs are especially likely to control the information presented (Schoenberger 2001). Biographical statements allow CEOs to highlight accomplishments, educational achievements, prior experience and high status positions that are particular sources of pride. As a result, the following relationship is expected:

H3 The higher the CEOs level of pride in their accomplishments reflected in the length of the CEO's biographical information communicated to the public, the more likely it is that the CEO's firm will experience earnings manipulation.

Founder as CEO

Entrepreneurs typically exhibit exceptionally high levels of confidence that their venture will succeed despite extremely high failure rates for new businesses (Simon and Houghton 2003; Palich and Bagby 1995; Cooper et al. 1988). These individuals display irrational confidence in their own unique knowledge and skills relative to peers and competitors (Bernardo and Welch 2001; Simon et al. 2000). In this way, hubris represents an important factor that influences new venture formation and entrepreneurs' on-going decision making (Haynes et al. 2015; Simon and Shrader 2012; Hmieleski and Baron 2009; Hayward et al. 2006). Additionally, initial success with a new venture reinforces an entrepreneur's' optimism and extreme self-confidence (Hayward et al. 2006; March 1997). Thus hubris is likely to continue to influence the decision making processes of entrepreneurs who found and operate successful companies (McCarthy et al. 1993). This leads to the hypothesis:

H4 Firms led by CEOs who were also founders of their companies are more likely to experience earnings manipulation relative to firms led by non-founder CEOs.

Agency and Earnings Manipulation

While the central premise of this paper is that hubris is associated with earnings manipulation, prior research points to other factors that also influence this decision. Within the literature, one well-established factor that drives managers to manipulate earnings is self-interest. In this regard, earnings manipulation represents a form of fraud associated with numerous large-scale corporate failures such as Enron and Worldcom (McClean and Elkind 2003; Palmer 2012). In many accounts of this behavior, manipulation is characterized as an agency problem in which managers utilize their superior control and information to advance their own self-interest (Jensen and Meckling 1976; Jensen and Murphy 1990; Zhang et al. 2008). Specifically, these managers intentionally manipulate reported earnings to secure performance bonuses or to maximize the value of the option-based compensation they receive (Healy 1985; Fudenberg and Triole 1995). Under this competing agency account of wrongdoing, manipulation does not result through flaws or biases in decision making processes. Rather, it represents a rational choice that individuals elect after careful reflection upon both the costs and benefits of their actions (Jensen and Murphy 1990; Becker 1968). In light of these arguments, the agency perspective leads to

the following competing hypothesis that also merits examination:

H5 Firms run by CEOs with greater financial incentives to manipulate earnings will experience manipulation with greater frequency compared to firms led by CEOs that lack such financial incentives.

Model

The development of hubris by individuals and its theorized impact upon decision making implies a specific temporal structure for the model. Media attention, positive self-assessments and prior success cause individuals to fall under the influence of hubris (Hayward and Hambrick 1997). This impairs moral awareness and biases individuals' decision making processes in ways that lead to higher levels of unethical decisions and behavior. Figure 1 summarizes the model.

Sample

The study adopts a matched pair structure (Ndofor et al. 2015; O'Connor et al. 2006; Hayward and Hambrick 1997). Firms that restated their financial statements are matched with comparable companies that did not restate during the same time frame to build the sample. A matched pair structure is appropriate for this type of data where sampling is driven by a specific differentiating property (Hambrick and D'Aveni 1988). The initial matching criterion for companies was industry membership as defined by the companies' two-digit SIC codes. Thereafter, asset size was used to pair companies and generate the full sample.

Restating companies are identified through the U.S. General Accounting Office's ("GAO") financial restatement database for the specific period of July 1, 2002 through September 30, 2002. This database details 1786 discrete financial restatements over the period of 2002–2006 that the GAO characterized as significant. A significant restatement occurs when the restatement is necessary to correct previously disclosed financial statements issued by the company in question. Such restatements are not triggered by a change in accounting standards. Rather, they stem from material misapplications and manipulations of accounting treatments within the financial disclosures that public companies are required to file with the SEC (GAO 2002). Prior research has employed this specific data to empirically examine intentional manipulations and financial fraud (See Kedia and Philippon 2009; Efedni et al. 2007; Harris and Bromiley 2007; Arthaud-Day et al. 2006; Burns and Kedia 2008; Lee et al. 2006).

During the relevant time period, the GAO database identifies ninety-two specific restatements. While the GAO database indicates the date each restatement is announced, it does not identify which specific disclosures or reporting periods are subject to restatement. As a result, after the GAO database identified a restatement event, the company's financial reports maintained on the SEC's EDGAR database were searched to obtain details about the specific time frame for each restatement. Additionally, if a company executed multiple restatements during the sample period, the firm was included within the sample only for the initial restatement. Missing data led to the elimination of twenty-one observations. This left seventy-one restatement events in the sample, bringing the aggregate sample size to one hundred and forty-two after matches were identified. Firms utilized as matches within a pair did not experience a serious restatement at any point during the 2002–2006 time frame covered by the full GAO database.

Method

The model was tested using a logistic regression model where the restatement represents the dependent variable of interest (O'Connor et al. 2006). Logit models are appropriate where the dependent variable is categorical (Press and Wilson 1978) and a random effects model was applied to permit across-group variance (Zhang et al. 2008). A clustered logistic regression was utilized to generate the likelihood estimation for the discrete independent variables. The regression was clustered around industry groups out to the two digit SIC code to correct for any potential serial correlation using Stata's cluster function.

Dependent Variable

Earnings manipulation represents the unethical behavior that constitutes the dependent variable of interest within the empirical study. Clear instances of earnings manipulation can be difficult to directly observe. Studies that examine earnings manipulation typically identify manipulation through specific observable outcomes associated with a company's disclosures (McNichols and Wilson 1988; Marquardt and Wiedman 2005; Petroni 1992). Here, a serious financial restatement of a prior period's publicly disclosed accounting statements is used to proxy for earnings manipulation (Harris and Bromiley 2007). Financial restatements occur to correct previously disclosed financial statements that were materially inaccurate. Restatements can occur due to mistakes, but they also result through affirmative choices to manipulate the company's disclosed financial information. As noted above, the sample reflects restatements that the GAO deemed serious. Numerous prior studies have employed these serious restatements as a proxy for financial fraud and intentional

manipulation (Agrawal and Chadha 2005; Harris and Bromiley 2007; Arthaud-Day et al. 2006). The dependent variable within this study is a dummy variable coded as "1" if a company restated its earnings during the relevant period, and "0" if it did not.

Independent Variables

The aggregate number of articles in the Lexis/Nexis database that reference both the CEO and the company over the period from January 1, 1997 through July 1, 2002 constitutes the media attention variable. Hayward and Hambrick (1997) employed positive articles about the CEO within their study but observed that a variable based purely on article counts was "highly correlated" (p. 114). Here the aggregate article count was used to facilitate a broader search of the Lexis/Nexis database beyond the seven newspapers that Hayward and Hambrick's original study drew upon. Others examining related characteristics such as CEO narcissism have followed this broader approach (Rijsenbilt and Commandeur 2013).

Self-importance is measured through a comparison of the annual salary and cash bonus of the CEO relative to the annual salary and bonus of the next highest paid executive at their firm (Chatterjee and Hambrick 2007). Larger differences between these two numbers create the inference of a heightened sense of self-importance on the part of the CEO (Hayward and Hambrick 1997). Compensation data was obtained through a search of the companies' proxy statements found within the SEC EDGAR database. The annual pay period prior to the year that the misstatement of the financial statements began was the time frame used for this compensation comparison. Thus if the company announced in 2002 that it was restating its financial statements from 2000, the relative compensation reported in the 1999 proxy statement was used to generate the variable of interest. This tracks the model and reflects the fact that the hubris condition precedes the decision to manipulate earnings.

A CEO's discussion of their accomplishments was captured through a word count of the biographical information found in the firm's proxy statement maintained on the EDGAR database. As an additional validity check for this measure, the formal content of several of the longest CEO biographical statements were examined to ascertain whether the language utilized supports an inference that hubris existed. This mimics the approach of Craig and Amernic (2011) who utilized detailed reviews of three CEO's letters to shareholders to indirectly examine narcissism. The three longest statements were the biographies of Christopher Pook of Championship Auto Teams, Inc., Dr. Henry Yeun of Gemstar-TV Guide, and Gerhard Kurz of Seabulk International. All three of these CEOs' firms experienced restatements. All three bios also go well beyond a simple outline of each individuals' employment history and service on outside boards. Mr. Pook mentions that he "conceived the idea of running a world-class automobile race through the city streets of Long Beach, and his dream became a reality." Dr. Yeun lists numerous awards he has received including the 1990 Business Week Entrepreneur of the Year Award, the 1991 Silver Anvil Award, along with the facts that he has published over 70 scientific papers and received 25 patents. Finally, Mr. Kurz indicates that he was honored with the International Maritime Hall of Fame Award and the 1999 Seatrade "Personality of the Year" Award. Thus, from world-class dreams come true to hall of fame enshrinement, each of these biographical statements reflects an elevated sense of pride and self-importance. Thus the formal content of these lengthier statements is consistent with the inference that hubris influenced these CEOs during the relevant time frame.

In addition, a dummy variable was included and coded as "1" if the CEO in question was also a founding member of the firm and "0" if they were not. This data was also obtained through a search of each CEO's biography set forth in the company's proxy statement. Within the sample, forty-one CEOs were also founders of their firms. Finally, the log of the aggregate dollar values of CEO stock sales prior to the announcement of the restatement are used to proxy self-interest and test the agency hypothesis. The logic behind using stock sales prior to the restatement is that insiders who are aware of the manipulation know that the company's reported results are inflated (Bergstresser and Philippon 2006). As a result the company's stock is overvalued. Thus, it is in these insiders' self-interest to sell equity at the inflated level before the true results become known and the market corrects the valuation. Data on historical insider sales was gathered from the National Archives AAD database. This database warehouses data on insider stock sales reported to the SEC on Form 4 over the period from January 11, 1998 through March 12, 2001.

Control Variables

The log of total assets of the firm for the year before the earnings manipulation occurs represents one control variable. In addition, stronger corporate governance mechanisms should serve to make earnings manipulation on the part of senior managers such as the CEO less prevalent (Harris and Bromiley 2007). Therefore a dummy variable reflecting CEO duality is incorporated as a proxy for the strength of corporate governance within the firm (Dunn 2004). The clustered regression methodology that utilizes two-digit SIC industry membership to define the clusters controls for industry effects. Finally, the matched pair

structure of the empirical study serves as an additional means of control across the sample (Hambrick and D'Aveni 1988). Most notably, the matched pair structure acts as a control for external circumstances that impact firms in the same industry or strategic group in similar ways. This was an important consideration in that the theory predicts hubris leads individuals to ignore these external circumstances. Through the matched pair approach, the study is able to examine whether the paired CEOs produce a different outcome in terms of earnings manipulation when faced with broadly similar external circumstances.

Results

The correlation matrix and descriptive statistics for the relevant variables are set forth in Table 1. None of the correlations across the variables in the model are excessive which indicates that collinearity is not a concern.

The four hypotheses (Hypotheses 1–4) that predict a positive relationship between hubris and earnings manipulation all receive some support. Specifically, the level of media attention CEOs receive is marginally and positively associated with earnings manipulation, providing some support for Hypothesis 1. Self-importance as expressed through pay differential is positively and significantly associated with earnings manipulation. Thus Hypothesis 2 is strongly supported. Similarly, the CEO's discussion of their accomplishments is also positively and significantly related to earnings manipulation at the focal firms. Therefore Hypothesis 3 also receives strong support. In addition, the CEO's status as a founder is both positively and marginally related to earnings manipulation, providing some support for Hypothesis 4. However, the CEO stock sale variable is not significant, indicating Hypothesis 5 lacks support. The results of the logit models are described in Table 2.

As an additional validity check on the results, both a probit specification and a conditional logit model conditioned upon each matched pair were applied to the sample. The results generated through these alternative specifications are generally consistent with the results of the logit model set forth above. The results of the logit model are reported because this specification offers the ability to develop more easily interpreted odds ratios for the variables of interest. These odds ratios are also reported in Table 2.

Discussion

The central empirical finding of this study is that hubris is associated with a higher observed incidence of unethical behavior in the form of earnings manipulation. This result contributes to the evolving literatures on both ethical decision making and earnings manipulation. Ethical decision making research has begun to explore how biased or less than fully rational decision making processes lead individuals to adopt unethical, illegitimate, or illegal behavior (Tenbrunsel and Messick 2004; Harris and Bromiley 2007; Palmer 2008; Tenbrunsel and Smith-Crowe 2008; Mishina et al. 2010; Bazerman and Gino 2012). This behavioral emphasis within ethical decision making research is part of a broader research agenda that seeks to better understand how biases impact managerial decision making (Dearborn and Simon 1958; March and Simon 1958; Cyert and March 1963; Kahneman and Tversky 1979; Griffin and Varey 1996; Levinthal 1997). Here the empirical results provide additional evidence for the idea that biased decision makers are more likely to make unethical choices. While the underlying mechanism of moral awareness is not tested, the observed outcomes are consistent with the theoretical predictions that hubris leads individuals to ignore contextual cues about the ethical dimensions of decisions they face.

Table 1 Correlation matrix ($n = 142$)

Variables	Mean	SD	1	2	3	4	5	6	7
Size	8.681	0.899	1.0000						
Duality	0.599	0.492	0.0026	1.0000					
Media attention	39.282	214.6	0.3819	−0.0969	1.0000				
Self-importance	1.605	0.763	0.1865	−0.0909	0.0328	1.0000			
Accomplishments	98.183	52.144	0.0143	0.1198	0.0320	0.0118	1.0000		
Founder	0.289	0.455	−0.1992	0.2998	−0.0307	−0.1988	0.1317	1.000	
Self-interest	2.026	2.932	0.3064	0.1915	0.2154	0.0095	−0.046	−0.006	1.000

Table 2 Hubris and earnings manipulation

Variable	Hypothesis and predicted direction	Control model	Full model	Odds ratio
Size		0.0217 (0.089)	−0.11 (0.183)	0.1641
Duality		−0.412 (0.369)	−0.5613 (0.381)	0.2171
Media attention	H1+		0.0044^{+} (0.002)	1.0044
Self-Importance	H2+		0.489* (0.205)	1.6308
Accomplishment	H3+		0.0097** (0.003)	1.0098
Founder	H4+		0.5715^{+} (0.335)	1.7709
CEO stock sales	H5+		−0.0657 (0.073)	0.9364
Constant		0.0587 (0.875)	−0.5649 (1.541)	
Wald Chi		1.74	39.18***	
Pseudo R2		0.007	0.095	

$^{+}$ $p < .10$, * $p < .05$, ** $p < .01$, *** $p < .001$

The empirical work also contributes to the developing literature on earnings manipulation. In this regard, the agency perspective represents the dominant narrative employed to explain a wide variety of corporate governance problems such as earnings manipulation and financial fraud. Both the popular press (Lewis 1989; Stewart 1991; Eichenwald 1995; McClean and Elkind 2003) and academic literature (Arrow 1963; Becker 1968; Jensen and Meckling 1976; Braithwaite and Makkai 1991) have embraced the idea that rational self-interest drives corporate managers to intentionally and mindfully adopt unethical behavior. In contrast, behavioral research acknowledges that while rational self-interest and intent often play integral roles in ethical decision making, complete reliance upon pure rationality to explain unethical behavior is misguided. Limitations on human awareness, attention, and cognition are real and must be considered to better understand how these decisions and behaviors actually result.

The influence of hubris is particularly significant in terms of the discrete practice of earnings manipulation. This is the case because earnings manipulation is largely irrational behavior over the long term. Typically it involves artificially increasing earnings in the near term at the expense of future periods based upon the belief that the earnings shortfall can be concealed or made up over time. However, continued concealment or recovery in the future is often unlikely. This is the case because the manipulation begins due to deteriorating performance that may be challenging to reverse quickly. Also, the initial manipulation often increases the expectations of analysts, shareholders, board members, and other stakeholders in regard to future performance. This makes filling an earnings shortfall while also meeting future earnings expectations even more difficult. Most managers of large, sophisticated publicly traded companies recognize this dynamic. Yet despite the probability of discovery and the penalties that can result, the observed frequency of earning manipulation remains quite high. In light of these considerations, alternative models of earnings manipulation that go beyond agency and self-interest are needed to provide a richer explanations of this complex and costly phenomenon. A hubris-driven model of earnings manipulation provides a complimentary perspective.

The null finding in regard to the agency hypothesis is also interesting and deserves attention, particularly in light of the hubris findings. The results from prior empirical research that investigates the relationship between managers' incentive compensation and earnings manipulation are mixed (Armstrong et al. 2010). Some studies identify a positive and statistically significant relationship between these factors (Johnson et al. 2009; Bergstresser and Philippon 2006), others find no significant relationship (Erickson et al. 2006), and still others find nuanced connections (Harris and Bromiley 2007; O'Connor et al. 2006). Here there is no statistical support found for an association between CEO stock sales and earnings manipulation. Given the significance of the hubris factors, however, this is not all that surprising. CEOs who suffer from hubris are overconfident and exhibit unwarranted belief in their own abilities (Judge et al. 2009; Bodolica and Spraggon 2011). A logical inference is that hubris-infected CEOs are unlikely to sell the shares they own in their firms because they expect these shares to grow in value over time.[3] Despite this null finding, agency considerations remain highly relevant. In circumstances where hubris is not operative or different empirical contexts, agency concerns may influence the decision to manipulate

[3] This insight was highlighted within the comments of two of the anonymous reviewers of this manuscript.

earnings.[4] The premise here is simply that factors such as hubris are also highly relevant to the development of a complete understanding of unethical behavior.

It is also important to note that any recognition of hubris' role in earnings manipulation in no way excuses this behavior. CEOs are typically highly compensated for their roles (Zajac and Westphal 1995). They have the responsibility to ensure that the information their firms disclose is accurate and not misleading. A failure to meet this responsibility due to biased decision making is still a failure that deserves reproach. To this point, Section 404 of the Sarbanes–Oxley Act provides that any material inaccuracy in the disclosed financial statements can serve as the basis for penalties for either the CEO or CFO at publicly traded firms. Individual intent or actual knowledge is not relevant to liability under this provision. Given the role senior managers occupy coupled with the significant part accurate disclosure plays within the U.S. securities regulatory framework, strict liability and censure for this type of failure is justified and necessary.

That said, the idea that manipulation can result through non-rational processes and biases presents some meaningful regulatory and governance questions. Most governance and regulatory approaches are designed to discourage and penalize intentional wrongdoers. However, such restrictions and penalties are largely irrelevant to decision makers that exhibit a non-rational or biased decision process like the one theorized here. Governance and regulatory approaches should not ignore that non-rational processes can also lead to undesirable outcomes. Instead these approaches must also account for boundedly rational and biased decision making to enhance both fairness and effectiveness. As an example, it seems appropriate to retain the strict liability standard under Section 404, but also allow for a reduction in penalties if the defendant can affirmatively demonstrate they lacked knowledge and intent.

The study also extends the research on hubris and the upper echelons perspective (Hayward and Hambrick 1997). Specifically, the empirical model documents another way that CEO hubris correlates with significant negative consequences at the firms they lead. Notably, the upper echelons perspective highlights that top managers' values and biases influence their organizations in many significant ways (Hambrick and Mason 1984; Hiller and Hambrick 2005). CEOs, through their beliefs and actions, play a large role in establishing the culture and ethical orientation of the firms they manage (Bragues 2008). In particular, the perceived ethicality of the CEO is an important factor that influences the potential that other members of the firm will engage in misconduct (Carson 2003; Chen 2010). In situations where CEOs adopt unethical behavior but lack awareness, the negative effects of the behavior are uniquely troubling. In direct terms, unethical behavior can lead to extreme negative outcomes such as the termination of the CEO or the failure of the firm as a going concern (Arthaud-Day et al. 2006). In addition, less direct effects on employees' perceptions of culture and ethicality at the firm can also result. These indirect effects create the potential for very problematic outcomes such as the spread of unethical behavior throughout the organization (Ashforth and Anand 2003).

Finally, the study also offers an interesting contribution to the entrepreneurship literature. Specifically, there is evidence that founder-CEOs are more likely to manipulate earnings. Hayward et al. (2006) apply the idea of hubris to entrepreneurial decision making to explain why individual entrepreneurs start new ventures despite the extremely high failure rates they face. These authors comment that while hubris triggers this positive entrepreneurial activity, "a hubris theory of entrepreneurship must link founder overconfidence to adverse outcomes for their ventures" as well (p. 166). The finding that founders exhibit a marginally significant tendency to manipulate earnings offers evidence of one such area where entrepreneurial hubris may be at work and lead to severe adverse outcomes.

Managerial Implications

The managerial implications of the ideas developed here are fairly straightforward but also present considerable challenges. Ethical decision making is a critically important aspect of managerial decision making. In particular, the development of moral awareness is a critical step in effective decision making. Yet human decision making in general is susceptible to predictable and systematic flaws and biases that can impair moral awareness (Messick and Bazerman 1996; Tversky and Kahneman 1974). In regard to the specific bias of hubris, Thaler and Sunstein (2008) observe that "[u]nrealistic optimism is a pervasive feature of human life; it characterizes most people in most social categories" (p. 33). An inherent difficulty in addressing such biases involves the fact that individual decision makers are unaware that the biases exist and are influencing their judgment. Unfortunately, broadly applicable methods to surface these biases and limit their impact have proven elusive (Fischhoff 1982).

Despite this issue, ethics training that targets how biases influence awareness has the potential to improve

[4] At the suggestion of one of the reviewers, the potential moderating effects of insider sales on the hubris factors were also examined. This required independent testing of distinct interaction terms of the insider sales and each hubris factor within independent specifications, using Stata's "inteff" command (Norton et al. 2004). No statistically significant moderating effects were found in any of these specifications.

managerial decision making. In this regard, research has shown that carefully structured ethics training programs can improve ethical decision making (Waples et al. 2009). To address biases, however, such training must be targeted to the elimination of a specific bias, tailored to the context, and provide personalized and immediate feedback (Bazerman 2006). As a result, some ethical training managers receive should emphasize surfacing discrete forms of bias and focus on the development of ethical awareness. In order to combat the specific bias of hubris, managers must cultivate the ability to adopt an outsider's perspective on decisions they face (Kahneman and Lovallo 1993). In light of this, the development of a diverse executive team, the ability to embrace criticism of both plans and outcomes, and an active board of directors should also help limit the influence of hubris within managerial decision making (Kroll et al. 2000). Finally, the idea that firms ought to manage reported earnings as a signaling mechanism is inherently problematic. Setting aside questions about the appropriateness of this practice in the abstract, the potential that hubris might influence senior managers' judgement makes such signaling behavior much too risky to adopt as a viable disclosure strategy.

Limitations and Future Research

The most significant limitation of the paper is that while the empirical study tests the relationship between hubris and unethical outcomes, it does not directly assess whether individual decision makers in the sample ever attained moral awareness. This is a function of both the phenomenon of interest and the empirical approach applied. People exhibit real reluctance to accurately self-report about their ethicality in general (Wouters et al. 2014). Capturing data about ethical decision making in a 'live' context such as a firm's reported earnings compounds these issues and carries obvious challenges. In light of these considerations, the question of how hubris impacts attention, awareness, and judgment represents a critical area for future research. In particular, experimental treatments likely offer a key method to better develop our understanding of these relationships. Along similar lines, another important limitation is that both hubris and self-interest are identified indirectly by means of proxy data. Direct measures of this type of data for senior managers such as CEOs are also notoriously hard to come by (Pettigrew 1992). While the measures utilized have a strong foundation in the literature, more direct measures of both hubris and self-interest may be possible and lead to more refined results.

In addition, the theory set forth here provides that hubris reduces or eliminates moral awareness which leads individuals to make unethical choices. While the theoretical focus is on awareness, nothing in the empirical study rules out the possibility that hubris impacts alternative cognitive processes that enable morally aware unethical behavior. In this regard, hubristic managers may be better equipped to morally disengage and avoid the self-sanction and cognitive dissonance normally attributable to unethical behavior (Bandura 1986). In particular, hubris may equip decision makers with better justifications for their misconduct (Bandura 1990). Thus, it is also possible that hubris enables various forms of post hoc rationalizations for wrongdoing (Ashforth and Anand 2003) that allow ethically aware decision makers to engage in unethical acts. Unpacking how hubris can impact moral disengagement and rationalization after-the-fact represents another area where additional research is needed.

Another important limitation of this study is that it only examines the hubris exhibited by CEOs at the subject firms. The determination of the reported earnings for an individual firm is a complex activity that draws on the effort and expertise of a number of executives. While the upper echelons literature supports the inference that the CEO is extremely influential in major decisions at their firms, other individuals are undoubtedly involved in the discrete decision studied here. Additional research should look to broaden the examination of the influence of hubris to include an analysis of the top management team at a firm. One way to possibly examine this issue would be to combine measures of hubris with measures of group think, team heterogeneity, strategic consistency or other top management team components to determine if effects at the group level of analysis exist (Hambrick et al. 1996; Carpenter et al. 2004; Cho and Hambrick 2006).

In addition, within the study self-interest is only measured through CEO stock sales. It is entirely possible that more nuanced measures of self-interest would show that this factor also significantly influences earnings manipulation activity (Bergstresser and Philippon 2006). Also, while a CEO may be driven by hubris, others at the firm may help facilitate the earnings manipulation to advance their own self-interest (Jiang et al. 2010). As a result, future research should continue to examine how both intentional and unintentional decision processes drive unethical behavior at work. Additionally, hubris also exhibits meaningful overlap with some related constructs like narcissism (Hiller and Hambrick 2005). While these factors are conceptually distinct, nothing within the empirical study allows us to distinguish between the effects of hubris and these closely related concepts. Finally, the empirical findings are limited through the potential for sample selection bias that results from sampling on the dependent variable (Berk 1983). While this is a weakness, the matched pair structure was adopted as a method to mitigate these concerns (Hambrick and D'Aveni 1988; Harris and Bromiley 2007).

Conclusion

Moral awareness represents a critically important component of effective decision making (Rest 1986). The development of awareness remains a challenge, however, due to the complexity inherent in many decisions coupled with limitations on human attention and cognition. Unethical behavior by individuals that lack awareness is especially noteworthy, however, due to the opportunity it presents. Presumably, some morally unaware decision makers would select an ethical course if awareness could be developed. While the challenges of eliminating biases within decision making are very real, the opportunity for improved ethical decision making and subsequent behavior is significant. In some ways, the capacity to minimize these biases within decision making provides some of "the best hope for improving individual and organizational ethics" (Bazerman 2006, p. 131).

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