

IZA DP No. 5818

**A Multi-Method Approach to Identifying Norms and  
Normative Expectations within a Corporate Hierarchy:  
Evidence from the Financial Services Industry**

Stephen V. Burks  
Erin L. Krupka

June 2011

# **A Multi-Method Approach to Identifying Norms and Normative Expectations within a Corporate Hierarchy: Evidence from the Financial Services Industry**

**Stephen V. Burks**

*University of Minnesota, Morris  
and IZA*

**Erin L. Krupka**

*University of Michigan  
and IZA*

Discussion Paper No. 5818

June 2011

IZA

P.O. Box 7240  
53072 Bonn  
Germany

Phone: +49-228-3894-0  
Fax: +49-228-3894-180  
E-mail: [iza@iza.org](mailto:iza@iza.org)

Any opinions expressed here are those of the author(s) and not those of IZA. Research published in this series may include views on policy, but the institute itself takes no institutional policy positions.

The Institute for the Study of Labor (IZA) in Bonn is a local and virtual international research center and a place of communication between science, politics and business. IZA is an independent nonprofit organization supported by Deutsche Post Foundation. The center is associated with the University of Bonn and offers a stimulating research environment through its international network, workshops and conferences, data service, project support, research visits and doctoral program. IZA engages in (i) original and internationally competitive research in all fields of labor economics, (ii) development of policy concepts, and (iii) dissemination of research results and concepts to the interested public.

IZA Discussion Papers often represent preliminary work and are circulated to encourage discussion. Citation of such a paper should account for its provisional character. A revised version may be available directly from the author.

## ABSTRACT

### **A Multi-Method Approach to Identifying Norms and Normative Expectations within a Corporate Hierarchy: Evidence from the Financial Services Industry**

This paper presents the results of a field study at a large financial services firm that combines multiple methods, including two economic experiments, to measure ethical norms and their behavioral correlates. Standard survey questions eliciting ethical evaluations of actions in on-the-job ethical dilemmas are transformed into a series of incentivized coordination games in the first experiment. We use the results of this experiment to identify the actual ethical norms for financial adviser behavior held by key personnel – financial advisers and their corporate leaders – in three settings: a clash of incentives between serving the client and earning commissions, a dilemma about fiduciary responsibility to a client, and a dilemma about whistle-blowing on a peer. We also measure the beliefs of financial advisers about the ethical expectations of their corporate leaders and the beliefs of corporate leaders about financial adviser norms. In addition, we ask financial advisers about their personal normative opinions, matching a common methodology in the literature. We find, first, systematic agreements in the normative evaluations across the corporate hierarchy that are consistent with ex ante expectations, but second, we also find some measurable differences between the normative expectations of corporate leaders about on-the-job behavior and the actual norms shared among financial advisers. When there is a normative mismatch across the hierarchy we are able to distinguish miscommunication from ethical disagreement between leaders and employees. Our subjects also report their job satisfaction and take part in a second incentivized experiment in which it is costly to report private information honestly. A last finding is that a mismatch between advisers' personal ethical opinions and corporate norms – especially those of peers – strongly correlates with job dissatisfaction, and less strongly but significantly with the willingness to be dishonest.

#### NON-TECHNICAL SUMMARY

We use coordination games with cash payoffs as well as standard survey questions to identify the norms financial advisers at a large financial services firm hold about behavior toward their clients. We also measure their beliefs about what their corporate leaders expect, and the actual expectations of those leaders, along with the beliefs of leaders about the ethics of advisers. We find much normative agreement, but also very interesting signs of disagreement, in one case due to a misunderstanding, and in the other to a divergence of ethical views, across the hierarchy. We also find that a clash between the personal ethical opinions of advisers and the norms of their organization predict both job dissatisfaction and the willingness to lie for a cash gain in a second experiment.

JEL Classification: C93, D23, M14

Keywords: norms, ethics, financial adviser, corporate leader, financial services, field experiment, coordination game

Corresponding author:

Stephen V. Burks  
Division of Social Science  
University of Minnesota Morris  
600 East 4th Street  
Morris, Minnesota 56267  
USA  
E-mail: [svburks@morris.umn.edu](mailto:svburks@morris.umn.edu)

## 1. Introduction.<sup>1</sup>

Much has been made of the influence of ethical norms on behavior in organizations (Victor and Cullen, 1988, Kohlberg, 1981, Jones, 1991, Donaldson, 2000, Treviño et al., 2008, Gino and Bazerman 2009) and, as a result, their cultivation has been embraced as a legitimate business goal and an important topic of study. Identifying ethical norms together with linking them to behaviors in business settings presents a sizable challenge to the research community. Getting study participants to truthfully respond to inquiries about ethically questionable behaviors (such as cheating, stealing, lying, or engaging in illegal behavior) is a significant methodological hurdle. This hurdle is not dwarfed by the task of convincing members across the organizational hierarchy to participate in a study that might expose that organization's ethical lapses.

In this paper we present the results from the analysis of data about on-the-job ethical norms collected at several workplaces of a large firm in the financial services industry. Our study participants are key personnel in the financial services industry: the financial advisors and corporate leaders of a large firm in the financial services sector in the US. The cooperating firm provides advising, planning, and investment services to individual clients and has annual revenues of more than \$1 billion per year. Using a novel research design which includes two behavioral economic experiments as well as more conventional survey instruments, we demonstrate the value of combining multiple methods so that we can elicit both ethical norms and related behavior. Specifically, we adapt a new method of identifying ethical norms using an economic experiment that is incentive compatible (Krupka and Weber, 2009) to a field setting, and extend this method to capture the manner in which norms and beliefs about norms vary within a corporate hierarchy. We then combine the norm-elicitation technique with a survey and a separate experiment measuring advice-giving behavior, with the same subjects in the same field setting.<sup>2</sup> Our multi-method approach yields several distinct contributions.

---

<sup>1</sup> The authors are listed in alphabetical order. We gratefully acknowledge assistance from the executives of the cooperating firm and are indebted to Doug Lennick for contributions to project development and to the on-the-job ethical dilemma vignettes we employ. We also thank Rachel Croson, Tanya Rosenblatt, Yan Chen and anonymous referees for offering helpful comments. Financial support was received from the Institute for the Study of Labor (IZA), Bonn, and the University of Minnesota, Morris. Errors are the responsibility of the authors.

<sup>2</sup> The use of multi-method and multi-task approaches to identify complex phenomena has been growing. Gächter et al. (2010) combine the Krupka and Weber norm elicitation technique with a laboratory experiment to tease out social preferences from norm compliance. For other examples of multi-method and multi-task approaches in different domains see for example, James Cox (2004), Harrison and List (2004) or Karlan (2005).

The norm elicitation technique of Krupka and Weber (2009) represents an important innovation in the study of norms. This method combines the versatility of the survey approach with an incentive compatible mechanism that induces subjects to reveal their true beliefs about the norm for a situation that is described to them. We adapt this technique to the field setting by applying it to ethical conflicts that can face financial advisers on the job.<sup>3</sup> However, in adapting this technique to the field context we also extend it, providing a novel method for distinguishing between different norm constructs and norms among different groups in the organization. Specifically, we can distinguish between the *norms* held by distinct groups within the corporate hierarchy (in this case financial advisers and their managers), the *beliefs* that each group has about the normative views of the other, as well as the employee's own *personal* ethical opinions.

To achieve this, we present three vignettes, each of which describes an ethical dilemma that a financial adviser could face on the job. We ask subjects to match with ("coordinate with") an anonymous other person in giving an ethical evaluation of several specific actions a financial adviser could take in response to this situation, and we pay subjects for correct matches. By asking both corporate leaders and financial advisers to provide responses in our matching task, and by varying the identity of the matching target (an anonymous financial adviser or an anonymous corporate leader) we are able to directly observe whether there is a common pattern of ethical evaluations that indicates the presence of a norm. Where such patterns occur, our technique allows us to separately identify the norm held by advisers, the beliefs of advisers about the desired norm that leaders have for advisers, the norm held by leaders for adviser behavior, and the beliefs of leaders about the norms advisers actually have. We also ask subjects to make a third pass through the action evaluations in which they are not incentivized to match responses to a target. This allows us to look for evidence for the conjecture that personal ethical opinions, as typically elicited in a survey-only approach, might diverge from collective norms.<sup>4</sup>

The final part of our approach is a survey of participants asking demographic and job-related background information, including current job satisfaction, followed by the administration of a second experiment, the "advice game" (Gneezy, 2005). In the advice game subjects reduce their personal payoff from \$150 to \$50 by giving honest advice, and while

---

<sup>3</sup> In section 3.a we provide a more thorough definition of what we mean by an ethical norm. We define an ethical norm as expressing a shared agreement regarding the appropriateness or inappropriateness of a particular behavior in a situation where another's welfare is directly affected.

<sup>4</sup> This setting deliberately makes it hard for us to find evidence for such variations, since the elicitation method has just systematically cued subjects to recall what the collective expectations of the firm's leaders and employees are.

subjects are anonymous in all interactions, we can connect advice-giving behavior with norm elicitation and survey responses for each participant.

We utilize this novel and rich source of information about ethical beliefs and expectations, job satisfaction, and advice-giving behavior within the corporate hierarchy in several ways. We construct a measure of agreement or “alignment” between the ethical norms held collectively by advisers and those held collectively by leaders for adviser behavior, and we also construct similar measures of alignment between the individual ethical opinions of advisers and the norms of their peers and the expectations of their leaders.<sup>5</sup> Using these measures of alignment, we find a new relationship between norm alignment and attitude, and norm alignment and behavior. In particular, we show that the influence of ethical norms on these two outcomes is correlated with degree to which personal ethical norms diverge from the norms of one’s peers and, to a lesser extent, from the norms espoused by leadership.

Finally, the results of this work also afford a unique opportunity to bridge the gap between scientific knowledge and its application by working closely with corporate partners to develop the elicitation instrument and share with them the results of our study. More specifically, by comparing the patterns of belief and expectation across three different vignettes, we show that when the ethical norms of employees and the ethical expectations of leaders for those employees do not match (are “misaligned”), it is possible to determine whether the mismatch is due to a failure to communicate, or to an underlying disagreement about what is ethical. These situations have very different implications for effective managerial interventions.

The balance of the paper is as follows. Section 2 situates the present project in the literature on business ethics. Section 3 provides a definition of ethical norms, motivates our method of eliciting local ethical norms using a coordination game experiment, and describes the experimental design. Section 3 also outlines the hypotheses we will test using our experimental design. Section 4 describes our results and Section 5 concludes, while some details of the ethical dilemmas are provided in the Section 6, the Appendix.

---

<sup>5</sup> We will have more to say on this below, but the degree to which an employee’s personal ethical opinions overlap with the norms actually held by his peers or with the ethical norms held by the corporate leadership can be thought of as a measure of ‘fit’ (see Edwards and Cable 2009, Ambrose et al. 2008; Herrbach and Mignonac 2007; Schminke et al. 2005, Valentine et al. 2002).

## 2. Related and Existing Work

The question of whether cultivating high ethical standards in a business setting influences behavior has been a source of speculation as far back as Mandeville (1670-1733) and Adam Smith (1723–1790) (Braques, 2005, Donaldson, 2000, Donaldson, 2005, Friedman, 2008, Orlitzky, 2001, Orlitzky et al., 2003, Smith, 1982 (1759)). By the end of the twentieth century the majority of the 500 largest corporations in the U.S. had codes of ethics, and among the full set of U.S. companies larger than small businesses, the proportion with codes of ethics was near 80% (Donaldson, 2000). Research in this area consistently documents a correlation between individual behavior and several other factors. These factors include individual perceptions about the ethical climate of the organization (Cullen and Bronson, 1993, Victor and Cullen, 1988), the degree to which leaders are perceived to behave ethically (Brown et al., 2005, Schwartz et al., 2005, Treviño et al., 2008), the actions of peers (Gino et al., 2009, Mazar and Ariely, 2006) and the external rewards to the misdeed (Gneezy, 2005).

An important and significant body of research uses surveys to elicit ethical norms from individuals, groups or organizations (see for example Schwartz, 1973; Victor and Cullen 1988; Cullen and Bronson 1993; Perkins and Wechsler 1996; Kanazawa and Stil 2001; Campo et al., 2003, Perkins and Wechsler, 1996, Schwartz, 1973, Jones and Kavanagh 1996).<sup>6</sup> While the strength of using a survey is that it can be adapted to ask about norms in different settings for different situations, and do so in a cost-effective manner, this format is not incentive compatible with the revelation of true beliefs or preferences by respondents (Furnham 1986; Friedman and Sunder 1995; Patel 2003; Dunn and Schome 2009; Auger and Devinney 2007; DeJong et al. 2010).<sup>7</sup> When questions about one's opinions or behaviors are sensitive (such as asking about bribing or whistle blowing practices), then direct questioning regarding those activities has been shown to lead to biases in many domains (Harrison and Rutström 2008; McFadden 2009).<sup>8</sup> Indeed, the evidence strongly favors the conclusion that there is significant bias in responses

---

<sup>6</sup> There are important exceptions to this. Cialdini et al. (1990), as an example, use experiments to observe how behavior changes when particular norms are made more or less salient in an actor's mind. However, the initial elicitation of the relevant norms was identified in a pre-study that used a survey format.

<sup>7</sup> As Vernon Smith notes in his 1991 article contrasting psychology and economics, the lack of discourse on incentive compatibility between psychologists likely stems from a difference in (historical) research focus. However, in so far as social scientists are interested in beliefs and behaviors (rather than the cognitive processes that give rise to them), incentive compatible elicitation techniques for eliciting beliefs and measuring behavior ought and need to be developed.

<sup>8</sup> See also the 'Bradley Effect': Elder, Janet. (2007, May 16). "Will There Be an 'Obama Effect?'" , The New York Times.

elicited in the absence of incentive compatibility; the bias can stem from the hypothetical nature of a question (Kagel and Roth 1995; Schulze et al. 1996; Harrison and Rutström 2008) or because the mechanism makes non-truthful revelation desirable (Smith 1991). A second problem with survey methods is that they often connect the norms they identify with reported behaviors (which are subject to recollection errors and misrepresentation) rather than observed behaviors of the responding individual. As a result, uncovering the influence that ethical norms may have on behavior using surveys is not always feasible.

Economists take a different approach to uncovering the influence of norms on behavior. Economists prefer to indirectly identify the norm by extracting it from observed behavior, as a kind of revealed preference (Andreoni and Miller, 2002). They typically do so by varying experimental conditions that are likely to yield behavior that is consistent with a preference for a particular norm (e.g. Fehr and Schmidt 1999, Bolton and Ockenfels 2000). The strength of the laboratory experiment is that it provides salient incentives to subjects to respond or behave in a way that is compatible with revealing their true preferences (Freedman and Sunder 1995). A second strength is that experiments directly measure behavior. However, laboratory experiments only measure norms indirectly from the decisions subject make. The problem with this approach is that using behavior to infer norms is not only *ad hoc*, but fails to distinguish between collective habits and shared norms, and between preferences for specific outcomes versus preferences for norm compliance.<sup>9</sup>

A further short-coming that is shared by many survey and laboratory approaches is that they often do not (or cannot) distinguish between norms with respect to different reference groups, or between a personal normative opinion and a norm shared by a group. Norms relevant to complex social settings are frequently associated with specific roles (or "identities") in the setting, and which norms apply to the role can depend on the reference group with respect to which the role is defined (Akerlof and Kranton 2010). Different groups within an organization can, and frequently do, have differing social norms for the same decision making context (cf. Harris 1990; Schminke et al. 2005).<sup>10</sup> The most intuitive example of this, and the one we examine in this paper, is when there exists a norm held by peers at one level of an organizational

---

<sup>9</sup> Using behavior to infer norms also fails to identify norms that prohibit behavior (because the behavior which the norm governs is rarely observed). See Bicchieri (2006) Chapter 1 for her longer discussion of how using behavior to infer norms can sometimes lead one astray.

<sup>10</sup> And in other contexts such as safety norms see Zohar and Luria 2005.

hierarchy (such as the employees) and a different ethical norm may be held by members of another level of the organizational (such as the norms held by those in leadership positions).

We argue that when seeking to relate ethical norms to behavior in an organizational context, it is pertinent to identify not only what the norms are but whose norms influence behavior. This is relevant because, as an example, considerable evidence points to a positive correlation between ethical leadership and ethical behavior among subordinates (Brown, Trevino and Harrison, 2005, Gatewood and Carroll, 1991, Smith et al., 2007, Treviño, Weaver and Brown, 2008). In addition, other literature suggests that the ethical behavior of one's peers may also be correlated with one's own ethical behavior (Zey-Ferrell et al. 1979, Zey-Ferrell & Ferrell, 1982, Jones & Kavanagh, 1996, Brass et al., 1998,). Thus, the ability to measure, in an incentive compatible manner, when and to what degree norms at the employee level overlap with norms at the management level in an organizational hierarchy would be a distinctive advance in the empirical tools available for studying organizational structure more generally and the effect of peer and leadership norms on behavior. This is a contribution afforded by the norm elicitation method we employ here, because in the field we can systematically vary the reference group subjects use in their matching tasks, and elicit not only the norms of each group, but the beliefs of each group about the normative expectations of the other.

Distinguishing between collectively held norms and personal ethical opinions is equally important, both in practice and in testing theoretical predictions. There is a long tradition in psychology of distinguishing these constructs (Schwartz 1973; Elster 1989a; Elster 1989b).<sup>11</sup> Group norms are characterized by shared knowledge (a formal definition will be given below) while personal norms need not be known to any other member of the group. Often one's personal norms and those of the group overlap, but they need not. Employing a method that elicits norms that are group-specific, and that can distinguish group norms from personal norms held privately by each member of the group, is important because it allows one to explore novel relationships, or to test predictions that arise from previous empirical work (Damon 1984) or from theory (cf. Akerlof and Kranton 2005).<sup>12</sup>

---

<sup>11</sup> But see also Bicchieri 2006.

<sup>12</sup> Trevino et al. (2006) review some of the hypotheses that follow from theories where different personal identities trigger different personal norms (in economics see also Akerlof and Kranton 2005). While not the focus of this paper, the methodology we develop here allows the researcher to explore, as an example, what kinds of triggers would make different personal identities and associated personal norms salient.

Our growing knowledge of the interplay between norms and behavior is expressed in the constructs themselves (such as the distinction made between group norms and personal norms) and in theory. Both demand measurement techniques and research designs to generate appropriate data. As an example, a typical theory (found in economics and in organizational psychology) that models the relationship between group norms, personal norms and behavior characterizes the individual as caring about both the payoff  $\pi(a_k)$  produced by the selected action,  $a_k$ , and the degree to which the action is compliant with a norm.<sup>13</sup> This is written in reduced form as follows:

$$u(a_k) = V(\pi(a_k)) + N_i(a_k) + \gamma N_g(a_k). \quad (1)$$

The function  $V(\ )$  represents the value the individual places on the monetary payoffs and is increasing in  $\pi(a_k)$ . In this model we can define the function  $N_i(a_k)$  as the degree of appropriateness that reflects an individual's personal beliefs about the appropriateness of a particular action. The function  $N_g(a_k)$  assigns to each action a degree of appropriateness or inappropriateness that reflects the norm of the relevant reference group  $g$ . Thus if, for an action,  $a_k$ , there is collective recognition that the action constitutes "norm consistent" behavior,  $N_g(a_k) > 0$ , while if there is joint recognition that an action constitutes "norm inconsistent" behavior,  $N_g(a_k) < 0$ . Defining  $N_g$  to describe the norm relevant to a specific group  $g$ , the parameter  $\gamma \geq 0$  then represents the degree to which the individual cares about adhering to group ethical norms.<sup>14</sup> In studies of organizational fit (fit reflecting the match between a person's values and those of the organization), individual personal norms and those of the organization are treated as distinctly different concepts (see Schneider 1987 as an example). Both  $N_g(a_k)$  and  $N_i(a_k)$  affect utility, and when the valence (positive or negative value) of both normative terms is the same the effect of ethical considerations on the utility derived from a particular action  $a_k$  is stronger, and when they are opposite the effect is weaker.

Models of this type predict, as an example, that an individual who perceives their personal norm to be similar to that of the group's norm, will have higher utility for the same job than someone whose personal ethical norms do not overlap with that group norm. Thus, we

---

<sup>13</sup> This one is adopted from Krupka and Weber (2009) and Akerlof and Kranton (2005). But see also List 2007 for examples of utility functions where social norms are separate arguments in the function.

<sup>14</sup> Other researchers have noted that individuals care heterogeneously about norm compliance (Ostrom 2000, Fisher and Huddart 2008, Andreoni and Bernheim 2008).

would expect that the former will express greater job satisfaction or a greater desire to remain with the firm (this would be consistent with models such as those in Schneider 1987 or Akerlof and Kranton 2005). The growing family of models that characterize behavior as a function of group and personal variables are exciting and promising provided one has a way to identify norms relative to different groups and to distinguish these from personal norms.

In summary, the main limitation of the previous work rests, on the one hand, in the lack of incentive compatible norm measurement techniques and, on the other hand, in the relative absence of studies which collect both measures of ethical norms and measures of relevant behavior. Our approach is distinguished from previous attempts to measure ethical norms in several ways. We combine multiple methods by adding an incentive compatible elicitation protocol to traditional vignette-based survey methods, and combining this with a second attitudinal survey and a second experiment about behavior related to the occupation of many subjects. We adapt the method of Krupka and Weber (2009) to a field setting in a financial services firm, and in so doing also extend the protocol to identify norms across groups in the organizational hierarchy and the beliefs each group has about the normative expectations of the others, as well as separating two different norm constructs (group and personal). We use these data to construct measures of normative alignment (between levels of the hierarchy and between the norms of employees and those of their peers and their leaders) and we correlate these measures with indicators of individual on-the-job behavior that are reported in a survey (such as job satisfaction) and observed in a controlled laboratory experiment (dishonest advice).

### **3. The Experimental Design**

The experimental design consists of three modules. The first module elicits norms and beliefs about normative expectations. In the second module subjects play an “advice game” in which they have material incentives to give bad advice by lying (Gneezy, 2005). The third module elicits basic demographic information and related variables of interest, such as job satisfaction. The order in which subjects see modules 1, 2 and 3 is always the same. In all cases, subjects are informed of their individual earnings only after all experimental modules had been completed. We now describe each of these modules in detail.

#### **a. Defining Ethical Norms**

There is a long tradition in psychology of distinguishing between several different kinds of norms: social norms that describe what one ought to do, social norms that describe what is regularly done and personal norms (Deutsch and Gerard 1955; Schwartz 1973; Cialdini et al. 1990). We follow this literature in distinguishing what one “ought” to do, or injunctive norms, from customs or actions that people regularly take, or descriptive norms (Bicchieri, 2006, Deutsch and Gerard, 1955). Both kinds of norms influence behavior (Herrbach and Mignonac 2007; Cialdini et al. 1990; Krupka and Weber 2009; Bicchieri and Xiao 2009; Gneezy et al. 2010). However, our primary focus in this paper is on injunctive norms, i.e., those described by Elster (1989a) as prescribing what one “should do” or “should not do.”

We adopt the following definition of an ethical norm:

*“An ethical norm reflects a shared agreement regarding the appropriateness or inappropriateness of a particular behavior in a situation where another’s welfare is directly affected.”*

This is a synthesis of many available definitions, but it captures the main emphases present in most descriptions of ethical norms (Boulding 1966; Saul 1981; Victor and Cullen 1988; Church et al. 2005; Jones 1991). The definition implies three properties which guide our norm elicitation approach.

First, an ethical norm is a social construct that involves joint recognition by group members that a particular behavioral rule exists and is to be applied to the relevant situation (Bicchieri 2006). The norm elicitation method first proposed by Krupka and Weber (2009) captures this joint recognition by using a specific behavioral economic experiment--a coordination game over rating the ethical appropriateness of actions for an ethical dilemma which we describe to subjects. Because social norms reflect “collective perceptions,” coordination games present a more effective way to identify such socially-held judgments than the more typical survey approaches.<sup>15</sup> Camerer and Fehr (2004) note that coordination games can be paired with economic incentives to reveal shared understanding and suggest that experimental paradigms, such as simple coordination games, can prove useful for measuring dimensions of

---

<sup>15</sup> Gächter et al. (2010) also use the Krupka and Weber method to identify social norms. For other research using coordination games to identify social norms, see also Leider et al. (2009) and Gintis (2009).

shared perception.<sup>16</sup> From a game-theoretic point of view, matching games such as the one we use in our experiment have a number of equilibria, and nothing intrinsic to the game makes one equilibrium favored (or focal) over the other. However, Schelling (1960) theorized and Mehta et al. (1994) and Sugden (1995) demonstrated that prominence derived from common culture and shared experiences can create focal points. In our experiment, the shared ethical norms of a particular group will create the focal points. The focal points of this coordination game are the ethical norms, and the degree of agreement about the focal points is a measure of concentration of beliefs about the norm.<sup>17</sup>

The second property implied by the definition is that “personal normative opinions” may significantly vary from the views that are understood by group members to constitute the collective norm. To allow for differences between group norms and personal normative opinions we elicit subject responses with the incentivized coordination task and then again, for the same context, without the coordination task or incentives. While norms are characterized by a shared understanding of appropriate behavior, we define a personal normative opinion as “self expectations for behavior constructed in specific situations on the basis of generalized internalized values” (Elster 1989a; Elster 1989b; Posner and Rasmusen 1999; Schwartz et al. 2005).<sup>18</sup> It follows that an individual’s personal normative opinion need not track a group norm (Bicchieri 2006; Young 2008). Thus, for instance, an individual may personally believe that blowing the whistle on a colleague is inappropriate but may recognize that the desired corporate norm is to report any infraction. In this paper, henceforth, we will refer to socially shared ethical norms as ‘ethical norms’ and personal ethical norms as ‘personal norms’.

The third property of ethical norms that follows from the definition is that ethical norms can vary from group to group (Krupka and Weber 2008). In a corporate setting there is a natural potential for a variation in norms between two relevant reference groups that are at different

---

<sup>16</sup> Gneezy and Rottenstreich (2008) demonstrate how the power of focal points is considerably weakened by payoff asymmetries. In our elicitation experiment, we use symmetric payoffs.

<sup>17</sup> Using coordination games to elicit injunctive norms, Krupka and Leider 2010 demonstrate that the responses obtained using coordination games are not overly sensitive to a subject’s *beliefs* about what others actually do, what *they themselves would do* or *observing* the actions of five other subjects. These results are taken as evidence that subjects are not using other focal points (such as beliefs about what others actually do, personal projection of what he might do, or the actual behavior of others ) to generate responses to the coordination game rating task.

<sup>18</sup> Upon distinguishing between personal and social norms, Elster (1989a) writes that “private norms ...are not shared with others” (p.100). Bicchieri (2006) differentiates social from personal norms in that social norms “have no reality other than our beliefs that others behave according to them and expect us to behave according to them.” (p.22)

levels of the corporate hierarchy--corporate leaders and financial advisers. When these two groups hold different shared norms our method will identify those differences by varying the reference group from which a subject's partner is drawn when playing the coordination game.

#### **b. Identifying Ethical Norms Using Coordination Games (Module 1)**

Our technique builds on the previous literature in which ethical norms are elicited using hypothetical vignettes (some recent examples include Fallon and Butterfield 2005; Conroy and Emerson 2006; and Gino et al. 2008) by adding the coordination game structure. Each vignette describes a situation containing an ethical dilemma with which participants will be familiar because it could face a financial adviser in the workplace. The vignette is presented along with a range of actions a financial adviser might choose to take in response to such a situation, so that each action may be individually rated as to its ethical appropriateness by subjects. To develop the vignette, we worked out several scenarios with a focus group comprised of members from our corporate partner (one corporate leader, one outside adviser with experience at the management and floor level, and two upper level human resource staff members) who were not participants in our final study and did not have employees who were directly below them who were going to participate in our study. In addition, we asked this group to read the final version of each vignette and to provide us with an *ex ante* ranking of the possible actions being considered, according to corporate ethical policy.

After developing the scenarios, we conducted a pilot with 8 subjects from a corporate office that was not going to participate in our final study. After the pilot we had an open discussion with the 8 subjects about the vignettes; we asked them about how real the scenario felt, how typical and likely such a situation was and whether the actions were reasonable and consisted of likely behaviors an employee might take. With minor adjustments the pre-pilot validated our design as realistic and relevant to the adviser role.

The experiment was then carried out at three different offices of the cooperating firm over a period of four days, by the same investigators and research assistants, using paper-and-pencil forms.<sup>19</sup> In this paper we focus initially on one of the three scenarios we developed in the

---

<sup>19</sup> Payments were offered in cash at the end of each session, except for one initial administration to corporate leaders which preceded the administration to the primary adviser groups; for this group we had to mail payments because we did not yet have adviser responses for matching, and so could not yet compute payoffs.

pre-pilot that is about whistle blowing.<sup>20</sup> The instructions explained to subjects that they will read about three different situations in which a person (‘individual A’) must make a choice among several possible alternative actions. For each vignette, subjects are asked to rate the extent to which each alternative available to ‘individual A’ is

- a) “very ethically inappropriate,”
- b) “somewhat ethically inappropriate,”
- c) “somewhat ethically appropriate,” or
- d) “very ethically appropriate.”

Our instructions say that by “ethically inappropriate” we mean “inconsistent with the moral or ethical standards that are appropriate for the setting,” and by “ethically appropriate” we mean “consistent with the moral or ethical standards that are inappropriate for the setting.”<sup>21</sup> The vignette is written from the perspective of a person in the financial adviser role, and depicts a common ethical dilemma faced by a financial adviser on the job. In the whistle blowing vignette, subjects read a small story about two financial advisers who are talking at work (full text is in the Appendix). The first adviser, David, tells the second, Tanya, that he has been working with two clients, a couple, for several months to select a portfolio of investments, and that they gave him a check for \$400,000 and signed the paperwork before leaving to finish packing for a vacation. However, the clients neglected to initial one of the multiple pages in the investment agreement, and because they had been rather upset at how long the paperwork had taken to develop and complete, he initialed for them instead of asking them to delay their vacation departure because he was afraid he would lose the business if the clients had to make time to correct the omission.

After reading about the scenario, subjects are asked to evaluate the ethical appropriateness of six different actions that Tanya, the one listening to David’s story, could take. The actions are listed below in order from least to most ethically appropriate, as identified *ex*

---

<sup>20</sup> The other two are described below in Section 4.a, and details are provided in Section 6, the Appendix.

<sup>21</sup> The decision to have only four appropriateness categories was made after considering the tradeoff between having too few (in which case it would be harder to discriminate between degrees of appropriateness) and having too many (in which case it might be too difficult for subjects to coordinate on the social norm, perhaps leading them to attempt to match using other focal principles). Further, we omitted the “neutral” category as this would have been a focal point separate from the focal point stemming from the ethical norm.

*ante* in the manner described above (although they were not presented in this order for the experiment).<sup>22</sup>

1. Tanya nods, but does not say anything to David. She does not report him to a compliance officer.
2. Tanya tells David that she doesn't think that initialing for them was the right thing to do. She does not report him to a compliance officer.
3. Tanya tells David that she doesn't think that initialing for them was the right thing to do and that she doesn't want David to *tell* her about that again, or she will have to report him to a compliance officer. She does not report him to a compliance officer.
4. Tanya tells David that she doesn't think that initialing for them was the right thing to do and that she doesn't want David to *do* that again or she will have to report him to a compliance officer. She does not report him to a compliance officer.
5. Tanya nods, but does not say anything else to David. She then reports him to a compliance officer.
6. Tanya tells David that she doesn't think that initialing for them was the right thing to do. She tells him that she has to report him to a compliance officer. She then reports him to a compliance officer.

In order to capture the pattern of norms and normative expectation across the corporate hierarchy, we ask subjects to complete the rating task for the vignette three times. The first pass through the possible actions subjects are asked to match their ethical appropriateness judgments with those of a typical financial adviser. Table 1 provides an example of two lines from the table subjects used to record their responses. The 'x' marks in Table 1 illustrate the possible responses of a fictive subject.

**Table 1 about here**  
**(Example of the response form.)**

The instructions state that the guesses of subjects will be compared with the actual responses of a randomly selected financial adviser and who is taking part in the study (see Table 2 below). On the second pass through the possible actions, subjects are asked to match their ethical appropriateness judgments with those of a typical corporate leader. For this pass the instructions state that the guesses of subjects will be compared with the actual responses of a

---

<sup>22</sup> By way of context, the firm is under a straightforward legal obligation to follow the requirement that the clients initial each page to show their approval. As a result, even though it is the intent of the clients to enter into the financial services agreement, if the adviser's action of initialing for them on one page were discovered it could potentially affect the legality of the contract. It is the firm's policy that it is ethically required for employees to follow the legal rules, and this in turn makes it an ethical requirement that Tanya blow the whistle on her colleague.

randomly selected corporate leader who is taking part in the study (see Table 2 below). On the third pass through the possible actions, subjects are asked to provide their own personal opinion, without trying to match anyone else. This form of normative opinion elicitation comes closest to the ethical survey approach most commonly used to elicit ethical norms in previous studies. There is thus the potential for considerable variation between the third rating and the prior ones.

Subjects are informed that the experimenters will randomly select a subset of the participants (25%) to receive a payment for their responses in the matching tasks. If an individual's response form is selected, then for each of his or her ratings that are identical to the ratings of the target respondent they will receive a financial payment of \$10. Subjects who are among the 25% chosen to receive payment for responses can earn up to \$320 if they make correct matches on all 32 questions, in addition to the other parts of compensation paid to all subjects.<sup>23</sup>

We can interpret subject responses in the following manner. If the subject is a financial adviser and his or her responses are matched with another financial adviser, then this technique elicits the subject's belief about the normative evaluations of his peers, and in the aggregate, statistically identifies the actual norm in place among financial advisers. This corresponds to Cell 1 in Table 2. If the subject is a corporate leader who is trying to match responses with a financial adviser, then this technique instead elicits the corporate leader's beliefs about the norms held by financial advisers and, in aggregate, it identifies corporate leader's beliefs about the ethical norms held by employees. This corresponds to Cell 3 on Table 2. Put differently, we estimate the norm function  $N_g(\cdot)$  from equation (1) by using the average norm rating elicited in our experiment for each action by group.

**Table 2 about here.**  
**(Belief and Norm Identification Using the Coordination Game Method.)**

If the subject is a corporate leader who is trying to match ethical appropriateness ratings with another corporate leader, then this technique elicits the subject's belief about the norms corporate leadership desire financial advisers to have (this is because our vignette describes a dilemma and action choices faced by someone who is a financial adviser). This corresponds with

---

<sup>23</sup> The initial show up fee was \$70, and the payment from the advice game (an average of \$100) raised the expected value for 32 correct matches to  $\$70 + \$100 + (.25 \times \$320) = \$250$ , with the maximum possible individual payout of \$540.

cell 4 in Table 2. Finally, if the subject is a financial adviser who is matching a corporate leader, this elicits the subject's beliefs about the normative expectations of corporate leaders and, in aggregate statistically identifies the beliefs of financial advisers about the normative expectations that superiors in the organizational hierarchy have for their behavior. This corresponds with cell 2 in Table 2. Using these measures, we also create a summary measure of 'misalignment' between an employee's perception of the norms held by a particular group (peers or leaders) and that group's actual ethical norms (described in more detail below).

**c. The "Advice Game" and Demographic Questionnaire (Modules 2 and 3)**

After subjects complete the norm elicitation module, but before they are told whether they have been selected for payment or how much they will receive, they participate in a decision making experiment. In this module we ask subjects to make choices in a setting that confronts them with an ethical dilemma that is analogous to one they might meet in their work settings. This is the "Advice Game" (Gneezy, 2005).

**Table 3 about here.  
(Choices in the Advice Game.)**

In this game each participant is anonymously paired with a counterpart for a one-time interaction and all subjects are paid based on their decisions in this round. The first-mover is told that there are two options that yield different payoffs for the first mover and second mover. The first mover is told what the payoffs are and how they are distributed over the two possible outcomes, Options A and B. The first mover is also told that the second mover will not know the payoffs associated with the two options but that the second mover will get to pick which option will be used to pay the first and second movers. The payoffs were \$150 for one member of the pair and \$50 for the other, with the first mover getting the higher payoff under "Option A" and the reverse occurring under "Option B."

The first mover's only available action is to decide which of two possible messages to send to the second mover. The first mover can either send a message that says "Option A will give you the highest payoff" or the first mover can send a message that says "Option B will give you the highest payoff." The first message would constitute a lie, but would increase the earnings of the first mover by \$100.

After the first mover indicates which message to send to the second mover, the first mover is asked to record whether he or she believes the advice will be followed.<sup>24</sup> The belief elicitation question allows us to control for strategic lying or truth-telling and distinguish between motives. After all first mover choices have been collected, the second mover receives a description of the choice faced by the first mover, with the exception that the second mover is not told what the payoffs are. The second mover then receives and opens a message from a randomly assigned first mover. After reading (and recording the contents of the message), the second mover picks one of the two options (without knowing the payoffs associated with either option). At no point is the second mover ever told what payments were associated with the options, or even the total amount at stake. Payments are made in private and aggregated with any payments earned from other modules. This game gives us a direct measure of the willingness to truth-tell at a significant financial cost while controlling for first mover beliefs about the likely responses of second movers.

The third and last module is a demographic and industry questionnaire. This provides information on job satisfaction as well as several important control variables for our analysis, such as age, gender, tenure with the organization, the number of clients, and the size of the adviser's portfolio.<sup>25</sup>

#### **d. Hypotheses**

We begin by asking whether we can measure norms about on-the-job behavior and detect variations in normative evaluations of on-the-job behavior across levels in the corporate hierarchy so that we can identify both alignments of employee norms with those desired by corporate leaders, and also normative misalignments between employees and corporate leaders, utilizing the *ex ante* rankings described above in Section 3.b. Hypotheses (1) - (4) state conjectures based on the view that the coordination game responses identify actual norms and can pick up both alignment and misalignment, and that the pattern of beliefs about the normative

---

<sup>24</sup> This belief elicitation is not incentivized.

<sup>25</sup> Because financial advisers and corporate leaders of financial services firms typically have annual incomes near \$100,000 per year and rising to significantly higher levels, it is relatively expensive to run economic experiments that recruit volunteers from this subject pool. The show up fee and the incentives for choices in the experiment must be significantly larger than for student subjects. Because of the sensitive nature of the data we have collected, we went to great lengths to ensure anonymity. Beyond the precautions we took during the experiment, we also used bracketed responses for all demographic questions.

expectations of others will also allow us to identify the source of misalignment when it is present.

- 1) [Corporate leaders align with *ex ante* evaluations.]. Corporate leader subjects will identify norms for financial adviser behavior that match the pattern in both valence (positive or negative evaluation) and intensity (of disapproval or approval) expected *ex ante* from the vignette construction.
- 2) [Greater financial adviser alignment for *ex ante* extreme actions.] Norm identification by financial advisers will have higher intensity (degree of positive or negative evaluation) and lower variance for actions identified *ex ante* as extremely inappropriate or appropriate.
- 3) [Normative alignment across the hierarchy.] We will observe a general pattern of alignment between financial adviser norms and the expectations of corporate leaders.
- 4) [Some measurable misalignment when interests conflict.] When the interests of financial advisers are in potential conflict with those of the firm we will identify at least some cases in which financial adviser norms will not align with expectations of corporate leaders in intensity, and possibly in valence.
- 5) [Diagnosis of misalignment.] When misalignment is identified there will be at least some cases in which we can distinguish between miscommunication and ethical disagreement across the hierarchy as the source.

Our last two hypotheses are about correlations between our measures of normative alignment and indicators related to actual on-the-job behavior. As mentioned above (and described in more detail below), the data from our incentivized elicitation technique can be used to construct measures of alignment between personal ethical opinions and group norms and can do so for distinct target groups over a range of actions for each situation. In a related literature, researchers use responses from (non-incentivized) questionnaires to measure specific constructs such as the climate about a particular topic within an organization and the values of each employee. In this literature ‘organizational fit’ is a measure of how well the employee’s values align with the values of the organization (Edwards and Cable 2009, Ambrose et al., 2008, Valentine et al., 2002; Herrbach and Mignonac 2007; Schminke et al. 2005).<sup>26</sup> Previous work has correlated organizational fit with an employee’s organizational citizenship attitudes (Baker et al., 2006),

---

<sup>26</sup> For example, Chatman (1989) defines person-organization fit "as the congruence between the norms and values of organizations and the values of persons".

turnover intentions (Herrbach and Mignonac, 2007) and job satisfaction (Edwards and Cable 2009).

A reduced form model such as we describe in equation (1) captures a simple interpretation of fit and connects it to our definition of ethical and personal norms. Translating into our framework, we interpret this literature to suggest that job satisfaction and related behavior will be correlated with perceiving a misalignment between one's personal ethical opinion and the norms desired by leadership, or between one's personal ethical opinion and the norms of one's peers. We thus offer the following two conjectures about the predictive power of individual normative evaluations.

- 6) [Misalignment and job satisfaction.] Differences between an individual's perception of his or her personal ethical opinion, on the one hand, and his or her beliefs about the norms of peers or the ethical expectations of corporate leaders, on the other, will be correlated with job satisfaction.
- 7) [Misalignment and honesty.] Differences between an employee's personal ethical opinion and his perception of either the norms of peers or the ethical norms desired by corporate leaders will decrease the likelihood of telling the truth in the advice game.

## **4. Results**

### **a. Assessing the measure and identifying alignment**

Table 4 presents summary statistics for our sample. Our sample consists of 54 subjects in total (9 are corporate leaders and 45 are financial advisers) who are largely male and white, between the ages of 36-40 (financial advisers) and 46-50 (corporate leaders). The modal financial adviser has some college education while the modal corporate leader has post-graduate training.

In addition to demographic questions, we elicited measures for social ties and of business success from financial advisers. We find that 70% of financial advisers socialize with colleagues outside of work, 60% work with colleagues that they trained with and 53% share staff at work. The modal annual gross dealer commissions (a measure of income) of a financial adviser is \$1-\$100,000, the modal category for 'assets under management' is \$1 million to \$5 million and the modal category for 'number of clients' is between 1 and 100.

**Table 4 about here.  
(Summary Statistics.)**

In order to test our hypotheses, we converted subjects' ethical norm ratings into numerical scores. A rating of "very socially inappropriate" received a score of -1, "somewhat socially inappropriate" a score of -1/3, "somewhat socially appropriate" a score of 1/3, and "very socially appropriate" a score of 1.<sup>27</sup> Table 5 presents summaries of subjects' ethical appropriateness ratings for financial advisors coordinating with other financial advisors and by corporate leaders coordinating with corporate leaders. Each row corresponds to one possible action choice that Individual A could take, described in the first column.

For each of the subject types (financial advisers and corporate leaders), the columns of Table 5 report first the mean of subject ethical appropriateness ratings and then the full distribution of responses. The final column reports the result of a Wilcoxon rank-sum test, a non-parametric comparison of the two distributions of responses that accounts for the ordinal nature of responses.

**Table 5 about here.  
(Responses to Norm Elicitation in Vignette Three.)**

Recall that when we designed our vignette we worked with a focus group to develop and rank the actions according to company ethics policy (see Section 3.b). This allows us to rank the actions according to how well they match company ethics policy and it benchmarks responses from our subjects against a normative standard. In Table 5 we color code the actions to reflect the rankings with which our focus group provided us. The focus group identified all actions that are red as "ethically very inappropriate". Two actions were ranked as appropriate, but were ranked differently; the focus group rated 'reporting but not saying anything' as consistent with the minimum requirements of the company's ethics policy but that peer to peer monitoring/sanctioning and reporting was ethically most appropriate in this context.

We see that subjects from both groups are able to anticipate ratings by their peers – the modal response for any action always receives over 40% of the responses. Consistent with Hypothesis (1), Table 5 shows that corporate leaders' modal ratings match the *ex ante* identified

---

<sup>27</sup> In so doing we are imposing ratio scale characteristics on measurements that are in design ordinal. In some of what follows this is merely for convenience, such as when we use a rank-order test for the equality of distributions. But on other occasions it implicitly adds extra assumptions upon which our analysis is then conditional, such as when we test for the equality of variances, or compare means.

rankings of actions that we obtained from our focus group remarkably well and the intensities of the evaluations, as indicated by the frequencies of the responses, are ordered appropriately.<sup>28</sup> The pattern of ratings from financial advisors shows substantial similarities, along with some differences. Specifically, consistent with Hypothesis (2), Table 5 shows that adviser alignment is indeed greater for the more extreme actions (1 and 6), as compared to the less extreme actions in between (Actions 2 through 4). The modal evaluation for financial advisors is "very inappropriate" for Action 1 and "very appropriate" for Action 6, the two extreme action choices. But the mode is only "inappropriate" or "appropriate" for Actions 2 through 4. The distributions show that advisers as a group have less agreement and perceive a measure of ethical ambiguity with respect to these choices, a perception that is not shared by corporate leaders. In Table 6 we present a formal comparison of the variances of extreme responses with those of the more ambiguous ones. This comparison also shows a pattern consistent with Hypothesis (2).<sup>29</sup>

**Table 6 about here.**  
**(Test of equality of standard deviations)**

Consistent with Hypothesis (3), Table 5 shows a strong general pattern of alignment between the norms of financial advisers (financial advisers matching other advisers, Cell 1 in Table 2) and the norm desired by corporate leaders for their advisers (corporate leaders matching other corporate leaders about choices that could be made by advisers, Cell 4 in Table 2). The agreement is complete as to valence: the two subject groups give modal responses for each action that are either both in the positive zone, or both in the negative zone: both groups agree across the board on whether a particular action is overall ethically appropriate or not. And on the two most extreme actions the intensity of the evaluation, as indicated by the modal response in Table 5, is identical.

However, Hypothesis (4) is also supported: there are subtle but significant indications of misalignment, and they occur for actions in between the two extremes of the *ex ante* ranking where adviser loyalty to the adviser peer group, and hence adviser ethics regarding the treatment of peers, are to a degree in conflict with corporate ethics policy. Figure 1 presents a graphical

---

<sup>28</sup> In Figure 1, below, we can also think of "intensity" in terms of the distance of the mean above or below the neutral point.

<sup>29</sup> While these results are conditional on our assignment of numerical values to the ordinal responses, the p-values are so small that it is unlikely they are sensitive to any reasonable changes in the assignment.

display of the mean evaluations of financial advisers matching financial advisers (Cell 1 of Table 2) as compared to those of corporate leaders (Cell 4 of Table 2).

**Figure 1 about here.**  
**(Norms of Advisers and Leaders for Adviser Behavior in Vignette Three)**

The misalignment is apparent in the gaps between the means in Figure 1 for some of the *ex ante* inappropriate actions, such as Actions 2 and 3. For example, actions that require Tanya to express some dissatisfaction but to take no action to formally report David are on average held to be ethically inappropriate among financial advisers, but significantly less so than they are among corporate leaders. Further, though the modal responses are all “somewhat” socially inappropriate there is also considerable variance on these ratings both above and below the modes: between 31% and 38% choose “very ethically inappropriate” and 18% to 20% choose “somewhat ethically appropriate.”

Thus, when it comes to the intensity of the evaluations, as indicated by the distance above or below the neutral point, what corporate leaders agree upon often differs measurably from what financial advisers agree on. For example, corporate leaders matching with corporate leaders find that any action where Tanya does not report David is very ethically unacceptable. But financial advisers matching with financial advisers over the same actions find that not reporting David is “somewhat inappropriate” (44%-49%) to somewhat appropriate (18%-20%). For two of those actions the difference in ratings is statistically significant (see Table 5) and we interpret these findings as evidence of significant misalignment over these actions in the intensity with which financial advisers hold the norms desired by corporate leaders. Thus, while we can clearly say that the financial adviser norm is to report David no matter what, we also observe that financial advisers are not uniform in their agreement, and the intensity with which they hold this norm as a group is below corporate leader expectations.

Our methodology allows us to investigate whether the misalignment we observe is the result of a miscommunication between leaders and employees or whether it reflects a divergence in ethical norms between employees and leadership. To explore this question we look at two different ethical appropriateness matches: financial advisers matching with corporate leaders, which identifies financial adviser beliefs about the norms corporate leaders desire of advisers (Cell 2 in Table 2), and corporate leaders matching with financial advisers, which identifies

corporate leader beliefs about what the financial adviser norm is (Cell 3 in Table 2). In each case we compare the beliefs with the relevant actual norms.

**Figure 2 about here.**  
**(Advisers Beliefs about and Actual Norms of Leaders for  
Adviser Behavior in Vignette Three.)**

Figure 2 compares mean financial advisor beliefs about the norms corporate leaders desire advisers to have (Cell 2 in Table 2) to the actual desires corporate leaders have for advisers (Cell 4 in Table 2). We can see that there are no significant differences between these ratings. This shows that financial advisers quite clearly understand that corporate leaders expect Tanya to blow the whistle, and that any choice not involving reporting David is quite ethically inappropriate according to the firm's leaders. We take Figure 2 as strong evidence that financial advisers are well informed of the corporate ethics policy and what that policy implies for the ethics of these actions.

**Figure 3 about here.**  
**(Leader Beliefs about and Actual Adviser Norms for  
Adviser Behavior in Vignette Three)**

Figure 3 compares corporate leader beliefs about financial adviser norms (Cell 3 in Table 2) with the actual financial adviser norms (Cell 1 in Table 2). We see that corporate leaders also understand reasonably well what the financial adviser norms actually are. We interpret the evidence from Figure 2 and Figure 3 as inconsistent with a miscommunication in which employees misunderstand the views of corporate leaders. Both levels of the corporate hierarchy understand what each other's ethical positions are, but rather, they simply hold different ethical norms. Consistent with Hypothesis (5) we diagnose this as an ethical disagreement. The most parsimonious explanation is that adviser loyalty to peers makes them somewhat reluctant to fully condemn actions which include expressing disapproval of David's action but do not include reporting him, as compared to the view of leaders, who believe that reporting David is always ethically required.

This interpretation is substantially strengthened if we compare the pattern of norms and beliefs in Vignette Three, whistle blowing, to the pattern in Vignette Two, the fiduciary

dilemma. This vignette is about a client who insists on making an investment which is, in the adviser's professional judgment, inherently unsuited to achieve the client's financial goals (because it is too risky).<sup>30</sup> Making the trade for the client would generate income for the financial adviser and business for the firm, and would be in deference to the client's exercise of property rights over his assets, but would be contrary to the adviser's fiduciary duty. In order of *ex ante* appropriateness the actions vary from simply making the trade (very ethically inappropriate) to refusing the trade altogether (very ethically appropriate), with various increasingly strongly worded warnings to the client in between.

In the Appendix (Section 6) we present figures for Vignette Two, the fiduciary dilemma, that are similar to those above for Vignette Three, whistle blowing. These show the degree to which adviser beliefs about the norms desired by leader match the actual desires of leadership, and the degree to which leadership beliefs about adviser norms match the actual adviser norms. What we observe is that for two non-extreme actions (one *ex ante* inappropriate and one *ex ante* appropriate) advisers and leaders are misaligned as to the intensity of the ethical evaluation. However, when we examine the pattern of beliefs, we find that advisers think their norms are aligned with leadership expectations. This pattern suggests that leaders have failed to effectively communicate their ethical expectations for these two actions; consistent with Hypothesis (5) we diagnose this as a miscommunication. Interestingly enough, the beliefs of leaders about adviser norms suggest that they already understand this fact.

These findings from Vignettes Two and Three are further complemented by results from Vignette One, the financial incentive clash.<sup>31</sup> In this vignette the client desires a liquid and safe investment with a secondary concern for return, and the adviser faces a trade off among assets providing these characteristics between the level of compensation to the adviser and the net return to the client. In this context adviser norms and the norms desired by corporate leaders are fully aligned, with the exception that corporate leaders are actually a bit too pessimistic about the norms advisers have with regard to several of the more ethically inappropriate of the action choices.<sup>32</sup> This evidence as a whole is consistent with the view that our method is identifying real differences. In this firm norms are substantially aligned across the hierarchy, but where there

---

<sup>30</sup> The full text of the vignette and action descriptions is provided in the Appendix, Section 6.

<sup>31</sup> The full text of the vignette and the action descriptions is provided in the Appendix, Section 6.

<sup>32</sup> Figures available from the authors upon request [BUT these are included for referees after the Appendix].

is misalignment, as conjectured in Hypothesis (5), we can distinguish between ethical disagreement and miscommunication between leaders and employees.

**b. Correlation between our measures and indicators of relevant behavior**

A second purpose of our study is to identify meaningful correlations between measures of normative alignment and indicators related to actual on-the-job behavior. Hypothesis (6) is a conjecture about misalignment and job satisfaction, while Hypothesis (7) links misalignment and honesty in the Advice Game. We construct three different kinds of misalignment and to assess the effect of misalignment on reported and observed behaviors. The three kinds of misalignment we can look at are (1) misalignment that a financial advisor perceives exists between financial advisors and the desired norm of the corporate leaders, (2) perceived misalignment between the desired norm of corporate leaders and an advisor’s own personal norm, and (3) perceived misalignment between the perceived norm of other (peer) financial advisors and an advisor’s own personal norm.

To create a summary measure of misalignment between an employee’s perception of the actual norm held by financial advisers and the desired norm of corporate leaders, our measure takes the absolute value of the difference between the average ethical appropriateness ratings provided by corporate leaders matching with corporate leaders (Cell 4 in Table 2) from the rating given by each individual financial adviser in the task of matching other financial advisers (Cell 1 in Table 2), and sums these differences for each individual over all actions. That is, our measure of misalignment between the perceived financial adviser norm and the norm desired by corporate leaders is as follows:

$$M_i^{CL,FA} = \sum_{j=1}^6 |\overline{action}_j^{CL} - action_j^{FA}|$$

In a similar fashion we construct a measure of misalignment between one’s personal norm and the norm desired by corporate leaders  $M_i^{CL,PN}$  (that is, we subtract ratings obtained from the personal norm elicitation from the *average* ratings given by corporate leaders coordinating with corporate leaders, from Cell 4 in Table 2). And we construct a measure of misalignment between one’s personal norm and financial advisers’ actual norm  $M_i^{FA,PN}$  (we subtract ratings

obtained from the personal norms elicitation from the *average* ratings given by financial advisers coordinating with financial advisers, Cell 1 in Table 2).

Table 7 reports OLS regressions in which we correlate  $M_i^{CL,FA}$ ,  $M_i^{CL,PN}$ , and  $M_i^{FA,PN}$  with stated job satisfaction. Job satisfaction was measured in our survey module using a Likert scale in which subjects could indicate that they were "very dissatisfied" (coded as 0) to "very satisfied (coded 3). Consistent with Hypothesis (6), we see that regardless of which type of measure of misalignment we use, an increase in the magnitude of the misalignment is significantly correlated with a decline in job satisfaction. All of the correlations are significant by conventional standards, two at the 5% level, and one at the 1% level. Interestingly, the strongest correlation is for a misalignment we did not specify in our hypothesis, between personal normative opinions and the perceived norms of financial adviser peers. Along with the findings about the misalignment of the intensity of the negative evaluation of non-whistle-blowing action choices, this suggests an in-group identification process, in which the identification of financial advisers with their peers is important, both when it succeeds and when it fails.

**Table 7 about here.**  
**(Correlations job satisfaction)**

Lastly, we turn to Hypothesis (7), the conjectured correlation between our measures of ethical norm alignment and behavior in the Advice Game. Recall that in the Advice Game the first mover's only choice is to decide which of two possible messages to send to the second mover: "Option A will give you the highest payoff" or "Option B will give you the highest payoff". The first message constitutes a lie, but increases the payoff of the first mover by \$100. In our sample, 25% choose to lie (n=7).<sup>33</sup> In Table 8 we report the marginal effects for a probit regression that correlates the probability of telling the truth with our three measures of misalignment.<sup>34</sup>

The signs of all three coefficients are negative, consistent with the conjecture that higher misalignment lowers the probability of honesty. A perceived misalignment between the actual norms held by financial advisers and leadership's desired norms ( $M_i^{CL,FA}$ ) is not significantly

---

<sup>33</sup> Of those that lie, all believe that their advice will be followed. Of those that tell the truth, 20 believe that their advice will be followed and 1 believes that his advice will not be followed.

<sup>34</sup> Because the experiment was run with paper and pencil, each subject can play only one active role, and this reduces our number of observations to 28.

correlated with the probability of telling the truth (Column 1 of Table 8). However, we find that a perceived misalignment between the *personal* normative opinion held by a financial adviser and those desired by corporate leadership ( $M_i^{CL,PN}$ ) is significantly correlated with a decline in the likelihood of telling the truth (Table 8 Column 2; estimated coefficient -0.10,  $p < 0.01$ ).

**Table 8 about here.**  
**(Correlations for lying)**

Further, a perceived misalignment between the *personal* normative opinion held by a financial adviser and those of his peers ( $M_i^{FA,PN}$ ) is associated with a decline in the likelihood of telling the truth (Table 8 Column 3, estimated coefficient -0.17,  $p < 0.01$ ). It is worth noting that the change in the magnitude of the coefficients tells a story consistent with the literature that finds that people use peers as reference groups when deciding whether or not to engage in unethical behavior (Zey-Ferrell et al. 1979 and Zey-Ferrell and Ferrell 1982, Gino et al. 2009 respectively).

These results give particular prominence to the alignment between two different norm constructs (personal and group norms). Previous work has looked at the correlation between ethical leadership and the ethical behavior among subordinates (Brown, Trevino and Harrison, 2005, Gatewood and Carroll, 1991, Smith et al., 2007, Treviño, Weaver and Brown, 2008) or between the ethical behavior of one's peers and one's own ethical behavior (Zey-Ferrell et al. 1979, Zey-Ferrell & Ferrell, 1982, Gino et al. 2009). Our findings suggest an additional and perhaps more subtle point: that the degree to which personal ethical norms align with the norms of one's peers and, to a lesser extent, with the norms espoused by leadership, are also potentially important influences on attitudes and behavior.

## **5. Conclusion**

The recent financial crisis, as well as historical scandals like that at Enron, have together highlighted the importance of ethics in business and the implications of ethical decision-making in financial services for the economy as a whole. This paper presents the results of a field study at a large financial services firm that combines multiple methods, including two economic experiments, to measure ethical norms and their behavioral correlates.

To elicit norms we use the Krupka and Weber (2009) method of transforming standard survey questions eliciting normative evaluations of actions in ethical dilemmas into a series of incentivized coordination games, and we adapt it to the field environment in the financial services industry by developing dilemmas directly relevant to on-the-job behavior of financial advisers. In addition, by varying the reference group with which subjects are coordinating, we extend the technique to provide a novel method for distinguishing between the norms held by distinct groups within the corporate hierarchy (in this case financial advisers and their managers), and the beliefs that each group has about the normative views of the other, and we also identify each subject's personal ethical opinions by eliciting a third, non-coordinated, evaluation.

We use the data we collect to identify the actual ethical norms for financial adviser behavior held by key personnel—financial advisers and their corporate leaders—in three settings: a clash of incentives between serving the client and earning commissions, a dilemma about fiduciary responsibility to a client, and a dilemma about whistle-blowing on a peer. First, we find systematic patterns in normative evaluations across the corporate hierarchy that are consistent with *ex ante* expectations that resulted from working with a consultant and corporate leaders to develop on-the-job ethical dilemmas and actions that would be relevant to the field setting. Norms are substantially in agreement across the hierarchy in this firm, and adviser norms generally agree with those desired by corporate leaders. Second, however, we also find that there are some measureable, if subtle, indications of normative mismatches ("misalignments"). These are most pronounced in the whistle blowing scenario, with regard to actions in which one adviser has violated a legal requirement to have clients initial every page of an investment agreement, and a second adviser admonishes but does not report the first. Advisers are significantly less willing to ethically condemn these action choices than are corporate leaders. Third, by comparing the patterns of belief and expectation across three different vignettes, we show that when the ethical norms of employees and the ethical expectations of leaders for those employees do not match (are "misaligned"), it is possible to determine whether the mismatch is due to a failure to communicate, or to an underlying disagreement about what is ethical. In the whistle blowing case we find there is a disagreement, while in the second vignette, on fiduciary responsibilities, there is a miscommunication. Fourth, we present a novel method for measuring the misalignment between the an employee's personal norms and the ethical norms held either by peers or by corporate leaders, and we show that a

mismatch between these constructs strongly correlates with job dissatisfaction, and less strongly but significantly with the willingness to be dishonest in our second experiment, in which it is costly to give honest advice. This finding highlights a new linkage, via the alignment of personal and organizational norms, that is related to but distinct from existing measures of organizational fit, through which norms may influence behavior.

Our methodology can be adapted for use in examining other norms in any organizational setting in which questions about one's opinions or behaviors are sensitive, and normative evaluations may vary across individuals and relevant subgroups within an organization. Examples might include norms regarding safety, environmental issues, power and authority, or shirking and effort. The introduction and application of an incentive compatible elicitation technique for norms and beliefs about them relative to relevant reference groups, especially one that can be linked to other measures of individual attitude and behavior, may be of broad interest to researchers seeking to understand the role that norms play in influencing behavior in an organizational setting.

## 6. Appendix

### a. Details on Vignette One: Incentive Clash

Text. "Roger is a financial advisor and he and his client have just completed an extensive "fact finding" and "goal setting" process. The client's goals, in priority order are 1) high liquidity, and 2) minimal risk. The client has no concern about taxes because he is not in a high tax bracket. Based on the client's stated goals and current situation, Roger concludes that the client needs a fixed income asset which exposes the client to little risk. He has different products to offer in this category and they each vary in how perfectly the product matches the client's goals and concerns. The commission Roger receives will depend on which product the client chooses. The client has said, 'I will do whatever you recommend.'"

**Table 9 about here.**

**(Choices in Vignette One: Incentive Clash.)**

*[Figure 7, Figure 8, and Figure 9 are included below for referees, but are intended to be listed as "available from the authors upon request" in the final paper. They show that norms and beliefs about norms are essentially well aligned between corporate leaders and employees in this vignette, except that corporate leaders are a little too pessimistic about adviser norms.]*

### b. Vignette Two: Fiduciary Dilemma

Text. "Anne is a financial advisor trying to build up her book of business. The client is an inexperienced investor who is 65 years old and a former high school teacher. He just received his lump sum pension payout and he has no other significant assets to invest. His main priority is retirement income. His teacher's retirement plan substituted for social security under state law, so returns from investment of his pension payout are his primary retirement income source. The client is consulting the firm because his brother is a long-time customer, but he has been convinced by his own on-line research that a real estate investment trust is the only thing he wants to invest in, because it is going to "take off next year". Anne starts by consulting with him about his goals and preferences."

**1.**

**Table 10 about here.**

**(Choices in Vignette Two: Fiduciary Dilemma.)**

**Figure 4, Figure 5, and Figure 6 about here.**

**(Patterns of norms and beliefs in Vignette Two)**

Figure 4, Figure 5 and Figure 6 show the pattern of norms and beliefs about norms described above, in Section 4.a. Specifically, adviser norms and the desired norms of leaders are misaligned as to intensity for two action choices, and this is due to a misunderstanding by advisers about what leaders expect, a misunderstanding which leaders appear to already know exists.

**c. Vignette Three: Whistle blowing on a Peer**

Text. “David and Tanya are both financial advisers who sometimes talk with each other. David tells Tanya that he has two clients, a husband and wife, who decided to implement his recommendations. As a result they are purchasing several financial products: life insurance, disability income, an IRA with mutual funds, and a cash management mutual fund. David has been working with these clients for several months. There have been tensions because the clients felt that the paperwork was not moving fast enough, but the paperwork for these purchases had been completed and the \$400,000 check had been given to David. However, before submitting the transactions, David noticed that both the clients failed to put their initials on one line. He knew that the clients had been bothered by all the paper work, and that it was important to them that the transactions be completed before their departure the next day for vacation. David also knew that the business would not be accepted by the home office without the initials. When Tanya asks David what he did, he tells her that the he was afraid the clients would walk away if he bothered them again, so he initialed for both of them.”

Since Tanya’s choices are detailed above, in Section 3.b, they are not repeated here.

## References

- G. Akerlof, Kranton, R. 2010. *Identity Economics*. Princeton University Press, Princeton, NJ.
- M. Ambrose, Arnaud, A., Schminke, M. 2008. Individual Moral Development and Ethical Climate: The Influence of Person-Organization Fit on Job Attitudes. *Journal of Business Ethics* 323-333.
- J. Andreoni, Miller, J. 2002. Giving According to GARP: An Experimental Test of the Consistency of Preferences for Altruism. *Econometrica*. 70(2) 737-753.
- J. Andreoni, and D. Bernheim. 2009. Social Image and the 50-50 Norm: A Theoretical and Experimental Analysis of Audience Effects. *Econometrica*, 77(5):1607-1636.
- P. Auger and T. Devinney. (2007). Do what consumers say matter? The misalignment of preferences with unconstrained ethical intentions. *Journal of Business Ethics* 76(4): 361-383.
- T.L. Baker, Hunt, T.G., Andrews, M.C. 2006. Promoting ethical behavior and organizational citizenship behaviors: The influence of corporate ethical values. *Journal of Business Research*. 59(7) 849-857.
- C. Bicchieri. 2006. *The Grammar of Society: the Nature and Dynamics of Social Norms*. Cambridge University Press, Cambridge, MA.
- C. Bicchieri, Xiao, E. 2009. Do the right thing: but only if others do so. *Journal of Behavioral Decision Making*. 22 191-208.
- G. Bolton and A. Ockenfels. 2000. ERC: A Theory of Equity, Reciprocity, and Competition. *American Economic Review*, 90(1): 166-193.
- K. Boulding. 1966. The Ethics of Rational Decision Making. *Management Science*. 12(6) 161-169.
- D. Brass, K. Butterfield and B. Skaggs. 1998. Relationships and unethical behavior: A social network perspective. *Academy of Management Review*, 23(1): 14-31.
- G. Braques. 2005. Business is One Thing, Ethics is Another: Revisiting Bernard Mandeville's Fable of the Bees. *Business Ethics Quarterly*. 15(2) 179-203.
- M. Brown, Trevino, L., Harrison, D. 2005. The Dimensions and Outcomes of Ethical Leadership: A Multi-Respondent Field Survey. . *Organizational Behavior and Human Decision Processes*. 97 117-134.
- C. Camerer, Fehr, E. 2004. *Measuring Social Norms and Preferences Using Experimental Games: A Guide for Social Scientists*. Oxford University Press, City.
- S. Campo, Brossard, D., Frazer, M., Marchell, T., Lewis, D., Talbot, J. 2003. Are social norms campaigns really magic bullets? Assessing the effects of students' misperceptions on drinking behavior. *Health Communication*. 15(4) 481-498.
- J. Chatman. 1989. Improving Interactional Organizational Research: A model of person-organization fit. *Academy of Management Review*, 14:333-349.
- B. Church, Gaa, J., Nainar, S., Shehata, M. 2005. Experimental Evidence Relating to the Person-Situation Interactionist Model of Ethical Decision Making. *Business Ethics Quarterly*. 15(3) 363-383.

- R.B. Cialdini, Reno, R.R., Kallgren, C.A. 1990. A Focus Theory of Normative Conduct: Recycling the Concept of Norms to Reduce Littering in Public Places. *Journal of Personality and Social Psychology*. 58 1015-1026.
- S. Conroy and T. Emerson. 2006. Changing Ethical Attitudes: The Case of Enron and ImClone Scandals, *Social Science Quarterly*, 87(2): 395–410.
- J. Cox. 2004. “How To Identify Trust and Reciprocity,” *Games and Economic Behavior*. 46:2, pp. 260–81.
- J. Cullen, Bronson, J. 1993. The Ethical Climate Questionnaire: An Assessment of the Development and Validity. *Psychological Reports*. 73 667-674.
- W. Damon. 1984. Self-understanding and moral development from childhood to adolescence. In W. Kurtines & J. L. Gewirtz (Eds.), *Morality, moral behavior, and moral development*: 109-127. New York: John Wiley.
- M. Deutsch, Gerard, H. 1955. A Study of Normative and Informational Social Influences upon Individual Judgment.
- T. Donaldson. 2000. Adding Corporate ethics to the bottom line. *Financial Times*.
- T. Donaldson. 2005. Defining the Value of Doing Good Business. *Financial Times*.
- J. Edwards and D. Cable. 2009. The value of value congruence. *Journal of Applied Psychology*, 94(3):654–677.
- J. Elster. 1989a. Social norms and economic theory. *Journal of Economic Perspectives*. 3(4) 99-117.
- J. Elster. 1989b. *The cement of society: A study of social order*. Cambridge University Press, Cambridge, UK.
- M. 'Fallon, and K. Butterfield. 2005. A review of the empirical ethical decision-making literature: 1996-2003. *Journal of Business Ethics*, 59(4): 375-413.
- E. Fehr and K. Schmidt. 1999. A Theory of Fairness, Competition, and Cooperation. *The Quarterly Journal of Economics*, 114(3): 817-868.
- P. Fisher, and S. Huddart. 2008. Optimal Contracting With Endogenous Social Norms. *American Economic Review*, 98(4): 1459-75.
- D. Friedman. 2008. *Morals and Markets: An Evolutionary Account of the Modern World*. New York: Palgrave Macmillan.
- A. Fumham. 1986. Response bias, social desirability and dissimulation. *Personality and Individual Differences*, 7, 385- 406.
- S. Gächter, D. Nosenzo and M. Sefton. 2010. "Peer Effects in Pro-Social Behavior: Social Norms or Social Preferences?" *Manuscript*.
- R. Gatewood, Carroll, A. 1991. Assessment of Ethical Performance of Organization Members. A Conceptual Frame Work. . *Academy of Management Review*. 16(4) 667-690.
- F. Gino, Ayal, S., Ariely, D. 2009. Contagion and Differentiation in Unethical Behavior: The Effect of One Bad Apple on the Barrel. *Psychological Science*. 20(3) 393-398.
- F. Gino and M. Bazerman. 2009. When misconduct goes unnoticed: The acceptability of gradual erosion in others' unethical behavior. *Journal of Experimental Social Psychology*, 45(4), 708-719.

- H. Gintis. 2009. *Game Theory Evolving*. Princeton University Press, Princeton.
- U. Gneezy. 2005. Deception: The Role of Consequences. *American Economic Review*. 95(1) 384-394.
- U. Gneezy, Rottenstreich, Y. 2008. The power of focal points is limited: even minute payoff asymmetry may yield large coordination failures. *American Economic Review*. 98(4) 1443-1458.
- A. Gneezy, Gneezy, U., Nelson, L. Brown, A. 2010. Shared Social Responsibility: A Field Experiment in Pay-What-You-Want Pricing and Charitable Giving. *Science*, 329(5989): 325-327.
- J. Harris. 1990. Ethical Values of Individuals at Different Levels in the Organization. *Journal of Business Ethics*, 9(9): 741
- G. Harrison and E. Rutström. 2008. Experimental evidence on the existence of hypothetical bias in value elicitation methods. In: V. Smith, Editor, Handbook of experimental economics results, 1: 752–767.
- O. Herrbach and K. Mignonac. 2007. Is Ethical P-O Fit Really Related to Individual Outcomes? A Study of Management-Level Employees. *Business & Society*. 46(3) 304-330.
- T. Jones. 1991. Ethical Decision Making by Individuals in Organizations: An Issue-Contingent Model *Academy of Management Review*. 16 366-395.
- G. Jones and M. Kavanagh. 1996. An experimental examination of the effects of individual and situational factors on unethical behavioral intentions in the workplace. *Journal of Business Ethics*, 15(5): 511-523.
- S. Kanazawa and Still, M. C. 2001. The Emergence of Marriage Norms: An Evolutionary Psychological Perspective. Social Norms. Ed. M. Hechter and K.-D. Opp. New York, Russell Sage Foundation: 274-304.
- J. Kagel and A. Roth, eds. 1995. *The Handbook of Experimental Economics*. Princeton, New Jersey: Princeton University Press.
- D. Karlan. 2005. Using experimental economics to measure social capital and predict financial decisions. *The American economic review* 95(5): 1688
- L. Kohlberg. 1981. *The philosophy of moral development: Moral stages and the idea of justice*. San Francisco: Harper and Row.
- E. Krupka, Weber, R. 2009. Identifying Social Norms Using Coordination Games: Why Does Dictator Game Sharing Vary? *IZA Discussion Paper #3860*.
- E. Krupka, S. Leider and M. Jiang. (2010). A Meeting of the Minds: Contracts and Social Norms. *Manuscript*.
- S. Leider, Mobius, M., Tanya, R., Do, Q.-A. 2009. Directed altruism and enforced reciprocity in social networks. *Quarterly Journal of Economics*. 124(4).
- J. List. 2007. On the Interpretation of Giving in Dictator Games, *Journal of Political Economy*, 115, 482–493.
- N. Mazar, Ariely, D. 2006. Dishonesty in Everyday Life and Its Policy Implications. *Journal of Public Policy and Marketing*. 25(1 ) 1-22.

- D. McFadden. 2009. The human side of mechanism design: a tribute to Leo Hurwicz and Jean-Jacque Laffont. *Review of Economic Design*, 13(1-2): 77.
- J. Mehta, Starmer, C., Sugden, R. 1994. The Nature of Salience: An Experimental Investigation of Pure Coordination Games. *American Economic Review*. 84(3) 658-673.
- M. Orlitzky. 2001. Does Firm Size Confound the Relationship Between Corporate Social Performance and Firm Financial Performance?" *Journal of Business Ethics*. 33 167-180.
- M. Orlitzky, Schmidt, F., Rynes, S. 2003. Corporate Social and Financial Performance: Meta Analysis. . *Organization Studies*,. 24(3) 403-424.
- Ostrom, E. 2000. "Collective Action and the Evolution of Social Norms." *Journal of Economic Perspectives*, 14(3):137-58.
- H.W. Perkins, Wechsler, H. 1996. Variation in perceived college drinking norms and its impact on alcohol abuse: A nationwide study. *Journal of Drug Issues*.
- R.A. Posner, Rasmusen, E. 1999. Creating and enforcing norms, with special reference to sanctions. *International Review of Law and Economics*. 19(3) 369-382.
- G. Saul. 1981. Business ethics: Where Are We Going? *Academy of Management Review*. 6 269-276.
- T. Schelling. 1960. *The Strategy of Conflict*. Harvard University Press, Cambridge, MA.
- M. Schminke, M. Ambrose and D. Neubaum. 2005. The effect of leader moral development on ethical climate and employee attitudes. *Organizational Behavior and Human Decision Processes*, 97, 135–151.
- B. Schneider. 1987. The people make the place. *Personnel Psychology*, 14: 437-453.
- W. Schulze, G. McClelland, D. Waldman and J. Lazo. 1996. Sources of Bias in Contingent Valuation, in D. Bjornstad and J. Kahn, eds., The Contingent Valuation of Environmental Resources: Methodological Issues and Research Needs. Cheltenham, U.K.: Edward Elgar Publishing Ltd., pp. 97–116.
- M.S. Schwartz, Thomas, W.D., Kline, M. 2005. Tone at the Top: An Ethics Code for Directors? *Journal of Business Ethics*(58) 79-100.
- S. Schwartz. 1973. Normative explanations of helping behavior: A critique, proposal, and empirical test. *Journal of Experimental Social Psychology*. 9(4) 349-364.
- A. Smith. 1982 1759. *The Theory of Moral Sentiments*. Liberty Fund, Indianapolis.
- V. Smith. 1991. Rational choice: The contrast between economics and psychology. *Journal of Political Economy*, 99(4): 877.
- C. Smith, Simpson, S., Huang, C. 2007. Why Managers Fail To Do The Right Thing: An Empirical Study of Unethical and Illegal Conduct. *Business Ethics Quarterly*. 17(4) 663-617.
- R. Sugden. 1995. A Theory of Focal Points. *The Economic Journal*. 105(430) 533-550.
- L.K. Treviño, Weaver, G.R., Brown, M.E. 2008. It's Lovely at the Top: Hierarchical Levels, Identities, and Perceptions of Organizational Ethics. *Business Ethics Quarterly*. 18(2) 233-252.
- S. Valentine, Godkin, L., Lucero, M. 2002. Ethical Context, Organizational Commitment, and Person-Organization Fit. *Journal of Business Ethics*. 41(4) 349-360.

- B. Victor, Cullen, J.B. 1988. The Organizational Bases of Ethical Work Climates. *Administrative Science Quarterly*. 33(1) 101-125.
- P. Young. 2008. Social Norms and Economic Welfare. *European Economic Review*. 42 821-830.
- M. Zey-Ferrell and O. Ferrell. 1982. Role set configuration and opportunity as predictors of unethical behavior in organizations. *Human Relations*,35(7):587-604.
- M. Zey-Ferrell, K. Weaver, O. Ferrell. 1979. Predicting unethical behavior among marketing practitioners. *Human Relations*. 32:557-561.
- D. Zohar and G. Luria. 2005. A Multilevel Model of Safety Climate: Cross-Level Relationships Between Organization and Group-Level Climates. *Journal of Applied Psychology*, 90(4): 616-628.

**Table 1: Example of the Response Reporting Form Used in the Coordination Game Experiment.**

<b>Tanya's choices</b>	<i>Very ethically Inappropriate</i>	<i>Somewhat ethically inappropriate</i>	<i>Somewhat ethically appropriate</i>	<i>Very ethically appropriate</i>	<i>(Study Use only) Response matches counterpart ?</i>
Tanya nods, but does not say anything to David. She does not report him to a compliance officer.	<b>X</b>				Y   N
Tanya tells David that she doesn't think that initialing for them was the right thing to do. She does not report him to a compliance officer.		<b>X</b>			Y   N

**Table 2: Belief and Norm Identification Using the Coordination Game Method.**

		Who are the <b>targets</b> of the match?	
		Financial Advisers	Corporate Leaders
Who is <b>making</b> the match?	Financial Advisers	(Cell 1) Actual norms held by financial advisers	(Cell 2) Beliefs of financial advisers about norms desired by corporate leaders
	Corporate Leaders	(Cell 3) Corporate leader’s beliefs about actual norms held by financial advisers	(Cell 4) Desired norms for financial advisers held by corporate leaders

**Table 3: Information Given to First Mover about Payoffs in the Advice Game**

	You get	Your counterpart gets
Option A:	\$150	\$50
Option B:	\$50	\$150

**Table 4: Summary Statistics.**

	Financial Advisers			Corporate Leaders		
	Mean	Median	N	Mean	Median	N
Age		36-40	45		46-50	9
Male	80%	male	45	66%	male	9
Race	98%	white	45	100%	white	9
Grad Degree	24%	some college	45	56%	post college	9
Extra Certifications	20%	No	45	33%	No	9
Tenure		x < 1 year	45		1-5 years	9
Annual Gross Dealer Commissions		\$0-\$100k	45		Not asked	
Assets under Management		\$1M-\$5M	45			
Number of Clients		x < 101	45			

**Table 5: Evaluations when Financial Advisers Match with Financial Advisers and when Corporate Leaders Match with Corporate Leaders.**

Action	Financial Advisers matching Financial Advisers						Corporate Leaders matching Corporate Leaders						FA vs CL Rank Sum Test (z)	
	Mean	--	-	+	++	StDev	Mean	--	-	+	++	StDev		
1	<b>Don't say anything; don't report</b>	<b>-0.85</b>	80%	18%	2%	0%	0.314	<b>-1.00</b>	100%	0%	0%	0%	0.000	1.45
2	<b>Say: "not okay"; don't report</b>	<b>-0.44</b>	33%	49%	18%	0%	0.470	<b>-1.00</b>	100%	0%	0%	0%	0.000	3.42**
3	<b>Say: "not okay, don't tell me again"; don't report</b>	<b>-0.47</b>	38%	44%	18%	0%	0.484	<b>-0.93</b>	89%	11%	0%	0%	0.222	2.72**
4	<b>Say: "not okay, don't do that again"; don't report</b>	<b>-0.35</b>	31%	44%	20%	4%	0.559	<b>-0.56</b>	56%	22%	22%	0%	0.577	1.05
5	<b>Don't say anything; report</b>	<b>0.41</b>	2%	20%	42%	36%	0.536	<b>0.72</b>	0%	0%	44%	56%	0.351	-1.51
6	<b>Say: "not okay"; report</b>	<b>0.87</b>	0%	4%	12%	84%	0.336	<b>1.00</b>	0%	0%	0%	100%	0.000	-1.25

Modal values in grey. Color coding gives *ex ante* status. Pink = very inappropriate; light green = somewhat appropriate; green = very appropriate

+ for  $p < 0.1$ , \*\* for  $p < 0.05$ , \*\*\* for  $p < 0.01$ ; all tests two-tailed. Responses are: "very socially inappropriate" (- -), "somewhat socially inappropriate" (-), "somewhat socially appropriate", (+), "very socially appropriate" (+ +); modal response is shaded grey.

**Table 6: Tests of the Equality of Standard Deviations between the Evaluations of Extreme Actions and the Evaluations of More Ambiguous Actions in Whistle Blowing.**

(These tests conditional on the selected assignment of numerical values to evaluation rankings.)			
FA's matching FA's		CL's matching CL's	
Test StDv #1 < StDv #3	p = 0.0025	Test StDv #1 < StDv #3	p = 0.0000
Test StDv #1 < StDv #4	p = 0.0001	Test StDv #1 < StDv #4	p = 0.0000
Test StDv #6 < StDv #3	p = 0.0086	Test StDv #6 < StDv #3	p = 0.0000
Test StDv #6 < StDv #4	p = 0.0005	Test StDv #6 < StDv #4	p = 0.0000

**Table 7: OLS Regression Correlating Measures of Normative Misalignment and Job Satisfaction.**

	<b>Dependent Variable</b>		
	1. Misalignment between perceived FA norm and CL desired Norms	2. Misalignment between personal normative opinions and CL desired norms	3. Misalignment between personal normative opinions and FA actual norms
Satisfied	-0.57* [0.27]	-0.58* [0.26]	-0.46** [0.15]
Observations	45	45	45
R-squared	0.21	0.21	0.27

Note: all regressions include controls for age, gender, assets under management, number of clients and gross dealer commission. Standard errors in brackets. \* significant at 5%; \*\* significant at 1%

**Table 8: Probit Regression Correlating Measures of Normative Misalignment and Deception.**

	Dependent Variable		
	1. Probability of telling the truth	2. Probability of telling the truth	3. Probability of telling the truth
Misalignment between perceived FA norm and CL desired Norms	-0.04 [0.29]		
Misalignment between personal ethical norms and CL desired norms		-0.10** [0.00]	
Misalignment between personal ethical norms and FA actual norms			-0.17** [0.09]
Observations	28	28	28
Pseudo R-squared	0.19	0.27	0.30

Note: all regressions include controls for age, gender. Standard errors in brackets.

Regression is clustered at the branch level.

\* significant at  $p < 5\%$ ; \*\* significant at  $p < 1\%$

**Table 9: Action Choices in Vignette One.**

**Roger's choices (in increasingly appropriate order; not offered in this order)**

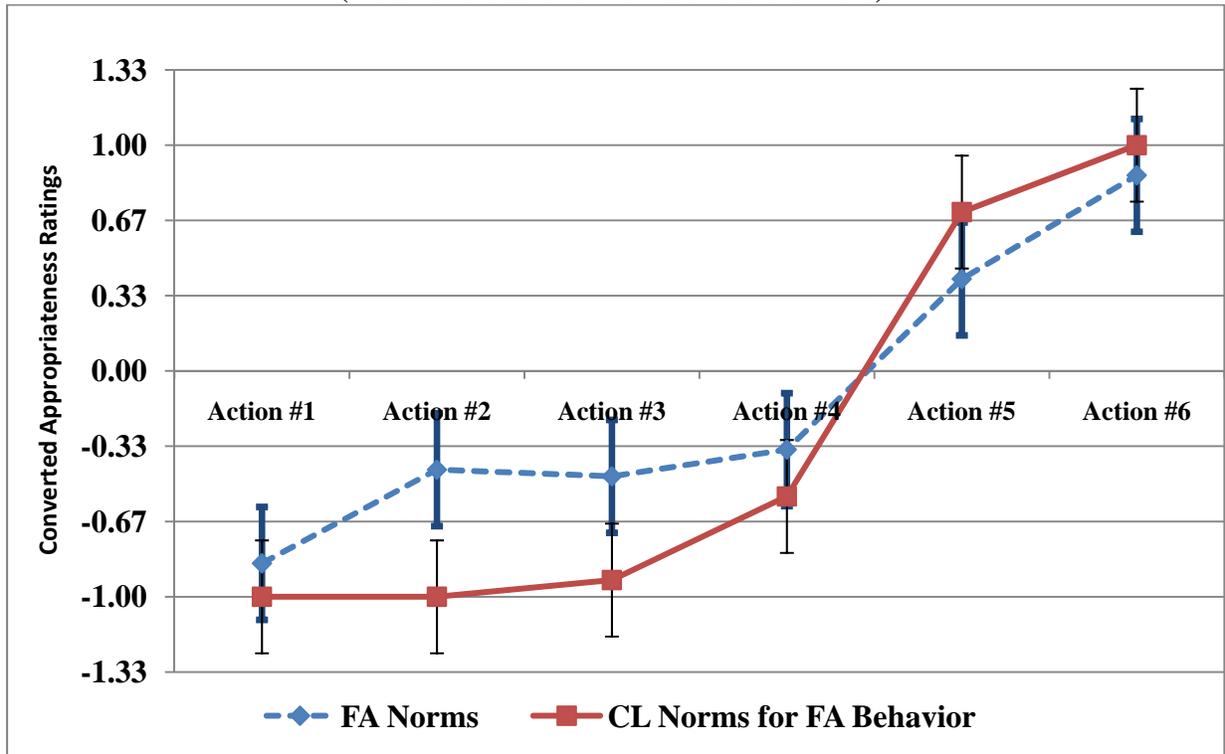
1. Roger can offer a fixed annuity with a 7 year diminishing surrender penalty that pays a large commission.
2. Roger can offer a bond fund that pays a small commission.
3. Roger can offer a certificate of deposit with a 1 year maturity date and an interest rate of 2.05% that pays a very small commission.
4. Roger can offer a cash management account which pays no commission.

**Table 10: Action Choices in Vignette Two.**

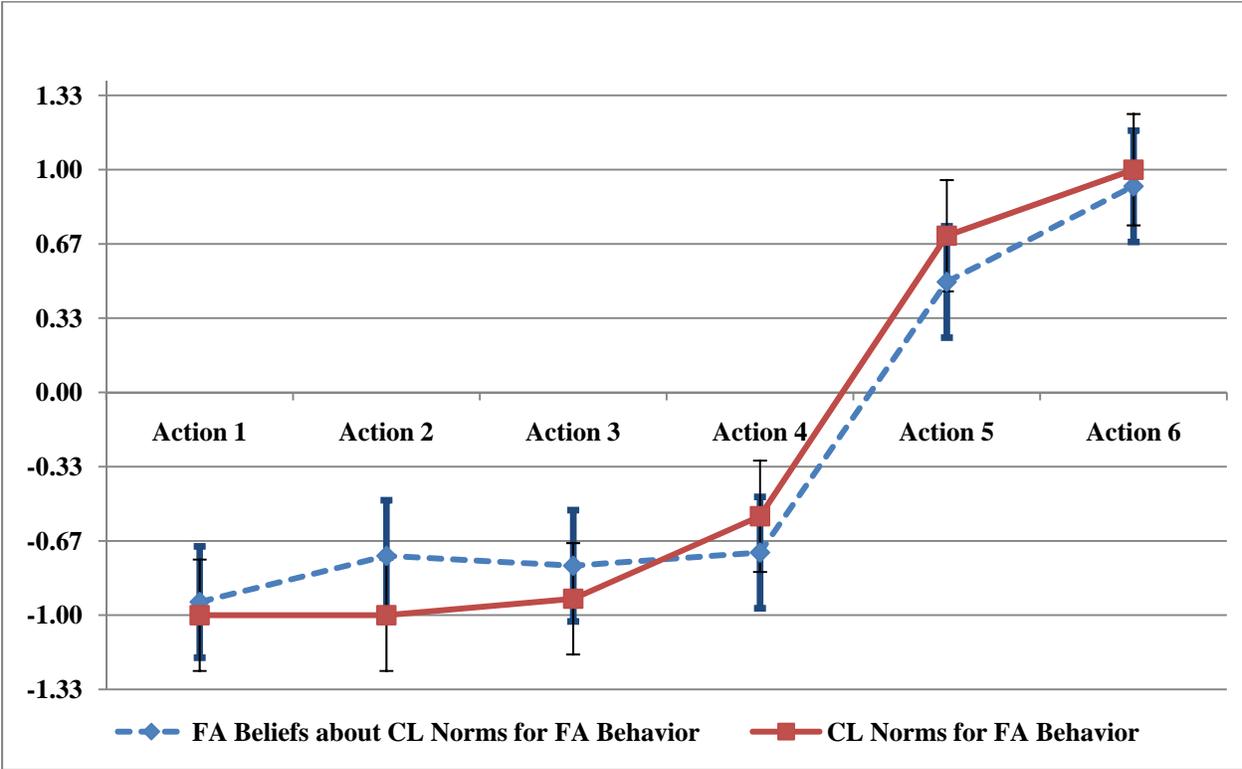
**Anne's choices (in increasingly appropriate order; not offered in this order)**

1. The client says that he wants a real estate investment trust. Anne reasons that it is the client's decision. Anne places the real estate investment trust trade.
2. Anne cautions that a portfolio needs to be diversified. When the client says that he wants a real estate investment trust, she reasons that it is the client's decision. Anne places real estate investment trust trade.
3. Anne recommends a specific diversified portfolio that includes a real estate component. When the client says that he wants a real estate investment trust, Anne reasons that it's the client's decision and places the real estate investment trust trade.
4. Anne recommends a specific diversified portfolio that includes a real estate component. When the client declines, Anne tells the client that she will not place the real estate investment trust trade unless the client promises to think about her other recommendations.
5. Anne recommends a specific diversified portfolio that includes a real estate component. When the client declines, Anne asks him to sign a declaration acknowledging her recommendations and the risks of his choice. Then she places the real estate investment trust trade.
6. Anne recommends a specific diversified portfolio that includes a real estate component. When the client declines, Anne tells the client that she will not place the real estate investment trust trade.

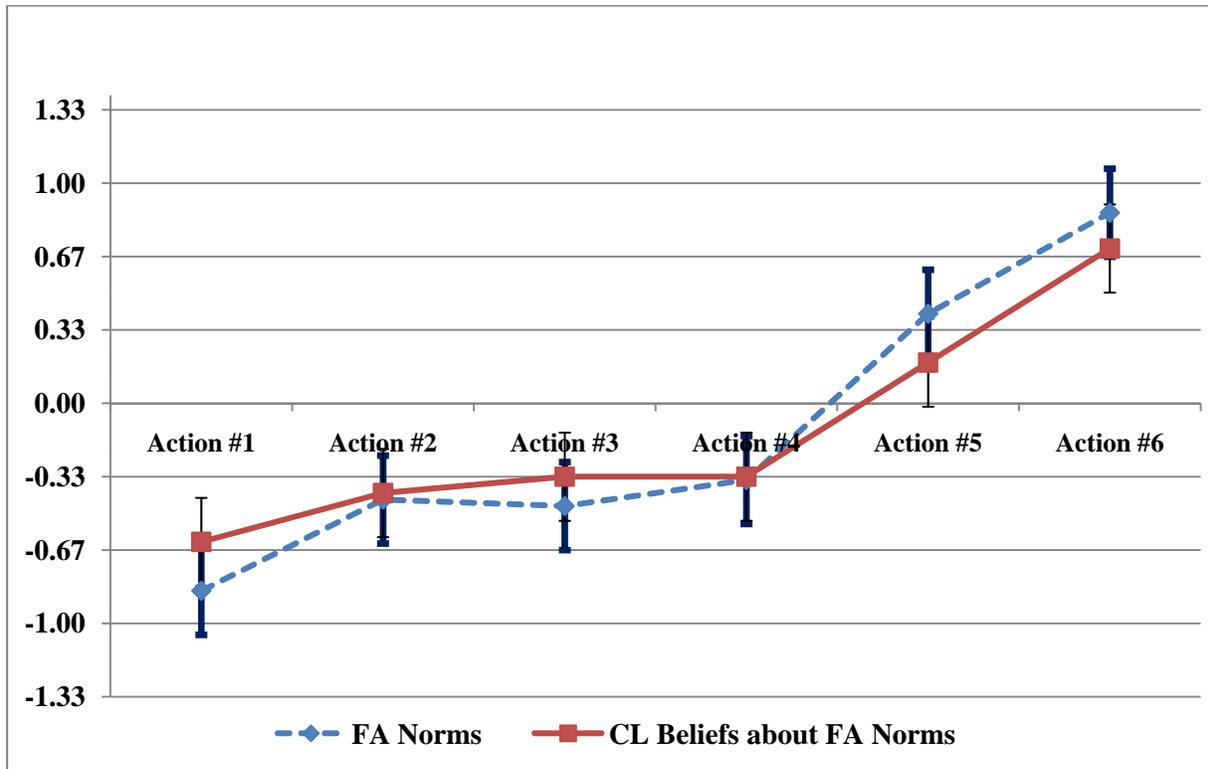
**Figure 1: Norms of Financial Advisers and Norms of Corporate Leaders for Adviser Behavior in Whistle Blowing Differ in Intensity on Some Actions (mean evaluations with standard errors).**



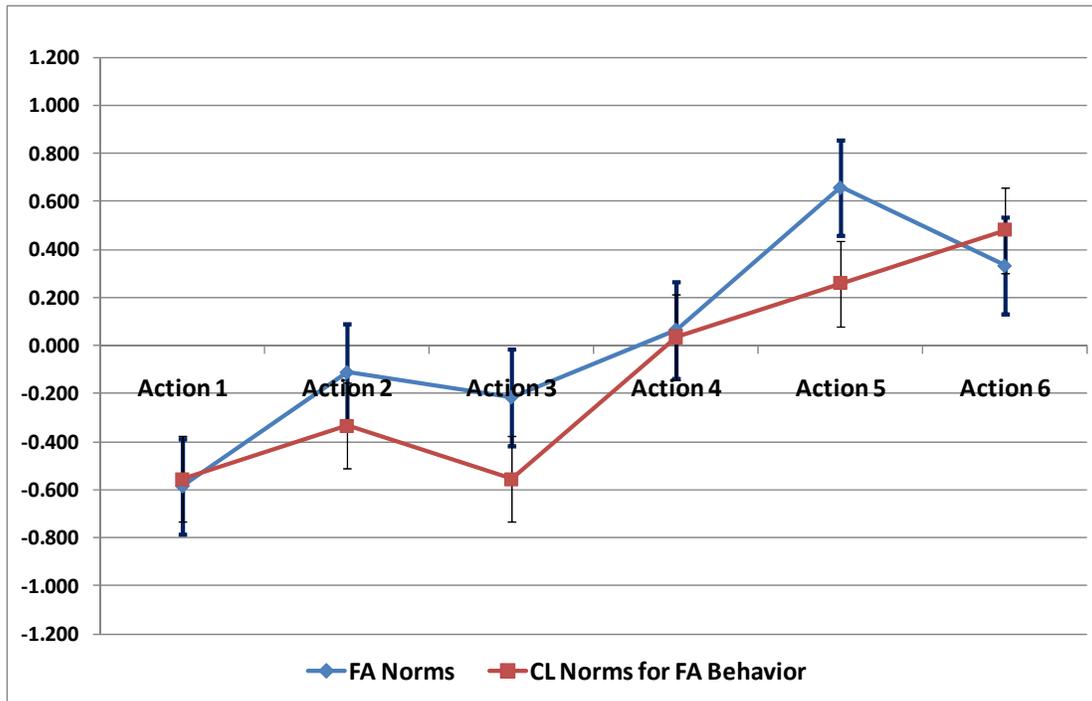
**Figure 2: FA Beliefs about Norms Desired by CLs and Actual Norms Desired by CLs in Whistle Blowing are Almost Identical (mean evaluations with standard errors).**



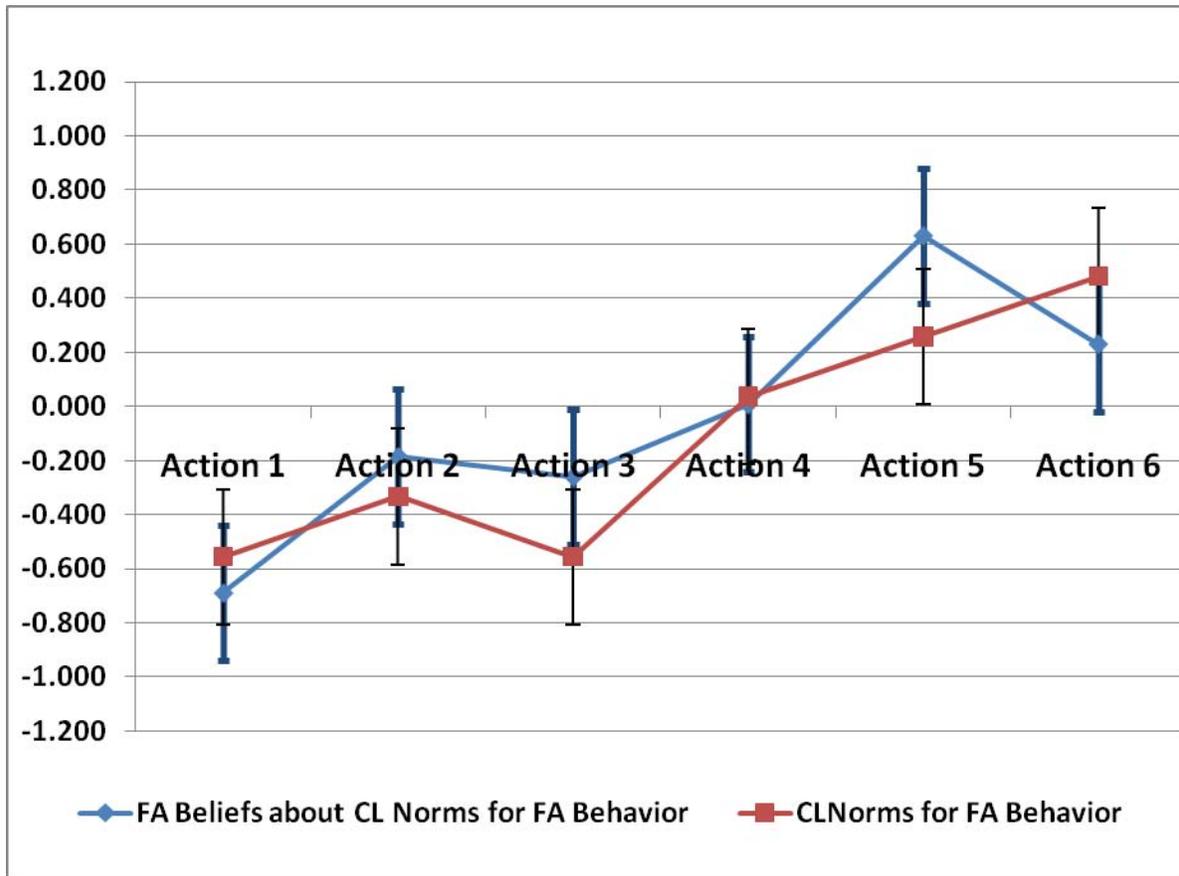
**Figure 3: CL Beliefs about FA Norms versus Actual FA Norms in Whistle Blowing Are also Almost Identical (mean evaluations with standard errors).**



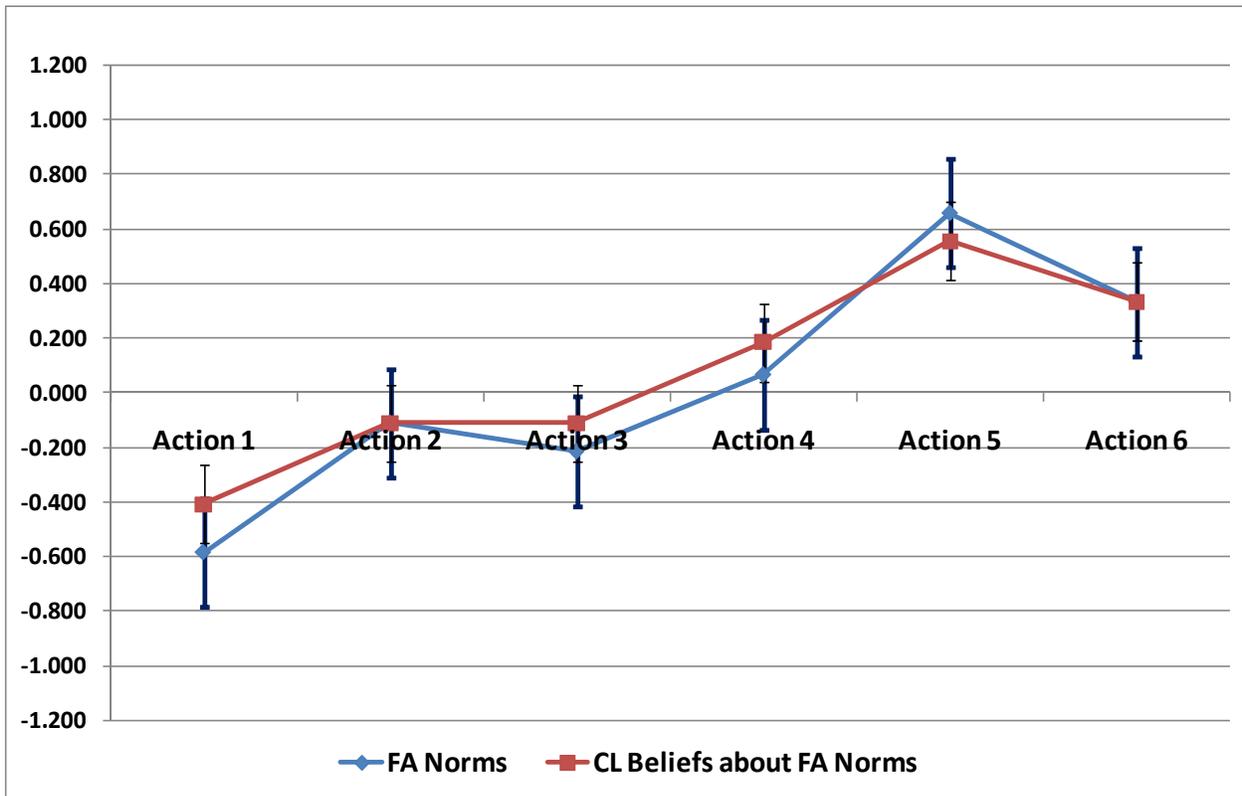
**Figure 4: FA Norms and CL Desired Norms for FA Behavior in Fiduciary Dilemma Show Misalignment on Actions 3 and 5.**



**Figure 5: FA Norms and FA Beliefs about CL Desired Norms in the Fiduciary Dilemma: FA's Beliefs about CL Desires for Actions 3 and 5 are Incorrect.**

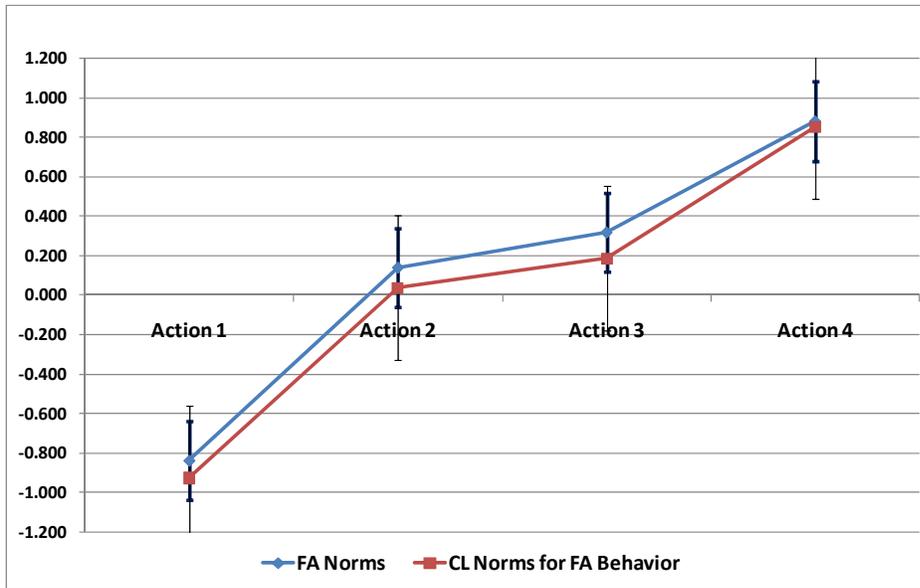


**Figure 6: FA Norms and CL Beliefs about them in the Fiduciary Dilemma; Leaders Already Understand FA Beliefs.**

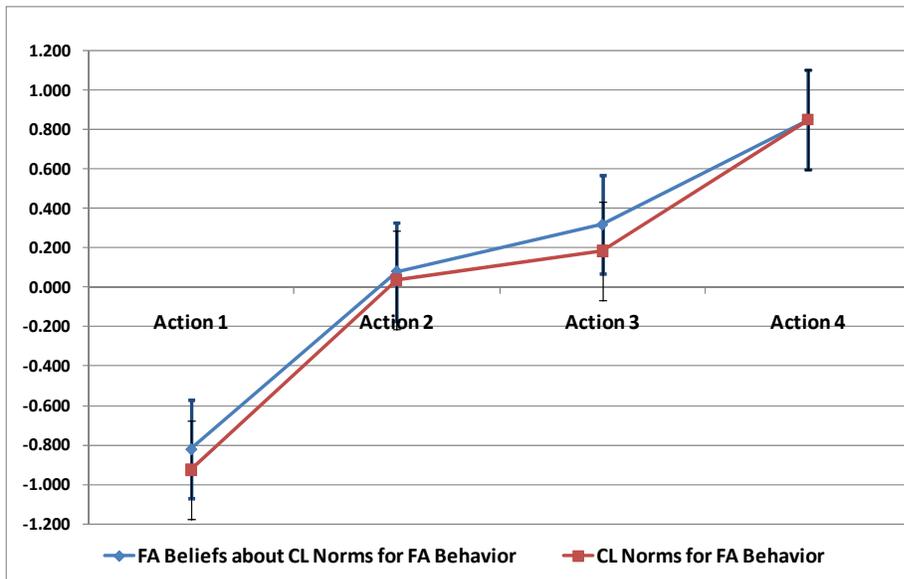


THE FOLLOWING FIGURES ARE INCLUDED FOR REVIEWERS BUT ARE INTENDED TO BE AVAILABLE UPON REQUEST FROM THE AUTHORS IN THE FINAL PAPER.

**Figure 7: FA Norms and CL Norms are Well Aligned in Incentive Clash**



**Figure 8: FA Beliefs about CL Desired Norms are Accurate in the Incentive Clash**



**Figure 9: Corporate Leaders are a Little Too Pessimistic about Adviser Norms in the Incentive Clash.**

