

ABSTRACT

Title of Thesis: RATIONAL CHOICE, CORPORATE ENVIRONMENTAL BEHAVIOR, AND THE ECO-GENDER GAP

Jocelyn Elizabeth Evens, Master of Arts, 2024

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Gender is a strong correlate of crime-including white-collar and corporate crime, with men having a higher propensity compared to women (Steffensmeier & Allen, 1996; Fagan, 2002; Kruttschnitt, 2013; Benson & Harbinson, 2020). This project specifically focuses on how men and women think about or make decisions regarding corporate environmental crime. Of particular interest is whether and how gender may be linked to corporate environmental offending and its counterpart "overcompliance" given that some research has uncovered an "eco-gender" gap in attitudes toward the environment. Using a factorial survey of environmental noncompliance and overcompliance vignettes that asks about their willingness to act as the depicted manager, I assess their evaluation of factors manipulated in the scenario and whether other characteristics (not experimentally manipulated) affect their behavioral intentions. I use a subjective utility model and employ regression analyses to further understand whether and how gender plays a role in decision-making. The evidence from the analyses forces me to fail to reject the null hypothesis that there is an eco-gender gap in corporate environmental decisions.

RATIONAL CHOICE, CORPORATE ENVIRONMENTAL BEHAVIOR, AND
THE ECO-GENDER GAP

by

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Thesis submitted to the Faculty of the Graduate School of the
University of Maryland, College Park, in partial fulfillment
of the requirements for the degree of
Master of Arts
2024

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Dedication

This thesis is dedicated to the mothers in my life – my mother, Karen, and my late grandma, Phyllis. My mom has always been my hero and biggest cheerleader, and has offered an enormous amount of encouragement along this journey. This project was a true labor of love that could not have been completed without her undying support for my success in educational endeavors. My grandma was a Godly woman who unfortunately passed during the completion of this degree. She cared for me while my mom worked from the time that I was 6 weeks old until I was three years old, so we had loads of time to bond while I rummaged through massive piles of her mail. I miss her everyday, but know that she would be proud of the work that I accomplished during my time in this program.

Acknowledgements

I would like to take this time to thank a number of people who were instrumental in my completion of this degree. First, and foremost, I want to express my sincere gratitude to my chair, Dr. Sally Simpson. Her expertise in the field of corporate crime was vital to this project and her amazing patience with me will never be forgotten. I appreciate all the time and effort that went into reviewing multiple drafts and providing insightful feedback. I would also like to thank the members of my committee, Dr. Greg Midgette and Dr. Rachel Ellis. Both provided invaluable insight and mentored me through expanding the project beyond what I thought I would be able to study with my initial concept for this project. I also greatly appreciate all the times, scheduled or unscheduled, that they allowed me to ask questions and talk through parts of the paper. Graduate school is not an easy journey, and I would not have been able to get to this point without the support of my closest friends and family.

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Chapter 1: Introduction

Gender is a strong correlate of crime—including white-collar and corporate crime, with men having a higher propensity compared to women (Steffensmeier & Allen, 1996; Fagan, 2002; Kruttschnitt, 2013; Benson & Harbinson, 2020). In this thesis, I focus specifically on how men and women think about or make decisions regarding corporate environmental crime. Of particular interest is whether and how gender may be linked to corporate environmental offending and its counterpart "overcompliance" given that some research has uncovered an "eco-gender" gap in attitudes toward the environment. This gap suggests that there are gender differences in decision-making based on differing opinions and concerns related to environmental offending and overcompliance. Socialization of women, compared to men, is more "other-focused," which conditions them to be more likely to protect and improve the environment for the ecological environment and human health.

In the next section, I review the gender and corporate crime literature with an emphasis on corporate environmental crime and overcompliance. In this section, I also discuss the empirical basis of the eco-gender gap. In the final section, I use a subjective utility model to develop research hypotheses that I test using two data sources: NIJ-funded grant that collected data from a sample of corporate managers and TMone database that sampled private and public company employees. These participants were given vignettes of environmental noncompliance and overcompliance and asked about their willingness to act as the depicted manager based on their evaluation of factors manipulated in the scenario. As part of the

factorial survey, respondents also were asked questions about their personal beliefs and circumstances, thus allowing an assessment of whether other factors and characteristics (not experimentally manipulated) affect their behavioral intentions.

GENDER AND CORPORATE CRIME

The gender gap in offending is salient across street and white-collar crimes. When women engage in white-collar crime, the offenses tend to be low-level fraudulent activities as opposed to more serious crimes (Benson, 2021). Males exceed females in their overall white-collar crime participation, except for embezzlement¹ (Benson & Harbinson, 2020). This anomaly may be explained through opportunity theory. Women are more likely to have access to the low-level positions that allow them access to the resources to commit these crimes (Dodge, 2007). The focus of this study, however, is on corporate offending—specifically environmental offending, and not the broader category of white-collar crime. Corporate offending is defined as the legally proscribed conduct of a company or its representatives, acting on behalf of the company, to achieve organizational goals (Braithwaite, 1984: 6). It can include behaviors that save companies money, increase profitability and/or market share, such as price-fixing, fraud, bribery, or improper toxic waste dumping. Women offenders are rarely prosecuted for environmental crime, accounting for just five percent of all white-collar environmental prosecutions² (Benson & Harbinson, 2020) and women have a lower likelihood of committing environmental offenses within the context of the corporation (Kremer, 2010).

¹ According to official statistics, women engage in embezzlement offenses more commonly than do men (USSC, NIBRS).

² According to EPA prosecution data (1987-2002).

Many theories can explain gender differences in corporate offending, including opportunity theory (Benson & Simpson, 2017), gendered socialization (Gilligan, 1982; Gilligan & Attanucci, 1988, Zeitz, 1981), gendered focal concerns (Steffensmeier & Allan, 1996; Steffensmeier, Schwartz, & Roche, 2013), and techniques of neutralization (Klenowski, Copes, & Mullins, 2011). Each of these theories adds to the argument that men and women's thought processes and social circumstances differ, providing support for the utilization of a model that can accommodate these differences.

Gendered socialization theory suggests that woman white-collar offenders' criminality originates from and is reinforced through the social construction of the *feminine*, especially motherhood (Zeitz, 1981). Recent empirical support for this explanation examined gendered white-collar crime justifications (Klenowski, Copes, & Mullins, 2011). Interviews with incarcerated male and woman offenders revealed how individuals rationalized their crimes. While there was a similarity in the frequency of techniques characterized by the participants, the study found a distinguished gendered experience that emphasized the construction of the *feminine* and *masculine*. Other theories, like opportunity theory and gendered focal concerns, examine the barriers and pathways that women experience regarding their involvement in corporate crime (Benson & Simpson, 2017; Steffensmeier, Schwartz, & Roche, 2013). Societal expectations and structures have objectively limited women's access to employment opportunities that could provide the chance to engage in white collar or corporate crime, such as gender roles, education, and biases towards females' abilities (Benson & Simpson, 2017). While there has been some research to

refute this idea, women's engagement in this criminal context is limited due to their comparatively diminished access to the organizational means to commit crimes and corporate power. Research has found that the recruitment and enrollment of women in conspiring corporate schemes is dependent on their positionality in the organization (*utility*) or through their relationship with the main conspirators (*relational*) (Steffensmeier, Schwartz, & Roche, 2013). Women's exclusion and inclusion is tied to the strength of their gender identity, roles, and societal perceptions. In this thesis, I incorporate some of these ideas into a rational choice theory of corporate crime (discussed in Chapter 2).

Chapter 2: Literature Review & Theoretical Background

ENVIRONMENTAL CORPORATE CRIME

Environmental crime includes a plethora of actions that violate environmental laws along with acts that harm or risk ecological health, human health, or both (Europol, 2022). However, as mentioned, this study investigates *corporate* environmental offenses. Given the size and reach of corporations, illegal environmental actions and decisions by corporate actors can be highly consequential for company employees, local communities, nations, and the health and well-being of the planet.

A few examples can demonstrate the scale and scope of corporate environmental crime. In 2017, Wood Group Incorporated was ordered to pay a multi-million dollar fine for falsifying safety reports of offshore oil rigs that discharged oil into the Gulf of Mexico. AIREKO Construction Company was fined and sentenced to probation for the illegal and inappropriate removal of materials containing asbestos in a San Juan building. The Volkswagen Group was ordered to pay billions for rigging their emissions control system to only control emissions when vehicles were being inspected. Multiple companies have paid penalties for employee deaths, severe injuries of others, and release of hazardous material into the atmosphere. In one case, workers were given falsified work permits to conduct dangerous welding work on pipes that were improperly handled (U.S. EPA, 2024). In addition to the losses of human life, physical injuries, and ecological destruction, these “corporate” decisions required billions of dollars and extensive resources to “clean-up” the damage.

The scope, costs, and consequences of these actions justify a closer examination of corporate environmental offending. These types of crimes are not considered impulsive. Decisions to commit corporate environmental crime are more calculated and thus, potentially, more easily controllable/preventable through a variety of different mechanisms, including formal as well as informal sanctions, stigma, and reputational damage (including financial consequences for the firm) moral inhibitions, and intra-organizational compliance systems (Gunningham et al., 2005; Paternoster & Simpson, 1996). To better understand how to control and prevent corporate environmental crime, it is important to identify the assorted costs and benefits of the behavior to the company and company representatives involved in the decision.

Noncompliance: Costs

Firms that engage in noncompliance may experience monetary and positionality losses. Disregarding regulations leaves firms open to regulatory, civil, or criminal sanctions, all of which could incur significant financial costs. Beyond bills and fines associated with enforcement actions, reputational damage can hurt the profits and competitive positions of sanctioned firms. The brands of such firms are often tainted and suffer from a diminishing consumer base (e.g., the Deepwater Horizon Oil spill into the Gulf of Mexico by the British Petroleum Company or Exxon Corporation oil spill in Alaska's Prince William Sound)³.

³ The reputation of the oil companies themselves as well as the industry was tarnished, making it harder for these companies to be able to gain access to drilling areas.

In addition to corporate costs, individuals may also experience costs and consequences for their participation in (or responsibility for) corporate illegal actions. Individuals may be legally sanctioned—prosecuted or sued civilly. They also could lose their current employment (fired by the firm) and negatively affect prospects for future employment if formal sanctioning labels individuals as deviant actors in the industry. Informal sanctions can include negative reactions from family, friends, coworkers, and personal shaming (feelings of guilt). The publicity or disclosure of noncompliance behaviors have the potential to alter others' image of you. As such, people may lose the respect of family members, friends, or colleagues. Internalized shame is a personal sanction that is incurred when your actions deplete the respect that you have for yourself. When people have strong moral inhibitions, acts of noncompliance will produce shame and loss of self-respect.

Gender is expected to explain differences in evaluations of the inputs and probability of environmental action. In reference to legal and informal sanctioning, people who discount the certainty and severity of their behavioral consequences are more likely to offend (Nagin & Paternoster, 1994). This can explain gender differences because men tend to discount the consequences of their behavior, such as when they are committing driving offenses (Freeman et al., 2017). Women tend to perceive sanctioning risks to be higher compared to men (Finley & Grasmick, 1985; Grasmick, Blackwell, & Bursik, 1993; Grasmick, Blackwell, Bursik, & Mitchell, 1993; Smith & Paternoster, 1987). Additionally, there are also observed differences in the likelihood of informal costs (such as perceived shame and embarrassment) associated with committing crimes (Finley & Grasmick, 1985; Grasmick, Blackwell,

& Bursik, 1993; Grasmick, Blackwell, Bursik, & Mitchell, 1993), indicating that gender differences in perceptions extend beyond legal punishments. This speaks to the socialization of women and their desire to avoid being ostracized and experiencing self-shame when personal moral codes are violated.

Noncompliance: Benefits

Noncompliance may allow corporations to cut corners on monetary investments (e.g., environmental abatement machinery) which would save the firm (at least in the short run) monies that could be used elsewhere. This benefit can trickle down as a benefit to the individual. At the firm level, if corporations can save money on manufacturing, like skimping on the appropriate way to dispose of toxic waste, the savings would be extra profit (Huisman & Van Erp, 2013). Hazardous waste disposal is a high cost for companies (Schmidt, 2004), and illegal behaviors produce double, if not quadruple, the savings for companies compared to legal disposal (Bruinsma, 1996; Massar & Monzini, 2004). A similar point can be made regarding the need to invest in environmental abatement. Old facilities may need new equipment to meet permitted discharge levels (e.g., air and/or water). But the cost of abatement may be viewed as excessively expensive. Because corporate decisions are made by individuals, the manager or executive team would need to take into consideration the financial benefit for the firm (weighed against the costs of noncompliance). But importantly, if the firm is doing better financially, noncompliance could also benefit the individual financially (through a bonus or salary increase). Another instrumental benefit for the individual could be career advancement. The manager may be positively noticed by executives for making financially prudent decisions that can

improve the financial performance and reputation of the firm. That manager is rewarded for doing so with a promotion.

CORPORATE ENVIRONMENTALISM

When companies move beyond mere compliance by far exceeding (or over-meeting) required permitted levels or standards, this is defined as “overcompliance” (Harrington, 1988; Magat & Viscusi, 1990; Simpson, Garner, & Gibbs, 2007). Theoretically, corporate overcompliance can stem from legal incentives (Ferrell et al., 1998), social pressures (Paddock, 2021; Phan & Baird, 2015), or an effort to gain market advantage (Simpson, Garner, & Gibbs, 2007). These efforts may be apparent by firms adopting environmentally-friendly policies, such as “greening” company policies and/or volunteering to participate in EPA sponsored programs.

Overcompliance: Benefits

Firm- and individual-level rewards can be realized following these initial costs. The mere implementation of such programs will benefit the firm through a reduced likelihood of falling out of compliance, further improving the investment value of the firm (Ngyuen et al., 2020). Acting in a socially preferred manner in regard to environmental responsibility could improve a firm’s reputation, gain a larger customer base, increase stakeholder’s investment (Paddock, 2021; Phan & Baird, 2015; Tinsley & Pallai, 2012), and improve their competitive position by demonstrating to regulators that new standards are achievable.

A green consumer explanation argues that environmentally-friendly behaviors appeal to consumers, increasing firms’ profitability through an increased willingness to pay for cleaner products (Arora & Gangopadhyay, 1995). When corporations take

these steps, consumers may expect to pay more, increasing market value and profitability (Arora & Carson, 1996). This also redirects consumer bases of competing firms who will, then, incur declining revenues and market position. This would be beneficial to the firm through increased profits which would trickle down to the individual employers for them to profit via salary or bonuses. Beyond financial incentives is social acceptance and appraisal within a firm through job promotion.

Companies may take stricter approaches to environmental standards, e.g., produce levels of pollution far below what is legally mandated, because they are engaging in strategic behaviors (Arora & Gangopadhyay, 1995). Stricter regulations may be coming “down the pike” in governmental legislation that will be costly and companies that act proactively will avoid losing profits during the turnover, resulting in improved market position. Some firms will push for stricter regulations to guarantee this position and harm their competitors’ profits (Salop & Scheffman, 1983). Initial implementation of “beyond-regulation” practices may require a large sum of investment money or a period with declining profits, but it is economically sustainable if revenue is above average increases in marginal costs (Maloney & McCormick, 1982). By focusing on increasing the firm’s competitive status, benefits of sustainability as well as corporate profitability increase (Manchiraju & Rajgopal, 2017). This not only improves regulatory relationships, but consumer impression as well. Consumers will support the cost of sustainability because production is expected to be cleaner (Porter & van der Linde, 1995; Porter & van der Linde, 1995) and environmental efforts improve consumer relationships (Simpson, Garner, & Gibbs, 2007; Tinsley & Pallai, 1996).

Overcompliance: Costs

Moving from the benefits of overcompliance, there are financial costs that the firm needs to be willing to incur. The initial implementation of extreme-volunteer practice may cost the firm more initially than when the practice is established and more normative throughout the industry. This is loosely related to ‘raising-rivals’ cost because the end benefit may be an increase in profits, but the initial costs may hurt the company temporarily (Sallof & Schepman, 1983). These costs may come from a necessary investment in updated technology or employment costs to improve internal compliance systems. These practices would be negatively felt at the individual and firm level with corporate profits being deferred and employee profits (salaries, bonuses, or commissions) declining. An initial decrease in profits may also result from a consumer resistance to retain loyalty to a corporations’ increasing prices on products stemming from increases in manufacturing costs. This may be especially harmful within industries that promote poor environmental behaviors. For example, if there are practices that are common among manufacturers, or even just within the firm, that save money, changing behaviors may be costly. Further, competitors may take advantage of the limited forceful control that exists within the regulatory field. Therefore, firms that move beyond the requirements will expectedly acquire larger declining revenues prior to the new practices being accepted as the new norm.

Responses to any action, but specifically extreme volunteerism in this case, are dependent on the context of what is common in the firm and industry. Individual managers’ may suffer if their actions diverge from the firm’s expectations and culture. Choosing overcompliance in this context may result in negative formal

consequences such as being fired or demoted. Managers may also experience social stigma from business associates who might blame the manager for taking the firm down the wrong path. The financial burden may be exacerbated if the firm is already experiencing declining revenue or losing ground to foreign competitors.

GENDER AND ENVIRONMENTALISM

Returning to the issue of gender and white-collar/corporate crime, research has found a gender gap (an eco-gender gap) in *attitudes* towards environmentalism. Women express greater concern for the environment than do men (McStay & Dunlap, 1983; Mohai, 1992; Stern et al., 1993; Xiao & McCright, 2010; Zelezney, Chua, & Aldrich, 2000). Beyond attitudes, this tendency also is behaviorally prevalent (Hunter et al., 2004) and in intentions to behave in a pro-environmental manner (Carlton & Jacobson, 2013; O'Connor, Bord, & Fisher, 1999). Focusing explicitly on the corporate context, women in corporate board positions have been shown to improve corporate governance (Ullah et al., 2019), to encourage a “green psychological climate” (Khan et al., 2019), and to increase environmental performance (Lu & Herremans, 2019). And there is research to suggest that real change to corporate culture, rather than semantic changes, start from the top. Thus, if those who are in power pursue ecological sustainability, employee behaviors should adjust accordingly (Mo et al., 2022).

Perception of Risk

Another important consideration regarding the eco-gender gap is that women appear to be more concerned about environmental consequences (especially health risks) than are men (Arachchi & Managi, 2021; Blocker & Eckberg, 1989; Bord &

O'Connor, 1992; 1997; Carlton & Jacobson, 2013; Davidson & Freudenburg, 1996; Mohai; 1992; O'Connor, Bard, & Fisher, 1999). Risk perception research has addressed a number of concerns including global warming and pollution from hazardous waste site management, impacting both human and ecological health (Bord & O'Connor, 1997; O'Connor, Bard, & Fisher, 1999),⁴ and suggests an enduring eco-gender gap observed among sustainable behaviors. This research suggests that perceptions of risk regarding harmful human and ecological impacts are higher for women compared to men (Arachchi & Managi, 2021; Xiao & McCright, 2015; Zelezney, Chua, & Aldrich, 2000) with surveys finding a higher level of risk salience reported by women respondents (Bord & O'Connor, 1997; Carlton & Jacobson, 2013). According to some theories, the positionality of women as familial care-givers reduces their presence in the public sphere and scientific knowledge comparatively to men, who are more focused on their image in the public sphere, pressured to have high status, and especially fathers, to have a heightened sense of responsibility to be the sole provider for their home. This theoretical framework links to the positionality of women in corporations and male domination in executive, leadership roles. Beyond established gender roles and domains, the inputs of women's decision-making tend to be different compared to men. Carlton and Jacobson (2013) and Arachchi and Managi (2021) found that individual perspectives of risk impacted choices. Their mirrored findings of women reporting higher risk perceptions were

⁴ Impacts of human health refer to negative consequences like cancer, pregnancy and birth issues, and polluted drinking water. On the other hand, ecological concerns refer to the impact on animals and vegetation.

related to decision-making processes that were less dependent upon “cold, hard” facts, but a “holistic” approach that considered ecological as well as individual risk.⁵

Value Orientations

Aside from the perceptions of risk and intent, or willingness to act due to concern, scholars have suggested and found evidence to suggest that men and women internalize different values. Gender socialization theory hypothesizes that women are likely to be “other-focused” compared to men-- i.e., concerned with developing and sustaining relationships through the act of caring for others (Gilligan, 1982). In relation to environmental problems, these perspectives may influence pro- or anti-environmental decisions through differences in moral development.

Caring for others (Strapko et al., 2016)⁶ and higher levels of empathy (Arnocky & Stroink, 2010) has been empirically linked to being more environmentally friendly. Studying correlates of each orientation, research has found that women prioritized altruistic values more than men (Stern, Dietz, and Kalof, 1993; Dietz, Kalof, & Stern, 2002). Previous literature reveals that women are socialized to care for others more than themselves (Gilligan, 1982; Gilligan & Attanucci, 1988) and these findings would suggest that women are more altruistic, lending an explanation to why women would be found to engage in environmentally friendly thinking and behaviors.

⁵ While empirical research tends to gauge participants’ willingness to engage in pro-environmental behaviors as opposed to purely and solely capturing risk perception, the research provides demographic descriptives in support of the main eco-gender gap argument. An assumption can be made that a higher willingness to engage in pro-environmental behaviors would correlate with a higher perception of risk associated with that concern.

⁶ This influence of value orientation was found for both men and women.

Looking at environmental values, Milfont and Sibley (2016) found that women were likely to have higher levels of empathy and lower levels of social dominance compared to men. This orientation mediated the gender difference in environmental concern. As such, this research is consistent with the idea that men are more individualistic and hold value for hierarchical orientations, while women are more “other-focused” (Gilligan & Attanucci, 1988). This research would suggest that we would expect women to value the protection of others (compared with men), and this should be reflected in their decisions not to act in ways that harm the environment or to take actions that protect the environment (e.g., overcompliance).

In the next section, I briefly summarize the main findings from the literature review and tie those results to Paternoster and Simpson’s rational choice theory of corporate crime that incorporates the formal legal and informal costs and benefits of noncompliance at two levels—the firm and the individual, including moral considerations. Although not explicit, the theory allows for gender differences guiding decision-making. It captures potential variation in perceived risks of offending while concepts of shame and morality encapsulate the value orientations argument. The theory, given its focus on firm and individual manager costs and benefits, can also be applied to overcompliance decisions.

I highlight the key ideas and concepts of the theory below.

RATIONAL CHOICE THEORY OF CORPORATE CRIME

Rational choice theory hypothesizes that crime is the solution to an economic calculation, balancing the costs and benefits of either engaging in or passing on the opportunity to commit crime (Becker, 1968). This perspective follows a risk and

reward model. The risks of crime relate to being punished, either through fines, probation, or imprisonment with the rewards, like vengeance, thrills, or financial gains, varying according to offense type. From a utilitarian perspective, one is expected to act in a criminal manner when the benefits outweigh the costs and to abstain from such illegalities when sanctioning risks are higher than potential rewards (Bentham, 1789). Deterrence theory, which draws from rational choice with its focus on formal legal sanction threats, emphasizes the certainty, severity, and celerity of sanctioning to increase the risks of criminal activities (Beccaria, 1764). Certainty is defined as the probability of being caught as no sanctions will be levied without official discovery of the illegal act. Certainty of discovery increases the credibility of the threat of punishment. Severity characterizes the intensity of the sanction cost and should be equal to the harm of the act. Celerity is defined as the swiftness of the response, meaning the justice system should reduce the time between offending and sanctioning to be as short as possible in order to link punishment to the crime. This is a hard principle to apply and test regarding corporate offenses because some are harder to detect and prosecute, especially environmental corporate offenses because of deals that prosecutors may make with organizations. Regulating authorities and agencies will work with the corporation to get them back on track to complying rather than throwing the book at them at the first since of noncompliance, allowing organizations timely courtesy to fix their issues while opposing this idea of swift sanctioning.

Subjective utility theory expands beyond “mere” deterrence (sanction threats associated with legal discovery) to include other kinds of costs and benefits, such as

informal consequences, threats to morality, and emotionality (e.g., thrills) that affect decision-making, which are often neglected in research (Makkai & Braithwaite, 1994). Potential informal costs can include the collateral consequences that result from formal processes, like lawsuits or incapacitation. These might include the loss of current and/or future employment prospects along with stigmatizing responses, like the loss of respect from individuals close to you or obtaining a negative reputation. These consequences are dependent upon being formally discovered first. Personal characteristics are also indicative of decision-making. In a test of their theory that analyzes both firm and individual-level factors predicted to affect corporate offending decisions, Paternoster, and Simpson (1996) find that individual morality influences intended behaviors. Morality can increase personal inhibitions, causing some behaviors to be perceived as unacceptable beyond the mere formal and informal sanctioning of the act. Any perceived benefits may be incapable of outweighing the costs to values that people abide by. On the other hand, morality can also promote prosocial attitudes and behaviors, like overcompliance. The subjective utility model helps us understand situations where we behave pro-socially even when potential costs outweigh the benefits. This theory is applicable to the study because it can incorporate an analysis of personal morality and informal processes that are imperative to the conversation concerning criminal inhibition, or behaving sustainably, beyond the focus of formal legal processes.

Chapter 3: Hypotheses, Data, & Methods

RESEARCH QUESTIONS & HYPOTHESES

I expect to find gender differences in both the willingness to engage in corporate environmental crime as well as overcompliance. Based on previous literature and empirical research, the mechanisms associated with these anticipated gender differences will lie in morality, perceptions of costs and benefits, and altruism. Hypotheses outlined below.

***Hypothesis 1:** women will be less likely to report intentions to engage in noncompliant behaviors and more likely to report intentions to engage in over compliant behaviors compared to men.*

***Hypothesis 2:** women will perceive environmental noncompliance as highly immoral compared to men.*

***Hypothesis 3:** women will perceive environmental overcompliance as highly moral compared to men.*

***Hypothesis 4:** women will perceive the risks of noncompliance behaviors to be greater compared with men.*

***Hypothesis 5:** Women are more likely to perceive the benefits of overcompliance to be less than the costs compared with men.*

***Hypothesis 6:** Altruism will guide woman intentions more so than male intentions.*

PRESENT STUDY

The current study empirically explores and assesses whether gender differences in environmental noncompliance and overcompliance are applicable in

the corporate crime context. Using a rational choice theory of corporate crime allows these differences to be explored because it incorporates the costs and benefits of crime and overcompliance along with the inhibiting and prosocial agency provided through morality. Examining men and women's responses will allow me to explore if there are (1) differences in the probability of acting, (2) how the responses vary by gender, and (3) which factors, by gender, influence the decision, delving into the mechanisms through which men and women make decisions.

SAMPLE, DATA, & METHODS

Research Design

The data used in this study originally were collected from factorial surveys (described below) designed to assess respondent willingness to engage in corporate environmental offending and overcompliance. Respondents were asked to report their behavioral intentions after reading several vignettes in which conditions known to affect environmental decisions were experimentally rotated in the scenarios. Follow-up questions then were asked after each vignette to probe deeper into respondent judgements. This method allows for a wide range of contextual variables to be considered in decision-making. Unlike self-report surveys, this survey did not ask about prior participation in illegal behavior, thus lowering the likelihood of socially acceptable responses (although the survey does ask respondents about whether they have had previous experiences with the situations described in the scenarios). In addition, the vignette design eliminates some of the temporal order problems associated with more traditional surveys. A major criticism of vignettes and factorial surveys is whether intentions to act (or not) are a reasonable proxy for actual

behavior. However, some research indicates that this link can be reliable (Pogarsky, 2004; Telser & Zweifel, 2007). Validity is increased when the respondents are more well-versed in the field of environmental regulations compared to the lay person. Drawing from a specialized sample can help reduce perceptual instability issues and order effects bias.

Samples

Researchers administered two waves of the vignette survey to individuals in organizations and businesses who were familiar with or had direct experience working with environmental regulations. The first survey was conducted as part of a larger project on corporate environmental offending funded by the National Institute of Justice (NIJ) (Simpson, Garner, and Gibbs, 2007). Forty-eight (48) companies were identified for participation in the study due to their business location in industries subject to extensive environmental oversight and regulation. These companies were U.S.-owned and EPA-classified “major” facilities in the steel, pulp and paper, and oil refining manufacturing industries. After initial contacts and follow-ups with firms, only three firms agreed to participate in the survey.

Top management gave researchers permission to administer the survey to employees using a link to a web-based survey. The link was shared with employees on an opt-in basis. A technical problem with survey administration in one of the companies resulted in their decision to withdraw consent to participate, thus reducing the number of participating firms (N=2). Given the low response rate, an analysis was conducted to identify any potential bias in the participating companies as some companies may be more inclined to respond if they have higher compliance rates

while others may choose not to participate if their compliance rates are below normative. The small sample size didn't allow for significance tests, but one company had a history of compliance behavior above the average company in the industry while the other had a history similar to the average compliance history.

This wave of data collection presented four scenarios to participants: two noncompliance and two overcompliance scenarios. Noncompliance scenarios included one of “technical noncompliance” (e.g., failure to act/comply with an environmental agency’s order with no information on how pollution levels will be impacted) (n=76) and another describing “significant noncompliance” (e.g., the intentional release of a toxic substance into a local waterway that produces pollution exceeding regulation limits by 200%) (n=78). The overcompliance scenarios asked respondents about their willingness to reduce pollution levels far beyond what regulation requires (n=79) and willingness to adopt a proactive response to protect potentially vulnerable plants with toxic storage sites from terrorist activities (n=75). . Because the outcome variable of interest is the respondent’s willingness to engage in the behavior, observations in which responses to this question were missing were dropped. The number of observations is not equal to a multiplicative estimate of the number of respondents because not all respondents responded to all the scenarios with which they were presented. There were 84 respondents who reported on their willingness to engage in the noncompliance scenarios (n=154) and there were 81 respondents who reported on their willingness to engage in the overcompliance scenarios (n=154). This produced 308 cases for potential analysis from eighty-four participants. There were nine women and 132 men participants who responded to

both noncompliance scenarios, and 10 women and 133 men participants who responded to both overcompliance scenarios in this wave. There were twenty-four participants whose gender was missing.

The second wave of data was collected from a sampling frame of environmental specialists put together by TMone. TMone produces databases for direct mail campaigns that target specific populations. Researchers asked for a list of environmentally experienced employees within organizations who could be contacted for survey participation. This technique removed the need for companies to mediate communication between researchers and participants. A list of 7,292 potential participants were identified by TMone. Letters describing the survey, along with a solicitation to participate in the study, were sent to all potential participants. There were 1,373 letters that were returned as undeliverable. Nonresponses to the original letter were followed up with postcard reminders. 717 individuals agreed to participate resulting in a response rate of 12%. Because the vignette is the unit of analysis, and participants responded to one, two, or three scenarios, this brought the sample size for this wave to 1,814 observations. However, 349 observations dropped from the sample because information on the dependent variable (the willingness to act) was missing, resulting in 1,465 observations reported by 548 participants. There were 206 observations completed by women and 751 observations completed by men for the noncompliance scenarios, and 131 observations completed by women woman and 553 observations completed by men responded to the overcompliance scenarios in this wave. There were 108 participants whose gender was missing.

These two waves of data collection are merged to produce a final sample of 1,773 scenarios completed by 632 participants. The TMone sample included an additional noncompliance scenario beyond what the NIJ sample included. This scenario refers to a storage decision that “ignores a hazardous waste label” (n=275). Survey administration for the NIJ participants allowed for the completion of all four scenarios offered while the TMone respondents were randomly presented with 3 of 5 scenarios. Given these differences, the analysis will control for the data source to account for disparateness between the two samples. However, when accounting for the missingness among all variables analyzed, 258 observations from the noncompliance scenarios and 153 observations from the overcompliance scenarios were dropped from the sample. The final analytic sample was made up of 1,230 person-scenario responses observed.

Survey Context

The data for NIJ was collected from 2005 to 2006 and TMone data collection occurred from December 2008 to April 2009. The administration of the survey and responses may have been impacted by world events and social contexts. The scenario gauging willingness to increase security around toxic storage sites was tied to the 9/11 terrorism events that preceded both times of data collection. Therefore, willingness to participate in this may have been overestimated by both groups, while there were other tragedies and scandals that followed the administration of the NIJ wave. These separate time periods saw drastic changes in the corporate world with the financial crisis, or “the Great Recession,” and an increase in pressure for corporate sustainability by consumers and investors. These marked transitions in the

management of corporations and employment were not considered in the NIJ responses, but decision-making may have been different for TMone respondents.

One wave of data (TMone) collection occurred during a financial crisis, or what later went on to be labeled as the “the Great Recession.” The expansion of the housing markets led to loans that could not be repaid and banks being fearful of lending due to increasing risks. This recession costs many their jobs and homes. Trends such as these increase the probability and intensity of losing one’s job and future employment prospects. Therefore, estimates of these measures may be biased due to an increased risk of unemployment, interfering with personal desire to act according to how they responded for this second wave of data collection. This may manifest as people being more willing to not comply even if it bends their moral values or feel more pressured if being asked by an upper-level manager in either noncompliance or overcompliance requests.

Individual and firm economic concerns were not the only points of societal trouble. Concerns for the environment were on the rise prior to the administration of this survey, inducing companies to be concerned with how they are contributing to environmental issues as they impact social acceptance and stakeholder investments. To improve these perceptions, some companies began to greenwash their environmental practices. Greenwashing is defined as “the intersection of two firm behaviors: poor environmental performance and positive communication about environmental performance” (Delmas & Burbano, 2011). Greenwashing activities were employed across the corporate environment industry to help with appearances. This may have influenced how respondents valued the overcompliance scenarios, but

the state of the world, declining revenues and losing competitive edges, may have negatively impacted the reasonableness of these behaviors. Therefore, it is hard to justify whether the prevalence of greenwashing will bias the reported intent to act on overcompliance because societal goals, like reducing harm to the environment, did not align with the reality of the economic status at the time, i.e., companies could not afford to increase investments into environmentalism. Fortunately, the survey did capture respondents' perceptions of whether they believed the behavior is *situationally realistic*, which may help in distinguishing between the desire to act environmentally and the ability to.

Among the overcompliance scenarios is one in which corporations employ extra security at their location to deter criminal activity and protect harmful substances from being purposefully deployed as weapons. Americans were on high-alert for acts of terror in the decade that succeeded the attacks of September 11th, 2001. Corporations that house toxins or materials that can have catastrophic effects when blown up, may have been sensitive regarding their vulnerabilities. Steps, like making their facilities more secure through increased technological security advancements or placing more guards at their locations, were actual alterations to business that companies could have made, increasing the situational reality of the scenario and potentially increasing intentions to over-comply. This would have impacted all the cases even though the data collection was at two time periods because this event happened prior to administration of both surveys. However, it is possible that the salience was greater for those responding in the NIJ wave because it

happened a few years closer to the attack. The implications of how this event impacted intentions will be explored in the discussion.

DATA AND VARIABLES

There are three parts to the vignette surveys, (1) the scenarios with experimentally manipulated domains, (2) survey questions following each scenario, and (3) demographic information about respondents. The specific domains (with rotated levels) that make up the scenario have been identified in the literature (either theoretically or empirically) to affect individual judgements and choices (see **Appendix 17** and **18** for examples of scenarios). Domains include things such as firm and industry culture as well as the locus of control⁷ regarding the scenario. The current economic and competitive status of the firm and its environmental record also are experimentally rotated. Finally, the dimensions include a firm's internal compliance structure, its history of internal compliance responses, and managerial ethics.

After the participants read the vignette, they are asked questions that tap into how they would act under these circumstances and additional factors that might affect their decision-making. These measures reflect the probability (0= "No chance"; 1= "100% chance") and severity, or intensity, (0= "No problem at all"; 10= "A very big problem") of a set of costs and benefits, including formal and informal considerations. The final part of the survey captures participant demographics (age, gender, marital status), their current employment and firm information (years of

⁷ Locus of control refers to the reasons as to why events occur. There are internal and external loci of control captured in this study. Internal identifies that the intention is rooted in the individual given their positionality and power, and external is defined as the reasons being tied to external pressures.

experience, position in the company, department, does the firm have a code of ethics, etc.), and experience with the situations described in the scenarios.

Dependent Variable

The dependent variable in this study is the participants' intentions of acting as the manager would under the circumstances of each vignette (see **Table X** for a distribution of variables by scenario type). This is measured as a probability on a Likert Scale (0= "No chance", 10= "100% chance") with one survey item asking: "What is the chance that you would act as the manager (Lee) did under these circumstances?" In each vignette, the manager engages in (or orders an employee to engage in) an environmental violation or an act of overcompliance. So, in each vignette the manager described is actively noncompliant or over compliant. Responses for intent to act in the noncompliance scenarios were right-skewed with most respondents indicating "no chance" or a low probability of acting, so this variable was transformed to a binary variable for the analysis. For the overcompliance scenarios, responses varied slightly more, but were left-skewed. For the analysis, the variable was transformed by dividing by 10 to be a fractional outcome that would increase granularity of the variable and precision.

Independent Variables

Gender. This thesis is addressing the eco-gender gap in offending and overcompliance, so the main independent variable of interest is respondent *gender* (0= "Male", 1= "Female").

Morality. Drawing from a multidimensional ethics scale (MES) used in the business ethics literature (Smith, Simpson, and Huang, 2007), nine survey questions captured several aspects of act morality. Eight of these items were transformed into three scales with the ninth variable referring to a general “ethical or unethical” evaluations. Each of these questions used a 7-point Likert scale to measure whether the respondent thinks the act is moral or not. The three dimensions include, *moral contractualism*, which asks if the act violates an unwritten contract or an unspoken promise; *moral relativism*, gauging the culturally or traditionally acceptable nature of the act; and *moral equity*, which is more of a fairness scale. Some of these scales measured the morality dimension with the high values representing a lower score of morality for the scenario act. The variables for *moral relativism* and *moral equity* were re-coded so that the act was rated as more moral when the score was higher and less so at the lower ends of the scale. For example, in reference to moral relativism, a higher score would now be an indication that the act was more culturally acceptable.

Cost of noncompliance. The individual costs of noncompliance include formal, informal, and self- sanctions. These sanctions are calculated as an interaction between the probability, or certainty, (0= “No chance”, 10= “100% chance”) and severity (0= “No problem at all”, 10= “A very big problem”) of the consequences (see **Appendix 2** for the variable descriptives for noncompliance scenarios). Formal sanctioning includes potentially being *arrested* for a criminal offense and being *civilly sued*. Informal sanctioning can come from social stigma at work and in one’s personal life if the act is known informally. This may be experienced as *losing the respect and good opinion of business associates and close friends*. Being involved in

the criminal justice system may also possibly result in *losing your current job position* and *jeopardizing future employment opportunities*. Beyond externally imposed punishments, people may personally experience *shame*, measured as the certainty and severity of experiencing this emotion. Ethical considerations, like *endangering human life* (0= “No chance”, 10= “100% chance”) and *endangering wildlife* can trigger shame and promote altruism. These variables can connect the perception of harm to the shame experienced and altruistic nature of the respondent because these factors capture “other” -focused information.

Firm costs of noncompliance include the same interaction between the chance (0= “No chance”, 10= “100% chance”) and severity (0= “No problem at all”, 10= “A very big problem”) of the consequences from not complying with the law or purposefully ignoring regulations. Firms can be formally sanctioned by being *civilly sued, criminally prosecuted, or investigated by a regulatory agency*. Informal sanctions refer to the potential of the firm losing a good reputation which is measured by the certainty and severity of the reputation being tarnished.

Benefits of noncompliance. While noncompliance includes potential negative consequences, it may also result in positive outcomes. Regardless of whether individuals over comply or fail to comply with regulations, depending on a company culture, that person may be seen as a loyal employee which can produce an extrinsic reward through “*advancing a person’s career*” (0= “Not at all”, 10= “A great deal”). Another reward, one of intrinsic value, may stem from experiencing a *thrill* (0= “Not exciting”, 10= “Very exciting”) from engaging in illegal behavior. Firms may benefit by “*strengthening their competitive position*” (0= “No”, 1= “Yes”).

Costs of overcompliance. Overcompliance would commonly be understood as only a good thing for the environment, a companies' reputation, possibly profits, and social acceptance, but not all firms care about the environment. An individual cost may come at the cost of going against the firm if they do not practice environmentally friendly practices. To measure whether an individual would be jeopardizing their position at their current employment, I will be using an interaction measure between the *desirability* (0="Not at all desirable", 10= "Very desirable") of the action and whether it is *common within the firm* (0= "No", 1= "Yes"). Firms may bear costs from extreme volunteerism if they are currently experiencing "*declining sales and revenues*" (0= "No", 1= "Yes") and "*losing ground to foreign competitors*" (0= "No", 1= "Yes").

Benefits of overcompliance. Individuals and firms can observe social, financial, and market benefits from engaging in practices that go above and beyond regulatory standards. These benefits refer to the interaction between the probability of experiencing the benefit (0= "No chance", 10= "100% chance") and the amount to which an individual would benefit from this result (0= "Not at all beneficial", 10= "Extremely beneficial"). These social benefits for individuals include "*gaining the respect and good opinion of business associates*" and "*of close friends*" along with being *promoted* at their current employer and *gaining future job prospects*. The personal benefits may include intrinsic rewards like experiencing *pride* (0= "No", 1= "Yes") for acting in an altruistic manner. The firm would be expected to experience a change (positive) in their *reputation* when they take these steps to improve their

environmental impact, measured by the certainty of the act enhancing the reputation and the intensity of such benefits.

Control Variables

Control variables include demographics like *age* (in years), *marital status* (binary), and *years at current employer*. These controls are informed by theory and empirical literature that argues that this type of crime and behaviors are likely to be committed by people who are older, on average, compared to street offenders. This is because it takes time to gain employment and power to act in corporations. Marital status relates to the traditional bonds that people have that would theoretically deter them from crime, and years working at a firm would also be a sign of a growing connection, or loyalty, to a corporation. Vignette survey questions about the *situational reality* (0= “Not realistic”, 1= “Realistic”) and *desirability* of the behavior (0= “Not at all desirable”, 10= “Very desirable”) were included because they would impact whether someone thought that the scenario construction itself was believable and if it would be something that would be acceptable by those around them. The respondents’ *firm’s ethical practices*, which were binary variables of independent practices that were transformed to a single dummy variable indicating whether at least one of these practices is common in the firm. This speaks to the respondent’s experience with ethics training and whether they believe that their firm would encourage or discourage these kinds of behaviors. The context in which the respondent was perceiving the scenario and decision, such as whether they were *being asked* (0= “No”, 1= “Yes”) or if someone else *asks a manager* along with the position of the supervisor (*middle vs. upper manager*) will be controlled. This is

because the external locus of control may force respondents to follow the demand of their supervisor, even if it is counter to their own morality or beliefs. Similarly, the demand to engage in misconduct or overcompliance may put others at ease because they are able to separate themselves from the actual decision responsibility. The internal locus of control, like the respondent's *level* ("employee," "management," or "executive") within the firm is theoretically tied to having varying degrees of knowledge and control on these types of situations. Their *personal experience with or knowledge of the different scenarios* occurring (0= "No", 1= "Yes") should be included because this past behavior would inform future offending or knowledge about how investing in sustainable efforts could help/hurt a firm. Finally, the organization of survey administration along with minor scenario construction and administration differences between the two surveys (*NIJ*; 0= "TMone", 1= "NIJ") requires them to be controlled for.

ANALYTIC STRATEGY

The distribution of the dependent variable clusters differently across the two types of scenarios indicating a need for different regression analyses. Among the noncompliance scenarios, the willingness to act is clustered toward the low end of the extreme (most participants reported a low probability of intent to act). Because most people reported a zero probability that they would act illegally, this outcome will be transformed into a binary variable where "0" represent "no chance" of engaging in illegal behavior and "1" represent a non-zero probability of illegal action. Logistic regression analysis will be conducted to estimate how the variables of interest influence decision making intentions. These results will be reported as beta

coefficient, odds ratios, and specific p values in the “Results” section and tables will report the results in terms of beta coefficients. The observations of the dependent variable for the overcompliance scenarios are skewed left, indicating that this outcome clusters around a 7.93 (or nearly 80 %) probability of acting. Tobit regression models will be estimated due to this concentration of the dependent variable around certain ranges— around 5 and 7-10. Logistic regressions are designed to estimate the log-odds of an event occurring and are utilized when the dependent variable is binary. Tobit regressions are appropriate for data that are censored at one tail of the theoretical distribution due to the nature of the variable definition. In this case, the distribution is concentrated near the upper bound of the scale overcompliance scale. Independent variables and interaction terms, in which these variables interact with being female, independent, and interacting with *woman*, will be included in the models to test hypotheses and assess whether key independent variables differentially affect intentions to engage in corporate environmental offending or overcompliance.

While variables were theoretically chosen to be in the models, multicollinearity tests were run to see any of the many independent variables or controls were collinear with one another (see **Appendix 3** for covariates and controls included in the noncompliance models and **Appendix 4** for covariates and controls included in the overcompliance models). These analyses did not identify any issues with two or more covariates or controls capturing similar and overlapping constructs. I chose the following variables as covariates in the regression models due to their theoretical links to the outcomes: *scenario*, *age (years)*, *years at current employer*,

marital status (binary), *personal experience in similar situations*, *firm's environmental commitment*, *ethical practices* (binary), *situational reality*, *desirability*, and *sample* (NIJ=1).

In conclusion, the theoretically identified independent variables and controls were appropriate because they were all contributing different concepts to the model that were related to the theoretical framework. However, there are some variables, like legal and informal individual and firm sanction risks that are perception-based scales that are overall measuring risk and costs of sanctioning. While these were measuring a similar concept, tests of multicollinearity did not recognize a concerning amount of overlap (variance inflation factor values 10 and over are concerning). They are also important individually as they capture separate explanations which contribute to possible gender differences – important to the present study that is examining the eco-gender gap.

Chapter 4: Results

DESCRIPTIVES

Table 1 lists the five different types of vignette scenarios that were experimentally rotated in the survey, with the distribution of gender for each scenario. As mentioned, three of the scenarios are describing non-compliance scenarios and two are overcompliance scenarios. Each type of scenario has a “normative” scenario while the other scenario(s) are slightly more extreme compared to the reference scenario. Noncompliance scenarios account for more of the data because there was an additional scenario added to the TMone wave of data collection – “ignores hazardous waste.” There are more males than females in the data, which will be discussed as a limitation later.

Table 1. The distribution of the different scenarios by type and frequency by gender.

Types of Vignette Scenario	%	Men (N)	Women (N)
Non-compliance Scenarios	58.83		
<i>Ignore Compliance Order</i>	37.20	205	55
<i>Discharge Toxins</i>	36.77	200	57
<i>Ignores Hazardous Waste Labeling</i>	26.03	140	42
Over-compliance Scenarios	41.74		
<i>Keep Pollution Levels 40% Below Required</i>	48.21	205	51
<i>Counter-terrorism: Enhance Security</i>	51.79	226	49

First, comparing the willingness to act across all vignettes, the “normative” scenario for both types of compliance, reports the higher probability. For noncompliance scenarios, this is the “ignore compliance order” situation, which reports a (mean=1.44) and for overcompliance scenarios, “enhance security” reports a higher likelihood compared to “keeping pollution levels 40% required levels” (mean=8.06).

The bivariate relationship between the experimentally rotated domain of scenario and the outcome is negatively related, meaning that as the experimentally rotated domain of scenario changes from a “norm” of “ignoring compliance orders” to “discharge toxins” for noncompliance or “enhancing security” to “keeping pollution levels 40% required levels” for overcompliance, the likelihood to act decreases. This indicates that when considering the scenario, independent of other covariates, is important to the likelihood to act and this probability decreases as the scenarios become more “extreme.” When reporting using the binary outcome, the “normative” scenario domain that is experimentally rotated also receives, on average, more support for intent to act (mean=0.468). The bivariate relationship between scenario and the binary outcome is statistically significant ($\beta = -.094$, OR = .910, $p=.03$). This indicates that the scenario type is important because there is a statistically significantly higher likelihood to act on the “normative” scenario compared to the more “extreme” scenarios.

Generally consistent with hypothesis 1, when comparing the willingness to act for each scenario between men and women, women had a lower probability of engaging in all three noncompliance scenarios while these probabilities were mixed in the overcompliance scenarios. In the overcompliance scenarios, women had a higher probability of willingness to act in the “extreme” scenario while men had a higher likelihood to act on the more “normative” scenario of “enhancing security.” *Gender* is statistically significant ($\beta = -.322$, $p=.030$), but this significance does not translate when the outcome is binary ($\beta = -.203$, OR = .817, $p=.228$). The reported probabilities of this scenario type (noncompliance) clustered at the lower end of the

Likert scale and these results indicate that there is statistical difference between men and women among these lower end values, but this significance is not observed when the variable is transformed to be more appropriately analyzed, as a binary, because these reports are clustered at the low end with relatively few high values reported. (See **Appendix 1** for the full list of descriptives among covariates used for noncompliance scenarios and **Appendix 2** for the full list of descriptives among covariates for overcompliance scenarios.)

REGRESSION ANALYSES

Noncompliance Models

The first noncompliance model is using logistic regression to test the predictive value of morality and if it varies between men and women's likelihood to engage in noncompliance. **Model 1** includes the key independent variables - *gender* and the moral dimensions (*moral relativism*, *moral contractualism*, and *moral equity*), both of which appear to be important indicators of the binary intent to act as the manager (see **Appendix 5**). This model identifies these four variables independently [*female*, ($\beta = 1.36$, OR = 3.90, $p=.04$); *moral contractualism*, ($\beta = .081$, OR = 1.08, $p=.02$); *moral equity*, ($\beta = 0.44$, OR = 1.55, $p=.00$); *moral relativism*, ($\beta = .068$, OR = 1.07, $p=.04$)] as positively associated and statistically significant with the dependent variable. In contrast to the binary results, *woman* is no longer associated with a lower probability of noncompliance (relative to males) once morality measures are included in the equation. These results indicate that being a woman increases, by 3.9 times, the likelihood of acting as the manager when different morality dimensions are added to the analysis. To determine if the statistical

difference between men's and women's moral dimensions in relation to the dependent variable was significant, interaction terms were included in the model- interacting gender with the three moral dimensions. When *moral contractualism* ($\beta = -.19$, OR = .83, $p=.03$) and *moral equity* ($\beta = -.23$, OR = .79, $p=.03$) are interacted with *gender*, they are negatively associated with the outcome and are statistically significant. This means that women are less likely, compared to men, to offend even if they perceive the act to be moral (see **Figure 1 & Figure 2**). Regarding *moral contractualism*, the direction of intention for men and women are opposite as the perception of morality increases for that scenario. This is not surprising for men as they are likely to feel comfortable engaging in behavior if they believe that the rules allow them to; this is related to the hierarchy of justice that is pronounced in prior literature (Gilligan & Attanucci, 1988). It is slightly surprising that as morality goes up, though, intention decreases for women. This could be that they theoretically understand that it is acceptable from a legal perspective to act illegally, but their moral values inhibit them because they know that it would be harmful. Related to prior literature, women are focused on others and men are subject to following the order of things. For *moral equity*, both men and women have positive relationships with these scores and the dependent variable. However, the slope for women is not as steep and men's likelihood levels off at a lower value compared to women, as illustrated in **Figure 2**. This indicates that men have a lower threshold for intention in relation to morality compared to women.

Figure 1. This margins plot illustrates the interaction between *gender* and *moral contractualism* among the noncompliance scenarios for the values of the distribution for moral contractualism. There is a negative relationship between intention and *moral contractualism* for women and a positive relationship for men.

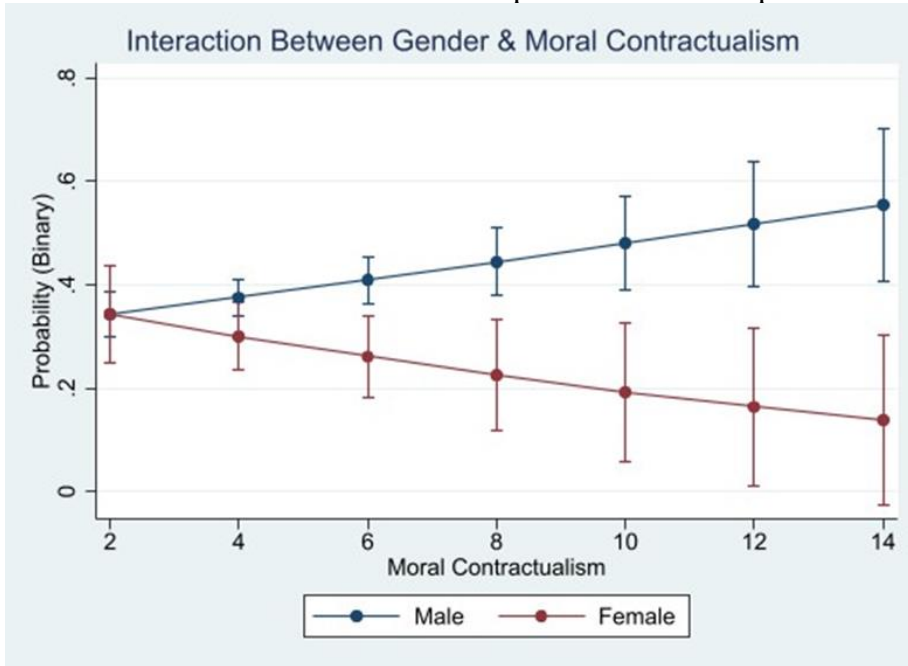
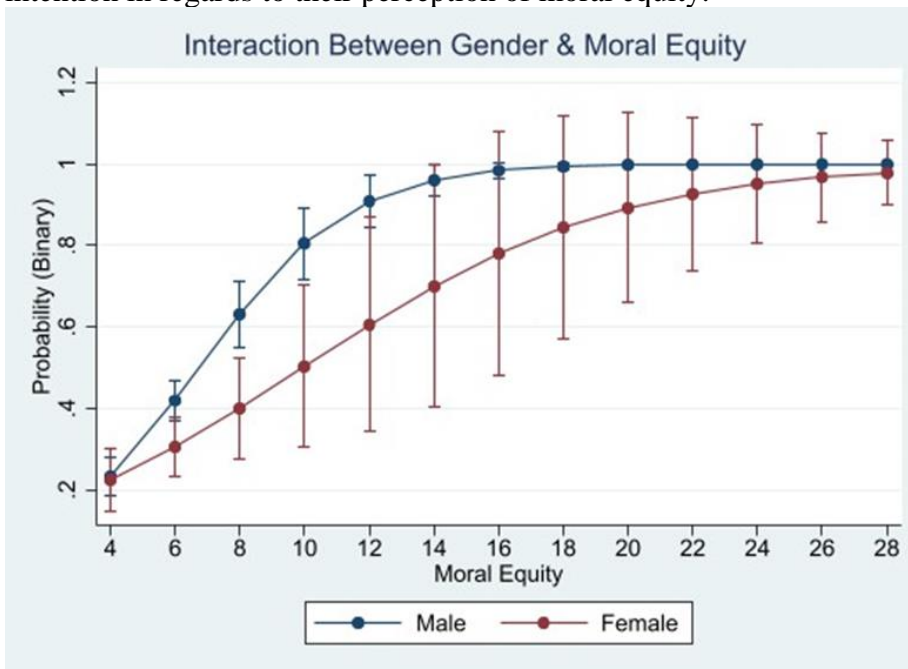


Figure 2. This margins plot illustrates the interaction between *gender* and *moral equity* among the noncompliance scenarios. Both men and women have a positive relationship between intention and moral equity, but men have a lower threshold for intention in regards to their perception of moral equity.



The second logistic model of noncompliance scenarios tests the influence of costs on the decision to act and the differences in risk perceptions between men and women. Therefore, **Model 2** includes the costs of engaging in noncompliance, including the legal and informal sanctioning at the individual and firm levels along with personal shame experienced, and interactions between being a *woman* and the risk perception of these costs (see **Appendix 6**). This logistic regression indicates that *gender* is not statistically significantly related to the dependent variable, it is negatively associated ($\beta = -.08$, OR = .92, $p=.93$) - opposite of what is evidenced in **Model 1**. The only important predictor indicated in this model are the *informal individual sanctions* ($\beta = -.01$, OR = .99, $p=.001$). Interestingly, the beta coefficient is negative supporting the expectation that more informal sanctioning would deter offending. The lack of statistical significance among the interaction terms suggests that there are no significant differences in perceptions of these costs and the outcome between men and women.

Another important part of the rational choice theoretical framework focuses on the benefits, or rewards, of not complying. **Model 3** utilizes Logit to analyze if, similar to costs, benefits are influential as expected rewards and if there is a perceptual difference between men and women in these rewards (see **Appendix 7**). These benefits include the individual informal social praises, extrinsic (*career advancement*), and intrinsic (*thrill*) rewards as well as firm-level reputational and economic benefits of not complying. *Career advancement* ($\beta = .19$, OR = 1.21, $p=.00$) and *thrill* ($\beta = .38$, OR = 1.46, $p=.00$) of committing a crime, are important indicators of willingness to act. The greater the likelihood and intensity for *career*

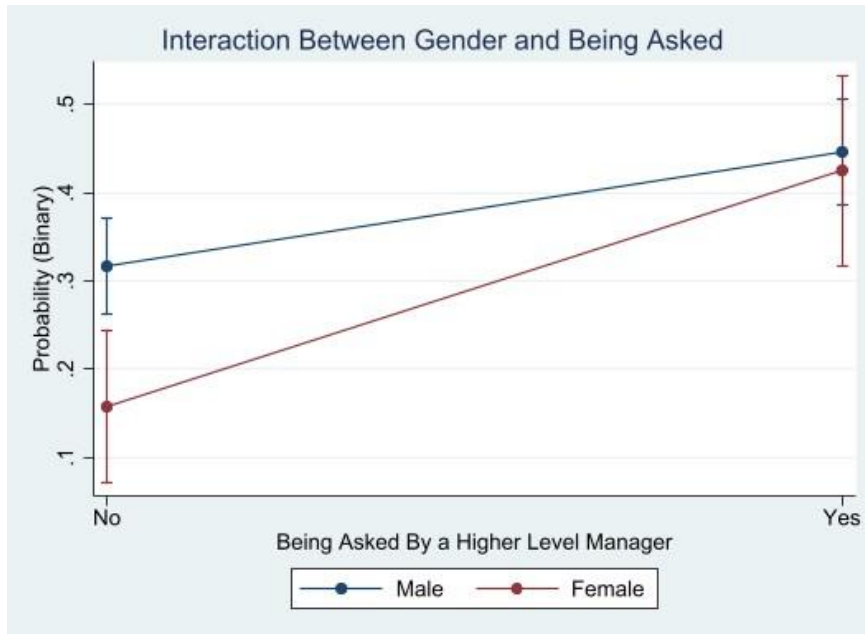
advancement and a higher score for the feeling of *thrill*, the greater the likelihood of intending to act illegally.

These findings may be a nod to the difficult times faced by the majority of respondents completing the survey. For TMone respondents, the financial crisis may have forced them to place a greater emphasis on individual advancement. And in regard to intrinsic rewards, this time was daunting, and many were stuck in survival mode, so this predictive power of thrill may be loosely coupled with the need to feel more than pure existence. The lack of statistical significance in the interaction terms suggests that men and women did not perceive these rewards differently. Hypotheses drawn from prior literature regarding gendered differences in the perceived costs and benefits of offending and harming the environment are unsupported in the logistic regression **Models 2** and **3**. This could be for statistical reasons in that both risks and rewards were not tested in the same model, or it may be related to contextual factors. Given the circumstances surrounding the uncertainty of employment security, judgment calls for men and women were more similar than different.

Moving beyond the key covariates and rational calculus, **Model 4** looks at the locus of control, internal and external, for decision-making, and how these loci interact with gender (see **Appendix 8**). The logistic regression tests where the responsibility for the decision is stemming from, within or outside actors, and if these sources of control differ for men and women. This model is important because we know that the feeling of being in control and being controlled are important in the corporate setting. While people have agency in their decisions, corporate needs and

expectations may trump this agency. Further, these experiences are gendered through women being more likely to abide by obedience norms to avoid conflict with others. *Being asked* by one's supervisor ($\beta = .56$, OR = 1.75, $p=.00$) was positively and significantly associated with noncompliance, meaning that there was a 1.75 times greater likelihood of intending to act compared to those whose scenarios did not indicate being asked. This is expected given that an outside request lowers internal locus of control, resulting in a greater willingness to do things that people may otherwise not want to do. There is also a significant interaction with *gender* at the .1 p -value threshold ($\beta = .84$, OR = 2.32, $p=.06$). Thus, men do not necessarily need to be asked by a higher-level manager to be willing to engage, but women's probability skyrockets when someone asks them to not comply (see **Figure 3**). This finding supports the theory that women are socialized to obey authority in that they prioritize relationships, i.e., someone asks you to do something, and this increases your willingness because you want to have a relationship with that person and offer support in any way you can. It could also be a consequence of a woman feeling vulnerable to suffering a penalty if they do not do what is asked of them.

Figure 3. This margins plot illustrates the interaction between *gender* and *being asked* by a higher-level manager among the noncompliance scenarios. A positive relationship is observed for both men and women, but the intent increases at a significantly higher rate for women when asked compared to the difference in being asked and not for men.



Model 5 is a full regression equation, inclusive of all the covariates included in **Models 1-4** as well as controls. These control variables include demographic information, employment status, and respondent’s corporate culture. It incorporates all of the theoretically motivated aspects of the rational choice theory of corporate crime-- threats of punishment, perceived rewards, and morality- as well as controls to test for which aspect is the most important when making the decision to act illegally. **Model 6** also includes these variables, but it focuses on assessing the objective concerned with the gendered mechanisms of the decision, so interaction terms are included in this model. (See **Appendix 9** for a side-by-side comparison of the independent effect of the covariates for these two models and **Appendix 10** for the results on the interaction between *woman* and the covariates.)

For **Model 5**, *moral equity* ($\beta = .34$, OR = 1.40, $p=.00$), *career advancement* ($\beta = .11$, OR = 1.11, $p=.01$), *thrill* ($\beta = .27$, OR = 1.31, $p=.00$), *danger to human life* ($\beta = -.15$, OR = .86, $p=.01$), *danger to aquatic and wildlife* ($\beta = .15$, OR = 1.16, $p=.05$), *being asked* ($\beta = .66$, OR = 1.93, $p=.00$), *scenario*, *years at current employer* ($\beta = -.03$, OR = .97, $p=.05$), *marital status (binary)* ($\beta = .77$, OR = 2.16, $p=.01$), *personal experience with the scenarios*, and *desirability* ($\beta = -.23$, OR = .79, $p=.01$) are identified as important indicators. *Woman* (relative to a man) is insignificant in the equation. This suggests that differences between males and females *per se* are not driving intentions to offend, but rather other factors appear to influence the decision. For instance, the more “just or fair” a person believes the act to be, the more likely they are to not comply with environmental requirements. This significant relationship indicates that those who find this act not “just or fair” are statistically different from those who find it more ethical. Morality (as measured by the dimension of an act being fair or just) then is a key factor affecting noncompliant intentions.

As for other predictors, *career advancement*, *thrill*, and *being asked* were all found significant in prior models, but the continued statistical significance in a model with all the covariates and controls indicate that these factors are driving the decision-making process. This means that the individual benefits of experiencing excitement and having the opportunity to advance in their employment matter more than firm level benefits (which fail to reach significance in the model). *Being asked* reflects the power aspect in the decision stems from another person, not the respondent.

Danger to human life (as expected) is negative while *danger to aquatic and wildlife* is positive. These contradictory results may indicate that people are more concerned with environmental consequences for humans than for aquatic life because we do not see or experience those dangers as intimately. It may also seem more deplorable to be willing to harm other humans than wildlife in general. Regarding *personal experience*, those who have experienced similar situations as those described in the scenarios ($\beta = -.47$, OR = .63, $p=.04$) or who find these scenarios unrealistic ($\beta = -.73$, OR = .48, $p=.05$) have a lower likelihood compared to people who have not had experience with them. This means that those who have experienced similar situations may be more in tune with the consequences of these decisions and feel that the aftermath of noncompliance is not worth the possible benefits, which relates to the deterrent idea connected to rational choice theory. As such, people who have experienced a situation once may have a better grasp on perceived risk and rewards. Similarly, the negative relationship of *desirability* is expected. *Desirability* may be linked to context, i.e., the TMone respondents are sensitive to the financial conditions in the country and thus are protective of their positions in corporations or their pro-environmental attitudes cause them to feel a greater sense of personal shame if they were to engage in crime. Because engaging in the illegality of noncompliance can negatively impact how these people and entities are perceived, this can hurt their position in the industry through a lower approval by stakeholders and decreased consumer base. This was not the time, given the expansion of sustainability pressures and a declining stock market to upset the image of the individual or their corporation.

The logistic regression for **Model 6** includes the interaction terms for the relationship between gender and the covariates (see **Appendix 10**). *Moral equity*, *career advancement*, *thrill*, *being asked*, *scenario*, and *personal experience* were all independently statistically significantly related to intention. The only important indicator among the interaction terms was the interaction between *woman* and the respondent's *ethical practices (binary)* ($\beta = 1.72$, OR = 5.58, $p=.04$). This measure is a dummy variable where "0" represents no ethical practices implemented in the respondent's firm and "1" representing at least 1 ethical practice implemented in the respondent's firm. Women respondents who are employed in a company that has at least one internal compliance program controls increases her likelihood of noncompliance compared to those whose firm has no such program. This is counterintuitive to expectations—perhaps reflecting that females (relative to males) may sense that the internal compliance mechanisms are window-dressing and therefore not meaningful in practice. However, men's reduced likelihood of acting compared to women when ethical practices are observed in their respective firms may be indicative of external morality affecting men and women differently. Men who observe ethical standards and codes in the workplace are more influenced by the "external" ethical nature of the firm compared to the impact that these practices would have on women.

Overcompliance models

As mentioned, the overcompliance models use Tobit regression to test the anticipated relationships. The following analyses follow a similar strategy to that utilized in the noncompliance models. The first overcompliance model examines

gender and morality to assess whether there is a gender difference in the likelihood of engaging in extreme environmentalism once morality is accounted for. Hypotheses 1 and 3 expect that females will be more likely to engage in overcompliance and that they will see the acts as more ethical than their male counterparts.

Model 1 includes the key independent variables - *gender* and the moral dimensions (*moral relativism*, *moral contractualism*, and *moral equity*), with only 2 dimensions being statistically significant [*moral equity*, ($\beta = .03, p=.00$); *moral relativism*, ($\beta = .02, p=.00$)] (see **Appendix 11**). While these are weaker associations than in the noncompliance models, the results indicate that those who think that these behaviors are more relatively moral and fair, are more likely to engage compared to those who do not think that these are relatively or fair acts. *Contractualism* is not significant, which is interesting because these behaviors, especially the more extreme scenario, are not technically breaking an unspoken promise or contract, but it is not necessarily common in industries given the demanding nature of keeping pollution levels that low. Contrary to expectations, *woman* is not significant in the model nor are any of interactions.

The second Tobit model of noncompliance scenarios tests the influence of costs on the decision to act and the differences in risk perceptions between men and women. Therefore, **Model 2** focuses on the costs of engaging in overcompliance, including individual costs, like social stigma experienced in the firm, and firm costs, like market and economic health being negatively impacted (see **Appendix 12**). Regressing the outcome on these variables, gender, and the interaction of gender and

these variables, the Tobit models test if there is predictive power from these variables and whether there is a significant difference between men and women. Directionally, women are less likely to engage in overcompliance in this model, which is not expected. However, the coefficient for woman is weak and insignificant. The *individual costs* ($\beta = -.02, p=.00$) of acting is statistically significant and negatively associated with acting, which is to be expected. The greater the individual costs, i.e., the more likely your firm will not approve of your decision to act environmentally, the less likely you are to act. However, the interaction between this variable and *gender* ($\beta = .006, p=.643$) was not statistically significant, indicating that this act would not differentially influence men or women regardless of the social acceptability of it. However, it is possible that this lack of statistical difference is because both men and women have different reasons why these would impact them, which would balance out the difference. Men would not want to act to reduce the risk of losing their job or appearing “weak” in the company, while women would also not want to risk their job, but would not want to experience social stigma, like they betrayed the company. This is still surprising, however, because this covariate is more focused on informal sanctioning within one’s firm. The criminological literature has found women to be more concerned than males about informal, or social stigma, consequences, which would predict lower participation, but the eco-gender gap would theoretically argue that they would be more likely to engage in overcompliance. The potentially weakening of the firm’s competitive status ($\beta = -.05, p=.03$) is also negatively and statistically significantly related to the outcome. This is to be expected because the firm’s survival impacts respondent’s employment status and the lack of

thriving by the company within the industry hurts finances at the individual level as well.

Another important part of this rational choice theoretical framework are the benefits, or rewards, of being environmentally conscientious. **Model 3** utilizes Tobit to analyze if, like costs, benefits are influential as expected rewards and if there is a difference between men and women's perceptions of these rewards. Hypothesis 5 anticipates a women will not perceive the rewards to be as beneficial compared to men. Like the noncompliance models, **Model 3** includes variables considered in a rational choice calculus but examines benefits rather than costs (see **Appendix 13**). These benefits include the individual informal social praise and intrinsic (*pride* and *feeling good*) rewards as well as firm-level reputational and economic benefits of over complying. The important predictors in this model were the *firm's reputational benefits* ($\beta = .00, p=.00$) and *feeling good* ($\beta = .34, p=.00$), but there were no significant differences between men and women among these factors. Reputation is a factor that can really help or hurt a firm in such a way that an individual level employee would experience negative consequences if their actions resulted in a bad firm reputation. If the firm's reputation suffers, profits and stocks suffer, which produce firm-level consequences, so it is not surprising that this was a significant influence. Theoretically, I would have expected these reputational benefits to be statistically significantly different between men and women. Men tend to value the positive economic and status related factors more, and especially when discussing overcompliance, I would have expected it to weigh more heavily on men's decision to act. The coefficient for *feeling good* shows a moderately positive relationship that

with every one unit increases in the intrinsic reward of feeling good about acting environmentally friendly, the probability of the respondent engaging increases by 0.34. Similar to the idea that *thrill* is significant among the noncompliance scenarios, people during this time were not experiencing the best emotions, so getting the opportunity to feel good about oneself was probability very important to the TMone respondents.

Moving beyond the key covariates and rational calculus, **Model 4** looks at the locus of control, internal and external, for decision-making, and how these loci interact with gender (see **Appendix 14**). The Tobit regression tests where the responsibility for the decision is stemming from, within or outside actors, and if these sources of control differ for men and women. *Being asked* ($\beta = .19, p=.00$) was positively and significantly associated with the dependent variable. This was observed among the responses for noncompliance as well, indicating that this source of external locus of control can greatly impact probability to act in either direction - illegally or as extreme volunteerism. This finding is informative because it illustrates how important the power dynamic can be in corporation decisions, but it is not surprising since we know that people were more fearful at this time. People in both waves of data collection were fearful of terrorist attacks, so it is possible that if a supervisor was asking for more security, it was trusted that it was necessary to the defense of a facility. And in the second wave, for either type of scenario, people were more fearful and vulnerable to loss of employment that was hard to regain.

Gender is a key variable, and the other covariates are linked theoretically to be gendered, which is why it is important to examine these parts of the decision-making process separately regarding gender. However, it is also important to include all the covariates in a model to identify which factors are driving the decision. **Model 5** includes all the covariates included in **Models 1-4** as well as controls (see **Appendix 15**). These control variables include demographic information, employment status, and respondent's corporate culture. This model does not include interaction terms to examine how gender interacts with all these variables, and the influence that all variables, including interactions, have on the dependent variable. However, **Model 6** does investigate these interaction terms (see **Appendix 16**). Utilizing Tobit regressions, **Model 5** incorporates all of the theoretically motivated aspects of the rational choice theory that are required - perception of costs and rewards as well as the prosocial influence of morality- as well as controls to test for which aspect is the most important when making the decision to act in an extreme manner. **Model 6** also includes these variables, but it focuses on assessing the objective concerned with the gendered mechanisms of the decision, so interaction terms are included in this model. (See **Appendix 15** for a side-by-side comparison of the independent effect of the covariates for these two models and **Appendix 16** for the results on the interaction between *woman* and the covariates.)

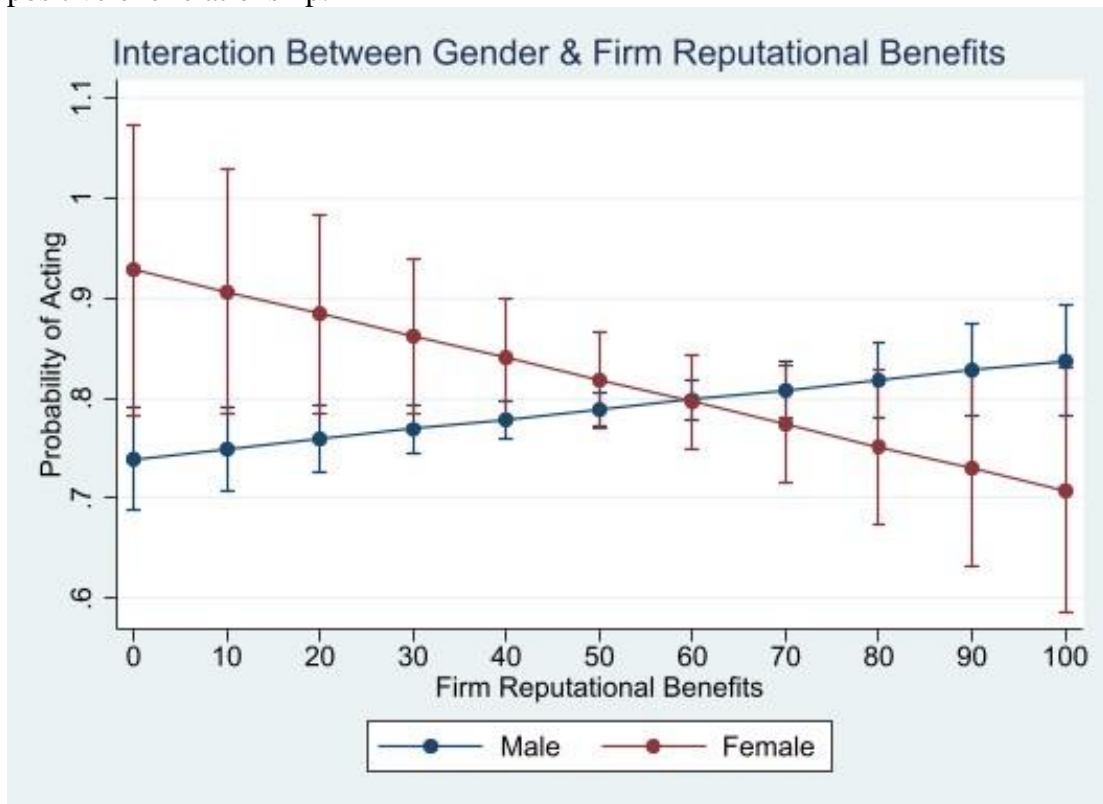
For **Model 5**, similar to findings in previous Tobit models, *moral equity* ($\beta = .02, p=.00$), *individual costs* ($\beta = .01, p=.00$), *feeling good* ($\beta = .07, p=.01$), and *being asked* ($\beta = .11, p=.00$) were important indicators for over complying. Compared to prior models, weakening their competitive position and the firm's

reputational benefits are not significant predictors. These variables are firm-level covariates while the variables in this model that explain overcompliance through the vignette domains are more individual-level factors. The relevance of these covariates in the model highlights that individual benefits and harm are important in making employment decisions. And the power of external control emphasizes that power dynamics in the workplace matter. Further, the *environmental commitment* of the respondent's firm, *situational reality* ($\beta = -.07, p=.00$), and *desirability* ($\beta = -.01, p=.00$) were statistically significant. The inverse relationship between *situational reality* and the dependent variable are expected because if the respondent does not perceive the situation, like "keeping pollution levels 40% below standard levels", as attainable, they are less likely to respond with the intent to act. This perceived lack of situational reality also could be associated with the other experimentally rotated vignette domains, like whether this could be common in the firm and something that would competitively hurt the firm. If these descriptions were used, it is possible that it would not be believable given that these are contradictory to the survival of the firm. However, the negative association between desirability and intentions is unexpected suggesting that the *more* desirable the behavior, the less likely the respondent would act. An explanation for this is that the act is desirable as an altruistic, environmental behavior, but it may be impacted by the negative ramifications of investing money at a time when companies could not afford it.

When including interaction terms in the Tobit regression, **Model 6** demonstrates that the same variables that were independently associated with overcompliance are still significant when including interactions (see **Appendix 16**).

Again, firm-level variables do not seem to be important factors when concerning these scenarios, except for an interaction term I discuss later. This lack of firm-level influences supports the idea that these types of environmental decisions within a corporate context are driven more by individually based factors. The only interaction terms that were found to be important are *firm reputational benefits* ($\beta = -.00, p=.02$), characterizing women as being more intentional about acting even when firm benefits are low (see **Figure 4**). The margins plot shows that women are still more likely than men to engage in overcompliance when the firm is not perceived as receiving large reputational benefits, but less likely when receiving these benefits. In reference to the uptick in probability to act, for men, when the benefits are perceived to be high, this is expected. Men are driven by external rewards more than women. This supports the idea that women do not need to perceive external rewards to act. However, the reduction in intent when benefits are high, for women, is harder to explain. The level of power could influence this decision because those in positions of higher power may be aware of the state of the firm and have better insight into whether engaging in sustainable efforts are realistic for the firm.

Figure 4. This margins plot illustrates the interaction between *gender* and *firm reputational benefits* among the overcompliance scenarios. Women have a negative association with firm reputational benefits and probability of acting while men have a positive one relationship.



Chapter 5: Discussion & Conclusion

DISCUSSION

The main purpose of this study is to assess whether there is an eco-gender gap in relation to corporate noncompliance and overcompliance. Further, I explore the differences between men and women in decision making. Gender was very rarely found to be a significant predictor in the models once rational choice variables are included, indicating that it may not play as big of a role in the decision as expected.

Descriptively, women do not necessarily perceive environmental noncompliance as highly immoral, more so than men. Women, on average, perceive *moral contractualism* and *moral relativism* higher than men's perceptions for noncompliance and lower for all moral dimensions among the overcompliance scenarios. This evidence does not support **Hypothesis 2** and **Hypothesis 3** and differs from prior literature that suggest women perceive crime and overcompliance to be more immoral and moral, respectfully. This could be related to the time of data collection in which case, women's behaviors were changing with the need for more women in the workforce during financially hard times. The population of women may just differ from previously studied groups of women. However, the interaction terms tell a different story. Even when men and women's scores are similar across the moral dimensions, women's likelihood to act is lower compared to men. Such interactions indicate that morality is not necessarily the deciding influence in making these decisions, as a higher perception of morality does not equate to a similar direction of intention. As such, morality is being shown to produce an inhibiting effect for women, but not men.

Hypothesis 4 is also not supported as most of the costs of noncompliance, in both the full model without and with interaction terms, are not perceived to be greater for women than men. Related to the rational choice theoretical framework, costs seem to be more pertinent than rewards, which may indicate that the sample may be composed of risk averse responders. This aversion is directly attached to the societal contexts of sustainable pressures and need for job security.

Hypothesis 5 lacks support from these analyses because there does not seem to be a difference in the perceptions between genders and their probability of engagement. However, men are likely to act when firm benefits are perceived to be greater. This is expected as men are socialized to be driven by external, monetary rewards. Related to the survey administration, this pursuit of enhancing firm reputation is coming at a time, for both NIJ and TMone respondents, when sustainability efforts are being pushed and consumers are straying from those who are not being environmentally conscientious. For observations from the TMone sample, this may also be due to the need to have competitive advantages as many industries were suffering from loss of investors and shrinking consumer bases. Altruism was not tested directly, but captured through proxy measures (*dangers to others* and *wildlife*), which were important predictors when accounting for all covariates.

Returning to the context of survey administration, the significance of some variables may be an indication of how those times were and the expectations of individuals and firms. The stronger relationship between individual benefits, like *career advancement* and *thrill*, and cost, like *informal costs* of social stigma, could indicate that people were worried about their place in firms and were willing to

comply with illegal requests out of fear of retaliation. *Being asked* was significantly associated with intent for both scenario types which is a nod to the idea that people were replaceable at that time. Like not being able to take environmentally friendly investment risks, people could not risk their personal livelihood because they knew that there were other actors that would come to the forefront to take over their position.

Regarding the overcompliance scenarios, a weakening competitive status was a deterrent which could be an indication that the firms would be able to handle not have a competitive edge in the market at that time. It is a sign that even though investments could pay off when it comes to behaving sustainably, the time to do so was not in accordance with the time of survey administration. Terrorism was also a concern of the time, especially as more prevalent threat among the NIJ respondents, with the attacks of 9/11 concerning corporations that had valuable or harmful products. Between the two overcompliance experimentally rotated domain scenarios, “enhancing security” was more likely to receive support from respondents which could indicate that people were concerned with threats of possible attacks related to what was witnessed years prior.

Overall, findings from these analyses provide information that does not necessarily allow for support of an eco-gender gap. However, mechanisms through which people make environmental decisions were identified. For men, moral contractualism assists in explaining why they violate environmental law. Men are not necessarily inhibited by morality. Women were more concerned and influence by the threat of social stigma as well as feeling pressured by higher managers. This supports

theoretically work that suggests that women are “other”-focused and try to please those that they have relationships with. Regarding the rational choice theory of crime perspective taken, morality does behave in accordance with predicted direction of intentions respectful of the scenario type, however, there is a lack of support for prior literature that the costs and benefits differ greatly between men and women, with women perceiving costs to be greater. This may be a sign that with changing times and gender norms, perceptions change as well.

CONCLUSION

Strengths & Limitations

This study utilized intention of offending or over complying as an outcome, which can be perceived as a strength and limitation. On one hand, this hypothetical nature of the survey differs from reporting on past behaviors in that self-reported past behaviors may not result in total transparency. But, when a respondent is reporting on willingness in a situation that has not or will not happen, they may be more likely to feel comfortable responding honestly. This study also is strengthened by utilizing different moral dimensions. Criminologists often use broad measures of morality (e.g., how ethical, or unethical is a behavior) which lack nuance. The multi-dimensional morality scale captures important differences in the types of morality that guide decision-making. Specifically, contractualism (the degree to which a behavior violates an unwritten contract) is an important characteristic in corporate behavior. Being able to identify if and to what extent this dimension influences willingness to engage is particularly of interest if future contracts regarding noncompliance and overcompliance practices can be set concrete standards through

contractualism. Being able to capture ethical practices was also pertinent in the promotional value of having an ethical corporate culture. Internal compliance systems are positively impactful in Model 5 for both scenario types, which tests all of the covariates without the interaction terms, and this provides support for the implementation and further study of these structures to gain a better understanding of the efficacy.

However, there are a few limitations to this current study that need to be discussed and some of which may be addressed as opportunities for future research. First, the size and composition of the sample suffers from a couple of limitations to the overall study, but more specifically the eco-gender gap that it attempts to fill. The sample size, at 932 respondents, and analytic sample, at 1,230 observations, is quite small after a few hundred observations were dropped due to missingness, decreasing the power of the sample. This impacts the significance of results when too many independent variables are included in the models. The composition of the sample, significantly less women than men in the sample, causes concern for the validity of the findings because of issues with statistical power. With this current study tapping into differences between men and women, a larger number of observations by women would strengthen the results to be more representative of women and increase the validity of the differences found. Second, the use of vignettes and the structure of the dependent variable capture the “willingness,” or intent, to engage rather than the actual act of engaging. There is mixed literature on whether intentions and actual behaviors are indicative of one another (Exum, Turner, & Hartman, 2011; Pogarsky, 2004). Beyond mere quantitative descriptives of the sample, the targeted population

reduces the generalizability of the results. Both the NIJ and TMone waves identified a sampling frame of corporate employees who were more likely to understand environmental regulations more compared to a layperson. So, these results are generalizable to those who work in manufacturing industries, but not the average corporate employee and their decision-making regarding non-environmental matters.

Future Directions

Directions for future research may help to improve upon the limitations of the data and advance the results observed in the present study. Given the contextual circumstances surrounding the administration of the data, I would like to readminister this data to measure if there are differences and to what extent are the predictive indicators important in today's corporate world. I also would like to compare these results measuring intentions to self-reported, or even officially reported, data on environmental corporate crime and extreme volunteerism. To support the empirical literature that has historically captured gender differences through intentions, future work may analyze behavioral data from decisions that corporate actors had to make for their firm. There are newer policies, especially in European countries, that encourage, and require, diversity on board of directors and in political positions. These policies will increase the presence of women in positions of decision-making.

Appendices

Appendix 1. Descriptive statistics of all the covariates and controls for the noncompliance scenarios.

Variable	Obs	Mean	Std dev.	Min	Max
Likelihood to Act	699	0.90	1.81	0	10
Likelihood to Act (Binary)	699	0.36	0.48	0	1
Woman	699	0.22	0.41	0	1
Moral Contractualism	699	4.16	2.97	2	14
Moral Equity	699	5.65	2.66	4	28
Moral Relativism	699	5.75	3.25	2	14
Legal individual Sanction Risks	699	92.64	57.92	0	200
Informal Individual Sanction Risks	699	264.79	94.07	0	400
Legal Firm Sanction Risks	699	160.26	81.85	0	300
Informal Firm Sanction Risks	699	59.69	28.77	0	100
Shame	699	0.17	1.04	0	10
Career Advancement	699	2.38	2.70	0	10
Thrill	699	0.48	1.44	0	10
Increasing Revenue	699	0.48	0.50	0	1
Strengthen Competition	699	0.48	0.50	0	1
Economically Healthy	699	0.33	0.47	0	1
Danger to Human Life	699	6.45	2.64	0	10
Danger to Wildlife	699	7.57	2.32	0	10
Level	699	1.56	0.62	0	2
Involvement in Environmental Decision-Making	699	1.78	0.50	0	2
Being Asked	699	0.50	0.50	0	1
An Upper-Level Manager	699	0.47	0.50	0	1
Scenario	699	2.41	1.60	1	5
Age (Years)	699	52.34	9.67	23	82
Years at Current Employer	699	13.83	9.55	0	55
Marital Status (Binary)	699	0.81	0.39	0	1

Personal Experiences with Similar Situations	699	0.78	0.60	0	2
Firm's Environmental Commitment	699	2.09	0.40	1	3
Ethical Practices (Binary)	699	0.86	0.34	0	1
Situational Reality	699	0.19	0.40	0	1
Desirability	699	9.39	1.32	0	10
Sample (NIJ=1)	699	0.17	0.38	0	1

Appendix 2. Descriptive statistics of all the covariates and controls for the overcompliance scenarios.

Variable	Obs	Mean	Std. dev.	Min	Max
Likelihood to Act	531	7.96	2.72	0	10
Fractional Outcome	531	0.80	0.27	0	1
Woman	531	0.19	0.39	0	1
Moral Contractualism	531	11.49	3.14	2	14
Moral Equity	531	23.10	5.98	4	28
Moral Relativism	531	10.98	3.01	2	14
Individual Costs	531	0.91	2.12	0	10
Declining Revenues	531	0.46	0.50	0	1
Economically Deteriorating	531	0.37	0.48	0	1
Weaken Competition	531	0.47	0.50	0	1
Individual Benefits	531	164.86	97.78	0	400
Firm Benefits	531	49.06	28.07	0	100
Pride	531	0.92	2.20	0	10
Feeling Good	531	0.85	0.36	0	1
Level	531	1.53	0.63	0	2
Involvement in Environmental Decision-Making	531	1.78	0.50	0	2
Being Asked	531	0.52	0.50	0	1
An Upper-Level Manager	531	0.52	0.50	0	1
Scenario	531	3.52	0.50	3	4
Age (Years)	531	52.00	9.86	23	80
Years at Current Employer	531	14.51	9.28	0	52
Marital Status (Binary)	531	0.83	0.37	0	1
Personal Experiences with Similar Situations	531	0.78	0.57	0	2
Firm's Environmental Commitment	531	2.06	0.38	1	3
Ethical Practices (Binary)	531	0.88	0.33	0	1
Situational Reality	531	0.19	0.40	0	1
Desirability	531	2.72	2.96	0	10
Sample (NIJ=1)	531	0.23	0.42	0	1

Appendix 3. Multicollinearity test of all the covariates and controls for the noncompliance scenarios.

Variable	VIF	1/VIF
Woman	1.22	0.82
Moral Contractualism	1.37	0.73
Moral Equity	1.72	0.58
Moral Relativism	1.62	0.62
Legal individual Sanction Risks	4.8	0.21
Informal Individual Sanction Risks	2.72	0.37
Legal Firm Sanction Risks	5.23	0.19
Informal Firm Sanction Risks	2.77	0.36
Shame	1.17	0.85
Career Advancement	1.48	0.68
Thrill	1.14	0.87
Increasing Revenue	1.05	0.95
Strengthen Competition	1.08	0.93
Economiclaly Healthy	1.07	0.94
Danger to Human Life	2.96	0.34
Danger to Wildlife	3.17	0.32
Level		
Management	4.68	0.21
Executive	5.86	0.17
Involvement in Environmental Decision-Making		
Somewhat Involved	4.29	0.23
Routinely Involved	4.72	0.21
Being Asked	1.09	0.92
An Upper-Level Manager	1.06	0.95
Scenario		
Discharge Toxins	1.49	0.67
Ignore Hazardous Waste Labeling	1.45	0.69
Age (Years)	1.57	0.64
Years at Current Employer	1.45	0.69
Marital Status (Binary)	1.15	0.87
Personal Experiences with Similar Situations		
Yes	1.39	0.72

N/A	1.27	0.79
Firm's Environmental Commitment		
Could Use Some Work	4.88	0.21
Poor	4.84	0.21
Ethical Practices (Binary)	1.21	0.83
Situational Reality	1.25	0.80
Desirability	1.45	0.69
Sample (NIJ=1)	2.37	0.42
Mean VIF	2.34	

Appendix 4. Multicollinearity test of all the covariates and controls for the overcompliance scenarios.

Variable	VIF	1/VIF
Woman	1.24	0.80
Moral Contractualism	2.25	0.44
Moral Equity	3.99	0.25
Moral Relativism	2.09	0.47
Individual Costs	1.3	0.77
Declining Revenues	1.04	0.97
Economically Deteriorating	1.03	0.97
Weaken Competition	1.05	0.95
Individual Benefits	3.44	0.29
Firm Benefits	3.18	0.31
Pride	1.21	0.82
Feeling Good	2.15	0.46
Level		
Management	4.34	0.23
Executive	5.53	0.18
Involvement in Environmental Decision-Making		
Somewhat Involved	4.87	0.21
Routinely Involved	5.29	0.19
Being Asked	1.1	0.91
An Upper-Level Manager	1.04	0.96
Scenario		
Enhance Security	1.16	0.86
Age (Years)	1.58	0.63
Years at Current Employer	1.43	0.70
Marital Status (Binary)	1.2	0.83
Personal Experiences with Similar Situations		
Yes	1.35	0.74
N/A	1.29	0.78
Firm's Environmental Commitment		
Could Use Some Work	3.39	0.29

Poor	3.36	0.30
Ethical Practices (Binary)	1.18	0.85
Situational Reality	1.27	0.79
Desirability	2.87	0.35
Sample (NIJ=1)	2.26	0.44
Mean VIF	2.28	

Appendix 5. Logistic regression of noncompliance intentions on *woman* and morality, including the interactions between woman and the morality dimensions.

Variable	Model 1
Woman	1.356* (0.671)
Moral Contractualism	0.0809* (0.0353)
Moral Equity	0.440** (0.0581)
Moral Relativism	0.0676* (0.0333)
Woman * Moral Contractualism	-0.189* (0.0875)
Woman * Moral Equity	-0.229* (0.105)
Woman * Moral Relativism	0.0459 (0.0655)
Constant	-3.701** (0.350)
Observations	699

Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.1

Appendix 6. Logistic regression of noncompliance intentions on *woman* and perceived costs, including the interactions between *woman* and these risk perceptions.

Variable	Model 2
Woman	-0.0828 (1.000)
Legal Individual Sanctions Risk	-0.00557 (0.00354)
Informal Legal Sanctions Risk	-0.00492** (0.00154)
Legal Firm Sanctions Risk	0.000910 (0.00259)
Informal Firm Sanctions Risk	0.00133 (0.00526)
Shame	0.154 (0.103)
Danger to Human Life	-0.0899 (0.0558)
Danger to Aquatic & Wildlife	0.0532 (0.0638)
Woman * Legal Individual Sanctions Risk	0.00747 (0.00717)
Woman * Informal Legal Sanctions Risk	-0.00322 (0.00360)
Woman * Legal Firm Sanctions Risk	0.00193 (0.00535)
Woman * Informal Firm Sanctions Risk	-0.00210 (0.0114)
Woman * Danger to Human Life	-0.128 (0.134)
Woman * Danger to Aquatic & Wildlife	0.0910 (0.148)
Constant	1.171** (0.385)
Observations	696

Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.1

Appendix 7. Logistic regression of noncompliance intentions on *woman* and perceived benefits, including the interactions between *woman* and expected rewards.

Variable	Model 3
Woman	-0.0800 (0.430)
Career Advancement	0.190** (0.0362)
Thrill	0.378** (0.0874)
Increasing Revenue	-0.122 (0.189)
Strengthen Competition	0.0375 (0.189)
Economically Healthy	0.0681 (0.203)
Woman * Career Advancement	-0.0493 (0.0716)
Woman * Thrill	-0.266 (0.164)
Woman * Increasing Revenue	-0.289 (0.422)
Woman * Strengthen Competition	-0.00692 (0.417)
Woman * Economically Healthy	-0.0400 (0.430)
Constant	-1.120** (0.192)
Observations	699

Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.1

Appendix 8. Logistic regression of noncompliance intentions on *woman* and loci of control, including the interactions between *woman* and these forms of control.

Variable	Model 4
Woman	-1.259 (0.805)
Level	
Management	0.0326 (0.455)
Executive	-0.251 (0.659)
Involvement in Environmental Decision-Making	
Somewhat Involved	0.0571 (0.564)
Routinely Involved	0.0890 (0.792)
Being Asked	0.559** (0.181)
An Upper-Level Manager	-0.00638 (0.180)
Man * Level	0.509 (0.358)
Man * Involvement in Environmental Decision-Making	-0.527 (0.430)
Woman * Being Asked	0.838+ (0.440)
Woman * An Upper-Level Manager	0.422 (0.418)
Constant	-0.565 (0.562)
Observations	699

Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.1

Appendix 9. Logistic regressions of noncompliance intentions on *woman*, morality, perceived costs, expected rewards, loci of control, and controls.

Variable	Model 5	Model 6
Woman	-0.453+ (0.257)	0.0771 (4.765)
Moral Contractualism	0.0236 (0.0358)	0.0546 (0.0403)
Moral Equity	0.336** (0.0544)	0.410** (0.0660)
Moral Relativism	0.00937 (0.0368)	0.0227 (0.0440)
Legal Individual Sanctions Risk	-0.00355 (0.00352)	-0.00334 (0.00439)
Informal Legal Sanctions Risk	0.000118 (0.00166)	0.00167 (0.00197)
Legal Firm Sanctions Risk	0.000881 (0.00258)	-0.000404 (0.00311)
Informal Firm Sanctions Risk	-0.00217 (0.00550)	-0.00385 (0.00653)
Shame	-0.108 (0.119)	0.00561 (0.149)
Danger to Human Life	-0.151* (0.0614)	-0.134+ (0.0711)
Danger to Aquatic & Wildlife	0.147* (0.0732)	0.137 (0.0848)
Career Advancement	0.115** (0.0410)	0.106* (0.0497)
Thrill	0.268** (0.0730)	0.351** (0.0883)
Increasing Revenue	-0.173 (0.200)	-0.111 (0.231)
Strengthen Competition	0.416* (0.204)	0.394+ (0.235)
Economically Healthy	-0.0633 (0.212)	-0.0472 (0.247)
Level		
Management	0.300 (0.469)	-0.503 (0.661)
Executive	0.254 (0.499)	-0.715 (1.029)
Involvement in Environmental Decision-Making		
Somewhat Involved	-0.0974 (0.567)	0.815 (0.811)
Routinely Involved	-0.259	1.509

	(0.542)	(1.238)
Being Asked	0.662**	0.499*
	(0.202)	(0.235)
An Upper-Level Manager	0.0608	-0.197
	(0.198)	(0.232)
Scenario		
Discharge Toxins	-0.869**	-0.918**
	(0.247)	(0.267)
Ignores Hazardous Waste Labeling	-0.303	-0.172
	(0.253)	(0.269)
Age (Years)	0.00984	0.00508
	(0.0124)	(0.0143)
Years at Current Employer	-0.0254*	-0.0267+
	(0.0129)	(0.0144)
Marital Status (Binary)	0.773**	0.583+
	(0.275)	(0.340)
Personal Experience with Similar Situations		
Yes	-0.469*	-1.301*
	(0.231)	(0.556)
Not Applicable	-0.733*	-2.294*
	(0.370)	(1.110)
Environmental Commitment of Your Company		
Could Use Some Work	-0.654	0.204
	(0.513)	(0.872)
Poor	-1.105+	0.169
	(0.584)	(1.482)
Ethical Practices (Binary)	0.0294	-0.229
	(0.298)	(0.356)
Situational Reality	0.241	0.368
	(0.277)	(0.325)
Desirability	-0.231*	-0.149
	(0.0914)	(0.0958)
Sample (NIJ=1)	-0.186	0.154
	(0.411)	(0.442)
Constant	-0.609	-0.322
	(1.407)	(1.756)
Observations	699	696

Standard errors in parentheses
** p<0.01, * p<0.05, + p<0.1

Appendix 10. Logistic regressions of noncompliance intentions on the interactions between *woman* and measures of morality, perceived costs, expected rewards, loci of control, and controls.

Variable	Model 6
Woman * Moral Contractualism	-0.213+ (0.129)
Woman Moral Equity	-0.0980 (0.172)
Woman * Moral Relativism	0.0950 (0.119)
Woman * Legal Individual Sanctions Risk	0.0121 (0.0103)
Woman * Informal Legal Sanctions Risk	-0.0102+ (0.00545)
Woman * Legal Firm Sanctions Risk	0.00258 (0.00726)
Woman * Informal Firm Sanctions Risk	0.0133 (0.0177)
Woman * Danger to Human Life	-0.264 (0.189)
Woman * Danger to Aquatic & Wildlife	0.140 (0.207)
Woman * Career Advancement	0.102 (0.119)
Woman * Thrill	-0.330 (0.295)
Woman * Increasing Revenue	-0.0550 (0.581)
Woman * Strengthen Competition	0.777 (0.679)
Woman * Economically Healthy	0.436 (0.619)
Man * Level	0.541 (0.548)
Man * Involvement in Environmental Decision-Making	-1.119+ (0.654)
Woman * Being Asked	1.279+ (0.674)
Woman * An Upper-Level Manager	0.742 (0.595)
Woman * Age (Years)	0.0419 (0.0357)
Woman * Years at Current Employer	0.00144 (0.0460)
Woman * Marital Status (Binary)	1.109 (0.713)

Man * Personal Experience with Similar Situations	0.735 (0.573)
Man * Environmental Commitment of Your Company	-0.726 (0.788)
Woman * Ethical Practices (Binary)	1.724* (0.844)
Woman * Situational Reality	0.379 (0.867)
Woman * Desirability	-0.731+ (0.392)
Constant	-0.322 (1.756)
Observations	696

Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.1

Appendix 11. Tobit regression of overcompliance intentions on *woman* and morality, including the interactions between *woman* and the morality dimensions.

Variable	Model 1
Woman	0.0861 (0.0919)
Moral Contractualism	0.00229 (0.00428)
Moral Equity	0.0256** (0.00247)
Moral Relativism	0.0161** (0.00420)
Woman * Moral Contractualism	0.00238 (0.00921)
Woman * Moral Equity	0.00302 (0.00498)
Woman * Moral Relativism	-0.0131 (0.00877)
var(e.OUTCOME)	0.0369** (0.00226)
Constant	-0.00701 (0.0412)
Observations	531

Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.1

Appendix 12. Tobit regression of overcompliance intentions on *woman* and perceived costs, including the interactions between *woman* and these risk perceptions.

Variable	Model 2
Woman	-0.0535 (0.0531)
Individual Costs	-0.0212** (0.00629)
Declining Revenues	-0.0268 (0.0258)
Economically Deteriorating	-0.0253 (0.0265)
Weaken Competition	-0.0546* (0.0257)
Woman * Individual Costs	0.00476 (0.0128)
Woman * Declining Revenues	0.0191 (0.0597)
Woman * Economically Deteriorating	0.0696 (0.0615)
Woman * Weaken Competition	0.0906 (0.0602)
var(e.OUTCOME)	0.0709** (0.00435)
Constant	0.858** (0.0242)
Observations	531

Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.1

Appendix 13. Tobit regression of overcompliance intentions on *woman* and perceived benefits, including the interactions between *woman* and expected rewards.

Variable	Model 3
Woman	0.0976 (0.0698)
Individual Benefits	0.000268 (0.000188)
Firm Benefits	0.00194** (0.000639)
Pride	0.00755 (0.00532)
Feeling Good	0.341** (0.0343)
Woman * Individual Benefits	0.000585 (0.000433)
Woman * Firm Benefits	-0.00285+ (0.00153)
Woman * Pride	0.00278 (0.0109)
Woman * Feeling Good	-0.0463 (0.0772)
var(e.OUTCOME)	0.0484** (0.00297)
Constant	0.357** (0.0327)
Observations	531

Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.1

Appendix 14. Tobit regression of overcompliance intentions on *woman* and loci of control, including the interactions between *woman* and these forms of control.

Variable	Model 4
Woman	0.0309 (0.109)
Level	
Management	0.0521 (0.0597)
Executive	0.103 (0.0906)
Involvement in Environmental Decision-Making	
Somewhat Involved	-0.0782 (0.0785)
Routinely Involved	-0.0355 (0.109)
Being Asked	0.190** (0.0249)
An Upper-Level Manager	0.0208 (0.0247)
Man * Level	-0.0645 (0.0498)
Man * Involvement in Environmental Decision-Making	0.0106 (0.0593)
Woman * Being Asked	-0.0839 (0.0576)
Woman * An Upper-Level Manager	-0.0657 (0.0584)
var(e.OUTCOME)	0.0654** (0.00402)
Constant	0.720** (0.0784)
Observations	531

Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.1

Appendix 15. Tobit regressions of overcompliance intentions on *woman*, morality, perceived costs, expected rewards, loci of control, and controls.

Variable	Model 5	Model 6
Woman	0.0418+ (0.0215)	-0.0723 (0.222)
Moral Contractualism	0.00248 (0.00361)	0.00276 (0.00404)
Moral Equity	0.0178** (0.00252)	0.0151** (0.00285)
Moral Relativism	0.00683+ (0.00363)	0.00901* (0.00406)
Individual Costs	0.0117** (0.00405)	0.0101* (0.00452)
Declining Revenues	-0.0133 (0.0154)	-0.0102 (0.0167)
Economically Deteriorating	-0.0138 (0.0158)	-0.0241 (0.0172)
Weaken Competition	-0.00862 (0.0155)	-0.0109 (0.0168)
Individual Benefits	0.000146 (0.000143)	1.00e-04 (0.000158)
Firm Benefits	0.000471 (0.000480)	0.000920+ (0.000521)
Pride	0.00652+ (0.00377)	0.00567 (0.00434)
Feeling Good	0.0668* (0.0311)	0.0655+ (0.0351)
Level		
Management	-0.00784 (0.0337)	0.0133 (0.0466)
Executive	0.0287 (0.0363)	0.0933 (0.0736)
Involvement in Environmental Decision-Making		
Somewhat Involved	-0.0180 (0.0463)	-0.0496 (0.0570)
Routinely Involved	-0.0259 (0.0444)	-0.0834 (0.0816)
Being Asked	0.107** (0.0158)	0.112** (0.0173)
An Upper-Level Manager	0.0146 (0.0154)	0.0225 (0.0168)
Scenario		
Enhance Security	0.0233 (0.0163)	0.0271+ (0.0162)

Age (Years)	0.000260 (0.000963)	0.000179 (0.00106)
Years at Current Employer	0.00115 (0.000973)	0.00143 (0.00103)
Marital Status (Binary)	0.00313 (0.0222)	0.0412 (0.0269)
Personal Experience with Similar Situations		
Yes	-0.000667 (0.0182)	0.0375 (0.0393)
Not Applicable	0.0381 (0.0328)	0.103 (0.0795)
Environmental Commitment of Your Company		
Could Use Some Work	-0.0899* (0.0392)	-0.0454 (0.0678)
Poor	-0.107* (0.0457)	-0.0382 (0.116)
Ethical Practices (Binary)	0.00964 (0.0248)	0.0175 (0.0285)
Situational Reality	-0.0734** (0.0215)	-0.0829** (0.0230)
Desirability	-0.0148** (0.00431)	-0.0155** (0.00480)
Sample (NIJ=1)	0.0442 (0.0270)	0.0327 (0.0272)
var(e.OUTCOME)	0.0302** (0.00185)	0.0289** (0.00177)
Constant	0.190* (0.0940)	0.238+ (0.121)
Observations	531	531

Standard errors in parentheses

** p<0.01, * p<0.05, + p<0.1

Appendix 16. Tobit regression of overcompliance intentions on the interactions between *woman* and measures of morality, perceived costs, expected rewards, loci of control, and controls.

Variable	Model 6
Woman * Moral Contractualism	0.00219 (0.00944)
Woman * Moral Equity	0.00947 (0.00644)
Woman * Moral Relativism	-0.0112 (0.00893)
Woman * Individual Costs	0.00347 (0.0104)
Woman * Declining Revenues	-0.0241 (0.0424)
Woman * Economically Deteriorating	0.0501 (0.0427)
Woman * Weaken Competition	0.0299 (0.0412)
Woman * Individual Benefits	0.000522 (0.000394)
Woman * Firm Benefits	-0.00317* (0.00138)
Woman * Pride	0.00355 (0.00906)
Woman * Feeling Good	-0.00216 (0.0772)
Man * Level	-0.0507 (0.0394)
Man * Involvement in Environmental Decision-Making	0.0219 (0.0439)
Woman * Being Asked	-0.0272 (0.0433)
Woman * An Upper-Level Manager	-0.0232 (0.0429)
Woman * Age (Years)	0.000605 (0.00245)
Woman * Years at Current Employer	-0.00218 (0.00288)
Woman * Marital Status (Binary)	-0.0780 (0.0507)
Man * Personal Experience with Similar Situations	-0.0360 (0.0414)
Man * Environmental Commitment of Your Company	-0.0316 (0.0609)

Woman * Ethical Practices (Binary)	-0.0330 (0.0597)
Woman * Situational Reality	0.0504 (0.0611)
Woman * Desirability	0.00327 (0.0107)
var(e.OUTCOME)	0.0289** (0.00177)
Constant	0.238+ (0.121)
Observations	531

Standard errors in parentheses
** p<0.01, * p<0.05, + p<0.1

Appendix 17. This is an example of a noncompliance vignette. The bolded text refers to vignette domains that were experimentally rotated.

Lee, an **upper-level manager** at AmCorp, **asks an employee to discharge toxins into a local waterway that exceed permitted levels by 200 %**. Lee believes that **discharging toxins into a local waterway may strengthen the firm's competitive position**. USACorp is **currently experiencing growing sales and revenues** in an industry that is **economically deteriorating**.

AmCorp is a **subsidiary of USACorp**, a **privately held** U.S. based firm. USACorp owns and operates **several** fully-integrated manufacturing facilities in a **suburban area near a large city**. The facilities, which are **new**, are designated as **major dischargers** according to the EPA ranking system with an environmental compliance record that **has met EPA compliance standards**. Last year, USACorp was contacted by the EPA to participate in a voluntary pollution reduction program but **declined to do so**.

The firm has been mandated to release public information regarding the type and amount of toxic substances released by its facilities.

At USACorp, ethical considerations **guide top management hiring decisions, performance evaluations, and promotions**. The firm has **mandatory ethics training**, but the firm **took no action** against an employee who was recently discovered violating environmental regulations.

Appendix 18. This is an example of a overcompliance vignette. The bolded text refers to vignette domains that were experimentally rotated.

Lee, a **middle-level manager** at AmCorp, is **asked by an executive** to **enhance security around toxic chemical storage sites**. **This practice is common in the industry**. Lee believes that **enhancing security around toxic chemical storage sites** may **weaken the firm's competitive position**. AmCorp is **currently experiencing declining sales and revenues** in an industry that is **economically deteriorating**.

AmCorp is a **publicly** held U.S. based firm. AmCorp owns and operates **one** fully-integrated manufacturing facility in a **suburban area** near a large city. The facility, which **has been refurbished**, is designated as a **minor discharger** according to the EPA ranking system with an environmental compliance record that **has met EPA compliance standards**. Last year, AmCorp **volunteered to participate** in an EPA sponsored pollution reduction program.

At AmCorp, ethical considerations **guide top management hiring decisions, performance evaluations, and promotions**. The firm has **internal random environmental audits** in which violations of compliance can be uncovered, but the firm **took no action** against an employee who was recently discovered violating environmental regulations.

Lee decides to comply with the manager's demand.

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