THE POWER TO JUDGE:

SOCIAL POWER INFLUENCES MORAL JUDGMENTS OF

SIMPLE AND COMPLEX TRANSGRESSIONS

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ABSTRACT

In our daily lives, we face many opportunities to judge others based on moral principles. These evaluations have consequences for future social interactions (Boehm, 2001; Haidt, 2001). In organizations, and in society, power is a defining characteristic of our roles. Social power governs the way we perceive, judge, and interact with others. It has been shown to decrease our inhibition, buffer us from the effects of rules and norms, and clarify our perception.

In the present research, I examine the ways in which social power influences our moral judgments of others. In two studies, participants' feelings of power are manipulated and then they are presented with a variety of moral vignettes. The vignettes present decision making scenarios that vary across several dimensions, including specific moral issues, the complexity of the information presented, the uncertainty of the information presented, and the moral principles underlying the scenario. Results from the two studies suggest that high power is associated with harsher moral judgments of simple moral issues. When participants are presented with moral vignettes complicated by additional information and/or moral principles, the association disappears. However, in complex moral dilemmas that pit utilitarian and deontological principles against each other, power (versus no power) is associated with harsher judgment of utilitarian acts. These findings demonstrate two distinct ways that power influences moral thinking.

Keywords:moral, judgment, power, transgressions

LIST OF FIGURES

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To my wife, Jean, whose unconditional love will always be my greatest source of strength.

INTRODUCTION

In October of 2012, Rajat Gupta, the former Global Head of McKinsey & Company and member of the boards of directors of both Goldman Sachs and Proctor & Gamble, was sentenced to two years in federal prison for multiple criminal counts related to securities fraud. Until 2010, Gupta was known to the international business community as a highly successful advisor to companies, a Harvard Business School graduate and board member, and a generous philanthropist, having founded the Indian School of Business in 2001 and led organized efforts to eradicate AIDS, tuberculosis, and malaria.

The charges against Gupta resulted from an FBI investigation of his alleged conspiracy with business associate and friend, Raj Rajaratnam, who ran a multi-billion dollar hedge fund, The Galleon Group. Federal prosecutors claimed that Gupta fed confidential, non-public information to Rajaratnam from his meetings with the Goldman board, including information about a potential investment in Goldman from Warren Buffett's Berkshire Hathaway during the 2008 financial crisis. This led The Galleon Group to profit by more than $5 million from trades in Goldman Sachs stock. On Gupta's sentencing, the presiding judge, Jed Rakoff, explained his interpretation of Gupta's motivation:

> *The court can say without exaggeration that it has never encountered a defendant*
> *whose prior history suggests such an extraordinary devotion, not only to*
> *humanity writ large, but also to individual human beings in their times of*
> *need...So why did Mr. Gupta do it? Having finished his spectacular career at*
> *McKinsey in 2007, Gupta, for all his charitable endeavors, may have felt*
> *frustrated in not finding new business worlds to conquer; and Rajaratnam, a*
> *clever cultivator of persons with information, repeatedly held out prospects of*

> *exciting new international business opportunities that Rajaratnam would help*
> *fund but that Gupta would lead.*[1]

In short, Judge Rakoff believed the evidence of the four-week trial demonstrated that it was Gupta's quest for more power, in the form of further business conquests and leadership opportunities, that led him to betray his duty of confidentiality to the firms he advised as a director for many years.

Many similar events from Wall Street to Washington that were revealed during the 2008 financial crisis have provided salient examples that power can breed unethical behavior. It seems that we have witnessed an unprecedented flux of highly accomplished, highly intelligent businesspeople from the boardrooms of corporate America to the cell blocks of federal prison. Despite this apparently recent trend, the underlying phenomenon is not new. Human history is rife with examples of powerful people engaged in corrupt acts. As Lord Acton wrote in 1887, "Power tends to corrupt, and absolute power corrupts absolutely."[2] Only recently have the powerful and their misdeeds been exposed so vividly in the media.

Certainly, these acts are not restricted to the powerful. It can hardly be questioned that immoral behavior is a part of human existence at all levels of power and influence. However, when the powerful commit immoral acts, the consequences for others is often much greater. If a car mechanic dumps several quarts of waste oil into a nearby stream, it will damage the environment, but probably not affect other people. If an oil refinery executive decides to dump thousands of gallons of waste into a nearby river, it could contaminate the water supply for many

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[1] Source: http://dealbook.nytimes.com/2012/10/24/rajat-gupta-gets-2-years-in-prison/
[2] Source: John Emerich Edward Dalberg, Lord Acton, Historical Essays and Studies, by John Emerich Edward Dalberg-Acton, edited by John Neville Figgis and Reginald Vere Laurence (London: Macmillan, 1907)

people. The potential for severe consequences is simply a result of control over resources, a fundamental aspect of power.

Power may enable those who commit immoral acts to affect more damage, but does power also increase the likelihood that people will commit such acts to begin with? Research is beginning to suggest that power can indeed lead to corruption in very specific ways (e.g., Kipnis, 1972). A significant portion of recent research efforts have focused on how power can influence perceptions of one's own moral behavior. In organizations, and in society at large, what leads to moral or immoral behaviors is often the collective decision making of groups of people. It is often several executives who decide to dump chemicals into the river, or at least several need to look the other way as it happens. In the Gupta case, a series of criminal charges were brought against more than 32 people, most of whom were employees of The Galleon Group, McKinsey, and Goldman Sachs.[3] In human society, power and moral judgment rarely exist in a vacuum. Power exists in, and is often maintained by, hierarchies. Moral judgments are made in concert with others. The world is just too complex for individuals to get into much trouble on their own.

The Present Research

The present research aims to explore specific aspects of moral judgment as it occurs in a variety of contexts. Individuals are frequently asked for their opinions on moral issues in simple terms, such as "How do you feel about abortion?" and they make judgments about others in the course of social life based on very limited information (e.g., "It's horrible that she wears a fur coat," or "I saw him throwing trash out of his car window - that's disgusting"). On the other

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[3] All information about the trial of Rajat Gupta and related investigations was acquired through the professional activities of the author. The number of total indictments related to The Galleon Group was reported by the Securities Law Blog, an internet publication of the law firm of Meyers & Heim on November 20th, 2012, at http://securitieslawblawg.com/2012/10/galleon-group-insider-trading-ring-update/

hand, people also frequently arrive at judgments about others based on more complex information. Managers make decisions on how to deal with the actions of long-time employees, judges and juries render judgments against criminal defendants after week-long trials, and many citizens decide the relative quality of political candidates by watching interviews and debates. All of these may require taking additional information about the situation, and the moral principles behind the situation, into account. Ultimately, these judgments may have significant consequences, both for the people being judged and, taken together, for society as a whole.

Social power may have variegated effects on different kinds of moral judgments. Recent research has suggested, for example, that power makes people harsher critics of others' immoral behaviors, while making people more lenient toward their own immoral behavior (Lammers, Stapel, & Galinsky, 2010).[4] These studies were designed to address apparent gaps in the current understanding of how power influences people's judgments of others' behavior as moral or immoral. Two dimensions of moral judgment will be emphasized in this research: (1) the degree of complexity of the information presented, and (2) the type of moral issue (e.g., the moral principle(s) or rules underlying the issue). Further, the present studies exclusively examine moral judgments of others, as opposed to the self. These dimensions have been chosen because much of the existing research on moral judgment has focused on judgments of the self, and has used relatively simple vignettes to elicit judgments (e.g., Zhong, Strejcek, & Sivanathan, 2010).

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[4] During the author's preliminary work on this project, it was announced that Diederik Stapel, a formerly distinguished scholar in the area of power and morality and an author of several articles cited herein, has been charged by his employer, Tilburg University, with research fraud, including falsifying data. Some of his articles have been retracted by the journals in which they appeared. The author has made an effort not to cite any Stapel articles that have been retracted as of the date of this writing, and has also had personal conversations with Stapel's coauthor on several articles, Adam Galinsky (Columbia Business School), who verified that the data in those articles was not collected nor analyzed under Stapel's supervision. For more information, see: http://www.nytimes.com/2011/11/03/health/research/noted-dutch-psychologist-stapel-accused-of-research-fraud.html

Thus, there remain many questions about the influence of factors such as social power on different types of judgments.

This research aims to make a contribution to the body of knowledge about the influence of power on moral thinking, and the ways that the relative simplicity or complexity of moral dilemmas can affect people's judgments about them. The findings of this research may also help to further explain why the powerful themselves commit corrupt acts and judge those acts to be reasonable (e.g., Kipnis, 1972; Boles, Croson, & Murnighan, 2000; Carney & Mason, 2010), and why the powerful allow or encourage others to commit such acts in their presence. Hopefully, a greater understanding of power will help leaders to build and run organizations that avoid the pitfalls of power-induced corruption. I also hope that the results of these studies will help to motivate further research at business schools into the nature of moral reasoning and judgment, as well as greater efforts to include training in ethics and corporate social responsibility as part of MBA curricula.

BACKGROUND AND LITERATURE REVIEW

Approaches to moral psychology

The study of moral judgment has experienced a recent surge of interest in the social psychology literature. A search of the PsycInfo database as of the writing of this thesis reveals that there have been 3,832 articles published with the word "moral" in the title in the ten year period from 2002 through 2012. This represents a nearly two-fold increase over the previous ten year period (2,008 articles with "moral" in the title were published from 1991 to 2001). Nevertheless, morality was not always thought to be a subject of importance for psychologists. For much of human history, morality was considered a topic for philosophers and religious

scholars. The earliest attempts to understand morality by philosophers like Plato and, much later, Kant were based on a *rationalist* understanding of cognition (Haidt, 2001). Rationalism is tradition of study that emphasizes the importance of reason and deduction over sensation and emotion, and it has had great influence over major theories in the behavioral, social, and economic sciences.

Ideas from the rationalist philosophers informed the early study of morality from a behavioral science perspective. American psychologist Lawrence Kohlberg advanced a rationalist approach suggesting that moral judgments are made through careful reason and reflection (Kohlberg, 1969). According to Kohlberg's theory, each person is a thoughtful judge of behavior, and is progressively able to take more information and issues into account in their judgment over the life course. Kohlberg based his theory on Jean Piaget's stages of human development. Young children are only able to consider the avoidance of punishment in their reasoning. This is the first of six stages of moral development, called pre-conventional reasoning. Later, we learn to consider rules, social norms, and the maintenance of social order as priorities. In the final stages, we take into account greater universal principles of morality. Laws are considered merely manifestations of principles of justice and fairness. Throughout the life course, the rationalist perspective on moral judgment assumes that reason is the source of moral judgment and behavior, and that values and emotions (e.g., caring or disgust, respectively) are not essential aspects of judgment. As in Piaget's stage-wise concept of development, Kohlberg's theory also predicted that we progress sequentially through the stages. Stages cannot be skipped, and the reasoning typical of earlier stages will seem overly simplistic. Thus, according to Kohlberg, humans use a variety of mechanisms to make moral judgments and they vary from person to person and over the life course.

Other theories of moral judgment have followed Kohlberg in the rationalist tradition, characterizing the person arriving at a moral judgment as a scientist (Turiel, 1983; Haidt, 2001). Like scientists, we form and test hypotheses, build models based on theories, and consult our theories when we need to make judgments of others. The process is one of clarifying the underlying rules and relationships, and then applying them to new situations as they arise. The evaluation of evidence, such as harm to others or the violations of rights, and the subsequent refining of the applicable moral rules, proceeds in a stepwise manner. A neo-Kohlbergian, Rest (1986; Rest, Narvaez, Thoma, & Bebeau, 2000) also put forth a stepwise account of moral decision making. The four-component theory of ethical decision making suggests that the process occurs over four different stages: (1) moral sensitivity or awareness, (2) moral judgment or reasoning, (3) moral motivation, and (4) moral action. The first step determines whether or not an individual identifies a situation as morally relevant. At this step, the individual may or may not determine that any moral principle needs to be applied. The second step produces the moral judgment, and this step requires a choice of which rule or principles (or a combination of several) should be applied to the situation. The third step determines whether the individual follows the moral course of action prescribed by the reasoning/judgment step. Here, the individual decides whether or not to execute the decision reached. At each of these stages, many situational and dispositional factors, such as attention and motivation, can influence the outcome of the stage, as well as the outcome of the entire process.

More recently, models of moral judgment have been expanded and revised to account for a greater number of factors at play in moral judgment. The social intuitionist approach (Haidt, 2001), for example, suggests that moral judgment does not result from careful reasoning, but rather from a rapid perception-like process. According to the social intuitionist theory, when

confronted with a moral judgment to make, people quickly arrive at an automatic moral intuition first. This is followed by more purposeful *ex-post facto* moral reasoning. Haidt developed this model based on the results of studies of moral vignettes describing acts that people judged as morally wrong (intuition), but struggled to come with a reason for why they felt that way (e.g., eating a family pet after it has died of natural causes). Through subsequent studies, the important contributions of emotions, (e.g., disgust) in moral intuitions are becoming better understood (Schnall, Haidt, Clore, & Jordan, 2008).

Modern dual-process theories of moral cognition, such as social intuitionism have also been informed by research in the field of psychophysiology, the study of the interaction between the brain and the body. The Somatic Marker Hypothesis (SMH; Damasio, Tranel, & Damasio, 1991) provides one mechanism by which moral intuitions can quickly arise. According to the SMH, emotions can cause a physiological response in the body, which in turn causes reactions in the brain areas that monitor those physiological processes. Through a process of emotional conditioning, these regions of the brain become excited at any time that a similar situation arises. Eventually, these regions of the brain become excited without any involvement of the body, producing feelings called somatic markers. These somatic markers have been shown in several studies to be a physiological link between emotion and moral judgment (Batson, Engel, & Fridell, 1999; Wheatley & Haidt, 2005).

Moral ambiguity

When asked directly about their viewpoints on moral issues, such as homosexuality or the War on Terror, people may respond by identifying and applying a moral rule or principle. To justify their support of war, people may call on the moral principle of patriotism (or loyalty, as

characterized by Graham, Haidt, & Nosek, 2009). In supporting the equal rights of gays and lesbians, people may use the principle of fairness. These issues are not unambiguous, but they do allow for the application of a rational process of moral reasoning to reach a judgment.

In modern life, however, we must deal with more complex situations. As individuals, we make judgments of others based not merely on how we think about a generic moral issue, but rather in the context of all of our thoughts, beliefs, and feelings about the situation and the people involved. For example, in 2011 on the Columbia University campus, a heated debate emerged over the possible return of a Reserve Officer Training Corps (ROTC) program to the University. Many students believed that the United States military's apparent intolerance for gay servicemen and women expressed by the "Don't ask, don't tell" policy meant that the ROTC program had no place on the campus of a private university. Others believed that the university has an obligation to support the nation and that students should have access to ROTC programs and the scholarships that they offer.

The Columbia campus debate could be characterized as a conflict between two moral principles - patriotism and fairness. For each person, arriving a just outcome to conflicts like this could involve the rational consideration of multiple factors, such as the conflicting moral principles, individual rights, and the welfare of the different stakeholders. It could also involve an intuitive or emotional response to the hot-button issues. Ultimately, it is likely to be a combination of these processes, moderated by situational and dispositional variables, that generate an individual's moral judgment.

The Psychology of Power

Recent research efforts have revealed broad-reaching implications of social power in a variety of contexts. In particular, power has been identified as a key factor in many types of social perception and judgment. Notably, it has been the focus of investigations by scholars at business schools interested in understanding its effects on organizations and, consequently, society. Stemming from its relevance in many contexts, power has been conceptualized in a variety of ways, including as a physiological state (Mazur & Booth, 1998), a position within a hierarchy (Hall, Coats, & Smith-LeBeau, 2005), or freedom and personal agency (Russell, 1938). For the purposes of this research, and following in the path of previous studies, I define power as the psychological experience of having control over valued resources and other people (Dahl, 1957; Emerson, 1962; French & Raven, 1959; Keltner, Gruenfeld, & Anderson, 2003). This definition emphasizes the subjective and transitory feeling of power. It also includes control over people, an attribute of power that makes power a fundamentally social phenomenon, and the focus of this research.

Power as Disinhibition

Recent empirical evidence has confirmed what has been reflected so clearly in recent media headlines - that power is linked with corrupt behaviors. Numerous theories have been developed to explain this relationship, and they can be grouped into a few general categories of associated effects. The first is most easily described as "power-as-disinhibition." First, people who are primed with feelings of power are faster at setting goals and pursuing them (Guinote, 2007). Further, power has been shown to activate the behavioral approach system (BAS) which, along with the behavioral inhibition system (BIS), controls goal-directed behavior (Keltner, Gruenfeld, & Anderson, 2003). In simple terms, the BAS increases our focus on positive

rewards, and is associated with positive emotion, impulsivity, and extraversion, while the BIS increases our focus on punishment and is associated with negative emotion and anxiety (Fowles, 1988). Power activates the BAS and increases our sense of agency and control over ourselves (Keltner, Gruenfeld, & Anderson, 2003). It also increases willingness to engage in action (Galinsky, Gruenfeld, & Magee, 2003), and improves motor performance (Burgmer & Englich, 2012). Low power, by contrast, hinders people's ability on cognitive tasks (Smith, Jostmann, Galinsky, & van Dijk, 2008). Taken together, these findings suggest that power can serve as a disinhibiting force in social interaction and judgment.

Power as Immunity

In a variety of contexts, power has also been associated with immunity from concern about others and from social influence. Kipnis (1972) demonstrated that people who feel powerful view the less powerful as objects of manipulation and responded by treating them poorly. Similarly, we have learned that people in positions of power dehumanize outgroup members (Lammers & Stapel, 2010). That is, the powerful deny others the essential elements of humanness, such as agency, emotions, and pain. Power can also lead people to objectify others, thereby giving people permission to "use" others as tools to achieve their goals (Gruenfeld, Inesi, Magee, & Galinsky, 2011). People who feel powerful also struggle to take the perspectives of others or correctly determine others' emotional expressions (Galinsky, Magee, Inesi, & Gruenfeld, 2006). A higher sense of power is associated with a decreased ability to feel distress when exposed to other people's suffering, suggesting that power may interfere with the sense of compassion (Van Kleef, Oveis, Van der Lowe, LuoKogan, Goetz, & Keltner, 2008). This blindness to others is carried to the societal level as high power individuals also tend to ignore

major social norms, such as those on sexual aggression (Bargh, Raymond, Pryor, & Strack, 1995).

Some of my own recent work with Dana Carney suggests that power buffers people against the psychological and physiological effects of stress (Carney, Yap, Mehta, McGee, & Wilmuth, in prep). It appears that feelings of power may induce an increase in testosterone secretion in both men and women. This increase in testosterone level appears to be associated with suppression of the increase in cortisol, usually associated with the stress response. The results of several behavioral studies have indeed shown that high power decreases the psychological and physiological responses to stress caused by social evaluation and physical pain. If normal people experience stress when committing immoral acts, power may reduce the psychological cost of immoral behavior, and thus lead to more of it. Similarly, power may reduce the psychological cost of evaluating the immoral behavior of others.

Power as Clarity and Control

A theory recently advanced by Wiltermuth and Flynn (2012) has characterized social power as clarity in social and moral judgment. According to this theory, power may be able to reduce the ambiguity with which people perceive others' behaviors and the appropriateness of their own judgments. This view is supported by studies that show that power is associated with overconfidence in one's own beliefs and judgments (Brinol, Petty, Valle, Rucker, & Becerra, 2007; Fast, Sivanathan, Mayer, & Galinsky, 2012) and certainty in speaking (Magee, Milliken, & Lurie, 2010). Feelings of power may help people to see the world in terms of black-and-white rules, just as it helps people to see certainty in their own thoughts and behaviors. As a result of perceiving and applying rules more easily, the powerful may believe that they are insulated from potential negative effects of enforcing rules with punishment (Wiltermuth & Flynn, 2012).

The Power to Judge

The results of previous research on power suggest that power influences judgment by preparing people to make decisions, buffering from the negative consequences of those decisions, and increasing the clarity with which they view the decisions to be made. The special case of moral judgment seems to proceed in one of two possible ways - a slow, deliberate, and rational process of moral reasoning, or a rapid, emotion-driven burst of moral intuition (e.g., Kohlberg, 1969; Haidt, 2001). Power is likely to influence these two mechanisms differently.

When people are asked about simple moral issues, they are likely to assess those issues rationally. For these issues, a moral principle can be easily applied and a judgment rendered. In this case, power may influence the rational decision maker by increasing his focus on the applicable rule, preparing him to enforce it through punishment, and buffering him from the potential stress of rendering a harsh judgment of another person. As such, power should encourage strict applications of rules and harsher judgments for violations of those rules.

More complex moral dilemmas may trigger a different pathway to moral judgment. Several clusters of research on judgment and decision making have identified the adaptiveness of using intuition rather than careful reasoning to make decisions based on more complex information (Dijksterhuis & Nordgren, 2006; Hogarth, 2005). The advantage to using intuition or unconscious processing to evaluate complex scenarios appears to stem in part from the *weighting principle*. This principle is based on findings that unconscious processes are better at determining weights for multiple factors in a complex scenario (Pretz, 2008). If complex moral problems activate an intuitive pathway, such as that described by Haidt (2001), rather than a deliberate, rule-based pathway, the enforcement of moral principles may not be as important in

the development of a judgment. As such, power would have less significant impact on the moral judgment of complex transgression.

HYPOTHESES

When individuals are faced with scenarios of simple moral transgressions, there is little chance for moral or situational ambiguity. Moral rules and principles are more easily applied when the issue is clear and simple. High power individuals have been shown to focus more easily on rules, and are prone to punish (Lammers & Stapel, 2010; Wiltermuth & Flynn, 2012). When presented with a simple moral issue, it is high power individuals are well prepared to attend to and apply a moral rule or principle (and ultimately deal with the consequences), which makes it easier to condemn another's actions. Thus, I expect that those primed with high social power will be more likely to judge people more harshly when presented with moral transgressions described in simple scenarios. The antecedent of this condemnation is a focus on rules, and the outcome is an increase in punishment.

> *Hypothesis #1: Increased feelings of social power will lead to an increase in the harshness of judgments of simple moral transgressions.*

This increase in harshness will be reflected in high power individuals' ratings of moral transgressions presented in simple vignettes (see Figure 1 for a summary).

However, when faced with scenarios of complex moral transgressions, power will not have a significant impact on moral judgments. When the moral transgression presented in a vignette is complicated by uncertainty, additional relevant information, or multiple moral principles, it is more difficult, and less adaptive, for an individual to use a rule-based rational process to arrive at a judgment. Rather, an intuitive, unconscious process is more likely to be

used. This intuitive process that people use to weigh multiple factors in a complex moral scenario may be less subject to influence by social power.

> *Hypothesis #2: There will be no significant difference between high and low power individuals in the harshness of their judgments of complex moral transgressions.*

METHODS AND RESULTS

Across two studies, I investigate how feelings of social power may influence individuals' judgments of moral transgressions. Study 1 tests the relationship between social power and judgments of simple moral issues. Study 2 tests the relationship between power and judgments of complex moral transgressions and examines this relationship across five different types of transgressions.

Study 1: Does Power Influence Judgments of Simple Moral Issues?

In Study 1, I aimed to investigate the relationship between power and moral judgment across a variety of simple moral issues.

Participants

One hundred participants (56% female; median age range: 30-39) were recruited online using Amazon Mechanical Turk, a popular crowd-sourcing platform that is now commonly used for conducting social science and behavioral research. Studies on the use of Amazon Mechanical Turk for behavioral research suggest that online responses closely approximate in-person responses (Buhrmester, Kwang, & Gosling, 2011). Participants were required to be 18 years old or greater and live in the United States. All participants who completed the

questionnaire were paid $2.00, which was credited to their Amazon accounts. The average time that participants took to complete the questionnaire was 9 minutes and 15 seconds. By receiving a payment of $2.00 for each questionnaire, participants received a mean effective rate of pay equal to $12.97 per hour. This rate of pay is comparable or generous compared to most laboratory-based studies. It is sufficient to properly incentivize participants to complete the questionnaire, but not overly generous that it would encourage participants to find a way to take the same questionnaire multiple times, or would skew the responses by priming monetary rewards.

Several checks were designed into the study to ensure that participants had a sufficient level of English comprehension and were reading the questions thoroughly. These attention checking items were adapted from suggested practices for screening Amazon Mechanical Turk participants (Downs, Holbrook, Sheng, & Cranor, 2010). Written responses to free-response questions were evaluated and several questions required that participants follow detailed instructions. If these instructions were not followed correctly, the participant's data was not used.

Design and Procedure

Study 1 employed a between-subjects design with two conditions, high power and low power. Participants were, unbeknownst to them, assigned to one of the two power conditions by the month of their birth. Odd months (e.g., January, March, May, etc.) were assigned to the high power condition and even months were assigned to the low power condition. This was an efficient way to approximate random assignment while also ensuring that each participant could only complete the questionnaire once (i.e., it did not require the use of multiple questionnaires).

Power was manipulated with a recall task that has been demonstrated to be a robust and consistent prime of feelings of power (e.g., Galinsky, Gruenfeld, & Magee, 2003; Wiltermuth & Flynn, 2012). The wording of the instructions for the high power recall task was the following:

Take a moment to remember a particular time in which you had power over another person or persons. By power, we mean a situation in which you controlled the ability of another person or persons to get something they wanted, or were in a position to evaluate those individuals. Please describe this situation in which you had power—what happened, how you felt, etc.

For the low-power condition, a similar set of instructions were presented:

Take a moment to remember a particular time in which someone else had power over you. By power, we mean a situation in which someone had control over your ability to get something you wanted, or was in a position to evaluate you. Please describe this situation in which you did not have power—what happened, how you felt, etc.

The phrase *et cetera* was purposefully left in the instructions to allow for some latitude in the participants' interpretation, and to encourage recollection of the experience holistically, rather than draw attention to specific aspects of power. Each participant was instructed to write four to five sentences on each topic.

Following the power prime, each participant responded to a set of 12 randomly-ordered questions about moral issues. Each item presented a moral issue, framed as a judgment about an anonymous individual engaging in a potentially immoral behavior. Participants were asked to judge the degree to which they found the person engaging in each behavior to be moral or immoral. Response choices ranged from "very immoral" to "very moral" on a 9-point Likert-type scale, with no midpoint demarcated. The moral issues presented were adapted from research by Zhong, Strejcek, & Sivanathan (2010), and included the following issues: adultery,

alcoholism, casual sex, drug use, homosexuality, littering, pornography, premarital sex, profane

language, prostitution, smoking, and wearing animal fur clothing.

Following the 12 moral issue questions, participants were asked to complete a

manipulation-check, which was a measure of self-reported feelings of power. Last, participants

completed a set of demographics questions, which included items on gender, age, race, and

political ideology.

Manipulation Check and Treatment of Variables

A total of 137 individuals completed the questionnaire for Study 1. Twenty-nine

individual participants failed to complete the entire study or registered a duplicate internet

protocol (IP) address, and their data were removed prior to analysis. Responses to the power

manipulation were reviewed carefully to ensure that participants followed the instructions and

took the task seriously. One participant did not follow the instructions, and this case was

removed. Therefore, a total of 107 individuals were included in the analysis.

Following the procedure of Lammers, Stapel, and Galinsky (2010), a six-item scale of

felt power was used as a manipulation check. The six items were averaged to create a composite

score of felt power (α = .83). As expected, participants assigned to the high power condition

reported feeling more power (M = 2.72, SD = .714) than those assigned to the low power

condition (M = 2.97, SD = 0.53), $t(105)$ = -2.064, p = .039.

While the manipulation check reveals that the difference in felt social power between the

high power and low power groups is significant, the effect size was not very large. This suggests

that some participants did not respond to the manipulation, or that their trait feelings of power

may have minimized its influence. Therefore, I decided to include in the analysis only those

participants who responded to the manipulation by selecting for cases that scored one standard

deviation above or below the mean score of all participants on the felt power scale. This is a common practice in social psychology studies when using a linear scale to measure the effects of two conditions (e.g., Van Kleef et al., 2008). The remaining analyses are based on the participants who responded most significantly to the high and low power manipulations ($N = 46$).

Main Analyses

The 12 moral issue items were averaged to create a composite measure of moral judgment ($\alpha = .83$; see Figure 4 for judgment scores for each item). As predicted, participants in the high power condition judged simple moral transgressions more harshly ($M = 3.96$, $SD = 1.09$; lower values correspond to judgments of immorality) than participants in the low power condition ($M = 4.60$, $SD = 1.00$), although the effect did not quite reach statistical significance, $t(44) = 1.98$, $p = .054$. The moral issue items were also analyzed individually. For each of the 12 individual moral issues, the sample means of moral judgments suggest that individuals in the high power condition judged each transgression more harshly than did those in the low power condition. That is, the sample means for the high power condition were lower than those for the low power condition across all items (lower mean indicates harsher judgment). For three of the 12 individual issues, this relationship reached significance at the .05 alpha level: casual sex ($M_{high} = 4.13$, $SD_{high} = 1.46$; $M_{low} = 5.10$, $SD_{low} = 1.45$, $p = .04$), profane language ($M_{high} = 3.80$, $SD_{high} = 1.86$; $M_{low} = 5.13$, $SD_{low} = 1.34$, $p = .01$), and premarital sex ($M_{high} = 4.80$, $SD_{high} = 2.24$; $M_{low} = 5.97$, $SD_{low} = 1.66$, $p = .05$) (see Figure 4). For littering and pornography, the p-values approach significance (each is approximately .1).

The results of Study 1 support the hypothesis that feelings of high power are associated with harsher judgments of moral transgressions when they are presented as simple issues.

Study 2: Does Power Influence Judgment of Complex Transgressions?

In Study 2, I investigate the relationship between power and moral judgment when moral vignettes are not presented as simple moral issues, but are modified to increase the level of complexity.

Participants

For Study 2, four hundred participants were recruited using the same online panel that was employed in Study 1. As in Study 1, participants were required to be 18 years old or greater and live in the United States. All participants who completed the questionnaire were paid $2.00, which was credited to their Amazon accounts. The average time that participants took to complete the questionnaire was 15 minutes and 31 seconds, which represents a mean effective rate of pay equal to $7.74 per hour. Participants took longer to complete this questionnaire, and so the effective rate of pay was not as much as what participants earned for Study 1. However, it is still comparable to typical payment for laboratory-based studies.

Design and Procedure

Study 2 employed three conditions, the high- and low-power conditions from Study 1 as well as a no-power control condition. As in Study 1, participants were assigned to these three conditions by the month of their birth. Power was manipulated using the same recall task that was used in Study 1. The same instructions were presented to participants in the high- and low-power conditions. For the no-power condition, participants were presented with the following neutral prompt adapted from another study using a power recall task as a manipulation (Galinsky, Magee, Inesi, & Gruenfeld, 2006):

Please recall your day yesterday. In the space below, describe your day including thoughts, feelings, events, etc. Write 4-5 sentences about this in the box below.

Following the power manipulation, participants were presented with a set of moral scenarios based on those employed in Study 1, but modified to include additional layers of complexity. The types of complexity measured were (1) uncertainty of information, (2) additional information specific to the moral scenario, and (3) additional information generally about the moral issue. For example, the following moral vignette from Study 1 measures judgments of a potentially immoral behavior, premarital sex:

Imagine that a person has just told you that he/she engages in premarital sex (sex before marriage). How moral or immoral do you judge them to be?

This scenario was modified for inclusion in Study 2 by adding a layer of complexity, in this example, additional information specific to the scenario:

Imagine that Susan has just told you that she engages in premarital sex (sex before marriage). She has been in a committed relationship for 8 months, and waited to have sex with her boyfriend until recently. She was planning to wait until she got married, but she was afraid that her boyfriend might leave her if she didn't have sex with him. How moral or immoral do you judge Susan to be?

Each item presented a scenario and then asked the participant to judge the degree to which the

person in the scenario was moral or immoral on a 9-point Likert-type scale. Scenarios were

modified from those used in Study 1 and other scenarios were presented to test the effects of

specific types of complexity. Each scenario focuses on a moral issue or principle, and further

provides one of the following additional layers of complexity: (1) additional information

generally pertaining the moral issues, such as the prevalence of and societal attitudes toward the

issue, (2) additional information specific to the scenario, (3) additional information about the

degree of certainty in the scenario, or (4) more than one moral principle, where the response

required the participant to prioritize the principles.

A fifth type of scenario was presented, which included three derivatives of the "trolley

problem," (Foot, 1967; Paxton, Ungar, & Greene, 2011) a moral dilemma which tests proclivity

toward deontological versus utilitarian reasoning (see Figure 5 for examples of each scenario

type). Deontology is an approach to moral reasoning that emphasizes the duties and rules behind

moral acts. It suggests that there is an inherent rightness or wrongness to each act, which is

unrelated to the outcome (Fiske, 2010). By contrast, utilitarianism is a consequentialist

approach. It emphasizes outcomes in determining whether an act is morally right or wrong. The

morally right action is the one that will result in the greatest overall good. The trolley problem

and its variants test the relative influence of these two approaches in moral reasoning by pitting

them against each other. In a short vignette about a train traveling down a track, about to run

over and kill a number of people tied to the track, another hypothetical person observing this can

perform an action and change the outcome, which will kill only one person. Confronted with a

trolley problem, a participant must choose between actively killing one to save many (utilitarian

outcome) or letting the many die to avoid actively killing the one (deontological outcome).

To create the vignettes with additional general information, several sentences were adapted from the Wikipedia entry for each. To choose the information at random, a random number generator (http://www.random.org/) was used to choose a number between 0 and 20 for each vignette. That number was then used to choose the paragraph in the Wikipedia entry. This was done to provide a relevant, but randomly selected (i.e., unbiased by the author's hypotheses), informational context for the moral issue.

Participants in Study 2 were also presented with a scale assessing self-reported feelings of power (Lammers & Stapel, 2009), which served as a manipulation check, and a set of demographics questions. As in Study 1, questions were also used to ensure that participants were reading the instructions carefully and paying attention.

Manipulation Check and Treatment of Variables

A total of 435 individuals completed the questionnaire for Study 2. Eighteen participants failed to complete the entire study and their data were removed prior to analysis. Another 10 participants did not follow the instructions for the recall power prime, and also were removed. An additional 18 participants registered duplicate internet protocol (IP) addresses. Since it could not be verified that two separate individuals completed the study on the same computer (rather than one person completing the study twice), these data points were also removed prior to analysis. Last, upon a visual review of the data, it was noticed that some participants responded with the same answer choice to every question in the survey (usually the midpoint of the scale). I assume that this response pattern indicates an attempt to rush through the questionnaire as quickly as possible without reading the questions thoroughly. To prevent these responses from

skewing the results, data from 6 additional participants were removed prior to analysis because they did not have sufficient variance *(SD > .5)* across the questions in the questionnaire.

A manipulation check was performed to test the efficacy of the power manipulation using the same six-item power scale used in Study 1 (Lammers, Stapel, & Galinsky, 2010). The six items were averaged to create a composite score of felt power ($\alpha = .80$). A one-way ANOVA was performed to test the effectiveness of the power recall task on manipulating feelings of power. Indeed, participants assigned to the high power condition reported feeling more power (*M* = 2.99, *SD* = .52) than those in the low power condition (*M* = 2.81, *SD* = .63), and both reported feeling more power than in the no power control condition (*M* = 2.75, *SD* = .64), *F*(380) = 5.53, *p* = .004.

As in Study 1, only those Study 2 participants who responded to the manipulation were included in the analysis by selecting for cases that scored one standard deviation above or below the mean score of all Study 2 participants on the felt power scale. This is a common practice in social psychology studies when using a scale to measure the effects of two conditions (e.g., Van Kleef et al., 2008). The remaining analyses are based on the participants who responded most significantly to the high and low power manipulations (*N* = 125).

Main Analyses

The 19 moral issue items were averaged to create a composite measure of moral judgment ($\alpha = .75$). As predicted, a one-way ANOVA comparing the composite measure across the three conditions revealed that there was no significant difference in the judgment of the complex moral transgressions between high power (*M* = 4.72, *SD* = .843), the low power condition (*M* = 4.57, *SD* = .734), and the no power control condition (*M* = 4.83, *SD* = .72),

$F(125) = 1.32$, $p = .271$. Since the control condition was added for Study 2, an independent samples t-test was also conducted between the high and low power conditions in order to directly compare the results of Study 2 to those of Study 1.[5] The t-test also revealed that there was no significant difference between the high and low power conditions in the harshness of moral judgments for the composite (average) ratings: $t(76) = -.816$, $p = .42$.

The moral items were further analyzed individually. For 16 of the 19 individual moral vignettes, the sample means of moral judgments did not differ significantly across the three conditions. This result provides further support for Hypothesis #2, that power fails to influence the severity of judgments of moral dilemmas complicated by additional information or uncertainty.

However, for all three vignettes derived from the classic trolley problem, a significant association emerged across the three conditions. In all three cases, the high and low power mean ratings were lower than the mean for the no power condition. This was true for the "baby" trolley problem (Sara must kill her baby to prevent it from alerting enemy soldiers; $M_{high} = 4.13$, $SD_{high} = 2.15$; $M_{low} = 4.44$, $SD_{low} = 2.35$; $M_{no} = 5.51$, $SD_{no} = 1.68$; $F(124) = 5.17$, $p = .007$), the "submarine" trolley problem (David must kill an injured crewman to conserve limited oxygen for the other crewmen; $M_{high} = 5.34$, $SD_{high} = 2.07$; $M_{low} = 5.17$, $SD_{low} = 2.21$; $M_{no} = 6.30$, $SD_{no} = 1.88$; $F(124) = 3.92$, $p = .02$), and the "classic" trolley problem ($M_{high} = 4.09$, $SD_{high} = 2.45$; $M_{low} = 3.72$, $SD_{low} = 1.96$; $M_{no} = 4.81$, $SD_{no} = 2.18$; $F(124) = 2.99$, $p = .05$) (see Figure 8 for a summary). This indicates that participants rendered harsher judgments against the subjects of

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[5] The use of control conditions has been the subject of a methodological debate in research on social power. Some studies have considered the low power condition to be a control, while others have included a separate control condition. Low power manipulations can sometimes result in increased feelings of power from a baseline merely because the manipulation primes thoughts of power. The use of a no power control in Study 2 is discussed in the General Discussion section.

each vignette for choosing the utilitarian outcome (i.e., participating in the killing of one to save many). Thus, participants in the two power conditions favored the deontological outcome.

It is important to note that the results also reveal that the relationship between the power conditions and the no power condition is reversed for two of the trolley problems ("submarine" and "classic") when comparing between the high and low power conditions. That is, for these two vignettes, high power participants favored the utilitarian outcome more than did the low power participants. This association is in accord with research linking high power to utilitarian motivation (Rucker & Galinsky, 2009). The relationship between power condition and preferences for deontological versus utilitarian outcomes is an unexpected but theoretically interesting finding. The implications for this are addressed in the General Discussion section, below.

Overall, the results of Study 2 suggest that the relationship between power and harsher judgment of moral transgressions disappears when the vignettes contain additional layers of complexity, such as additional information or uncertainty. When moral judgments are made in the context of such additional information, high power and low power individuals behave similarly. However, when the principles of deontology and utilitarianism are positioned against each other in a complex vignette, high power individuals favor the outcome of the deontological decision. That is, they judge the subject of the vignette more harshly for choosing the utilitarian outcome.

GENERAL DISCUSSION AND FUTURE DIRECTIONS

Discussion

Moral judgment is a fundamental aspect of navigating the social world. In everyday life, morality is one of the many dimensions by which we perceive and evaluate other people. In

certain contexts, such as in organizations, the moral judgments of individuals can have particularly profound repercussions. The factors potentially influencing people's judgment deserve attention in behavioral and social science research. In the case of Rajat Gupta, the federal judge assigned to his sentencing (and also who presided over his trial) blamed the inebriating effects of power for the crimes Gupta committed at the end of his career and after decades of philanthropic work.

Power appears to have the ability to influence individuals' moral judgments of themselves. Previous research has shown that power serves as a disinhibiting, immunizing, and clarifying force in social judgment. Power encourages the powerful to act and to pursue goals and rewards, prevents them from feeling stress, and gives them feelings of control and the impression that situations are clear and simple. As such, it promotes a focus on rules and a willingness to condemn others based on those rules. Building on these previous findings, I hypothesized that high power would lead to harsher moral judgments when a rational, rule-based approach to moral reasoning is employed, as when making judgments of simple moral issues (Hypothesis #1). By contrast, I proposed that power would fail to demonstrate influence over moral judgments when the scenarios presented are complicated by uncertainty, additional information, or multiple moral principles (Hypothesis #2). Previous research has demonstrated the adaptiveness of using an unconscious approach to weighting multiple factors before making a judgment (e.g., Dijksterhuis, 2004). Thus, facing more complex moral scenarios, people may use a less rational, more intuitive approach which is less vulnerable than a rule-based approach to the influence of social power.

The results of Studies 1 and 2 support the two hypotheses. Across the two studies, it was demonstrated that people who feel high power respond differently to moral dilemmas than

people who feel low or no power. When moral issues were presented in the absence of additional information in Study 1, the powerful exhibit greater moral condemnation of other's acts. A statistically significant effect was seen for three of twelve moral issues: profane language, premarital sex, and casual sex. For all of the other issues, the direction of the effect was consistent with the hypothesis but did not reach significance. It should be noted, however, that the effects for the littering and pornography vignettes were nearly statistically significant. The effect sizes for each were large, but relatively large variance in the responses to each prevented the association from being significant. If this study were replicated, a larger sample size would likely reveal a significant relationship for these two variables, thereby adding further evidence to support the general relationship between power and harsh judgment for simple moral issues.

Theoretical Implications

Three main findings emerged from the present research. The first is that people who feel high power judge moral transgressions more harshly than those who feel low power when the transgressions are presented as simple issues, without any additional information. This finding fits well with much of the existing literature addressing power's influence on social judgment. Rendering a harsh judgment of another person could be considered an approach-focused or disinhibited behavior. It prepares one to act to enforce a moral rule by calling out or punishing the transgressor. Punishment may be particularly difficult or unpleasant if the punisher is not convinced by his own moral judgment that the punishment is just (Carlsmith, Darley, & Robinson, 2002).

This finding also supports the power-as-immunity theory. Condemning another person's behavior is an action that can bring about negative social consequences. If the judgment is

known by the target, it may encourage reciprocal negative judgments or another form of

retribution. Similarly, if the judgment is made known to others and it violates social norms, the

judge may elicit criticism or, in extreme cases, social ostracism. This would be even more likely

to occur if the judge is low in social standing or authority. In contrast, if the judgment is

rendered by someone who has power, authority, or respect, the target of the judgment and other

people may be more likely to accept the judgment as valid. These social processes may serve to

reinforce feelings of immunity for those with high power and feelings of vulnerability for those

with low power. Further, if the powerful are predisposed to being psychologically immune from

concern about others' thoughts and decisions, they will be less likely to perceive social

disapproval when their judgments do produce it.

Last, the theory that power leads to clarity in moral judgments is further supported by the

results of Study 1. In society, high power roles often accompany the right and obligation to

judge other people in order to establish and maintain social norms (Foucault, 1980). To enforce

social norms, a person must be able to identify such norms clearly. Further, to apply social norms

to individuals, the powerful would be aided by a decrease in perceived ambiguity of other's

behaviors and intentions. The results of Study 1 suggest that the powerful are more able to

strictly enforce moral rules by applying them to scenarios and condemning the transgressors.

Nevertheless, the limitations of moral clarity are apparent from the results of Study 2.

When presented with complex moral vignettes, participants with high power do not produce

harsher judgments. The difference in power's effects on simple and complex moral judgments

may result from the different cognitive mechanisms that people use when confronted with each

type of scenario. When presented with simple moral issues, individuals may rely on a rational

and deliberate rule-based approach to moral reasoning. They apply rules strictly and without

consideration for the perspectives of others. Here, the effects of power can be seen. When moral dilemmas become more complex, people may shift to the more functionally adaptive process of intuitive judgment (perhaps with *ex post facto* rationalization, as proposed by Haidt). Unconscious, intuitive processes facilitate the weighting of multiple factors when decisions are based on complex information (Dijksterhuis, 2004), and therefore may make the production of a judgment less cognitively taxing. When an intuitive cognitive process is used, power may have less opportunity to skew judgments toward strict rule-based judgments. Overall, these results expand the body of knowledge of the effects of power on judgment, and the manifold factors that influence how people evaluate others based on moral principles and intuitions.

An unexpected finding, the results of Study 2 support the existence of a relationship between felt social power and preference for decisions producing deontological versus utilitarian outcomes of moral dilemmas. However, the direction of the association is not entirely clear. While participants in both the high and low power conditions preferred the deontological outcomes to utilitarian ones more than those in the no power condition, a comparison between the high and low power conditions reveals the reverse effect - high power participants preferred the utilitarian outcome more so than the low power ones. This latter effect finds limited support in the existing literature (i.e., Lammers & Stapel, 2009). An important limitation of the studies conducted by Lammers and Stapel is that they employ only two conditions, high and low power. As with many studies using social power manipulations (including Study 1 of this thesis), a no-power control is lacking. The problem with not including a no-power condition is that the low power condition may produce a power priming effect compared to baseline feelings of power. That is, an unintended consequence of the low power condition of a power manipulation could be *increased* feelings of power, merely because the concept of power is brought to the

participants' attention. In the present research, a comparison between the no-power control and either experimental group would reveal the true association between power and these two moral principles. Under this interpretation, the results of Study 2 reveal that powerful individuals exhibit a preference for deontological outcomes. This notion fits well with previous research and other findings presented herein that power encourages strict, rule-based judgments.

Practical Implications

The findings presented herein have practical implications for scholars engaged in research on power. First, it provides support for the effectiveness of the power recall manipulation in an online setting. The vast majority of research on social power has been performed with resource-intensive laboratory-based behavioral experiments (e.g., Carney et al., in press). The manipulation checks performed for Study 1 and Study 2 reveal that the power recall task given via an online survey platform is effective in manipulating feelings of power and those feelings are revealed by a self-report measure.

Second, the results of Study 1 and Study 2 highlight the different results that can emerge by measuring moral judgment with a variety of vignettes. While many previous studies have employed relatively simple moral dilemmas, some researchers have begun to use more complicated scenarios in order to study the foundations of moral thinking as they relate to other variables, such as political ideology (e.g, Graham, Haidt, & Nosek, 2009). Further use of complex scenarios in research may result from an attempt to increase the realism and external validity of the measures used. However, caution should be exercised when directly comparing participants' judgments made across simple and complex moral dilemmas. Social power may be just one of many factors that may influence moral judgments made based on these vignettes. In a similar vein, caution should be taken when generalizing the results of moral judgment studies to

real-life scenarios, which are often far more complex than any researcher would present to participants. Social power and other situational variables are likely to have different effects on human judgment when taken off of the questionnaire or outside of the behavioral laboratory.

The findings of this research also have implications for leaders in business and policy, as well as the general public. If business leaders are better able to understand how power and other factors can bias their own judgment and the judgment of those around them, they will be able to design systems in organizations to limit the possible negative effects of these biases.

Last, the implications for society at large of research on social power are many. Morality is one of the mechanisms by which individuals and groups establish and maintain social order. The results of this research are important for both those with high social power and those without it. If those low in power fail to perceive the actions of the powerful as morally objectionable, it makes them vulnerable to oppression and victimization. In such cases, conflicts may reach a resolution, but that resolution is unlikely to be equitable. Achieving a greater understanding of how people judge the morality will inform strategies to effectively manage conflicts that arise from diverse moral viewpoints.

Limitations and Future Directions

There are several natural limitations of the present research. First, the two studies were conducted on the internet, using an online participant pool. Internet-based survey research is becoming increasingly popular in behavioral science researchers because of its ability to produce large samples at relatively low cost. As with any study using self-report measures, there are concerns that participants do not respond truthfully or carefully. The opportunity for participants to "cheat" by responding rapidly or at random to items is potentially greater in an online setting. While I attempted to minimize the incentive to cheat by compensating participants well (with

comparable rates of pay to in-person studies) and incorporating several items to check for inattention, it is still possible that some participants provided false data. An open-ended "Comments" section at the end of the questionnaire revealed that many participants found the questionnaire interesting, which suggests that they were paying attention and were motivated to take the questionnaire seriously. Nevertheless, further investigations could benefit from in-person questionnaires and behavioral measures.

Another limitation is that both studies employed a between-subjects design. Between-subjects designs are often used in studies of social power because it is impractical to run a within-subjects design when the manipulation is a power recall task. The psychological and physiological effects of power priming can last for more than 30 minutes, and the participant may become aware of the purpose of the study upon completing a second recall task in one sitting. Potential bias was minimized by randomly assigning participants to one of the power conditions using their self-reported birth months. A within-subjects study could reveal more about how temporary feelings of power can affect the judgment of a given individual. In addition, both simple and complex dilemmas could be given to the same individual. This would create a 2 x 2 factorial design and allow for the statistical analysis of interaction effects. A two-way ANOVA would be a more definitive method of analysis to determine the size of the effect, but it was not performed here because the responses to simple and complex vignettes were collected in different studies from different samples.

Last, future research could include the measurement of potential covariates or mediating variables, such as general intelligence or emotional intelligence. Perhaps individuals with higher levels of intelligence respond to complexity differently. If they use more rational processes to evaluate complex moral issues, power may have a broader impact on them. Cognitive

mechanisms such as processing fluency, self-concept maintenance, and psychophysiological factors may also play a role in moral reasoning. An interesting first step may be to use implicit (non-conscious) attitude measures, such as the Implicit Association Test (IAT; Greenwald, McGhee, & Schwartz, 1998) and examine variations in physiological levels during moral judgments.

SWC comments:

Overall, this is an excellent master's thesis, and it is clear that you've put a lot of work in the creation of surveys, gathering of data, the analysis of the data, and on the formation of the thesis itself. Your writing lends itself to a clear read, with plenty of examples and supportive sentences that explain your results in plain language. The introduction was particularly engaging, with a great use of a real-life example.

For future versions of this thesis (and I would encourage you to expand on this research further for your own academic and career interests), I would focus on a few things. First, I think the literature review is running too long, and there needs to be greater focus on and explanation on how and why each subsection relates to your own research questions. Second, I would make the results section easier to read – eliminate the statistics that aren't fundamental to the reader understanding what you're trying to say, and provide the longer explanations and policy implications within the results section. The conclusion should then provide a summary of your work, and talk about some of the most important findings and their relevance.
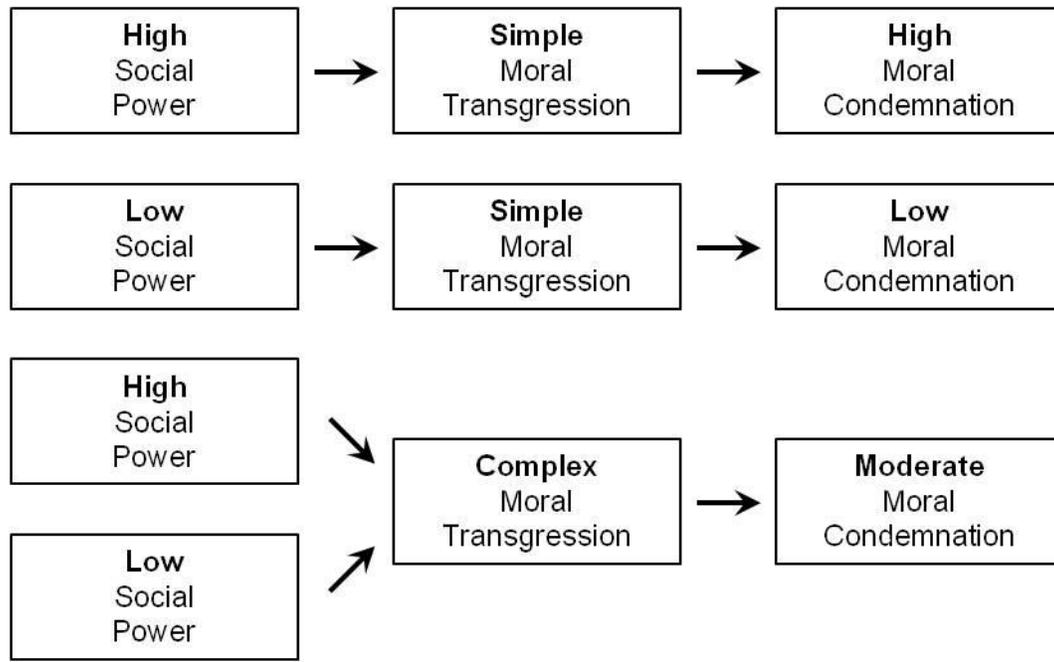
Grade: A

FIGURES


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│  High   │        │   Simple     │        │    High      │
│ Social  │  ───►  │   Moral      │  ───►  │    Moral     │
│ Power   │        │ Transgression│        │ Condemnation │
└─────────┘        └──────────────┘        └──────────────┘

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│   Low   │        │   Simple     │        │     Low      │
│ Social  │  ───►  │   Moral      │  ───►  │    Moral     │
│ Power   │        │ Transgression│        │ Condemnation │
└─────────┘        └──────────────┘        └──────────────┘

┌─────────┐
│  High   │
│ Social  │  ──┐
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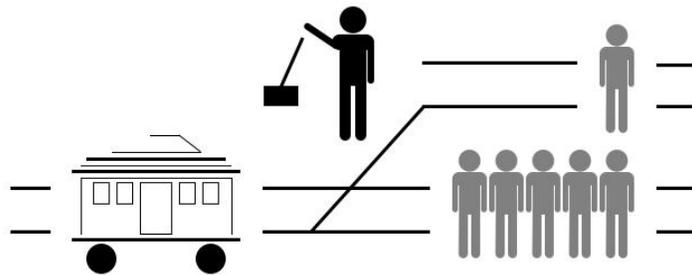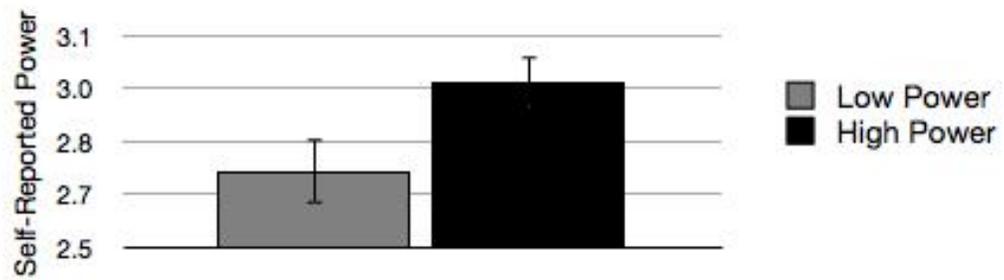
Figure 1. Hypotheses

Figure 2. "Classic" trolley problem diagram

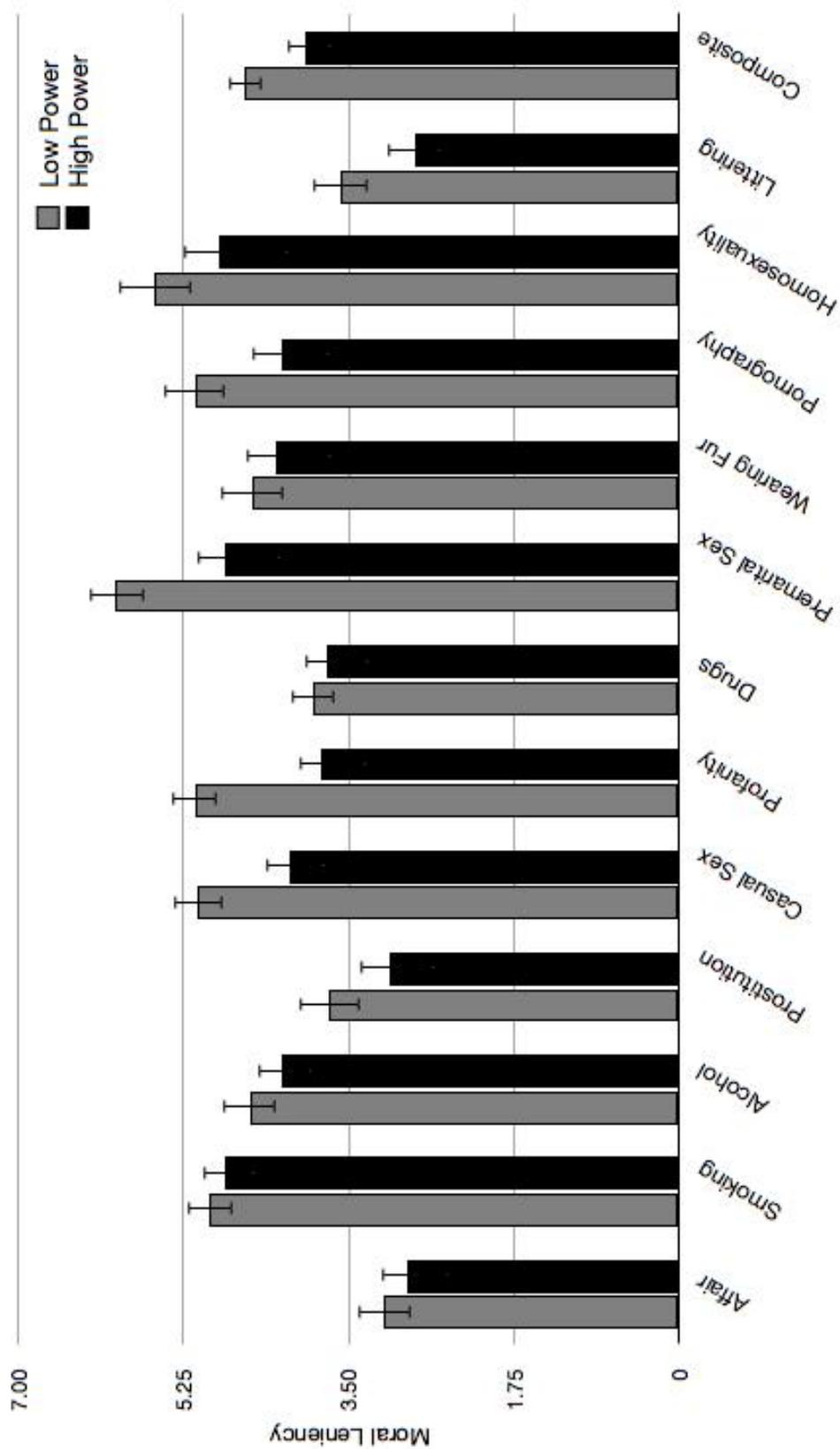**Figure 3.** Power manipulation for Study 1

Figure 4. Results of Study 1

Complexity Type	Example Vignette
Additional information - general	Imagine that you see Scott littering (throwing trash on the ground). Litter is a human impact on the environment and is a serious environmental issue in many countries. Litter can exist in the environment for long periods of time before degrading and be transported large distances into the world's oceans. Litter can affect quality of life. How moral or immoral do you judge Scott to be?
Additional information - specific	Imagine that Susan has just told you that she engages in premarital sex (sex before marriage). She has been in a committed relationship for 8 months, and waited to have sex with her boyfriend until recently. She was planning to wait until she got married, but she was afraid that her boyfriend might leave her if she didn't have sex with him. How moral or immoral do you judge Susan to be?
Degree of certainty	Imagine that your co-worker, Brian, has just failed an employment drug screening test. You know that the test is only accurate about 75% of the time. How moral or immoral do you judge Brian to be?
Two conflicting moral principles	Anita learns that her father shot and killed an animal from an endangered species on a hunting trip. In response, she decides to break off all communication with her family for one year. How moral or immoral do you judge Anita to be?
Deontological vs. utilitarian reasoning	Enemy soldiers have taken over Sara's village. They have orders to kill all remaining civilians. Sara and some of her townspeople have sought refuge in the cellar of a large house. Outside they hear the voices of soldiers who have come to search the house for valuables. Sara's baby begins to cry loudly. She covers his mouth to block the sound. If she removes her hand from his mouth, his crying will summon the attention of the soldiers, who will kill her, her child, and the others hiding out in the cellar. To save herself and the others, she must smother her child to death. She does this. How moral or immoral do you judge Sara to be?

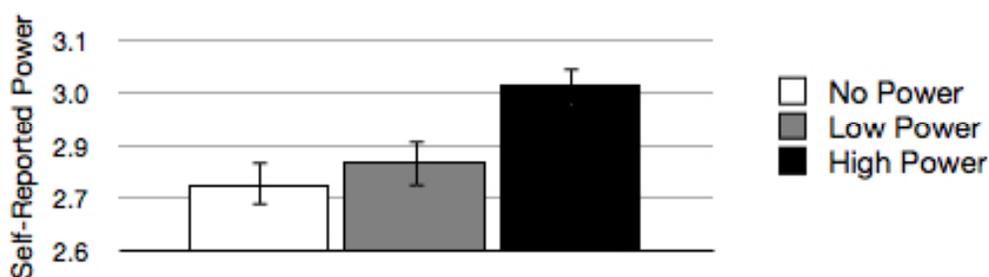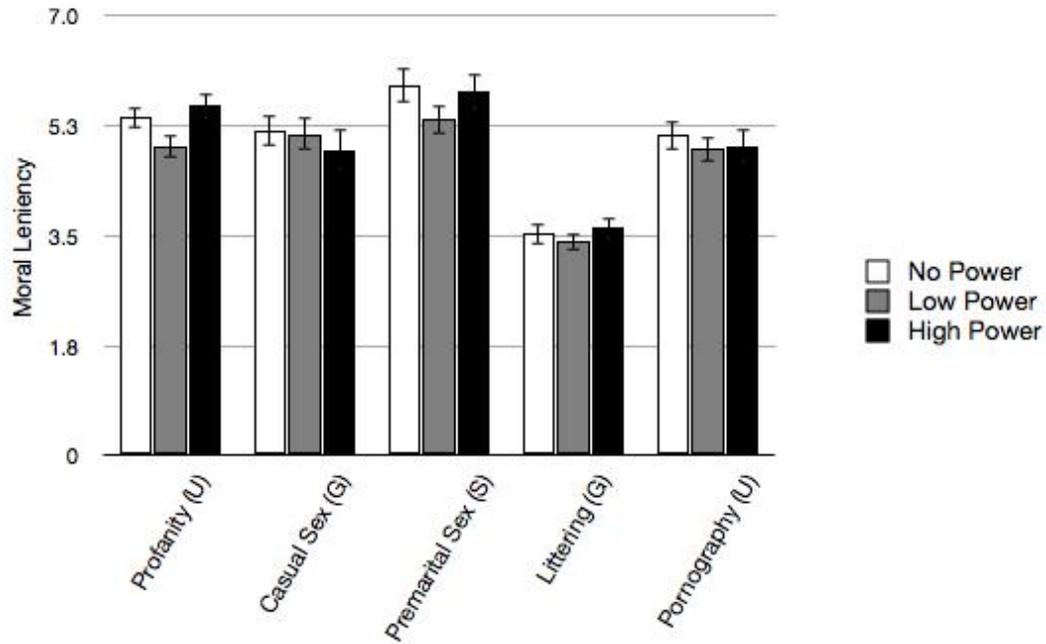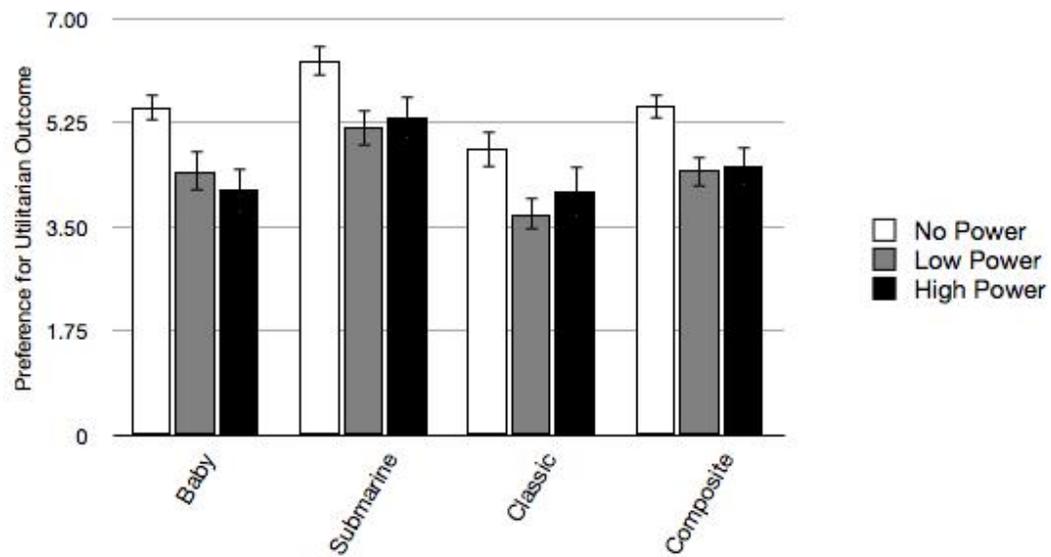**Figure 5.** Examples of moral vignettes from Study 2

Figure 6. Power manipulation for Study 2

Figure 7. Results of Study 2 (only those that were significantly across power conditions in Study 1)

Figure 8. Trolley problem results of Study 2

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