

HOMO RELIGIOSUS AT WORK: AN EXPLORATION OF HOW “RELIGIOSITY”  
RELATES TO ETHICS

by

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## ABSTRACT OF THE DISSERTATION

*Homo Religiosus at Work: An Exploration of How “Religiosity” Relates to Ethics*

By ANDIKA PUTRA PRATAMA

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Dr. Danielle E. Warren

In this dissertation, I address recent calls for empirical research on religiosity and ethics in the management-organizational literature by focusing on sacredness, an important aspect of religiosity. In this dissertation, I integrate a psychological view of religiosity as an individual disposition (i.e. *homo religiosus*) and a sociological notion of “the sacred,” which theoretically can be anything. In Study 1 (N = 585), I create an instrument for exploring “the sacred” and explore how it relates to values, religiosity-related constructs (e.g. intrinsic religiosity) and moral dispositional constructs (e.g. moral disengagement propensity). In this initial study, I discover two forms of individual sacredness: materialism and traditional religion. In a second data collection (N = 521), I confirm the existence of the first two forms of sacredness (materialism and traditional religion) and discover a third form of sacredness: virtue. In Studies 2, 3 and 4, I conduct pretests that explore study manipulations and instruments to be used in tests of the relationship between sacredness and ethical and unethical work behavior. In Study 5 (undergraduate sample; N = 421) and Study 6 (adult sample; N = 100), I test the relationship between forms of sacredness (materialism, traditional religion, virtue), situational factors (self-transcending and self-enhancing situations) and ethical and unethical work behaviors. In

Study 5, I find those who sacralize virtue are less likely to exhibit unethical work behavior (measured by lying about performance). I also find evidence that exposure to a self-transcending situation (versus a self-enhancing situation) causes students who sacralize materialism to engage in more ethical work behavior (measured by willingness to engage in a voluntary act). In Study 6, I find those who sacralize traditional religion and virtue are more likely to exhibit ethical work behavior (measured by the willingness to volunteer once and multiple times) while those who sacralize materialism are more likely to exhibit unethical work behavior (measured by lying about performance). Taken together, the results of my empirical studies provide support for the complexity of religious phenomena and a possible explanation at how being religious can be associated with something morally “good” and “bad” at the same time.

Keywords: sacralizing materialism, religiosity, sacredness, sacralizing traditional religion, sacralizing virtue

## PREFACE

I began working on the topic (“religiosity”) relatively later in the process, in the middle of my third year. During my first two years, I had been working on another topic. At that time, I felt that I needed to work on something that was more meaningful personally. In the beginning, it was rather difficult to present my topic because it was not really a mainstream topic in my field, management and particularly organizational behavior. But I learned that it was a growing topic. Still, I had to learn from scratch.

I can say that the nature of my dissertation is interdisciplinary. Even though it is written from the point of view of organizational or management scholarship, it has benefitted so much from neighboring disciplines such as psychology and sociology. Therefore, the audience for my dissertation is potentially not only organizational or management scholars and students, but also those in neighboring fields who are also interested in studying religion, religiosity, and spirituality. This way, I wish to speak to a broader audience.

In my dissertation, I tried to challenge current assumptions we have about “religiosity.” I learned that such a challenge was possible given the variety in which the term “religiosity” has been used in the literature. I particularly found Wilfred Cantwell Smith’s book, *The Meaning and End of Religion*, especially insightful. I believe that reading the book was a turning point for me in exploring “religious” phenomena beyond the conventional way of looking at religiosity, if any.

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## CHAPTER 1

### INTRODUCTION

A growing management and organizational scholarship has called for a more meaningful and holistic way of studying religion and religiosity in the workplace (Chan-Serafin et al., 2013; Gundolf & Filser, 2013; King, 2008; Tracey, 2012; Weaver & Agle, 2002). For example, with insights from the sociology of religion, Tracey (2012) provides a list of domains worthy of further investigations in the context of management, including “religious ideas in secular contexts” (p. 116), a theme explored in this dissertation. Such urgency seems to be driven by the increasingly diverse workforce, in the West especially, thus the need to accommodate various forms of religiosity at work (Cash & Gray, 2000; King, 2008; Walker et al., 2012; Weaver & Agle, 2002). More fundamentally, studying religion and religiosity in the workplace is important because it has been argued to have a major impact on people’s behavior, including economic, organizational and moral behavior (e.g. Senger, 1970; Weaver & Agle, 2002; Weber, 1930/2005).

As a complex phenomenon (see Atran & Norenzayan, 2004; Graham & Haidt, 2010; Saroglou, 2011), religion has been approached from a variety of angles and in various forms (Chan-Serafin et al., 2013). Particularly in the management literature, religion has largely been discussed rather *prescriptively* (see Gundolf & Filser, 2013), providing a range of normative, theoretical, insights into how to conduct business or practice management from the *religious* points of view (e.g. Abeng, 1997; Ali et al., 2000; Beekun & Badawi, 2005; Kim et al., 2012; Vogel, 2001). Consequently, there is a need to empirically study religion in the context of management “in a more meaningful and

determined way” (Tracey, 2012: 87). This includes the various ways in which religion affects people’s behavior at work, the *good* and the *bad* (Bloom, 2012; Chan-Serafin et al., 2013; Mentzer, 2002).

In this dissertation, I explore how “religiosity” relates to ethics. On the one hand, given the overwhelming number of works in the management literature that provide some sort of ethical guidelines (Gundolf & Filser, 2013), the relationship between religiosity and ethics seems clear. On the other hand, given the various standards with which we deal with religiosity and ethics, resulting in the difficulty to define each, we might expect the relationship between the two to be somewhat complex (Weaver & Agle, 2002) and potentially inconsistent (see Craft, 2013; Parboteeah et al., 2008). Therefore, some conceptual clarifications are needed.

To unravel the complexity surrounding religiosity and ethics, I necessarily narrow my focus on what constitutes religiosity. First, I view religiosity as a psychological disposition, grounded in the idea of human beings as *homo religiosus* (DuBose, 2014b). It refers not to an institutional or creedal commitment, but a deep-seated, basic and often subconscious aspect of human life that helps explain behaviors, including organizational and ethical behaviors. Second, to explore the potentially various forms of being religious, I adopt the concept of “the sacred” as arguably central to any religious phenomenon (e.g. Durkheim, 1912/1965) and to various definitions of religiosity or religiousness (see Zinnbauer & Pargament, 2005). Given that anything can be considered sacred (e.g. Durkheim, 1912/1965), I argue that this could generally contribute to the various forms of “religiosity” (i.e. sacredness), including the paradoxical tendencies of being religious:

the “good” and the “bad,” in a moral sense (Bloom, 2012; Chan-Serafin et al., 2013; Mentzer, 2002).

The field of organizational behavior has mostly assumed that human beings are either *homo economicus*, being rational beings and motivated by self-interest, or *homo heuristicus*, being somewhat irrational beings and motivated by what is available in their surroundings such as socially acceptable norms or “common heuristics” (Kluver et al., 2014: 152). Kluver et al. (2014) extends these assumptions by arguing for the idea of *homo duplex*, used by Durkheim (1912/1965). That is, people have the ability to move back and forth between self-interest and group-interest, for better or worse. I extend that this (i.e. the juggling between self-interest and group-interest) holds because human beings are essentially *homo religiosus*, seeking a higher-level goal that is expected to give them some sense of meaning or significance (Zinnbauer & Pargament, 2005). This perceived higher-level goal is what is called *the sacred*, whatever it is and may mean (Durkheim, 1912/1965; Hill et al., 2000; Zinnbauer & Pargament, 2005).

Here, I shall attempt to fill this gap in the organizational scholarship with regard to the assumption made about human nature. I argue that the importance of studying “religion,” whatever it may mean, in the workplace is not only a matter of whether there are “religious people” in the organization, but more importantly about what people and organizations consider “sacred” (e.g. Ashforth & Vaidyanath, 2002), which is arguably the core of all religious phenomena (Durkheim, 1912/1965). Organizations are arguably considered “secular religions” where leaders and employees congregate to achieve organizational goals as a path to salvation (Ashforth & Vaidyanath, 2002), for better or worse. Thus, I argue that religiosity, a kind of faithfulness to what is perceived as sacred

(i.e. the perceived higher-level “goal”), becomes indeed a central organizational phenomenon and its examination in the context of organizational and ethical behaviors is critical and relevant. And in order to explore the relationship between “religiosity” and ethics, several studies are conducted.

First, in Study 1, I develop a theoretical framework of religiosity emphasizing individual sacredness and conduct an exploratory study to discover forms of sacredness. In the theory section, I discuss the nomological network of (the forms of) sacredness that encompasses self-transcendence and self-enhancement values, several religiosity-spirituality constructs and moral dispositional constructs. The overall results, including results from a follow-up analysis, suggest a particular support for the existence of different forms of sacredness. Overall, three forms of sacredness have been discovered: materialism, traditional religion, and virtue. This discovery helps us to initially understand how “being religious” (i.e. holding things sacred) can potentially lead to less ethical outcome.

Second, in multiple studies, I focus more specifically on how the different forms (i.e. constructs) of sacredness affect the ethical and unethical work behaviors themselves and whether the relationship can be influenced by situational factors. This is important considering the absence of studies on the effect of religiosity on individual behavior (Craft, 2013). First, I discuss the notion of religiosity and proceed to explain what constitutes being ethical and being unethical. Second, I theorize how the forms of sacredness individually affect ethical behavior and unethical behavior. I then explain the situational effects relevant to this study (i.e. self-transcending and self-enhancing situations) and how they moderate the effects of the forms of sacredness on un/ethical



behaviors. The overall results support differential effects of forms of sacredness on unethical behavior. Further, in a sample of students (i.e. Study 5), it is also found that a self-transcending situation, as opposed to a self-enhancing situation, moderates the effect of sacralizing materialism on ethical work behavior.

Overall, the dissertation is expected to address the emerging voices in the organizational literature to examine religion and religiosity more thoroughly (Gundolf & Filser, 2013; King, 2008; Tracey, 2012: 87; Weaver & Agle, 2002), including examining the *good* and the *bad* (Bloom, 2012; Chan-Serafin et al., 2013; Mentzer, 2002). Here I propose to see religiosity not as an “entity” separate from the realm of work, rather as an integral aspect of human living and functioning. It is similar to other psychological dispositions such as values and something that human beings carry to all aspects of their lives, including organizational lives. By designing studies that include the “good” and the “bad,” I hope to make progress in understanding how religion affects work behavior.

## CHAPTER 2

### STUDY 1: CONSTRUCT DEVELOPMENT, A THEORETICAL FOUNDATION

In this study, I develop new constructs of sacredness, a central theme of religiosity. I briefly discuss the puzzling concept of religiosity and define it for the purpose of this study (i.e. focusing on sacredness).

### THE CONCEPT OF RELIGIOSITY: A THEORETICAL FOUNDATION

There is little consensus in defining religiosity or religiousness (e.g. Zinnbauer & Pargament, 2005). One reason may be disciplinary. The psychological literature generally treats religiosity (or religiousness) as an individual phenomenon (e.g. Hill et al., 2000), while the sociological literature treats religiosity as a social or group phenomenon. In addition, the social psychological approach regards religion/religiosity as an individual approach in relation to the social (Batson et al., 1993), including the cross-cultural psychological approach (e.g. Saroglou, 2011). Nevertheless, within the psychological study of religion itself, there is no consensus in how religiosity is defined (Zinnbauer & Pargament, 2005). For organizational research, given its reliance on neighboring disciplines such as psychology and sociology (e.g. Porter, 1996), this has been a very tricky subject (e.g. Weaver & Agle, 2002). To further complicate matters, any scholarly definition related to religiosity could potentially contradict “a given individual’s self-definition” (Zinnbauer & Pargament, 2005: 37).

Historically, “religion” as a term has evolved from an internal experience of a person signifying personal piety to a rigid entity signifying a collective system of belief (Batson et al., 1993; Hill et al., 2000; Smith, 1962/1991) or culture (Geertz, 1973; Saroglou & Cohen, 2011). It is argued that the shift has been due to increasing contact among different so-called religious communities (Smith, 1962/1991). Given the importance of a definition in putting a boundary condition to a phenomenon under study (Mills, 1959), I explain the conceptualization of religiosity for the purpose of this study, which integrates insights from both psychological and sociological literatures on religiosity.

### **Religiosity as an Individual Disposition**

To begin the conceptualization of religiosity for the purpose of this study, I first adopt the psychological notion of human beings as *homo religiosus* (DuBose, 2014b). That is, humans are inherently religious. But this does not refer to “a person’s creedal beliefs or institutional commitments per se,” but to “...our existential drive toward transcendence, freedom, and meaning-making, no matter the differences of religious or a/religious backgrounds or convictions” (p. 827). This may include an atheist (Batson et al., 1993). Everyone, regardless of whether or not the language of expressing transcendence involves what is called “God,” may have a drive towards transcendence. This need to transcend has been thought to be the highest of all human motivation (Maslow, 1971; Koltko-Rivera, 2006). This viewpoint implies that human beings can be more or less religious, stretching from being religious to being irreligious. But it does not recognize being “non-religious,” given that being religious is not considered a category. Viewing religiosity as an individual disposition enables it to function in broader contexts,

including organizational contexts. In addition, it can also be suggested that humans being *homo religiosus* have a goal to be moral or virtuous individuals. There are scholars who would argue that the main purpose of “religion,” in a broader sense, is to maintain morality (e.g. Durkheim, 1912/1965; Graham & Haidt, 2010; Krueger, 1986). Recall the semantic origin of the term “religion” itself, which signifies personal piety (see Smith, 1962/1991).

### **Religiosity as Commitment to the Sacred**

From a more sociological perspective, I focus on the notion of the sacred, arguably central to any religious phenomena (Demerath, 1999; Durkheim, 1912/1965; Leuba, 1913). It is also central to various psychological definitions of religiosity (see Chan-Serafin et al., 2013; Zinnbauer & Pargament, 2005). However, what is considered sacred can be simply anything (Demerath, 1999; Durkheim, 1912/1965), beyond what is traditionally regarded as sacred (see Hill et al., 2000). Given the secularization of the society, especially in the West, it is argued that things that traditionally are not the concerns of “religion” as a system of belief have been adopted as sacred matters as well (Belk et al., 1989; Demerath, 1999), such as modern organizations (Ashforth & Vaidyanath, 2002). Generally speaking, things are sacred “when they come to us as the expression of powers superior to us and connected with us, when there are ways of ‘putting oneself right’ with these powers, and when failure to conform to these ways entails danger” (Leuba, 1913: 327). The sacred can thus be thought of as the “standard” with which one’s action is supposed to be in accordance. What is called “God” can be considered sacred, which is embedded in some definitions of religiosity (e.g. McDaniel &

Burnett, 1990). But the fact that people have different mental representations of God (Davis et al., 2013; Shariff & Norenzayan, 2011), thus enabling them to accept or reject that representation (Armstrong, 1993), makes “God” as a term potentially a malleable concept.

### **Tensions of Homo Religiosus**

Humans are born into a community or society where rules, norms, ideas or structures, including those related to morality, have been predefined. Communities, to a large extent, control the overall behaviors of their members, ensuring that they act as one moral collective (Durkheim, 1912/1965; Geertz, 1973; Graham & Haidt, 2010). They are usually known simply as “religions,” in which *the sacred* has or have been predefined (Leuba, 1913), no matter how rudimentary it is understood or how many manifestations there are. Religion is traditionally understood as any means of approaching what the “religious” community considers sacred (Hill et al., 2000; Zinnbauer & Pargament, 2005).

But this idea of predefined rules or norms, which are subject to social construction overtime (Berger & Luckmann, 1966), should also apply to a secular collective like an organization (Ashforth & Vaidyanath, 2002). Every community has rules or codes of ethics, written or unwritten, about what is ought to be done and what is forbidden. These rules are made sacred or sacralized and bind its members, whether or not they are willing to conform (e.g. Warren, 2003). In other words, given that the sacred is or are defined or predefined (Ashforth & Vaidyanath, 2002), all communities are essentially religious communities. As Durkheim (1912/1965) maintains, it is the sacred, whichever way it is

defined (e.g. God, gods, objects, humans or kinds of ends), that constitutes a “religion.” This includes organizations as “secular religions” (Ashforth & Vaidyanath, 2002).

Given this socially constructed nature of sacredness, human beings as *homo religiosus* face the potential tension between being religious as driving towards “transcendence, freedom, and meaning-making” (DuBose, 2014b) and being religious as what the community or communities consider(s) sacred. Individuals will then be predisposed to behave according to what they consider sacred. This corresponds to the potential conflict between what is called the *hypernorms*, or “principles so fundamental to human existence that... we would expect them to be reflected in a convergence of religious, philosophical, and cultural beliefs” (Donaldson & Dunfee, 1994: 265) and the norms adopted by a referent group, such as an organization (Warren, 2003). They do not necessarily conflict, but they could. Overall, as *homo religiosus*, humans experience tensions with regard to what they consider sacred. To some extent, such tensions may bring humans to sacralize something less fundamental than the universal, whatever it is. Here, we can argue how being religious can potentially have good or bad behavioral consequences (Chan-Serafin et al., 2013).

Overall, communities act as a mechanism that sets the boundary conditions for people to behave. In this way, they may serve as either a barrier or a facilitator of the act of transcendence, which can be thought of as a virtue that “forges connection to the larger universe and therefore provide meaning” (Dahlsgaard et al., 2005: 205), signifying “an experience of moving from one mode of existence to another, for various reasons, and done in a myriad of ways” (DuBose, 2014c: 1808). It is also “a fundamental capacity of the individual, a source of intrinsic motivation that drives, directs, and selects behaviors”

(Piedmont, 1999: 988). Transcendence signifies an approach to wholeness, an attempt to integrate parts into a whole or make sense of all that exist as an indivisible collective. Especially in the context where communities are intersected with one another, human beings as *homo religiosus* experience tensions or competing motives throughout their lives, relentlessly asked to decide on which course of action to take, based on choices of sacred matters. These tensions contribute to the ability of individuals to transcend. Consequently, some people may end up sacralizing certain matters and desacralizing others while some may struggle to decide on what matters should be considered more sacred than others, things that would make them feel “safe.”

### **Defining Religiosity and Forms of Sacredness**

Through the theoretical framework of individual sacredness, religiosity as here studied can be defined as *a psychological disposition of an individual emphasizing an inclination to act in accordance with what the individual considers sacred*. On the one hand, religious teachings and beliefs, within various traditions, are arguably sources of “good” values such as prosociality, virtuousness, and other basic moral values (e.g. Chan-Serafin et al., 2013; Dahlsgaard et al., 2005; Norenzayan & Shariff, 2008). Interestingly, atheistic values do also seem to converge on these basic moral values (Kinnier et al., 2000). What is more interesting is the assertion that individuals are biologically wired with these religious-moral values (Lawrence, 2004; Sadler-Smith, 2012). On the other hand, the existence of “religion,” or to a large extent community itself, seems to provide the basis for other self-serving motives (Allport & Ross, 1967; Bloom, 2012; Sedikides & Gebauer, 2010), with emphasis on “values” such as pride and egocentrism (Chan-Serafin

et al., 2013). To the extreme, it can be the kind of fundamentalist religiosity (or non-religiosity), in a traditional sense (Ysseldyk et al., 2010). Bloom (2012) argues that the “bad” side of religiosity itself seems to be unrelated to religious belief, but to “religion,” as a social validator.

Overall, given the tensions that human beings as *homo religiosus* experience, there are potentially a variety of sacredness, the forms of which are still unexplored. Below, I explain several related constructs that can help us discover forms of sacredness.

### A NOMOLOGICAL NETWORK OF SACREDNESS: CONSTRUCT VALIDITY

A nomological network of a construct refers to a web of relationships between the construct of interest and other theoretically related constructs (Schwab, 1980). Given that the “construct” itself remains unexplored, I consider several constructs that theoretically may be related to the idea of religiosity or sacredness, thus helping us to discover forms of sacredness. Here, the nomological network of sacredness considered encompasses *values* (i.e. self-transcendence and self-enhancement), *religiosity-related constructs* (i.e. intrinsic religiosity, quest religiosity, and spirituality) and *moral dispositional constructs* (moral disengagement propensity, moral identity, and the five moral foundations).

#### **Values: Self-transcendence and Self-enhancement**

Here, I relate the idea of sacredness with values, particularly self-transcendence and self-enhancement. In Schwartz’ value theory (e.g. Schwartz, 1992, 1994, 2003), these two higher-order values are two diametrically opposed values. This means that, on



average, those with a high level of self-transcendence would have a low level of self-enhancement and vice versa. I argue that these two particular values may help us discover forms of sacredness. Below are more detailed explanations.

*Self-transcendence* is defined as the value of seeing others equally and having concerns for their well-being or welfare (e.g. Caprara et al., 2012; Schwartz, 1992, 1994). In Schwartz' value theory, it generally consists two sub-values: *benevolence* and *universalism*. Benevolence is defined as "preservation and enhancement of the welfare of people with whom one is in frequent personal contact," while universalism entails "understanding, appreciation, tolerance, and protection for the welfare of all people and for nature" (Schwartz, 1994: 22; Schwartz et al., 2001: 521). Benevolence includes values such as honesty, forgiveness, helpfulness, responsibility, and spiritual life, while universalism includes inner harmony, social justice, wisdom, equality, and broad-mindedness. Essentially, these are values that take individuals away from their egocentrism.

*Self-enhancement* has been argued to be a core and prevalent organizational phenomenon that could explain varieties of behaviors (Pfeffer & Fong, 2005). Essentially, it is the idea that people are motivated to view themselves in a favorable or positive light (Pfeffer & Fong, 2005; Roccas, 2003). In Schwartz' value theory (1992, 1994), it consists of *power* and *achievement*. The former is defined as "social status and prestige, control or dominance over people and resources," while the latter entails "personal success through demonstrating competence according to social standards" (Schwartz, 1994: 22; Schwartz et al., 2001: 521). Power includes social recognition,

preserving public image, authority, wealth, and social power, while achievement includes being ambitious, influential, successful, capable, and intelligent.

I argue that forms of sacredness as dispositions of religiosity may be related to either self-transcendence or self-enhancement. On the one hand, varieties of self-transcendence (e.g. empathy) appear to be universally and unconditionally espoused by all major religious teachings (e.g. Ali et al., 2000; Dahlsgaard et al., 2005; Kriger & Seng, 2005; Norenzayan & Shariff, 2008; Saroglou, 2011; Vogel, 2001). Interestingly, the universality also applies to philosophical and atheistic traditions (Dahlsgaard et al., 2005; Kinnier et al., 2000). As it is argued, the point of convergence is often times gone unnoticed simply because of the use of different linguistic expressions (Kriger & Seng, 2005). On the other hand, being religious in a traditional sense (i.e. intrinsic religiosity) has been related to social desirability, which is a form of self-enhancement (Sedikides & Gebauer, 2010). In the context of sacredness, people may sacralize matters that enable them to feel self-enhanced. Overall, self-transcendence and self-enhancement values should be particularly useful and insightful in facilitating the discovery of forms of sacredness.

### **Religiosity-related Constructs**

This dissertation is essentially about religiosity. Therefore, it is essential to check whether forms of sacredness attend to some of the existing religiosity-related constructs. Here, I consider *intrinsic religiosity* (e.g. Allport & Ross, 1967), *quest religiosity* (Batson et al., 1993), and *spirituality* (Liu & Robertson, 2011).

*Intrinsic religiosity*<sup>1</sup> is one of the two earlier dimensions of what is called religious orientation (Allport & Ross, 1967; Feagin, 1964), a very widely used construct of religiosity in the psychological studies of religion (Donahue, 1985; Ghorpade et al., 2010; Wei & Liu, 2013). The individual with intrinsic religiosity is understood as someone who “lives his religion” (Allport & Ross, 1967: 434). Initially thought to be the kind of pure or genuine religiousness, from which all the good supposedly come (Allport & Ross, 1967; Hood, 1985), several empirical studies indicate that it is the kind of religiosity that enables self-stereotyping (Burris & Jackson, 2000) and suffers from social desirability (Sedikides & Gebauer, 2010) and moral hypocrisy (Carpenter & Marshall, 2009). For these two somewhat conflicting views and the potential paradoxical meanings in “living one’s religion,” it is possible that it will be positively related to both forms of sacredness.

*Quest religiosity* (Batson et al., 1993) is a form of religiosity that questions “religion” itself. It is a kind of open-minded religiousness (Saroglou, 2002) and puts emphasis on “doubt as a key characteristic of religion and having a willingness to embrace the full complexity of life’s existential questions” (Graham et al., 2008: 148). Some scholars argue that quest religiosity is not a measure of religiosity at all (Hood, 1985), rather a measure of agnosticism at best (Donahue, 1985; Neyrinck et al., 2010). Nevertheless, Batson et al. (1999, 2001) empirically argue that it is quest religiosity, not intrinsic

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<sup>1</sup> Ideally, intrinsic religiosity would be accompanied with extrinsic religiosity (with the later usually being associated with a more “impure” version of religiosity, see Allport & Ross, 1967). For several reasons, I include only intrinsic religiosity, but not extrinsic religiosity. First, extrinsic religiosity relies on an assumption that there is something called “religion,” something that is strictly separate from all other aspects of life. In my conceptualization, I have avoided this assumption. Second, intrinsic religiosity is viewed as a psychological disposition, focusing on being religious as a guiding principle of all aspects of life. In other words, its role in the landscape of the religiosity concept is more central than extrinsic religiosity. Extrinsic religiosity, on the other hand, relies on other motives external to “religion” in its core concept. Overall, I find extrinsic religiosity as a concept problematic due to its heavy reliance on viewing “religion” as an entity, something that is not explicitly examined.

religiosity, which favors universal compassion. In particular, they suggest that quest individuals could develop antipathy toward value-violating behavior, but not the person.

*Spirituality* considered here refers to the construct developed by Liu & Robertson (2011) in the context of workplace. People with high level of spirituality are thought to have a more transcendental self-identity, beyond individual, relational, and collective self-identity. At the highest level of spirituality, human beings are thought to have a high degree of interconnection with a higher power, human beings, and nature and all living things (i.e. its dimensions).

### **Moral Dispositional Constructs**

Generally, the idea of the sacred is always juxtaposed with the idea of the profane (Durkheim, 1912/1965). Therefore, on the one hand, it is important to understand how certain moral dispositional constructs are related to forms of sacredness. On the other hand, moral dispositional constructs are expected to help us discover these forms of sacredness. Here, I include leading moral dispositional constructs in organizational research: *moral disengagement propensity* (Moore et al., 2012), *moral identity* (Aquino & Reed, 2002), and *moral foundations* (Haidt & Graham, 2007).

*Moral disengagement propensity* is the more straightforward moral disposition in terms of how it tells us about morality. Defined as, “an individual difference in the way that people cognitively process decisions and behavior with ethical import that allows those inclined to morally disengage to behave unethically without feeling distress” (p. 2). Given that the sacred relates to the profane, a form of sacredness may be related to moral disengagement propensity.

*Moral identity* is defined as “a self-conception organized around a set of moral traits (Aquino & Reed, 2002). In measuring moral identity, nine traits are selected to induce the salience of the identity: caring, compassionate, fair, friendly, generous, helpful, hardworking, honest, and kind. Moral identity may relate to a certain form of sacredness given the similarity in terms of the things to approach. In the case of moral identity, it is a set of moral traits that become the things to approach.

*Moral foundations* are based upon the moral foundations theory that generally proposes that there are different moral intuitions (or foundations) found across and within societies (e.g. Haidt & Graham, 2007). But the theory does not attempt to state which one is more ethical or moral than the other. It simply attempts to explain the variety of human moral intuitions. The initial list of moral foundations includes five foundations only, which is what this study is focused on (see Iyer et al., 2012, for a preliminary work on the sixth foundation). The variety of moral foundations is expected to help us discover forms of sacredness.

## CHAPTER 3

### STUDY 1: CONSTRUCT DEVELOPMENT, AN EMPIRICAL INVESTIGATION

In this chapter, I discuss the method and results of the construct development of sacredness. This includes the pretest aiming to develop the instrument for discovering and measuring forms of sacredness. It ends with a brief discussion of the results.

#### METHOD: INSTRUMENT DEVELOPMENT PRETEST

##### **Procedures**

The *first* and most challenging part of the instrument development was to come with a list of potential sacred items. In developing the preliminary list of sacred items, I used insight from Belk et al.'s (1989) study on the sacralization of the secular in the context of consumer behavior. Their study was particularly insightful in generating kinds or categories of sacred items. In their study, the categories of sacredness were places, times, tangible things, intangible things, persons and other beings, and experiences. Based on these categories, I attempted to come up with items, as many as possible. In my preliminary list<sup>2</sup>, places include “workplace,” “school,” “home,” “country,” and “religious sites;” times include “leisure time,” “sleep time,” and “work time;” tangible things include “clothes I wear,” “money,” “animals,” and “trees and plants;” intangible things include “divine presence,” “science,” “economy” and “career;” persons and other beings include “prophets or messengers,” “saint individuals,” and “friends;” while experiences include “private thought, prayer, or meditation,” and “doubts and

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<sup>2</sup> The full list is presented in Appendix C on Sacredness Instrument.

uncertainties.” Some of these could obviously be categorized differently. While an extensive list of sacred items was desirable, given the exploratory nature, it needed to be practically feasible as well. Overall, a list of 64 potential “sacred items” was retained for the pretest. When coming up with these items, no particular construct was used as an anchor. It was largely exploratory.

The *second* part was to create an anchor question that would lead respondents to rate the sacredness of the items listed. In order to prevent respondents from using their preconception of the sacred in their answer, the criteria of the sacred offered by Leuba (1913) were used. It is possible that their evaluation of “the sacred” would conflate with what they have known. Therefore, the sacred criteria were crucial. Things are sacred “when they come to us as the expression of powers superior to us and connected with us, when there are ways of ‘putting oneself right’ with these powers, and when failure to conform to these ways entails danger” (Leuba, 1913: 327). In the instrument, it was also enforced that they were asked to rate the sacredness of things not based on what people think as sacred but what the respondent thinks as sacred, anchored by the criteria.

The *third* part was to streamline the initial list of 64 sacred items into a shorter list to be more practical when it was finally included in the main study. Several criteria were used in streamlining the list. Primarily, I used self-transcendence and self-enhancement as one criterion. Previously, I argued that these two higher order values would be in the nomological network of sacredness. On the one hand, these two values, while being the opposite of each other, are associated with “religion” in its various manifestations (see Dahlsgaard et al., 2005; Sedikides & Gebauer, 2010). On the other hand, the fact that these are higher order values, which act as criteria for choosing behaviors (Schwartz,

1992), make them especially relevant to the idea of the sacred. In addition, the opposite nature of these two values makes it possible for discovering a broad range of sacred matters. In essence, self-transcendence and self-enhancement were seen as appropriate criteria in order to streamline the list. Thus, those that were not found to relate to either one of these values would be cut. In addition, given the focus on “religiosity,” I also used intrinsic two religiosity-related constructs (i.e. intrinsic religiosity and spirituality) as additional criteria to streamline the list.

## **Samples**

Given the theoretical foundation, emphasizing the dispositional nature of sacredness, it was desirable to sample a diverse set of individuals and not only individuals from certain religious backgrounds. For the pretest, I used Amazon Mechanical Turks (i.e. MTurk) and obtained a sample of 96 respondents. The sample included 1 Jewish, 12 Catholic, 29 Protestant, 1 Muslim, 1 Buddhist, 4 Hindu, 2 Mormon, 19 Atheist, 15 Agnostic, and 9 Spiritual individuals. Three participants indicated they were “Others.” 92% were Americans (N = 88), with 1 respondent not indicating his/her nationality.

## **Pretest Results**

### *Two Scales of Self-transcendence and Self-enhancement*

In the values literature, two scales exist for measuring self-transcendence and self-enhancement: the *Schwartz Value Survey* (SVS) and the *Portrait Values Questionnaire* (PVQ) scales (Schwartz et al., 2001). I ran an exploratory factor analysis (EFA) for each



scale to see whether the distribution of the items would be the same as theorized by Schwartz and colleagues (Schwartz, 1992, 1994; Schwartz et al., 2001). The results are presented in Table 3.1 and Table 3.2. The finding of the exploratory factor analysis showed the same exact distribution of items as theorized for the PVQ scale, with items falling in their respective values (i.e. universalism and benevolence for self-transcendence; power and achievement for self-enhancement). This did not happen in the case of the SVS scale.

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 INSERT TABLE 3.1 HERE  
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### *Sacred Items*

As mentioned, there were initially 64 sacred items. To streamline the list of the sacred items, as explained before, I checked how the items relate to self-transcendence, self-enhancement, intrinsic religiosity, and spirituality. Overall, by using these four measures and intuitively evaluating the meaning of the items, I decided to retain 22 items. Ten items were found to be positively correlated with self-transcendence: “divine presence” (28), “all dealings in life” (32), “private thought, prayer, and meditation” (42), “larger presence of reality” (43), “personal-religious growth” (51), “convictions” (55), “connection to the world” (56), “the present moment” (58), “the future” (59), and “God or any of its other terms” (61). To make these more representable, they were called

*Sacred for Self-transcendence* (SS-Transcend). Moreover, twelve items were found to be positively correlated with self-enhancement: “country” (5), “natural disasters” (11), “leisure time” (13), “clothes I wear” (16), “social groups” (20), “university” (35), “political party” (36), “economy” (47), “science” (48), “career” (49), “social status” (50), and “money” (62). Similarly, they were called *Sacred for Self-enhancement* (SS-Enhance)<sup>3</sup>.

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 INSERT TABLE 3.3 HERE  
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Further, I also performed 2-factor EFA to see if SS-Transcend and SS-Enhance also reflected in some way the two dimensions of self-transcendence and self-enhancement, respectively. Factor 1 for SS-Transcend items includes items “divine presence,” “private thought, prayer, or meditation,” “personal-religious growth,” “convictions,” and “God or any of its other terms” only, out of the 10 items previously retained. All items, excluding “convictions,” had factor loadings higher than 0.60. “Convictions” was dropped because, without it, Factor 1 yielded a slightly higher alpha. Factor 2 for SS-Transcend items included items “all dealings in life,” “larger presence of reality,” “connection to the world,” “the present moment,” and “the future.” All items had factor loadings higher than 0.6 (nothing was dropped). Overall, I decided to retain 9 items for SS-Transcend. Factor 1 for SS-Enhance includes items “clothes I wear,” “social groups,” “political party,” “social status,” and “money,” while Factor 2 includes “economy,” “science,” and

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<sup>3</sup> The choosing of these items, while being informed by the correlations, was also intuitive. The goal was to streamline the list, so a strict rule of looking at the correlations was not applied, while also to allow for variations to exist or emerge.

“career.” Four items (“country,” “natural disasters,” “leisure time,” “university”) had factor loadings lower than 0.6, so I decided to drop them. Overall, I retained 8 items for SS-Enhance. Table 3.4 shows the exploratory factor analysis for both SS-Transcend and SS-Enhance. Overall, 17 items were retained.

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 INSERT TABLE 3.4 HERE  
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#### *Correlations between SS-Transcend, SS-Enhance and Other Measures*

As seen in Table 3.5, Sacred for Self-transcendence (SS-Transcend) positively and highly correlated with the self-transcendence<sup>4</sup> ( $r = 0.34$ ;  $p < 0.01$ ), while Sacred for Self-enhancement (SS-Enhance) positively and highly correlated with self-enhancement ( $r = 0.49$ ;  $p < 0.001$ ). It is also interesting to note that SS-Transcend correlated positively with SS-Enhance ( $r = 0.40$ ;  $p < 0.001$ ).

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 INSERT TABLE 3.5 HERE  
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Overall, the pretest served as a foundation for using the instrument in the actual study. From the initial list of 64 potential sacred items, in order to maintain the parsimony of the instrument and because of the correlations shown, it was decided that there were only 17 items that would be retained for use in the main study.

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<sup>4</sup> Curiously, it is also positively correlated with self-enhancement.

## METHOD FOR STUDY 1

### **Samples and Procedures**

For the main study, a diverse set of samples was gathered. The samples included professors (N = 76), staff (N = 69), undergraduate students (N = 199) and graduate students (N = 51) at Rutgers University, a school known for its diversity. In addition, a sample of individuals was recruited through the Amazon Mechanical Turk or MTurk (N = 190). Rutgers University employee and graduate samples were invited via e-mail to participate in the survey. Undergraduate students were recruited through the Rutgers Business School Lab, which administered the survey.

In total, there were 585 usable surveys<sup>5</sup> in this study, encompassing diverse religious backgrounds (21 Jewish, 126 Catholic, 80 Protestant, 23 Muslim, 16 Buddhist, 45 Hindu, 3 Sikh, 3 Mormon, 90 Atheist, 67 Agnostic, 41 Spiritual, and 63 Others), with 7 people not reporting their religious identity. The average age was about 35 years old, with standard deviation of 14.37 (4 people did not report their age). For gender, there were 276 men and 306 women (3 people did not report their gender). The sample included 60% Americans (N = 349) and 4% (N = 25) did not indicate their nationality. The rest of the sample (32%) was not American (e.g. 9% from European countries, 7% from India, 5% from Latin America, and others from other Asian and African countries).

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<sup>5</sup> There were initially 700 surveys. The number was reduced due to missing data.

## **Data Analysis**

To empirically establish construct validity (i.e. convergent and discriminant validity), correlational analyses were performed, involving the emergent factors with values (i.e. self-transcendence and self-enhancement), religiosity-related measures (i.e. intrinsic religiosity, quest religiosity, spirituality) and moral dispositional measures (i.e. moral disengagement propensity, moral identity, and the five moral foundations). In addition, multiple regression analyses were performed in order to see how the newly developed measures of sacredness compared with other religiosity-related measures.

## **Measures**

### *Self-Transcendence and Self-Enhancement*

Self-transcendence and self-enhancement were measures used to empirically evaluate the content or significance of the sacred items. Both of these values, along with two other higher-order values (i.e. conservatism and openness to change), were measured using the same instrument. But there were two instruments developed to measure the values: the Schwartz Value Survey and Portrait Values Questionnaire scales (Schwartz et al., 2001), the latter considered “more concrete and contextualized, provides descriptions of people rather than abstract value terms, asks for similarity judgments rather than self-conscious reports of values, and uses a response format that does not require expressing judgments in numerical ratings. Respondents to the Portrait Values Questionnaire scale are unaware that they are answering a values questionnaire” (p. 538). In the pretest, both were used. In addition, only questionnaire items related to self-transcendence and self-enhancement

were included in the instrument. Consistent with Schwartz et al. (2001), the Portrait Values Questionnaire was used in the study given the finding of the exploratory factor analysis showing the same exact distribution of items as theorized by Schwartz and colleagues (Schwartz, 1992, 1994; Schwartz et al., 2001).

### *Other Measures*

For intrinsic religiosity, a 7-item scale was used, reduced from an extensive list of 23 items gathered from Gorsuch & Venable (1983), Hoge (1972), Ji & Ibrahim (2007), and Maltby (1999). Quest was measured using the 12-item scale (Batson et al., 1993), while spirituality was measured using the 16-item scale (Liu & Robertson, 2011). Moral disengagement propensity was measured using the 8-item scale developed by Moore et al. (2012), while moral identity was measured using the 12-item scale developed by Aquino & Reed (2002). The five moral foundations were measured using the 30-item scale developed by Haidt and colleagues (e.g. Haidt & Graham, 2007).

## RESULTS

The presentation of the results is divided into two parts. The first part involves all participants, including the “non-religious” groups (i.e. atheists and agnostics), while the second part only includes the “religious” participants (i.e. participants in the “religious” category). This attempts to explore whether excluding the “non-religious” participants provides different results.

## Part 1: Including Atheists and Agnostics

### *Exploratory Factor Analysis*

Table 3.6 shows the result from exploratory factor analysis of the sacred items with two factors. Items loaded into **Factor 1** only were “economy,” “science,” “career,” “social status,” and “money” ( $\alpha = 0.89$  with “science,”  $\alpha = 0.91$  without “science”) while items loaded into **Factor 2** only were “divine presence,” “private thought, prayer or meditation,” “personal-religious growth” and “God or any of its terms.” Of all the items loaded into Factor 1, “science” had the lowest factor loading score (0.60), compared to all others (all above 0.80). Overall, the alpha coefficients for both factors showed very high reliability. Both factors were also positively correlated ( $r = 0.11$ ;  $p < 0.01$ ).

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INSERT TABLE 3.6 HERE  
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### *Convergent and Discriminant Validity*

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INSERT TABLE 3.7 HERE  
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Further, both factors were juxtaposed with values, religiosity-related and moral dispositional constructs as seen in Table 3.7. Factor 1 (i.e. “economy,” “career,” “social status,” and “money”) positively and highly correlated with self-enhancement ( $r = 0.45$ ;  $p$

< 0.001) and correlated negatively with self-transcendence ( $r = -0.12$ ;  $p < 0.01$ ). Factor 2 (i.e. “divine presence,” “private thought, prayer, or meditation,” “personal-religious growth,” and “God or any of its terms”) correlated positively with self-transcendence ( $r = 0.10$ ;  $p < 0.05$ ), with no statistically significant correlation with self-enhancement.

With regard to religiosity-related measures, Factor 1 positively and highly correlated with intrinsic religiosity only ( $r = 0.20$ ;  $p < 0.001$ ), Factor 2 positively and highly correlated with all three measures. It was almost completely mapped onto intrinsic religiosity ( $r = 0.74$ ;  $p < 0.001$ ). It also positively and highly correlated with spirituality ( $r = 0.56$ ;  $p < 0.001$ ) and quest religiosity ( $r = 0.24$ ;  $p < 0.001$ ). Note that among the three religiosity-related measures, spirituality correlated positively with both intrinsic religiosity ( $r = 0.58$ ;  $p < 0.001$ ) and quest religiosity ( $r = 0.30$ ;  $p < 0.001$ ) while intrinsic religiosity and quest religiosity were not correlated at all. This indicates that Factor 2 appears to capture the complexity of religiosity.

With regard to moral dispositional measures, only Factor 1 correlated positively with moral disengagement propensity ( $r = 0.22$ ;  $p < 0.001$ ), while both Factor 1 and Factor 2 correlated positively with moral identity. The correlation between Factor 2 and moral identity was more statistically significant ( $r = 0.28$ ;  $p < 0.001$ ) than between Factor 1 and moral identity ( $r = 0.12$ ;  $p < 0.01$ ). In terms of moral foundations, both factors positively and highly correlated with foundations based on authority, ingroup, and purity. However, Factor 1 negatively correlated with fairness ( $r = -0.10$ ;  $p < 0.05$ ), while Factor 2 positively correlated with the harm/care ( $r = 0.16$ ;  $p < 0.001$ ) and did not correlate with fairness. Multiple regressions with Factor 1 and Factor 2 as dependent variables (see Table 3.8), separately, showed that the most statistically significant moral foundations for



Factor 1 were authority ( $p < 0.001$ ) and ingroup ( $p < 0.001$ ) while the most statistically significant moral foundations for Factor 2 were purity ( $p < 0.001$ ) and harm/care ( $p < 0.001$ ).

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 INSERT TABLE 3.8 HERE  
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Overall, Factor 1 and Factor 2, while sharing a certain feature of “religiosity” (i.e. intrinsic religiosity) and a moral disposition (i.e. moral identity), appeared to represent distinct forms of sacredness, with Factor 2 appearing to be related to a more complex religious-spiritual landscape (i.e. related to all three religiosity-related measures, even to quest religiosity, which is characterized by “doubt”) and Factor 1 being positively related to moral disengagement propensity. Factor 1 and Factor 2 also differed in terms of the moral foundations that they were most related to (Table 3.8).

### *Comparing the Measures*

In order to analyze how the new measures of religiosity compared with the other religiosity-related measures in terms of their moral significance (as seen in Table 3.9), I ran multiple regression analyses involving moral disengagement propensity (Model 3), moral identity (Model 4), and self-transcendence (Model 5) as well as self-enhancement (Model 6) as dependent variables, separately. In all analyses, I included age, gender (1 is for “male,” 0 is for “female”), atheism, agnosticism, and the question “how religious are

you?” as control variables (14 observations were deleted due to missing data in religious identity, age, and gender combined).

Across all models, Factor 1 related to the dependent variable. It positively related to moral disengagement propensity (Model 3,  $p < 0.001$ ), moral identity (Model 4,  $p < 0.01$ ), and self-enhancement (Model 5,  $p < 0.001$ ), as well as negatively related to self-transcendence (Model 6,  $p < 0.05$ ). In a stark contrast, Factor 2 did not relate to the dependent variable in all models. Overall, Factor 1 had the more statistically significant relationship with moral dispositions and values than Factor 2.

In Model 3 (i.e. moral disengagement propensity as the dependent variable), it can be seen that, among the religiosity-related measures, only spirituality had a negative regression coefficient ( $p < 0.001$ ), while quest and Factor 1 had positive regression coefficients ( $p < 0.001$ ). Both intrinsic religiosity and Factor 2 did not relate to moral disengagement propensity. Interestingly, among the control variables, age negatively and highly related to moral disengagement propensity ( $p < 0.001$ ). That is, moral disengagement propensity decreased as people aged. This also applied to atheism ( $p < 0.05$ ), in that being atheist (as opposed to non-atheist) somewhat related to a lower level of moral disengagement propensity.

In Model 4 (i.e. moral identity as the dependent variable), spirituality had a positive and the strongest relationship with moral identity ( $p < 0.001$ ), beyond Factor 1 and atheism ( $p < 0.01$ ). Consistently, intrinsic religiosity and Factor 2 did not relate to moral identity. Interestingly, gender negatively related to moral identity ( $p < 0.01$ ), making men generally had lower level of moral identity than women.

In Model 5 (i.e. self-enhancement as the dependent variable), only Factor 1 had a positive and statistically significant relationship with self-enhancement ( $p < 0.001$ ). Among the control variables, only gender did not relate to self-enhancement. Atheism ( $p < 0.01$ ), agnosticism ( $p < 0.001$ ), and age ( $p < 0.001$ ) all negatively related to self-enhancement. This entailed that that being atheist and agnostic (as opposed to being non-atheist and non-agnostic) was related to having significantly lower level of self-enhancement. Also, as people aged, their level of self-enhancement decreased.

Lastly, in Model 6 (i.e. self-transcendence as the dependent variable), we can see that, again, spirituality was found to have the most statistically significant relationship with self-transcendence ( $p < 0.001$ ), beyond atheism ( $p < 0.01$ ). Among all other religiosity-related measures, it was also the only variable that had a positive and statistically significant relationship with self-transcendence. Factor 1 and quest both negatively related to self-transcendence ( $p < 0.05$ ).

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 INSERT TABLE 3.9 HERE  
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## Part 2: Excluding Atheists and Agnostics

### *Exploratory Factor Analysis*

Table 3.10 shows the result from exploratory factor analysis of the sacred items with two factors, by excluding “atheists” and “agnostics” ( $N = 421^6$ ). Here, while there were more items that belonged exclusively to **Factor 1**, the items that had a high factor loading

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<sup>6</sup> This number does not include those that do not indicate their religious identity.

score (above 0.75) remained the same: “economy,” “career,” “social status,” and “money” ( $\alpha = 0.90$ ). Items loaded into **Factor 2** only were “divine presence,” “private thought, prayer or meditation,” “personal-religious growth” and “God or any of its terms,” similar to what was previously found. However, in contrast with the previous finding, Factor 1 and Factor 2 were not correlated ( $r = -0.02$ ).

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 INSERT TABLE 3.10 HERE  
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#### *Convergent and Discriminant Validity*

Further, both factors were juxtaposed with values, religiosity-related and moral dispositional constructs as seen in Table 3.11. Factor 1 (i.e. “economy,” “career,” “social status,” and “money”) positively and highly correlated with self-enhancement ( $r = 0.43$ ;  $p < 0.001$ ) and correlated negatively with self-transcendence ( $r = -0.14$ ;  $p < 0.01$ ). Interestingly, Factor 2 (i.e. “divine presence,” “private thought, prayer, or meditation,” “personal-religious growth,” and “God or any of its terms”) did not correlate with either self-transcendence ( $r = 0.09$ ) or self-enhancement ( $r = -0.09$ ). In the previous set of findings, when including “atheists” and “agnostics,” it correlated positively with self-transcendence.

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 INSERT TABLE 3.11 HERE  
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With regard to religiosity-related measures, Factor 1 correlated positively with intrinsic religiosity only ( $r = 0.11$ ;  $p < 0.05$ ), Factor 2 positively and highly correlated with intrinsic religiosity and spirituality (previously, it also correlated positively with quest). Among the three religiosity-related measures, spirituality correlated positively with both intrinsic religiosity ( $r = 0.42$ ;  $p < 0.001$ ) and quest religiosity ( $r = 0.17$ ;  $p < 0.001$ ) while intrinsic religiosity was negatively correlated with quest religiosity ( $r = -0.14$ ;  $p < 0.01$ ). Previously, by including “atheists” and agnostics,” these two were not correlated at all.

With regard to moral dispositional measures, only Factor 1 correlated positively with moral disengagement propensity ( $r = 0.21$ ;  $p < 0.001$ ), while both Factor 1 and Factor 2 correlated positively with moral identity. The correlation between Factor 2 and moral identity was more statistically significant ( $r = 0.23$ ;  $p < 0.001$ ) than between Factor 1 and moral identity ( $r = 0.11$ ;  $p < 0.01$ ). In addition, Factor 2 correlated negatively with moral disengagement propensity ( $r = -0.16$ ;  $p < 0.001$ ). Previously, when including “atheists” and “agnostics,” they were uncorrelated. In terms of moral foundations, both factors positively and highly correlated with the foundations based on authority and purity. Factor 1 also positively correlated with ingroup ( $r = 0.35$ ;  $p < 0.001$ ), while Factor 2 positively correlated with fairness ( $r = 0.12$ ;  $p < 0.05$ ) and harm/care ( $r = 0.20$ ;  $p < 0.001$ ). A multiple regression analysis (Table 3.12) showed that, among all other moral foundations, the ingroup foundation was the only, most statistically significant, moral foundation that positively predicted Factor 1 ( $p < 0.001$ ). In contrast, another multiple regression analysis with Factor 2 being the dependent variable showed that the ingroup

foundation negatively related to Factor 2 ( $p < 0.01$ ), while the harm/care and purity positively related to Factor 2 ( $p < 0.01$  and  $p < 0.001$ , respectively).

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 INSERT TABLE 3.12 HERE  
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### *Comparing the Measures*

Similar to the previous attempt, multiple regression analyses were run involving moral disengagement propensity (Model 9), moral identity (Model 10), and self-transcendence (Model 11) as well as self-enhancement (Model 12) as dependent variables, separately (see Table 3.13).

In Model 9, where moral disengagement propensity was the dependent variable, among the religiosity-related measures, spirituality had a negative regression coefficient ( $p < 0.001$ ), while quest ( $p < 0.001$ ) and Factor 1 ( $p < 0.05$ ) have positive regression coefficients. Similarly, both Factor 2 and intrinsic religiosity did not relate to moral disengagement propensity. Among the control variables, age negatively and highly related related to moral disengagement propensity ( $p < 0.001$ ). This entails that moral disengagement propensity decreased as people aged.

In Model 10, where moral identity was the dependent variable, spirituality related positively to moral identity ( $p < 0.001$ ). Similar to the previous analysis, Factor 1 also statistically predicted moral identity ( $p < 0.01$ ). Consistently as before, intrinsic religiosity and Factor 2 did not relate to moral identity. Gender negatively related to

moral identity ( $p < 0.01$ ), which indicated that men generally possessed a lower level of moral identity than women.

In Model 11, where self-enhancement was the dependent variable, only Factor 1 had a positive and statistically significant relationship with self-enhancement ( $p < 0.001$ ).

Among the control variables, only age related negatively to self-enhancement ( $p < 0.001$ ), meaning that adherence to self-enhancement decreases as people age.

Lastly, in Model 12, where self-transcendence was the dependent variable), spirituality was the only variable that related positively to self-transcendence ( $p < 0.001$ ). No other variables, religiosity-related or control variables, were found to have a statistically significant relationship with self-transcendence.

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 INSERT TABLE 3.13 HERE  
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### **Post-hoc Analysis: Atheists, Agnostics, and Religious-Spiritual People**

This analysis was conducted to show how the non-religious groups compared with the religious groups in their inclination to sacralize either form of sacredness. Multiple regressions were run involving either Factor 1 or Factor 2 as the dependent variable and all religiosity-related measures, along with atheism and agnosticism, as the independent variables. Table 3.14 shows that **Factor 1** was negatively related to atheism ( $r = -0.72$ ;  $p < 0.01$ ) and spirituality ( $r = -0.30$ ;  $p < 0.001$ ) and positively related to intrinsic religiosity ( $r = 0.18$ ;  $p < 0.001$ ), while **Factor 2** was negatively related to atheism ( $r = -1.52$ ;  $p <$

0.001) and agnosticism ( $r = -0.73$ ;  $p < 0.001$ ) and positively related to intrinsic religiosity ( $r = 0.55$ ;  $p < 0.001$ ), spirituality ( $r = 0.15$ ;  $p < 0.05$ ), and quest religiosity ( $r = 0.24$ ;  $p < 0.001$ ). Further, Table 3.15 shows the results of a one-way ANOVA, comparing the means for Factor 1, Factor 2, self-transcendence, self-enhancement, intrinsic religiosity, spirituality, quest religiosity, and moral disengagement propensity by religious identity.

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 INSERT TABLE 3.14 HERE  
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 INSERT TABLE 3.15 HERE  
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## DISCUSSION

The main purpose of this study was to develop a new instrument to explore forms of sacredness. Empirically, two forms of sacredness have been discovered. One form of sacredness centers on what is called *materialism* while the other form centers on what is called *traditional religion*.

### **Form 1: Materialism as Sacred**

Considering its sacred items (i.e. “economy,” “career,” “social status” and “money”), Factor 1 appeared to illustrate a form of sacredness that centers on materialism or materialistic gains. In two separate analyses, one that included the “non-religious” groups and one that excluded them, Factor 1 was positively related to self-enhancement and



negatively related to self-transcendence. It was also positively related to intrinsic religiosity and unrelated to either spirituality or quest religiosity. In relation to moral dispositional constructs, it was negatively related to moral disengagement propensity and positively related to moral identity, with authority and ingroup being the most dominant moral foundations.

Conceptually, things like “economy,” “career,” “social status,” and “money” appear to be tied to self-enhancement, thus explaining the positive association between sacralizing materialism and self-enhancement. All items did seem to converge conceptually with the idea of power or dominance and achievement or personal success as central elements of self-enhancement (Schwartz, 1992, 1994), thus the emphasis on materialistic gains. Sacralizing materialism was also positively related to intrinsic religiosity, suggesting that those who were likely to sacralize materialism were also those who were intrinsically religious. These associations between sacralizing materialism and self-enhancement and between sacralizing materialism and intrinsic religiosity together support and extend the previous finding showing the positive relationship between intrinsic religiosity and self-enhancement (Sedikides & Gebauer, 2010).

Further, while sacralizing materialism was positively related to moral disengagement propensity, which had been found to predict actual unethical behaviors (Moore et al., 2012), it was also positively related to moral identity, “a self-conception organized around a set of moral traits (Aquino & Reed, 2002). These findings imply that, even though people with an inclination to sacralize materialism would be more likely to have an inclination to morally disengage, they would also be more likely to identify themselves in a way that contains a set of moral traits.

Moreover, the most dominant moral foundations for people with a tendency to sacralize materialism were *authority* and *ingroup*, which were positively related to self-enhancement. This authority foundation is based upon the idea that people live within social structures and that it is morally desirable to bow to those in authority (e.g. see Haidt & Graham, 2007). The people serving in both the higher and the lower level of the social structure can maintain this foundation. The ingroup foundation is based upon things such as group loyalty and patriotism. Based on this foundation, it is said that diversity may not be valued that much within this foundation (Haidt & Graham, 2007). This supports a meta-analytic study that shows that religious people tend to favor conservatism, such as preserving traditions (Saroglou et al., 2004), even though major religious leaders have arguably been those that challenged the status quo (Jost et al., 2014). In addition, the authority foundation may explain the “social status” aspect of sacred materialism. That is, the sacralization of “social status” in particular is justified by the support for the moral foundation that highly regards authority figure as someone to follow. This may “inspire” people to regard “social status” as highly sacred.

Lastly, who are *less* likely to sacralize materialism? The evidence suggests that it is either those who had a higher level of spirituality (i.e. having a transcendent self-identity, with interconnection with a higher power, human beings and all living things) or those who identified as “atheists.” This particular finding adds a layer to the complex landscape of religiosity-spirituality, putting spirituality and atheism in the same camp in terms of those who are less likely to sacralize materialism.

Taken together, several conclusions can be made about religiosity through the lens of materialism as sacred. *First*, it speaks to Weber’s (1930) classic argument about a

religious foundation of capitalistic spirit, which could arguably be associated with materialistic gains. That is, people may be drawn to worldly success (i.e. materialistic gains) partly because they are religiously encouraged. As “religion” is said to encourage hard work (e.g. Parboteeah et al., 2009), the aim for materialistic gains as a consequence of hard work may be interpreted as religiously justified. That is, some people may find it religiously justifiable to aim for materialistic gains, likened to having power and socially desirable achievement, with people sacralizing materialism likely to be intrinsically religious as well. *Second*, it speaks about the complexity underlying intrinsic religiosity, previously thought as representing a good and pure kind of religiosity (e.g. Allport & Ross, 1967; Hood, 1985). Some people with an inclination toward intrinsic religiosity appear to have a materialistic motive, which is related to a propensity to morally disengage. Here potentially lies the “moral hypocrisy” that could be experienced by individuals with a higher level of intrinsic religiosity (Carpenter & Marshall, 2009). That is, individuals with a higher level of intrinsic religiosity may be equipped with a theory of morality (i.e. what is good and what is not good) but may lack the ability to translate the theory into behaviors. This lack of ability may be related to the motive associated with sacralizing materialism.

## **Form 2: Traditional Religion as Sacred**

Considering its sacred items (i.e. “divine presence,” “personal-religious growth,” “private thought, prayer, or meditations,” and “God or any of its terms”), Factor 2 appeared to illustrate a form of sacredness that centers on what is traditionally associated with religion as a system of belief. Thus, Factor 2 will appropriately be called traditional

religion as sacred or sacralizing traditional religion. When including the “non-religious” groups, sacralizing traditional religion was positively related to self-transcendence. But when excluding the “non-religious” groups, it was not related to either self-transcendence or self-enhancement (refer to Tables 3.7 and 3.11). With regard to religiosity-related constructs, it appeared to capture a more complex religious orientation, positively related to all three constructs: intrinsic religiosity, spirituality, and quest religiosity. In terms of moral dispositional constructs, it was negatively related to moral disengagement propensity, but only after excluding “atheists” and “agnostics,” and positively related to moral identity, with harm/care and purity being the most dominant moral foundations.

While sacralizing materialism was positively and highly related to self-enhancement, sacralizing traditional religion was positively related to self-transcendence, but not as strongly as the association between sacralizing materialism and self-enhancement. This supports a meta-analytic finding that religious people tended to have limited self-transcendence, related to benevolence but not to universalism (Saroglou et al., 2004).

Further, sacralizing traditional religion was not only positively related to intrinsic religiosity, but also with spirituality and quest religiosity, even though intrinsic religiosity (i.e. religiosity that emphasizes living the religion) and quest religiosity (i.e. religiosity that emphasizes questioning religion) were understandably not well related. In other words, sacralizing traditional religion appeared to illustrate a more complex religious landscape than sacralizing materialism. It was even related to quest religiosity, a kind of religiosity that “questions” religion itself, putting emphasis on “doubt as a key characteristic of religion and having a willingness to embrace the full complexity of life’s existential questions” (Graham et al., 2008: 148). In other words, traditional religion as a

form of sacredness is marked by at least a sense of living the religion (i.e. intrinsic religiosity), a sense of doubt on religion as a system of belief (i.e. quest religiosity), and a sense of transcendent self-identity (i.e. spirituality).

Sacralizing traditional religion was also negatively related to moral disengagement propensity, only after excluding “atheists” and “agnostics.” Given that these two groups are considered “non-religious” groups, this means that within and across the “religious” groups included, people who hold traditional religion sacred would be less likely to morally disengage than those who do not hold traditional religion sacred.

In terms of moral foundations, sacralizing traditional religion had very strong associations with purity and harm/care. The purity foundation is based on the idea of disgust and contamination, in that it is morally desirable to be pure and noble, free of contamination (see Haidt & Graham, 2007), either in moral or physical sense (Zhong & Liljenquist, 2006). It seems obvious that sacralizing terms such as “God” or “divine presence” would be associated with the purity principle, given its “religious” origin (Haidt & Graham, 2007; Zhong & Liljenquist, 2006). The harm/care principle was also related to sacralizing traditional religion. The foundation is based on the human sensitivity of others, thus willing to care for others and unwilling to harm them (Haidt & Graham, 2007). What is called “God” may be considered a symbol of compassion. Further, this association between the harm/care foundation and sacralizing traditional religion may be explained by the idea of the Golden Rule, putting an emphasis on compassion and humanity, which is arguably universally endorsed by all major religious teachings (e.g. Dahlsgaard et al., 2005; Kinnier, 2000). In this way, what are being

prescribed by religious teachings (what is normative) may be translated into an individual disposition in the form of sacralizing traditional religion (what is descriptive).

Taken together, several conclusions can be made about religiosity through the lens of traditional religion as sacred. *First*, viewing aspects of traditional religion as sacred enable for a further exploration of the rich and complex landscape of religiosity-spirituality. People are multidimensional, and so is their religiosity. Here, sacralizing traditional religion appears to capture both adherence to religion (i.e. intrinsic religiosity) and questioning religion (i.e. quest), with a sense of transcendent self-identity (i.e. spirituality). The implication of this is to avoid oversimplifying the notion of “religious people” or using intrinsic religiosity as the “proxy” for religiosity. *Second*, people who hold traditional religion sacred could have at least two inclinations: an inclination to sacralize materialism and an inclination to embrace spirituality, two things that have opposing associations with moral disengagement propensity. The former focuses on the “material” while the latter focuses on the “spiritual.” Atheists, on the other hand, have a very low tendency to sacralize materialism and traditional religion and embrace spirituality.

### **Relationship between *Materialism* and *Traditional Religion* as Sacred**

It is interesting that both in the pretest and the main analysis that included both “atheists” and “agnostics,” sacralizing materialism and sacralizing traditional religion were positively related. But in the analysis that excluded the two groups, they were poorly related, meaning that they are orthogonal constructs. Taken together, this indicates that the relationship between sacralizing materialism and sacralizing traditional religion

may be more complex and not as straightforward as we might think. One may argue that being religious in a traditional sense may be related to sacralizing materialism, pointing to the rise of capitalism (Weber, 1930/2005). But the exclusion of “atheists” and “agnostics” in the analysis suggests that, “religious people” may have the tendency to either sacralize or desacralize materialism.

## CHAPTER 4

### VIRTUE AS SACRED

In the previous study, which is exploratory in nature, two forms of sacredness have been found, which are labeled “materialism” and “traditional religion.” While sacralizing materialism relates positively to self-enhancement, sacralizing traditional religion relates to self-transcendence, but not as strongly as the relationship between sacralizing materialism and self-enhancement. Further, sacralizing traditional religion lacks universality, not being embraced by “non-religious” groups. Informed by this finding, I have decided to explore another potential form of sacredness, one that centers on *virtue*. When virtue becomes the sacred, the focus of being religious is on moral virtues.

### THEORETICAL BACKGROUND

It has been studied and recorded that a group of universal values (e.g. transcendence, courage, humility, thankfulness, temperance, benevolence) and their forms are espoused by all major religious teachings (e.g. Ali et al., 2000; Dahlsgaard et al., 2005; Kriger & Seng, 2005; Norenzayan & Shariff, 2008; Saroglou, 2011; Vogel, 2001). Interestingly, the universality also applies to philosophical and atheistic traditions (Dahlsgaard et al., 2005; Kinnier et al., 2000). As it is argued, the point of convergence is often times gone unnoticed simply because of the use of different linguistic expressions (Kriger & Seng, 2005). Overall, it is safe to say that these virtues are both religiously and universally prescribed, thus sacred. Yet, these can be counted as what in the business ethics literature



are called “hypernorms,” “principles so fundamental to human existence that... we would expect them to be reflected in a convergence of religious, philosophical, and cultural beliefs” (Donaldson & Dunfee, 1994: 265).

## METHOD

### **Procedures and Samples**

This study included two general samples: undergraduate students ( $N = 421$ ) and adults (i.e. Amazon Mechanical Turks sample;  $N = 100$ )<sup>7</sup>. Recruited by the Rutgers Business School Behavioral Lab, the undergraduate students participated in an extra credit project within a course at Rutgers Business School. In this section, the goal is to report an analysis of part of the data collection attempting to discover another form of sacredness, in addition to materialism and traditional religion.

### **Measures**

Similar to Study 1, self-transcendence, self-enhancement, intrinsic religiosity and spirituality were included as measures<sup>8</sup>. Moral disengagement propensity was only included in the student sample. In exploring virtue as another form of sacredness, the same instrument as in Study 1 was used, with additional sacred items that would potentially measure “virtue” (i.e. compassion, empathy, mercy, and forgiving) and items

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<sup>7</sup> These data are the same data that will later be reported and analyzed in the following studies that examine the relationship between forms of sacredness and un/ethical work behaviors.

<sup>8</sup> Quest religiosity, moral identity, and the five moral foundations were excluded due to the need to reduce the number of measures for fear of fatigue on the part of the participants.

that would add richness to sacralizing materialism (e.g. rewards) and sacralizing traditional religion (e.g. spiritual life).

## RESULTS

### Summary

Across the two samples ( $N = 521$ ), there were 236 women and 284 men (1 missing). 81% were in the age group of 15 to 24 years old, followed by the age group of 25 to 34 years old ( $N = 59$ ). Unlike the previous study, the participants in the Virtue study were relatively younger. In terms of religious diversity, there were 30 Jewish, 129 Catholic, 46 Protestant, 17 Muslim, 17 Buddhist, 66 Hindu, 6 Sikh, 54 Atheist, 50 Agnostic, and 14 “Spiritual” respondents. There were 92 people who identified as “Others.” In terms of nationality, 439 people identified as being “American,” while 76 people identified as being “Non-American,” with about 6% identifying themselves as “Chinese” and 3% as “Indian” (of the total sample).

### Data Analysis

#### *Exploratory Factor Analysis*

Three forms of sacredness were discovered (Table 4.1). Items in Factor 1 still included “economy,” “career,” “social status,” and “money” ( $\alpha = 0.86$ ). Other items that also belonged to Factor 1 were “rewards,” “dominance,” “wealth,” “pride,” and “social image” ( $\alpha = 0.93$  for the 9-item factor). Items in Factor 2 also still included “divine

presence,” “private thought, prayer, or meditation,” “personal-religious growth,” and “God or any of its other terms” ( $\alpha = 0.89$ ). Also included in Factor 2 were “religion,” and “spiritual life” ( $\alpha = 0.94$  for the 6-item factor). Factor 3, the newly discovered factor, had four items: “compassion,” “empathy,” “mercy” and “forgiving” ( $\alpha = 0.87$ ). In the analysis below, the four-item factors for the purpose of consistency with the previous study or analysis. Further, another exploratory factor analysis, by excluding “atheists” and “agnostics” ( $N = 417$ ), showed the same tendency (Table 4.2).

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 INSERT TABLE 4.2 HERE  
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#### *Correlations with Values, Intrinsic Religiosity, and Spirituality*

In Table 4.3, Factor 1, with 4 original items, correlated negatively with Factor 2 ( $r = -0.11$ ;  $p < 0.05$ ), with 4 original items, and correlated positively with Factor 3 ( $r = 0.09$ ;  $p < 0.05$ ). Factor 2 and Factor 3 were very highly and positively correlated ( $r = 0.44$ ;  $p < 0.001$ ). As previously found, Factor 1 was positively and highly correlated with self-enhancement ( $r = 0.42$ ;  $p < 0.001$ ) while Factor 2 was positively correlated with self-transcendence ( $r = 0.11$ ;  $p < 0.05$ ). Factor 3 was positively and strongly correlated with self-transcendence ( $r = 0.29$ ;  $p < 0.001$ ). Both Factor 2 and Factor 3 were positively and highly correlated with intrinsic religiosity and spirituality ( $p < 0.001$ ). But while Factor 2 was more highly correlated with intrinsic religiosity ( $r = 0.61$ ) than with spirituality ( $r =$

0.51), Factor 3 was more highly correlated with spirituality ( $r = 0.39$ ) than with intrinsic religiosity ( $r = 0.21$ ). Another set of correlational analyses was conducted by dropping the “atheist” and “agnostic” groups, yielding no statistically significant difference (Table 4.4).

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#### *Further Explorations with Multiple Linear Regressions*

By controlling for age and gender in a multiple linear regression model, I explored what variables correlated the most with each forms of sacredness. The 4-item Factor 1 (i.e. sacralizing materialism) was strongly and positively related to self-enhancement ( $p < 0.001$ ), and negatively predicted by age ( $p < 0.05$ ) and self-transcendence ( $p < 0.05$ ). The 4-item Factor 2 (i.e. sacralizing traditional religion) was strongly and positively related to intrinsic religiosity ( $p < 0.001$ ) and spirituality ( $p < 0.001$ ), and negatively related to age ( $p < 0.05$ ). Lastly, the 4-item Factor 3 (i.e. sacralizing virtue) was strongly and positively related to spirituality ( $p < 0.001$ ) and self-transcendence ( $p < 0.001$ ) as well as positively related to age ( $p < 0.05$ ). In addition, age was strongly and negatively related to sacralizing materialism ( $p < 0.001$ ) and sacralizing traditional religion ( $p < 0.001$ ) and strongly and positively related to sacralizing virtue ( $p < 0.001$ ). All these analyses are presented in Table 4.5.

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INSERT TABLE 4.5 HERE  
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## DISCUSSION

Overall, three forms of sacredness have now been discovered: *materialism*, *traditional religion*, and *virtue*. The relationship between sacralizing virtue and self-transcendence was positively stronger than the relationship between sacralizing traditional religion and self-transcendence. The virtue items that were taken into account in this analysis are “compassion,” “empathy,” “mercy,” and “forgiving.” Obviously, there are other “virtues” that could be taken into account. It is shown that those who had a higher level of spirituality would tend to also sacralize virtue. Using the samples in this follow-up study, sacralizing traditional religion and virtue were very closely related. Contrary to the previous finding, sacralizing materialism and sacralizing traditional religion were negatively related (using the 4-item scale). It is important to note that I have not attempted to theoretically construct how these three forms of sacredness relate to one another. We have only begun to understand what they are. More explorations on the relationship between these three forms of sacredness are needed, using a diverse set of samples.

**Spirituality and Virtue as Sacred**

In this follow-up study, spirituality was found to relate very strongly and positively to sacralizing virtue. In this context, spirituality is conceptualized as the extent to which one has a transcendent self-identity, beyond collective, relational and individual identity (Liu & Robertson, 2011). Spirituality also has three distinct dimensions: interconnection with a higher power, human beings, and all living things. Therefore, it theoretically makes sense that those who have a higher level of spirituality (i.e. feeling interconnected with a higher power, human beings, and all living things) would also be more likely to be those who cannot live without “virtue,” or without acting upon compassion, empathy, mercy, or forgiving/forgiveness (the four items considered in this analysis).

CHAPTER 5  
RELIGIOSITY AND UN/ETHICAL WORK BEHAVIORS: HYPOTHESIS  
DEVELOPMENT

RELIGIOSITY IN ETHICAL DECISION MAKING

**Brief Overview of Religiosity and Ethical Decision Making**

The number of studies examining religiosity and ethical decision-making seems to be increasing (see Craft, 2013; Ford & Richardson, 1994; Loe et al., 2000; O’Fallon & Butterfield, 2005). Most recent studies on religiosity in the context of ethical decision-making typically use the framework of intrinsic-extrinsic religiosity as a proxy for religiosity (Allport & Ross, 1967), while defining religiosity in a variety of ways such as “the faith that a person has in God” (McDaniel & Burnett, 1990; as cited in Singhapakdi et al., 2013: 184). The studies find that intrinsic religiosity, as opposed to extrinsic religiosity, is positively related to ethical judgment (Putrevu & Swinberghek, 2013; Walker et al., 2012) and ethical intention (Chen & Tang, 2013; Singhapakdi et al., 2013). Overall, it seems that “religious” individuals, in the traditional sense, seem to be equipped with some theory of morality. This supports the notion that religiosity or religion serves as a source of morality (Vitell et al., 2009; Weaver & Agle, 2002). But this does not mean that those who understand morality from a religious perspective are more likely to behave more ethically. For example, it is found that intrinsic religiosity may only lead to prosocial behavior if intrinsically religious people are reminded of (i.e. primed with) the prosocial value inherent in the religious teaching (Carpenter &

Marshall, 2009). A meta-analysis also shows that intrinsic religiosity is strongly and positively related to social desirability (Sedikides & Gebauer, 2010). In addition, there is a tendency for “being religious” to feel “better” or “more virtuous” than others (Chan-Serafin et al., 2013), potentially enabling them to develop a kind of moral authority (Bloom, 2012) that paradoxically may give them moral license to engage in less ethical behavior (Bersoff, 1999; Carpenter & Marshall, 2009). Further, it is also interesting to note that out of the religion/spirituality studies mentioned in a recent review by Craft (2013), no study has examined its effect on behavior. Most have focused on awareness, judgment, or intent. Here, I contribute to the existing literature by focusing on both ethical and unethical behaviors.

### **Ethical and Unethical Behavior**

It is argued that defining what is ethical is as much difficult as defining what is religious (Weaver & Agle, 2002). Generally, what is considered ethical and/or unethical usually falls under three categories (Trevino et al., 2006; Trevino et al., 2014): something that is consistent with moral standards (i.e. ethical), something that is inconsistent with moral standards (i.e. unethical), and something that goes beyond moral standards (i.e. ethical). For example, assuming that “honesty” is a moral standard, being honest can therefore be considered ethical (first category) while not being honest is considered unethical (second category). But being honest while whistle blowing can be considered an extra role behavior beyond a moral standard of honesty (third category). Given the variety of moral foundations across and within societies (e.g. Haidt & Graham, 2007), it certainly adds layers to the difficulty in defining these moral standards.



In this study, to differentiate between ethical and unethical behaviors, I use the third category in defining ethical behavior. That is, something is considered ethical when it exemplifies a behavior or a decision that is beyond a moral standard. A voluntary behavior would be considered an ethical behavior. It is an extra role behavior that is not necessary or needed but considered beneficial or helpful to a beneficiary of that behavior or decision. As for unethical behavior, it is defined as a behavior or decision that fails to reach a certain moral standard. Therefore, failing to be honest is considered an unethical behavior.

Despite this attempt at defining both ethical and unethical behaviors, it is important to also note certain complexities related to some “intuitive” terms associated with ethical and unethical behaviors. For example, while “being helpful” is generally regarded as an ethical behavior, being helpful in the context of wrongdoings (e.g. cheating) is more complex than what the idea of “helpfulness” itself generally suggests (see Gino et al., 2013). A group of friends who cheat can be said to be helpful to one another when they are cheating for the benefit of the group, but not necessarily ethical. Therefore, it is important to emphasize that the definitions put forth above are very general and intuitive. They do not take into account these possible complexities.

## HYPOTHESIS DEVELOPMENT

### **Main Effects**

Previously, three forms of sacredness have been discovered: *materialism*, *traditional religion*, and *virtue*. Based on these categories, individuals can be said to be

materialistically religious, traditionally religious, and virtuously religious. When materialism becomes the sacred, the focus of being religious is on materialistic matters, such as “money” and “social status.” When traditional religion becomes the sacred, the focus is on what we traditionally ascribe to “religion,” such as “God” and “private prayer or meditation.” When virtue becomes the sacred, the focus of being religious is on moral virtues such as “empathy” and “compassion.” It has been theorized that these sacred forms may exist within the same individuals.

### *Materialism and Ethical/Unethical Work Behavior*

The idea of materialism as sacred essentially marries Durkheim’s notion of the sacred as central to religion (1912/1965) with Weber’s thesis of the Protestant Ethic and the Spirit of Capitalism (1930/2005)<sup>9</sup>. Notwithstanding debates on what enables the spirit of capitalism (see for example Turner, 1974), I argue that the notion of hard work inherent in various religious traditions, as shown in religious people (see Parboteeah et al., 2009), is central to the argument for materialism as sacred. This is not to say that religion favors materialism. Rather, the principle of hard work can imply materialistic gains as its consequence. In other words, it can be argued that people are aware that there are (materialistic) consequences, expectedly desirable outcomes, stemming from hard work. Materialism becomes highly sacred when it becomes an end in itself. In other words, hard

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<sup>9</sup> In Weber’s *Protestant Ethic*, it is argued that a certain form of Protestant work ethic enables the development of capitalistic spirit, in which worldly success is seen as an end. “Man is dominated by the making of money, by acquisition as the ultimate purpose of his life,” as Weber mentions (1930/2005: 18). This materialistic orientation is argued to relate to the idea of “calling,” emphasizing “that the fulfillment of worldly duties is under all circumstances the only way to live acceptably to God. It and it alone is the will of God, and hence every legitimate calling has exactly the same worth in the sight of God” (p. 41).

work is attempted specifically because of the expected materialistic gains, such as “money,” “social status,” and “career.”

The question is whether holding materialism sacred gives the individual the motivation to behave ethically or behave unethically. If materialism becomes an end, individuals may narrow down their view to be concerned more with materialistic gains over others. Because of this narrowed view, it may be difficult for individuals who hold materialism sacred to conduct an extra role behavior (i.e. ethical work behavior). Findings from the previous study (i.e. Study 1) show that sacralizing materialism was very strongly correlated with moral disengagement propensity and self-enhancement, two psychological dispositions found to predict forms of unethical behavior (Moore et al., 2012; Pulfrey & Butera, 2013). In addition, it was found that people who love money highly, suggesting the sacralization of materialism, would tend to be “less ethical in their intentions” (Singhapakdi et al., 2013: 188). Overall, sacralizing materialism can be theorized to motivate individuals to behave unethically. Recall that unethical work behavior is defined as failure to comply with a moral standard, such as lying (in a general sense). Therefore, sacralizing materialism may only lead to unethical work behavior in this general sense, but not necessarily in the case where lying is done, for example, to protect the ingroup.

*Hypothesis 1: Holding materialism sacred will negatively relate to ethical work behavior.*

*Hypothesis 2: Holding materialism sacred will positively relate to unethical work behavior.*

*Traditional Religion and Ethical/Unethical Work Behavior*

Traditional religion as sacred means a way of life that centers on the idea of “God,” either understood as transcendent (i.e. going beyond anything) or immanent (i.e. within an individual or anything) (Petrican & Burris, 2012). It includes means of approaching “God” such as prayers or meditations that are automatically attached to “God.” These means may also become ends in and of themselves, given “the sacred” definition (Leuba, 1913). That is, prayers or meditations become an end that is inclusively embedded in the idea of “God” or any of its other terms (see Hill et al., 2000). They are not only a means to reach “God,” but also what “God” tells people to do, thus an end. For example, prayers are not only a means to approach “God,” but also an end that is prescribed by “God.”

Similarly, the question is whether sacralizing traditional religion gives the individual the motivation to behave ethically or behave unethically. The answer may not be that straightforward, given that there is evidence for theorizing one way or the other (see Bloom, 2012; Chan-Serafin et al., 2013). Generally, being religious in a traditional sense can be both self-transcendent and self-centered. This is evidenced in the finding that there are two types of prayer (Whittington & Scher, 2010): prayers that are not self-centered and prayers that are self-centered. In another study, depending on one’s view of “God,” individuals may be more or less likely to behave unethically (Shariff & Norenzayan, 2011).

Nevertheless, given the finding that religious people are found to have a strong motivation to work (Parboteeah et al., 2009), it can be theorized that sacralizing traditional religion would motivate people to conduct an extra role behavior (i.e. ethical work behavior). The previous finding (i.e. Study 1) also shows that sacralizing traditional

religion is positively related to self-transcendence, a value that has been found to predict prosociality (Caprara et al., 2012). It is argued that the “bad” side of being religious does not stem from religious teaching itself, but from religion as a social validator (Bloom, 2012).

*Hypothesis 3: Holding traditional religion sacred will positively relate to ethical work behavior.*

*Hypothesis 4: Holding traditional religion sacred will negatively relate to unethical work behavior.*

#### *Virtue and Ethical/Unethical Work Behavior*

Virtues are moral values, which appear to be universally prescribed by all major religious teachings (e.g. Ali et al., 2000; Dahlsgaard et al., 2005; Kriger & Seng, 2005; Norenzayan & Shariff, 2008; Saroglou, 2011; Vogel, 2001). The universality also applies to philosophical and atheistic traditions (Dahlsgaard et al., 2005; Kinnier et al., 2000). Similar to other forms of sacredness, virtue as sacred also entails that virtue can become an end in itself. In other words, individuals with a higher level of virtue hold that virtues such as compassion and empathy are not only means, but also ends.

How virtue leads to ethical and unethical work behaviors appears to be more straightforward than the other two forms of sacredness. By definition, individuals who hold virtue sacred may think that living is about being virtuous. Therefore, they would be more likely to exhibit an extra role behavior (i.e. ethical work behavior) and avoid being

unethical. Given the definition of sacredness (Leuba, 1913), being unethical would violate the moral rules or values of individuals who hold virtue sacred.

*Hypothesis 5: Holding virtue sacred will positively relate to ethical work behavior.*

*Hypothesis 6: Holding virtue sacred will negatively relate to unethical work behavior.*

### **Situational Factors: Self-transcending and self-enhancing situations**

In an organizational setting, it has been argued that individuals often behave according to the situation imposed on them rather than simply based on their dispositions (e.g. Davis-Blake & Pfeffer, 1989). Therefore, it is important to understand whether a certain situational factor can alter the effect of individual disposition on behavior. Here, I consider self-transcending and self-enhancing situations as two opposite situational cues that are theorized to have an effect on the relationship between forms of sacredness and un/ethical work behaviors.

In general, a self-transcending situation is a situational cue that emphasizes self-transcendence value while a self-enhancing situation is a situational cue that emphasizes self-enhancement value. Self-transcendence value is a value of viewing others equally and having concerns for their well being, while self-enhancement value is a value of having a desire to view oneself in a positive or favorable light (see Pulfrey & Butera, 2013; Schwartz, 1992, 1994). Therefore, a self-transcending situation would give individuals exposure to the importance of self-transcendence value, while a self-enhancing situation would give individuals exposure to the importance of self-enhancement value. Overall, given that self-transcendence value has been found to

positively predict prosociality (Caprara et al., 2012) and predict non-destructive leadership behavior (Illies & Reiter-Palmon, 2008) while self-enhancement value has been found to positively predict cheating (Pulfrey & Butera, 2013) and predict destructive leadership behavior (Illies & Reiter-Palmon, 2008), it would be expected that exposure to a self-transcending situation would enable individuals to behave more ethically and exposure to a self-enhancing situation would enable individuals to behave more unethically. A self-transcending situation is expected to broaden people's horizon to include others' concerns in their decision-making, while a self-enhancing situation is expected to narrow people's view, focused only on their personal gains.

In the following sections, I theorize how each form of sacredness interacts with situations (i.e. self-transcending and self-enhancing situations) to affect ethical and unethical work behaviors. In the symbolic interactionist framework of religiosity and ethical behaviors by Weaver & Agle (2002), situations may trigger or hamper certain *religious role expectations* attached to the religion of the individuals or expectations regarding the roles that are supposedly need to be enacted by the religious individuals. Similarly, overall, it can be argued that situations may either trigger or hamper the emergence of role expectations attached to each form of sacredness.

### *Sacralizing Materialism and Situations*

It has been hypothesized that sacralizing materialism would negatively relate to ethical work behavior and positively relate to unethical work behavior. Sacralizing materialism emphasizes materialistic gains as an end. In Study 1, it is found that sacralizing materialism, although positively related to moral disengagement propensity, is

also positively related to moral identity. This entails that those who sacralize materialism have the inclination to identify themselves around a set of moral traits, the effect of which on ethical behavior would depend on how accessible this set of moral traits is (Aquino et al., 2009). This could mean that people who sacralize materialism can exhibit ethical behavior when their moral identity becomes salient or accessible to them. A self-transcending situation, the content of which is theoretically similar to moral identity (Aquino & Reed, 2002), could then act as situation that triggers the accessibility of one's moral traits, which could guide one's (ethical) behavior. A self-enhancing situation, on the other hand, would reinforce the focus on materialism as sacred, thus personal gains. As a result, an extra-role behavior would be unlikely to be exhibited due to the exaggerated focus on personal gains, with a decrease in ethical framing (Tenbrunsel & Messick, 2004).

*Hypothesis 7: Individuals who hold materialism sacred will be more likely to behave ethically when they are exposed to a self-transcending situation than when they are exposed to a self-enhancing situation.*

To a certain extent, sacralizing materialism can be thought to be close to valuing self-enhancement or gains for power and achievement (Schwartz, 1992, 1994), including wealth and social image. This is supported by the strongly positive association between sacralizing materialism and self-enhancement in Study 1. It is found that people whose core value is self-enhancement, which is positively related to sacralizing materialism (in Study 1), would be less likely to condone cheating when exposed to a self-transcending



situation, as opposed to a self-enhancing situation (Pulfrey & Butera, 2013). Similarly, it can be theorized that a self-transcending situation, as opposed to a self-enhancing situation, would reduce the likelihood of people who hold materialism sacred to behave unethically. While a self-transcending situation would generally broaden people's view, a self-enhancing situation would further narrow the view of those who sacralize materialism, focusing even more on getting materialistic gain(s) or self-gain(s). For example, given that honesty is considered a moral standard and that it falls outside the realm of materialism, exposure to a self-enhancing situation would further turn the importance of honesty away from the consideration of people who hold materialism sacred. In a way, they would become more ethically blind (Palazzo et al., 2012), decreasing an ethical framing (Tenbrunsel & Messick, 2004). In addition, it is found that exposure to money, which can be thought of as a self-enhancing tool, can motivate unethical intentions and behavior (Kouchaki et al., 2013). Further, since the idea of self-transcendence is congruent with the idea of moral identity (Aquino & Reed, 2002), a self-transcending situation may trigger ethical framing in individuals (Tenbrunsel & Messick, 2004).

*Hypothesis 8: Individuals who hold materialism sacred will be less likely to behave unethically when they are exposed to a self-transcending situation than when they are exposed to a self-enhancing situation.*

### *Sacralizing Traditional Religion and Situations*

It has been hypothesized that sacralizing traditional religion would positively relate to ethical work behavior and negatively relate to unethical work behavior. As a reminder, sacralizing traditional religion means sacralizing things related to what is called “God,” either understood as transcendent or immanent (Petrican & Burris, 2012). In Study 1, after excluding “atheists” and “agnostics,” sacralizing traditional religion was not found to correlate with either self-transcendence or self-enhancement. It can be argued that a self-transcending situation (i.e. emphasizing caring for others) would arouse the self-transcendence aspect of religion (e.g. Dahlsgaard et al., 2005) while a self-enhancing situation (i.e. emphasizing positive self-image) would arouse the self-enhancement aspect of religion (e.g. Sedikides & Gebauer, 2010). In other words, being exposed to certain situations would affect how religious individuals (i.e. those who hold traditional religion sacred) would behave (Weaver & Agle, 2002).

In a study of Christian college students (Carpenter & Marshall, 2009), it was found that they were likely to behave prosocially only after being primed with a Bible theme emphasizing “love for God and God’s love for humanity” (p. 388), which theoretically converges with the idea of self-transcendence. A self-enhancing situation, on the other hand, would arouse the self-enhancement aspect of being religious, such as having a strong religious identity (Ysseldyk et al., 2010). But instead of having the identity attached to expectedly good, ethical, values attached to religion (Weaver & Agle, 2002), this identity is tied more to positive self-image, thus self-enhancement. Thus, instead of performing righteousness, those who hold traditional religion sacred would exhibit self-righteousness (Chan-Serafin et al., 2013), as a way to protect positive self-image. This

focus on the “goodness” of the self as an image could paradoxically prevent one from performing an extra-role behavior. Essentially, if one already regards oneself to be “good,” there may be no need to perform any more “goodness.” In other words, one may not feel the need to perform any extra-role behavior because he or she is already having a psychological mechanism that enables him or her to maintain a positive self-image, regardless of what one would do.

*Hypothesis 9: Individuals who hold traditional religion sacred will be more likely to behave ethically when they are exposed to a self-transcending situation than when they are exposed to a self-enhancing situation.*

In a study of “God” image (Shariff & Norenzayan, 2011), people who perceived “God” as loving, compared with those who perceived “God” as mean, were more likely to cheat. A perceived loving “God” at the time or right before conducting an action may be interpreted as an enabler of self-enhancement in religious individuals. In other words, individuals may feel self-empowered, thinking that “God” loves them. In a study of power, it is found that being powerful, compared to being powerless, increases the likelihood of imposing strict moral standards on other people but not on the self (Lammers et al., 2010). That is, individuals with power, especially when it is seen as legitimate, tend to condemn other people’s cheating behavior while they themselves cheat. Together, it can be theorized that when people who sacralize traditional religion are exposed to a self-enhancing situation, they may feel self-enhanced or self-empowered, which would prevent them from evaluating themselves using strict moral

standards. A self-transcending situation, on the other hand, would allow individuals to have a closer access to moral principles or standards that are associated with religion, such as self-control (Dahlsgaard et al., 2005). Overall, while being religious can be associated with having ethical judgments (Walker et al., 2012), the judgments may not transfer directly to behaviors.

*Hypothesis 10: Individuals who hold traditional religion sacred will be less likely to behave unethically when they are exposed to a self-transcending situation than when they are exposed to a self-enhancing situation.*

#### *Sacralizing Virtues and Situations*

It has been hypothesized that sacralizing virtue would positively relate to ethical work behavior and negatively relate to unethical work behavior. Sacralizing virtue means making moral values sacred, without which one would feel in danger<sup>10</sup>. On the surface, it does appear that sacralizing virtue would allow one to behave ethically regardless of situations. Since a self-transcending situation is congruent with virtue (see Chatman, 1989), it would simply confirm the moral values or virtues in individuals who sacralize them, while a self-enhancing situation would be frowned upon. In the follow-up study of Study 1, it was found that sacralizing virtue was negatively related to self-enhancement. The congruence between self-transcending situation and virtue as sacred would enable individuals to behave more ethically than when the incongruence happens. Therefore, it can be theorized that a self-transcending situation, as opposed to a self-enhancing

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<sup>10</sup> The reference to “danger” is in line with the definition of the sacred provided by Leuba (1913), given on page 8, which also serves as a guideline for measuring forms of sacredness.

situation, would enhance the likelihood of people who hold virtue sacred to behave ethically and decrease the likelihood to behave unethically.

*Hypothesis 11: Individuals who hold virtue sacred will be more likely to behave ethically when they are exposed to a self-transcending situation than when they are exposed to a self-enhancing situation.*

*Hypothesis 12: Individuals who hold virtue sacred will be less likely to behave unethically when they are exposed to a self-transcending situation than when they are exposed to a self-enhancing situation.*

## CHAPTER 6

### STUDIES 2-4: PRETESTS

In this chapter, I report the pretests that were conducted prior to the actual hypotheses testing. The pretests were primarily aimed at testing the validity of the manipulation of the situational factors and usefulness of the ethical and unethical behavior measures. The first and second pretests were identical, in that they contained the same set of manipulations and questions. The third pretest was a follow-up test aimed at primarily testing the revised manipulations and manipulation checks.

#### STUDIES 2 AND 3: PRETESTS 1 AND 2

##### **Samples and Procedures**

The first pretest involved a sample from Indonesia (92 participants) while the second pretest involved a sample from Amazon Mechanical Turks or MTurk (49 participants). The Indonesian sample consisted of business school students enrolled in a research methodology class. Upon agreement with the instructors, they were invited to participate in exchange for extra credit. The survey was administered in English, with the knowledge that students were familiar enough with English since it is a language of instruction employed at the school. Each participant completed the experiment/survey in a classroom with no one else in the room. The MTurk sample was paid \$1.75 per participant. The description that was given to the MTurk respondents was, “the overall purpose of this research is to understand how certain factors affect people’s behaviors,” without

mentioning “ethical” and “unethical.” Overall, the pretests involved an online experimental method.

### **Manipulations**

Three conditions were manipulated: self-transcendence, self-enhancement, and control conditions. All conditions begin with the following statement, “*In the following pages, you will perform a series of tasks.*” The control condition stops at this statement while the other two conditions have further statements following it.

The self-transcendence manipulation continued as follows: “*Performing a task is essentially an act of fulfilling a responsibility and honesty is required. The use of our broad-mindedness and wisdom are necessary in order to perform any task. Performing a task will help in establishing unity in the community. By performing a task, someone is being helped by our efforts even though we may not immediately realize the benefits.*”

The self-enhancement manipulation continued as follows: “*Performing a task is essentially an act of proving to ourselves and others how intelligent and capable we are. Performing a task well makes it easy to influence others and maintain a good and positive image in front of others and ourselves. By performing a task, we establish power and dominance in the society and benefit from the resources we control.*”

The manipulation checks consisted of statements to which the participants would rate their agreement. Such statements include “Work is about proving our position in our community or society” for a self-enhancement item and “Work is about helping people, including ourselves and others” for a self-transcendence item. They established whether

the manipulations yielded the expected impact on the participants. For both pretests, the manipulations were exposed only once; that is, in the beginning before Task 1.

### **Tasks and Measures of Un/Ethical Work Behaviors**

After the manipulation(s), participants were directed to tasks that would eventually measure unethical and ethical behaviors. The first task (i.e. Task 1) was a jumbled word task in which participants were presented with nine jumbled (supposedly English) words to solve in 3 minutes. Task 1 was designed in a way that would lead to a measure unethical behavior. This task was adapted from Wiltermuth (2011), who used a jumbled word task to measure unethical behavior. In the case of Wiltermuth (2011), all words were solvable, with one (almost) impossible word to solve. For this pretest, only three words were solvable. Unethical behavior was measured by the question “how many jumbled words were you able to solve?” Statements beyond three were considered unethical. In addition, participants were also asked to “select the jumbled words you were able to solve?”

Task 2 and Task 3 were designed to measure ethical behaviors. Task 2 was a descriptive task, asking participants to describe their country of origin. The instruction was as follows: *“In this task, please give some description, as detailed as possible (from 10 to roughly 250 words), about your country of origin. The description will be used as a learning aid for people in a future task to learn about your country of origin. Note that even though longer (i.e. more detailed) description is considered more helpful, it is NOT necessary. Also, you don’t have to think too much for this task, since your information will be combined with information from other people.”* The number of words provided



was counted as ethical behavior. Task 3 contained a series of 10 sub-tasks, which would also give a measure of helping behavior, a form of ethical behavior. Because there were no precedents for these measures of helping behavior, a form of ethical behavior, these two tasks were needed as alternatives.

## **Results**

### *Manipulation Checks*

The first and second pretests were generally unsuccessful in terms of testing the manipulation checks because it was found out that they might have tapped into “beliefs” related to self-transcendence (ST) and self-enhancement (SE) rather than the manipulations themselves. An example of the manipulation check statement was “work is about proving our position in our community or society” for SE and “work is about helping people, including ourselves and others” for ST. This was supported by the strong positive correlations between the manipulation check statements for ST and ST value ( $p < 0.001$ ) and between the manipulation check statements for SE and SE value ( $p < 0.001$ ), by combining the data for both samples ( $n = 134$ ), suggesting the convergence between the manipulation checks and values. Tables 6.1, 6.2, and 6.3 show the correlations between the manipulation check items and self-transcendence/self-enhancement values for the American sample/MTurk, Indonesian sample, and combined sample, respectively.

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### *Unethical Work Behavior and Ethical Work Behavior*

Table 6.4 shows the mean and standard deviation for unethical behavior using the question “how many jumbled words were you able to solve?” in both samples. Note that the mean does not directly indicate unethical behavior. Rather, it simply indicates the number of solved words as participants claim. Recall that there were only three solvable words. As a general rule of thumb, it can be said that the higher the number of solvable words as claimed, the more unethical the behavior. No one can theoretically and practically answer more than three words. Therefore, an answer higher than three words indicates a potential for unethical behavior. With a mean higher than 3 (3.36 for Indonesian sample and 3.08 for MTurk sample), it is shown that there is a potential for committing an unethical behavior. In addition, the standard deviation (1.96 for Indonesian sample and 1.26 for MTurk sample) indicates the likely variation in committing an unethical behavior.

One-sample t-test was conducted to understand whether the sample mean was different from the population mean. For the Indonesian sample, it was found that the sample mean did not differ from the population mean ( $p < 0.08$ ; mean = 0.36). For the

MTurk sample, it was also found that the sample mean did not differ from the population mean ( $p < 0.65$ ; mean = 0.08).

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Task 2 was eventually dismissed as a measure of ethical behavior because of the concern regarding the Indonesian sample and regarding the possibility that it may not really measure ethical behavior. Task 3 was also considered unsuccessful for the Indonesian sample given that almost all participants completed all the sub-tasks (Mean = 9.98, out of 10, SD = 0.10).

For the MTurk sample, more variance occurred. The mean for the number of words provided by participants for Task 2 is 35.78 (SD = 15.13) and the mean for the number of sub-tasks performed by participants is 6.47 (SD = 4.13).

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## STUDY 4/PRETEST 3: MANIPULATION CHECKS STUDY

Given the mixed results for the manipulations and measures of behavior, I revamped the manipulations for a third pretest.

### Sample and Procedures

A sample of 33 Amazon Mechanical Turk participants was recruited to test the manipulation and manipulation checks. At this time, there were only two conditions (i.e. 16 participants in self-transcendence and 17 participants in self-enhancement conditions). This was decided due to the theoretical justification of self-transcendence and self-enhancement being two diametrically opposite values. This was similar to the practice by Pulfrey & Butera (2013) in their study of self-transcendence and self-enhancement as the opposite situational factors. Participants were asked randomly to pick either “A” or “B,” functioning as an anchor to each manipulation.

Within each condition, participants were given 5 words associated with either self-transcendence or self-enhancement and asked “how you would feel if these words were parts of your employer’s handbook for new employees?” The words in the self-transcendence (i.e. ST) condition were *responsibility, honesty, unity, broadmindedness, helpfulness*, while the words in the self-enhancement (i.e. SE) condition were *intelligence, influence, positive image, ambition, and wealth*. The words were taken and adopted from the Schwartz’ list of values emphasizing each value (Schwartz, 1992, 1994). After answering several questions following the manipulation and since the focus was on the manipulation, they were asked to perform one task (i.e. a jumbled word task

in which participants were presented with 9 jumbled words to solve in 3 minutes).

Similarly to the previous pretests, only three words were solvable. It was designed in a way that would lead to a measure of unethical behavior. Before performing the task, participants were shown the same exact words as in the manipulation and asked to keep the words in mind while performing the task(s). Manipulation checks were presented after both tasks were completed. Participants were asked whether they were asked to keep the “following words when completing the tasks.” All ten words from both the ST and SE conditions were presented.

## Results

The pretest, using the manipulation and manipulation check statements as explained before, showed valid manipulations and reliable manipulation checks ( $n = 33$ ; 16 in ST condition and 17 in SE condition). The five ST items have  $\alpha = 0.97$  while the five SE items have  $\alpha = 0.98$ , showing reliable manipulation checks. One-way ANOVA shows a statistically significant difference between ST condition ( $mean = 6.14$ ;  $SD = 1.46$ ) and SE condition ( $mean = 1.40$ ;  $SD = 1.14$ ) for the ST manipulation check ( $p < 0.001$ ) and between ST condition ( $mean = 1.28$ ;  $SD = 6.61$ ) and SE condition ( $mean = 6.61$ ;  $SD = 0.76$ ) for the SE manipulation check ( $p < 0.001$ ), showing the validity of the manipulation.

## CONCLUSION

Through three pretests, I decided to retain the manipulations and manipulation checks explored in the third pretest (i.e. Study 4) and used Task 1 as a means of measuring unethical behavior and Task 3 as a means of measuring ethical behavior. The pretests gave sufficient evidence as to whether to use them in the actual study.

## CHAPTER 7

### STUDY 5: HYPOTHESIS TESTING I

In this chapter, I provide a report of the empirical testing of the hypotheses as described in Chapter 5, involving a student sample. It includes an explanation of the method and results and a discussion section.

#### METHOD

##### **Sample and Procedure**

As mentioned in Chapter 6, an online experiment embedded in a survey was administered. The sample was recruited through the Rutgers Business School Lab and consisted of 421 students. Students participated in exchange for extra credit in the “Introduction to Marketing” class. All completed the experiment/survey in the same period. There were only 2 conditions in the actual study, as opposed to 3 conditions as in the pretests<sup>11</sup>. After reading the consent form and agreeing to participate in the survey, students were directed in the survey to choose A or B based on the final digit of their student ID number. The odd numbered students would choose A (i.e. self-transcendence condition), while the even numbered students would choose B (i.e. self-enhancement condition).

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<sup>11</sup> This is due to both practical and theoretical reasons. Practically, it was more feasible to use two conditions only. Theoretically, self-transcendence and self-enhancement are considered two diametrically opposed values. Therefore, it was also treated as so in this study, similar to Pulfrey & Butera (2013).

## Manipulations

Within each condition, participants were given 5 words associated with either self-transcendence or self-enhancement and asked “how you would feel if these words were parts of your employer’s handbook for new employees?” The words in the self-transcendence condition (i.e. ST condition onwards) were *responsibility*, *honesty*, *unity*, *broadmindedness*, *helpfulness*, while the words in the self-enhancement condition (i.e. SE condition onwards) were *intelligence*, *influence*, *public image*<sup>12</sup>, *ambition*, and *wealth*. The words were taken and adopted from the Schwartz’ list of values emphasizing each value (Schwartz, 1992, 1994). After answering several questions following the manipulation, they were asked to perform two tasks. Task 1 was a jumbled word task in which participants were presented with several jumbled words to solve 7 jumbled words in 2 minutes. Only three (out of seven) words were solvable. Task 1 was designed in a way that would lead to a measure unethical behavior (see below). Task 2 contained a series of 7 sub-tasks, which would give two measures of ethical behavior. Before each task (i.e. Task 1 and Task 2), participants were shown the same exact words as in the manipulation and asked to keep the words in mind while performing the task(s). Manipulation checks (in both conditions) were presented after both tasks were completed. Generally, participants were asked about their agreement with whether they were asked to keep the “following words when completing the tasks.” All ten words, combined from both the ST and SE conditions, were presented. Lastly, participants completed a survey questionnaire.

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<sup>12</sup> In the third pretest, “positive image” was used instead of “public image.” The change was due to consistency with Schwartz’ (1992) emphasis on “preserving public image.” A “positive image” is theoretically true for self-enhancement, but it could be a more abstract concept than “public image,” which is thought to be more straightforward.



## Measures

*Forms of Sacredness.* Forms of sacredness were measured using the sacredness instrument developed in Study 1. From the previous study, as reported in Chapter 3 and 4, there are three forms of sacredness.

*Unethical work behavior.* Unethical work behavior was measured through the question, “how many jumbled words were you able to solve?” after Task 1. Given that there were only three solvable words out of seven words, the higher the number of jumbled words would generally indicate more unethical work behavior. But the calculation of unethical behavior involved matching the information about the number of jumbled words they thought they were able to solve with the words that they actually solved. To record the latter, they were given a box next to each jumbled word when they were performing the task to solve the words. For example, when in the boxes it was found that they actually solved 3 words correctly but when they answered 5 for the question above, they received 2 points for unethical work behavior. This operationalization of unethical work behavior focuses on a personal gain.

*Ethical work behavior.* Ethical work behavior, signifying voluntary behavior, was measured in two ways. One was by the number of sub-tasks performed in Task 2 (i.e. Volunteer-amount), and the other was by whether or not participants participated in Task 2 regardless of how many sub-tasks performed, as indicated by the first agreement to participate in Task 2 (i.e. voluntary act). For the latter, it is considered more ethical to volunteer to participate in Task 2. While the first gives continuous data, the second gives dichotomous data (i.e. participate or not). The instruction was “*In the following task, you*

*will be exposed to 7 sub-tasks, which will take approximately 5 to 10 total minutes to complete. In some sub-tasks, you will be asked to match words with their definitions. In some others, you will be asked to answer questions related to you. Please note that you will not be judged by how accurate your responses are and that performing the following sub-tasks is completely voluntary (i.e. not required for you to complete the entire survey).*” Following the instructions were two choices whether or not they agreed to participate. But instead of asking their willingness to participate, the question directly measured their behavior, as it would be known whether they proceeded to the next page or not. If they answered “yes,” they would be directed to the first sub-task. If “no,” they would be directed to the manipulation check questions, skipping all sub-tasks.

*Control variable.* Gender was included as a control variable. Theoretically, gender seems to be quite an influencing factor in the ethical decision-making literature (see Craft, 2013). For example, it is reported that females were higher than males in their ethical awareness (Eweje & Brunton, 2010) and moral reasoning ability (Herington & Weaven, 2008). Female was coded 0 and Male was coded 1. Age was not included as a control variable because of the lack of variation.

## RESULTS

### **General Summary**

Overall, there were 185 women and 235 men (1 missing) participating in Study 5. 98% were in the age group of 15 to 24 years old ( $N = 410$ ), followed by the age group of 25 to 34 years old ( $N = 10$ ), with 1 missing. The average age was 20 years old ( $SD =$

1.67). In other words, there was not much variation in age in this sample. In terms of religious diversity, there were 28 Jewish, 111 Catholic, 23 Protestant, 17 Muslim, 13 Buddhist, 63 Hindu, 6 Sikh, 30 Atheist, 36 Agnostic, and 8 “Spiritual” respondents. There were 86 people who identified as “Others.” In terms of nationality, 345 people were identified as being “American,” while 71 people were identified as being “Non-American” (e.g. Chinese, Indian, Korean).

### **Manipulation**

In this study, 227 and 194 people were in the ST and SE conditions, respectively. In both samples, the reliability for the manipulation check statements was very high ( $\alpha = 0.96$  for self-transcendence items and  $\alpha = 0.97$  for self-enhancement items). One-way ANOVA showed a statistically significant difference between the two groups in their evaluation of the words associated with the respective manipulation ( $p < 0.001$ ). The mean for ST manipulation check was 6.17 in ST condition ( $SD = 1.15$ ) and 2.08 in SE condition ( $SD = 1.80$ ;  $p < 0.001$ ). For SE manipulation check, the mean was 6.39 in SE condition ( $SD = 1.02$ ) and 1.98 in ST condition ( $SD = 1.63$ ;  $p < 0.001$ ).

### **Forms of Sacredness**

Tables 7.1 and 7.2 shows the result from the Exploratory Factor Analysis involving the sacred items. Table 7.1 presents factors with the original sacred items included in Study 1 while Table 7.2 presents factors that include several added items. Overall, factors with the added items yielded a much higher alpha for all three factors. Sacralizing materialism yielded  $\alpha = 0.85$  (four original items) and  $\alpha = 0.92$  (nine items), sacralizing

traditional religion yielded  $\alpha = 0.86$  (four original items) and  $\alpha = 0.94$  (eight items), and sacralizing virtue yielded  $\alpha = 0.85$  (four original items) and  $\alpha = 0.89$  (seven items).

Table 7.3 shows the correlations between sacralizing materialism, traditional religion, and virtue. Using the student sample, it was found that sacralizing materialism and traditional religion were negatively and highly correlated ( $r = -0.23$ ,  $p < 0.001$  for original factors;  $r = -0.16$ ,  $p < 0.001$  for factors with added items), while sacralizing materialism and virtue were positively and highly correlated ( $r = 0.19$ ,  $p < 0.001$  for original factors;  $r = 0.26$ ,  $p < 0.001$  for factors with added items), and sacralizing traditional religion and virtue were positively and highly correlated ( $r = 0.39$ ,  $p < 0.001$  for original factors;  $r = 0.38$ ,  $p < 0.001$  for factors with added items). Overall, among the three forms of sacredness, only the relationship between sacralizing materialism and traditional religion were highly negative (with  $p < 0.001$ ).

Another set of analyses was run, that is, by dropping those that identified as either “atheist” or “agnostic” to see if there was any difference ( $N = 355$ ). The results are shown in Tables 7.4 through 7.6, showing that there was mostly no statistically significant difference. The only main difference was that the correlation between sacralizing materialism and traditional religion became less statistically significant ( $r = -0.11$ ,  $p < 0.05$  for factors with added items).

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### **Hypothesis Testing**

Multiple regressions were run to test the hypotheses. Linear regression analyses were performed for Volunteer-amount and Unethical behavior, while the generalized linear model analyses were performed for Voluntary Act. All were done hierarchically<sup>13</sup>. The results for both studies are presented in Tables 7.7 through 7.12. In addition, considering the overall positive and high correlations between sacralizing traditional religion and virtue (as theorized), they were not entered into the same analyses.

### *Main Effects*

Tables 7.7 and 7.8 present the analyses for Volunteer-amount, while Tables 7.9 and 7.10 present the analyses for Voluntary Act. Tables 7.11 and 7.12 present the analyses for Unethical work behavior. Overall, there was no statistically significant relationship between any of the main independent variables with the dependent variables for ethical work behavior. In other words, neither Volunteer-amount nor Voluntary act appeared to

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<sup>13</sup> The software “R-commander” was used in running all the analyses.

be affected by any of the measures of sacredness. However, as can be seen in Table 7.12, sacralizing virtue was found to relate negatively to Unethical work behavior ( $\beta = -0.08$ ;  $p < 0.05$ ) across all hierarchical steps.

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### *Interaction Effects*

To operate the interaction effect of situations (i.e. the effect of a self-transcending situation versus a self-enhancing situation on the relationship between forms of sacredness and un/ethical work behaviors), they were coded categorically in that a self-transcendence cue was coded 1 and self-enhancement cue was coded 0. All interaction terms are presented in Tables 7.7 through 7.12 as well. Overall, the only statistically

significant result involved the interaction between sacralizing materialism and situational cues with Voluntary Act as the dependent variable ( $\beta = 0.68$  in step 8, Table 7.9;  $p < 0.05$ ). More specifically, individuals that scored high on sacralizing materialism were more likely to perform Voluntary Act in a self-transcending situation, as opposed to in a self-enhancing situation. Figure 7.1 illustrates the interaction effect. All other interaction effects were not statistically significant.

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 INSERT FIGURE 7.1 HERE  
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## DISCUSSION

Overall, of all the six hypotheses, only hypotheses 6 and 7 were supported (to be detailed further). Hypothesis 6 was supported in that sacralizing virtue was found to relate negatively to unethical work behavior. This means that the lack of sacralizing items such as “empathy,” “compassion,” and “patience” would drive individuals to behave unethically (i.e. lying about performance). Hypothesis 7 was supported in that sacralizing materialism was found to relate positively to ethical work behavior, measured by voluntary act (i.e. initiation to volunteer), when or after being exposed to a self-transcending situation (as opposed to a self-enhancing situation).

While sacralizing materialism was not found to relate to unethical work behavior in this study, the support for hypothesis 6 (i.e. sacralizing virtue negatively relates to unethical work behavior) adds to the understanding of a potential driver of unethical

behavior. That is, it may not only be associated with possession of a self-enhancement value, but also the lack of sacralizing virtue. In the case where students were the participants, holding virtue sacred was shown to be a rather important disposition that prevented individuals from behaving unethically.

Further, it was found that a self-transcendence cue, as opposed to a self-enhancement cue, increased the likelihood of students who sacralized materialism to behave ethically. That is, students who sacralized materialism were more likely to engage in extra role behavior (i.e. choose to act voluntarily) in a situation where a self-transcendence cue rather than a self-enhancement cue is present. Given that sacralizing materialism is strongly correlated with self-enhancement value, this extends the finding that students who strongly adhered to self-enhancement would reduce their condoning of cheating in a situation where a self-transcendence cue was present as opposed to in a situation where a self-enhancement cue was present (Pulfrey & Butera, 2013).



## CHAPTER 8

### STUDY 6: HYPOTHESIS TESTING II

In this chapter, I provide a report of the empirical testing of the hypotheses as described in Chapter 5, involving an adult sample. It includes an explanation of the method and results and a discussion section.

#### METHOD

##### **Sample and Procedure**

Similar to Study 5, an online experiment embedded in a survey was administered, with two conditions. The sample ( $N = 100$ ) was recruited through Amazon Mechanical Turk. After reading the consent form and agreeing to participate, students were directed in the survey to choose A or B based on the final digit of their student ID number. Those with an odd numbered birth date were asked to choose A (i.e. self-transcendence condition), while those with an even numbered birth date were asked to choose B (i.e. self-enhancement condition).

##### **Manipulations**

Within each condition, participants were given 5 words associated with either self-transcendence or self-enhancement and asked “how you would feel if these words were parts of your employer’s handbook for new employees?” The words in the self-transcendence condition (i.e. ST condition onwards) were *responsibility*, *honesty*, *unity*,

*broadmindedness, helpfulness*, while the words in the self-enhancement condition (i.e. SE condition onwards) were *intelligence, influence, public image, ambition, and wealth*. The words were taken and adopted from the Schwartz' list of values emphasizing each value (Schwartz, 1992, 1994). After answering several questions following the manipulation, they were asked to perform two tasks. Task 1 was a jumbled word task in which participants were presented with several jumbled words to solve 9 jumbled words in 3 minutes<sup>14</sup>. In both cases, only three (out of nine) words were solvable. Task 1 was designed in a way that would lead to a measure unethical behavior (see below). Task 2 contained a series of 10 sub-tasks<sup>15</sup>, which would give two measures of ethical behavior. Before each task (i.e. Task 1 and Task 2), participants were shown the same exact words as in the manipulation and asked to keep the words in mind while performing the task(s). Manipulation checks (in both conditions) were presented after both tasks were completed. Generally, participants were asked about their agreement with whether they were asked to keep the “following words when completing the tasks.” All ten words, combined from both the ST and SE conditions, were presented. Lastly, participants completed a survey questionnaire.

## Measures

*Forms of sacredness.* Forms of sacredness were measured using the sacredness instrument developed in Study 1.

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<sup>14</sup> In Study 5, there were 7 jumbled words to solve in 2 minutes. This was due to the consideration of time constraint. Here, time was not an issue.

<sup>15</sup> Similarly, the number of sub-tasks was higher than in Study 5 because time was not much of an issue in Study 6.

*Unethical work behavior.* Unethical work behavior was measured through the question, “how many jumbled words were you able to solve?” after Task 1. Given that there were only three solvable words out of nine words, the higher the number of jumbled words would generally indicate more unethical behavior. But the calculation of unethical behavior involved matching the information about the number of jumbled words they thought they were able to solve with the words that they actually solved. To record the latter, they were given a box next to each jumbled word when they were performing the task to solve the words. For example, when in the boxes it was found that they actually solved 3 words correctly and when they answered 5 for the question above, they received 2 points for unethical work behavior.

*Ethical work behavior.* Ethical work behavior was measured in two ways. One was by the number of sub-tasks performed in Task 2 (i.e. Volunteer-amount), and the other was by whether or not participants participated in Task 2 regardless of how many sub-tasks performed, as indicated by the first agreement to participate in Task 2 (i.e. voluntary act). For the latter, it is considered more ethical to volunteer to participate in Task 2. While the first gives continuous data, the second gives dichotomous data (i.e. participate or not). The instruction was “*In the following task, you will be exposed to 7 sub-tasks, which will take approximately 5 to 10 total minutes to complete. In some sub-tasks, you will be asked to match words with their definitions. In some others, you will be asked to answer questions related to you. Please note that you will not be judged by how accurate your responses are and that performing the following sub-tasks is completely voluntary (i.e. not required for you to complete the entire survey).*” Following the instruction was a question asking whether or not they agreed to participate. But instead of

asking their willingness of participate, the question directly measured their behavior, as it would be known whether they proceeded to the next page or not. If they answered “yes,” they would be directed to the first sub-task. If they answered “no,” they would be directed to the manipulation check questions, skipping the sub-tasks.

*Control variable.* Gender was included as a control variable in both samples. Theoretically, gender seems to be quite an influencing factor in the ethical decision-making literature (see Craft, 2013). For example, it is reported that females were higher than males in their ethical awareness (Eweje & Brunton, 2010) and moral reasoning ability (Herington & Weaven, 2008). Female was coded 0 and Male was coded 1.

## RESULTS

### General Summary

There were 51 women and 49 men in total. 49% were in the age group of 25 to 34 years old (N = 49 people), followed by the age group of 35 to 44 years old (N = 23), 45 to 54 years old (N = 14), 15 to 24 years old (N = 10), and above 55 years old (N = 4)<sup>16</sup>. In terms of religious diversity, there were 2 Jewish, 18 Catholic, 23 Protestant, 4 Buddhist, 3 Hindu, 24 Atheist, 14 Agnostic, and 6 “Spiritual” respondents. There were 6 people who identified as “Others.” In terms of nationality, 94 people were recorded as being “American,” while 4 people identified as being “Non-American” (i.e. Indian) Like in Study 5, the sample here represented quite a diverse set of religious identities. But unlike in Study 5, the representativeness of Non-American participants was lacking.

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<sup>16</sup> The actual age was not asked in Study 6.

## **Manipulation**

In this study, 53 and 47 people were in the ST and SE conditions, respectively. The reliability for the manipulation check statements was very high ( $\alpha = 0.97$  for ST items and  $\alpha = 0.98$  for SE items). One-way ANOVA shows a statistically significant difference between the two groups in their evaluation of the words associated with the respective manipulation ( $p < 0.001$ ). The mean for ST manipulation check is 6.23 in ST condition ( $SD = 1.10$ ) and 1.43 in SE condition ( $SD = 0.98$ ;  $p < 0.001$ ). For SE manipulation check, the mean is 6.67 in SE condition ( $SD = 0.71$ ) and 1.73 in ST condition ( $SD = 1.25$ ;  $p < 0.001$ ).

## **Forms of Sacredness**

The results from the Exploratory Factor Analysis, with three factors, are presented in Tables 8.1 and 8.2. Table 8.1 presents factors with the original sacred items included in Study 1 while Table 8.2 presents factors that include several added items. Overall, factors with the added items yielded a higher alpha for all three factors. Sacralizing materialism yielded  $\alpha = 0.84$  (four original items) and  $\alpha = 0.93$  (nine items), sacralizing traditional religion yielded  $\alpha = 0.96$  (four original items) and  $\alpha = 0.97$  (six items), and sacralizing virtue yielded  $\alpha = 0.85$  (in this study, sacralizing virtue did not have any added item).

Table 8.3 shows the correlations between sacralizing materialism, traditional religion, and virtue. Unlike in the student sample, the only statistically significant correlation was found between sacralizing traditional religion and virtue ( $r = 0.42$ ,  $p < 0.001$  for factors with original items;  $r = 0.41$ ,  $p < 0.001$  for factors with added items). No statistically

significant correlation was found between sacralizing materialism and traditional religion and between sacralizing materialism and virtue.

Another set of analyses was run, that is, by dropping those that identified as either “atheist” or “agnostic” to see if there was any difference in the results ( $N = 62$ ). The results are shown in Tables 8.4 through 8.6, showing that there was mostly no statistically significant difference. That is, the only statistically significant correlation was found between sacralizing traditional religion and virtue ( $r = 0.37$ ,  $p < 0.01$ ), similar to the previous findings.

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## Hypothesis Testing

As a reminder, the dependent variables tested were Volunteer-amount and Voluntary act as measures of ethical behavior and Unethical behavior. Linear regression model analyses were performed for Volunteer-amount and Unethical behavior, while the generalized linear model analyses were performed for Voluntary Act. All were done hierarchically<sup>17</sup>. The results for both studies are presented in Tables 8.7 through 8.12. In addition, given that sacralizing traditional religion and virtue were strongly correlated, they were not entered into the same regression analyses.

### *Main Effects*

Across all hierarchical steps, it was found that sacralizing traditional religion related positively to Voluntary-amount ( $\beta = 0.54$ ;  $p < 0.01$ , after controlling for gender). Similarly, sacralizing virtue also related positively to Volunteer-amount ( $\beta = 0.63$ ;  $p < 0.05$ , after controlling for gender). This significance was also consistent across all hierarchical steps. In addition, sacralizing virtue, as seen in Table 8.10, also positively related to Voluntary act ( $\beta = 0.44$ ;  $p < 0.01$ , after controlling for gender). Further, as can be seen in Tables 8.11 and 8.12, sacralizing materialism was also found to positively relate to Unethical behavior ( $\beta = 0.20$ ;  $p < 0.05$ , after controlling for gender). This significance level was maintained until the interaction that included sacralizing materialism was entered.

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<sup>17</sup> The software “R-commander” was used in running all the analyses.

*Interaction Effects*

Similar to Study 5, to operate the interactional effect of situations, they were coded categorically in that a self-transcending situation was coded 1 and self-enhancing situation was coded 0. All interaction terms are presented in Table 8.7 through Table 8.12 as well, embedded in the hierarchical analyses. Overall, there was no statistically significant relationship that involves any interaction effect.

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## DISCUSSION

Overall in Study 6, there were more hypotheses supported than in Study 5. More specifically, three hypotheses related to the main effects (i.e. hypotheses 2, 3 and 5) were supported, while no support was found for all interaction effects. Hypothesis 2 was supported in that sacralizing materialism related positively to unethical work behavior. Hypothesis 3 was supported in that sacralizing traditional religion related positively to Volunteer-amount, which to a certain extent represents some commitment to behave ethically. Hypothesis 5 was supported in that sacralizing virtue related positively to Volunteer-amount and Voluntary act, both measures of ethical work behavior.

## CHAPTER 9

### STUDIES 5 AND 6: GENERAL DISCUSSION AND POST-HOC ANALYSES

#### GENERAL DISCUSSION

A summary of the support for the hypotheses in Studies 5 and 6 is presented in Tables 9.1 (main effects) and 9.2 (interaction effects). While some hypotheses were supported, the support was not replicated across studies or samples.

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Most of the supports for the hypotheses were shown in Study 6, with the adult sample. More specifically, sacralizing materialism was shown to positively relate to unethical work behavior, while sacralizing traditional religion and virtue were shown to positively relate to ethical work behavior. The only main effect supported in Study 5 was the negative relationship between sacralizing virtue and unethical work behavior, a hypothesized relationship that was not supported in Study 6.

Given that sacralizing materialism was strongly correlated with self-enhancement, this particular finding to a certain extent supports previous findings showing that self-enhancement predicted cheating (Pulfrey & Butera, 2013) and destructive leadership

decisions (Illies & Reiter-Palmon, 2008). Generally, sacralizing materialism (i.e. materialism as sacred) is theorized to put an emphasis on personal, materialistic, gains, such as money. In effect, due to this narrowing of the view on personal gains, sacralizing materialism would motivate people to behave unethically.

Virtue is the only form of sacredness that related positively to both measures of ethical work behavior, emphasizing voluntariness (Study 6). Given that sacralizing virtue was strongly related to the value of self-transcendence, this finding to a certain extent supports a previous finding showing that it positively predicted prosociality (Caprara et al., 2012). In theory, sacralizing virtue as sacred means holding virtues such as compassion and forgiving sacred. Individuals who strongly sacralize virtue would feel in danger when they do not “approach” these virtues. In effect, sacralizing virtue would motivate individuals to behave ethically (i.e. exhibit an extra role behavior). In Study 5, sacralizing virtue was negatively related to unethical work behavior.

Overall, in the adult sample, unethical work behavior was explained more by sacralizing materialism, while in the student sample, it was explained more by the lack of sacralizing virtue. This difference in the result in terms of what explains unethical work behavior may be partly associated with the finding in Study 5 (student sample) that sacralizing virtue was positively related to sacralizing materialism. This may mean that students were still equipped with the possibility of sacralizing materialism and virtue at the same time. Given this, it may be that sacralizing materialism had not yet turned into a form of motivation that narrowed their view. Generally, sacralizing materialism, in the case of students, was not as strong of a driver to behave unethically as it was in the case of adults.

Regarding the situational effects, they did appear to affect students more than adults. A self-transcending situation was shown to enable students who sacralized materialism to behave ethically (i.e. exhibit a decision to volunteer) while a self-enhancing situation further prevents students who sacralize materialism from behaving ethically (i.e. exhibit a decision to volunteer). Given that sacralizing materialism was strongly and positively related to self-enhancement value, this finding aligns with previous findings showing that the attitude of people who adhered to self-enhancement value tended to be affected by situations (Pulfrey & Butera, 2013; Roccas, 2003). One study on music also found that people with a self-enhancement inclination tended to have a conformist preference (Gardikiotis & Baltzis, 2010), showing a preference that was more socially desirable. But the current finding extends to the actual (ethical) behavior, beyond preference. Nevertheless, I only found support in the student sample.

## POST-HOC ANALYSES

Here, I report several post-hoc analyses involving data gathered in Studies 5 and 6. First, I explore the role of spirituality (Liu & Robertson, 2011), found in Study 1 to have a very strong relationship with self-transcendence value. Second, I explore the differences in the means of all forms of sacredness and ethical work behavior as well as unethical work behavior by religious identities. Third, I explore the role of positive feelings across dispositions.

## Spirituality

Spirituality, as conceptualized by Liu & Robertson (2011), emphasizes a degree of interconnection with a higher power, human beings and all living things. Individuals with a higher level of spirituality are said to have a transcendental self-identity. Across studies, spirituality is very highly related to self-transcendence, a value that has been found to predict prosociality (Caprara et al., 2012) and non-destructive leadership decision (Illies & Reiter-Palmon, 2008). In addition, spirituality has been explored in the literature of the psychology of religion and spirituality as similar to the concept of “religiosity” or “religiousness” (see Zinnbauer & Pargament, 2005). Given that no evidence was found that sacralizing traditional religion or virtue affects either measure of ethical work behavior in Study 5 (student sample), I was curious to see whether spirituality has an effect on ethical work behavior.

Tables 9.3 and 9.4, using hierarchical regression analyses, show that spirituality positively affected both Volunteer-amount ( $\beta = 0.22$ ;  $p < 0.05$ , after controlling for sacralizing materialism and gender<sup>18</sup>) and Voluntary act ( $\beta = 0.39$ ;  $p < 0.05$ , after controlling for sacralizing materialism and gender).

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 INSERT TABLE 9.3 HERE  
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<sup>18</sup> Conceptually, sacralizing materialism focuses on self, materialistic, gains, while spirituality focuses on transcendent self-identity, beyond the self at the individual, interpersonal, and collective levels. Therefore, sacralizing materialism presents itself as a context and boundary condition to understand how spirituality may operate on ethical work behavior. In Study 1, sacralizing materialism was uncorrelated with spirituality. In addition, past research suggests that women differ from men in their ethical awareness (Eweje & Brunton, 2010) and moral reasoning ability (Herington & Weaven, 2008). Therefore, gender was also entered as a control variable.

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INSERT TABLE 9.4 HERE  
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### *Discussion*

The results shown extend the idea that spirituality, a construct developed by Liu & Robertson (2011), affects ethical work behavior. Further, there needs to be a more refined theory of how spirituality can lead to ethical work behavior. For example, since spirituality centers on the idea of transcendent self-identity, beyond individual, interpersonal and collective self-identity, one may argue for the transcendent feature of spirituality and how it relates to ethical behavior.

### **Mean Differences based on Religious Identities**

In this section, I explored whether the means of all forms of sacredness and ethical work behavior as well as unethical work behavior differed across religious identities or religion types. Tables 9.5 through 9.7 present the means and standard deviations for sacralizing materialism, traditional religion, and virtue, respectively, both involving the student sample (Study 5) and the adult sample (Study 6).

For sacralizing materialism, as seen in Table 9.5, there was no statistically significant difference in the means across all religious identities or religion types both in Study 5 and in Study 6. This suggests that sacralizing materialism may not be specific to a certain religion or religious identity. This applies at least in the case of Rutgers' undergraduate students and American adults. For sacralizing traditional religion, the religious groups (e.g. Jewish, Catholic, Protestant, Muslim) tended to have significantly higher means ( $p <$

0.001) than the non-religious groups (i.e. Atheist, Agnostic), both in Study 5 and Study 6. In addition, we would expect that at least those who identified as ‘atheist’ would score much closer to 1 in the traditional religion scale. The fact that it was not entirely true suggests the complexity of religious or non-religious experience, which cannot entirely be attributed to any religious identity. This is worth further research. As for sacralizing virtue, the difference in the means was evident only in the case of students. But the difference did not appear to be associated with whether one belonged to a particular religious or non-religious group. In addition, given that the sample involved undergraduate students, the difference in the means of sacralizing virtue could not seem to be attributed to the difference in religious identities.

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 INSERT TABLE 9.5 HERE  
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Further, I also explored whether the means of ethical work behavior and unethical work behavior differed across different religious identities or religion types. Table 9.8 presents the difference in the means and standard deviations of ethical work behavior while Table 9.9 presents the difference in the means and standard deviations of unethical work behavior. It is shown that there was no statistically significant difference in the

means of ethical work behavior across studies. As for unethical work behavior, only in the student sample was there a statistically significant difference.

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 INSERT TABLE 9.8 HERE  
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 INSERT TABLE 9.9 HERE  
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### **Mediators for Unethical Work Behavior**

In Study 5, it was found that sacralizing virtue negatively affected unethical work behavior. In Study 6, it was sacralizing materialism that positively affected unethical work behavior. Here, I explored some potential mediators of this relationship between forms of sacredness and unethical work behavior. Two measures that relate to self-assessment are considered: perceived performance and perceived satisfaction. *Perceived performance* is a measure of how well one perceives his/her performance to be while *perceived satisfaction* is a measure of the extent to which one feels satisfied with his/her performance after he or she completes the jumble word task. In theory, assuming that generally participants are not aware of the insolvability of some of the words (even though they could potentially suspect that there are several unsolvable words), it is impossible to perform well on the task. Generally speaking, the better their perception of how well they perform and how satisfied they are with their performance is by definition indicative of the more unrealistic their self-assessment is.



Overall, it was found that the negative relationship between sacralizing virtue and unethical work behavior in Study 5 was partially mediated by perceived satisfaction, while the positive relationship between sacralizing materialism and unethical work behavior in Study 6 was mediated by perceived performance and perceived satisfaction. More detailed explorations and explanations are below.

*Sacralizing virtue and unethical work behavior: Study 5*

The core idea behind sacralizing virtue is its emphasis on sacralizing virtues or moral values. Therefore, committing an unethical behavior would essentially take away what is considered sacred. In essence, sacralizing virtue acts as a guidance that prevents individuals from committing unwanted (i.e. unethical) behavior. Given that virtues align with ethical principles, sacralizing virtues enable people to have easier access to virtues or moral principles to guide their behavior. In essence, moral values become easily identified.

To find out about how sacralizing virtue would discourage unethical work behavior through a realistic self-assessment, a mediation analysis (Baron & Kenny, 1986) is conducted. Table 9.10 shows how sacralizing virtue affected perceived performance and perceived satisfaction. It is shown that sacralizing virtue negatively affected perceived satisfaction ( $\beta = -0.11$ ;  $p < 0.05$ ) but it did not correlate with perceived performance. This establishes that perceived satisfaction is potentially a mediator between sacralizing virtue and unethical work behavior.

Next, the mediator needs to predict unethical work behavior. Table 9.11 (step 2) shows that perceived satisfaction positively related to unethical work behavior ( $\beta = 0.10$ ;

$p < 0.01$ ). Taking both sacralizing virtue and perceived satisfaction together into the regression as the final step of the mediation analysis, I found that both related to unethical work behavior. The relationship between perceived satisfaction and unethical work behavior ( $\beta = 0.09$ ;  $p < 0.01$ ) was stronger than the relationship between sacralizing virtue and unethical work behavior ( $\beta = -0.08$ ;  $p < 0.05$ ). Overall, it shows that perceived satisfaction only *partially* mediated the relationship between sacralizing virtue and unethical work behavior.

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 INSERT TABLE 9.10 HERE  
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 INSERT TABLE 9.11 HERE  
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Figure 9.1 illustrates the path relationships among the three variables, showing the direction from sacralizing virtue to unethical work behavior, mediated partially by perceived satisfaction.

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 INSERT FIGURE 9.1 HERE  
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### *Sacralizing materialism and unethical work behavior: Study 6*

The core idea in sacralizing materialism is the focus of personal, materialistic, gains. In other words, individuals who sacralize materialism narrow their view so that they focus exclusively on personal gains. In line with this conceptualization, I examined whether the positive relationship between sacralizing materialism and unethical work

behavior in Study 6 could be explained through the mechanism that illustrates this focus on personal gains.

The next step is to establish whether sacralizing materialism predicts either perceived performance or perceived satisfaction. Table 9.12 shows, in separate regressions, that sacralizing materialism correlated positively with perceived performance ( $\beta = 0.27$ ;  $p < 0.05$ ) and perceived satisfaction ( $\beta = 0.24$ ;  $p < 0.05$ ). As seen in Table 9.13, perceived performance was also positively and highly correlated with unethical work behavior ( $\beta = 0.45$ ;  $p < 0.001$ ). It also shows that, after taking both sacralizing materialism and perceived performance together, the effect of the former on unethical work behavior became statistically insignificant while the effect of latter on unethical work behavior remained statistically significant ( $\beta = 0.42$ ;  $p < 0.001$ ). Further, Table 9.14 shows that perceived satisfaction related positively to unethical work behavior ( $\beta = 0.36$ ;  $p < 0.001$ ). But after taking sacralizing materialism and perceived satisfaction together, it is shown that only perceived satisfaction positively related with unethical work behavior ( $\beta = 0.33$ ;  $p < 0.001$ ). All these support that either perceived performance or perceived satisfaction *fully* mediated the positive relationship between sacralizing materialism and unethical work behavior.

Moreover, we can also see if perceived performance or perceived satisfaction had a statistically significant relationship with unethical work behavior. In Table 9.15, it is shown that only perceived performance positively related to unethical work behavior ( $\beta = 0.44$ ;  $p < 0.01$ ). Finally, in Table 9.16, it is shown that perceived satisfaction positively related to perceived performance ( $\beta = 0.82$ ;  $p < 0.001$ ). It also positively related to

perceived performance, after taking sacralizing materialism into account ( $\beta = 0.81$ ;  $p < 0.001$ ).

It can be concluded that the relationship between sacralizing materialism and unethical work behavior was mediated by both perceived performance and perceived satisfaction, with the latter leading to the former. Figure 9.2 illustrates the path diagram connecting sacralizing materialism, perceived satisfaction, perceived performance, and unethical work behavior.

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INSERT FIGURE 9.2 HERE  
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### *Discussion*

In Study 5, it was found that sacralizing virtue negatively related to unethical work behavior. Here, it was found that the relationship was mediated by perceived satisfaction. That is, individuals who hold virtue sacred would be less likely to behave unethically due to their relatively low perceived satisfaction. It could be interpreted that having low perceived satisfaction represents a more reflective self-assessment, which seems to be enabled by the sacralization of matters such as “empathy,” “compassion,” and “inner strength.” In other words, sacralizing virtue to a certain extent prevents individuals (i.e. students) from having to feel satisfied with a low level of success in a jumble task.

In Study 6, it was sacralizing materialism that was found to relate positively to unethical work behavior. Through post-hoc analyses, it was found that the positive relationship was co-mediated by perceived satisfaction and perceived performance, with the latter being the closest to unethical work behavior. This means that individuals who hold materialism sacred would be more likely to behave unethically because they feel good about their performance and are satisfied with their performance even though it is objectively not possible to have a good performance. Feeling satisfied could motivate individuals to explicitly state that their performance was good in order to justify the feeling. What exactly was good performance? This was indicated in their level of lying about how many words they were able to solve (i.e. unethical work behavior).

### **Self-transcending situation and Positive Feelings**

In Studies 5 and 6, study participants were asked about the extent to which they would feel “happy,” “excited,” “secure,” “disappointed,” and “uneasy” if a certain group

of words were in their employer's handbook for new employees. The first three are positive feelings, while the last two are negative feelings. This was a part of exposure to self-transcending and self-enhancing situations. The theory of person-situation fit (e.g. Chatman, 1989) would suggest that individuals who hold materialism sacred would feel more positive in the self-enhancing situation (given that sacralizing materialism is strongly related to self-enhancement value) while individuals who hold virtue sacred would feel more positive in the self-transcending situation (given that virtue is strongly related to self-transcendence value). Multiple regression results suggest a more complex reality.

In the student sample (Study 5), positive feelings were positively related to either sacralizing traditional religion ( $\beta = 0.11$ ;  $p < 0.001$ ) or virtue ( $\beta = 0.14$ ;  $p < 0.01$ ) and unrelated to sacralizing materialism ( $\beta = 0.02$ ), in separate regressions (Table 9.17). In a multiple regression that included the interaction between situations and sacralizing materialism, a self-transcending situation still strongly and positively related to positive feelings ( $\beta = 1.00$ ;  $p < 0.01$ ). Sacralizing materialism and the interaction term itself were not shown to relate to positive feelings. However, the case was different with sacralizing traditional religion and virtue. In separate regressions, after taking into account the interaction between the form(s) of sacredness and situations, the effect of a self-transcending situation on positive feelings became statistically insignificant. In separate regressions, sacralizing traditional religion ( $\beta = 0.11$ ;  $p < 0.001$ ) and virtue ( $\beta = 0.14$ ;  $p < 0.01$ ) still positively and highly related to positive feelings.

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 INSERT TABLE 9.17 HERE  
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In the adult sample (Study 6), the results related to the main effects of forms of sacredness were reversed, compared to those found in the student sample. That is, it was sacralizing materialism that was found to positively relate to positive feelings ( $\beta = 0.30$ ;  $p < 0.01$ ), while sacralizing traditional religion and sacralizing virtue was unrelated to positive feelings. After taking the interaction between situations and sacralizing materialism, the effect of sacralizing materialism on positive feelings was strengthened ( $\beta = 0.50$ ;  $p < 0.001$ ). In addition, the interaction between situations and sacralizing materialism yielded a negative correlation ( $\beta = -0.41$ ;  $p < 0.05$ ). This means that those that scored high on sacralizing materialism would tend to have more positive feelings in a self-transcending situation than in a self-enhancing situation. Further, after taking into account the interaction between situations and sacralizing traditional religion and the interaction between situations and sacralizing virtue (in separate regressions), none of the variables was found to have a statistically significant relationship with positive feelings. These results can be seen in Table 9.18.

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 INSERT TABLE 9.18 HERE  
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*Discussion*

The results from multiple regressions above showed some differences across the two different samples. Nevertheless, the general tendency was that those who sacralized materialism (adult sample) would tend to have a higher level of positive feelings in a self-transcending situation than in a self-enhancing situation. But those who sacralized traditional religion or virtue were not shown to favor any of the two situations (self-transcending vs. self-enhancing situations). To reemphasize, the positive feelings were not a measure of the current feelings, but the feelings people would have if they were put in a particular situation.



## CHAPTER 10

## GENERAL DISCUSSION AND CONCLUSION

## DISSERTATION REVIEW

This dissertation begins with a questioning view of the notion of “religiosity” and offers an alternative look at religiosity by integrating a psychological notion of *homo religiosus* (DuBose, 2014b) and a sociological notion of the sacred (Durkheim, 1912/1965). The former deals with a view of human beings as inherently driving toward “transcendence, freedom, and meaning-making...” (DuBose, 2014b: 827), “... so that we become discerning, interpreting, responsible, and loving human beings toward one another...” (DuBose, 2014a: 789). The latter is arguably central to any religious phenomenon (Demerath, 1999; Durkheim, 1912/1965), where “religion” is understood as a moral collective or community (Durkheim, 1912/1965).

Taking both views together, I have attempted to offer a theoretical framework of sacredness, which proposes that “religiosity” is necessarily an individual disposition characterized by some commitment to what is or are considered sacred (descriptively speaking, not prescriptively). Even though people themselves do not necessarily call what is sacred “sacred,” in essence they could do so. Given that people live in societies in which sacred matters have been predefined and pre-established and that everything can be considered sacred, people may experience conflicting motives related to the sacred that may or may not lead to behaviors that characterize responsible and loving human beings as the motive of *homo religiosus*.

Three forms of sacredness have been discovered: *materialism*, *traditional religion*, and *virtue*. Materialism as sacred is characterized by a commitment to personal gains that involve materialistic matters such as “money,” “career,” and “social status.” Generally, these are not items usually associated with religiosity, rather with non-religiosity (or secularity, not irreligiosity). Traditional religion as sacred is characterized by a commitment to what has been traditionally associated with religion, such as “God” and “personal-religious growth.” Virtue as sacred is characterized by a commitment to virtues or moral values such as “empathy” and “compassion.” All of these are considered “sacred matters,” without which individuals would feel in danger.

*Sacralizing materialism* has been found to be positively and highly related to a propensity to morally disengage (Study 1). Interestingly, sacralizing materialism is positively related to intrinsic religiosity (Study 1), the form of religiosity in which individuals live his or her “religion.” It also positively relates to unethical work behavior using an adult sample (Study 6). *Sacralizing traditional religion* is also positively and highly related to intrinsic religiosity (Study 1). But in addition to this, it is also positively and highly related to the construct of spirituality and quest religiosity (Study 1), the latter being counterintuitively the kind of religiosity that questions “religion.” It is negatively related to a propensity to morally disengage, after excluding the “atheist” and “agnostic” groups in the sample (Study 1). This confirms the complexity of religious experience (e.g. Graham et al., 2008), unable to be captured by any one religious dimension. Further, it positively relates to ethical work behavior in the form of the amount of voluntariness (Study 6). *Sacralizing virtue* is another form of sacredness found in the follow up analysis to Study 1. It is found to be strongly and positively related to the value of self-

transcendence (post Study 1), a value that emphasizes concerns for the wellbeing of others (Caprara et al., 2012). It is consistently related positively and highly to sacralizing traditional religion (Study 5 and Study 6). Further, it positively relates to ethical work behavior in the form of the amount of voluntariness and the initiation of voluntariness (Study 6) and negatively relates to unethical work behavior (Study 5).

Interesting to note is the evidence found in this follow-up study that sacralization to a certain extent has something to do with age. That is, as people age, sacralizing materialism and traditional religion appear to decrease, while sacralizing virtue appears to increase, even though sacralizing traditional religion is also more likely to be accompanied by sacralizing virtue.

## CONTRIBUTIONS

### **Theoretical Contributions**

First, it provides an alternative, hybrid, way of looking at “religiosity” by integrating a psychological insight with a sociological one, blurring the distinction between the realm of the “religious” and the realm of “the non-religious” or “secular” (Belk et al., 1989; Demerath, 1999). One of the challenges of any definition of religiosity/religiousness is believers’ own, potentially conflicting, idea of being religious (Zinnbauer & Pargament, 2005). But if religious people, in a traditional sense of viewing “religion,” think that working is inherently important and religiously prescribed (e.g. Parboteeah et al., 2009), whatever falls within the realm of work can be considered inherently part of religious conversation as well (e.g. Kim et al., 2012), thus sacred. In addition, it also speaks to the

view of modern organizations as “secular religions,” with all the sacred matters associated with them (Ashforth & Vaidyanath, 2002). But while Ashforth & Vaidyanath (2002) approach it from a more sociological point of view of an organization, I look at the issue from an individual point of view (i.e. *homo religiosus*) in relation to the sacred. In short, “religiosity” is simply like any other psychological-moral disposition of any individual. In this way, “religiosity” is seen as something that as well functions within the realm of organizational lives, focusing on sacredness.

Second, it provides support to not only the complexity of religious phenomena but also a possible explanation at how being religious can be associated with something that is morally “good” and “bad” at the same time (Bloom, 2012; Chan-Serafin et al., 2013). Bloom (2012) reasons that being religious can be morally bad not because the inherent teachings of religion but because the existence of religion as a social validator. In this dissertation, while not directly speaking about “religion” as a social validator, I have tried to lay out the multiple (sacred) motives of individuals that could explain how being “religious” in the traditional sense we usually perceive it can lead individuals to behave ethically and unethically. One’s focus on materialism or personal gains may be an answer to the question of how being religious could lead to a more unethical behavior. Chan-Serafin et al. (2013) also argues that while being religious can be a source of virtuousness and prosociality, it also can be associated with pride and egocentrism. While the former can be captured by the sacralization of virtue, the latter can be illustrated by the sacralization of materialism. In a way, a discovery of the sacralization of something like “money,” “economy,” or “wealth” may speak to what Porter (2010) calls the “distortions in the American dream” (p. 535), pointing to the gap between “work ethic,” something

enabled by capitalism and democracy, and “ethical work,” the necessary moral work for the benefit of the whole.

Third, this dissertation contributes to the ethical decision-making literature. Previously, it has been noted that while the number of works examining religiosity/spirituality in the ethical decision-making literature seems to increase, there has not been any study that directly links religiosity to behavior (Craft, 2013). In this dissertation, religiosity is linked to un/ethical work behavior in a way that scrutinizes the whole idea of “religiosity” itself as opposed to simply accepting what has been taken as a proxy for religiosity (i.e. intrinsic religiosity).

### **Methodological Contribution**

I have attempted to create an instrument that explores sacred matters. Interestingly, the instrument itself can be used in two ways. The first use is to discover sacred matters in the most exploratory way. For example, it is somewhat surprising to find something like “money” or “career” to be considered a sacred matter and whether such a sacred matter is associated with some moral dispositions (e.g. moral disengagement propensity). The second use is to discover other forms of sacredness. In this study, I have only discovered three forms of sacredness. There could potentially be other forms of sacredness.

## PRACTICAL IMPLICATIONS

The results related to the forms of sacredness may inform “religious” decision makers (i.e. individuals who either perceive themselves as “religious”) working in particularly secular business organizations about the varieties or forms of sacredness and how they potentially operate in their decision-making, especially ethical decision-making. That is, while religious individuals may have their own convictions or ideas about their “religiosity,” they may want to take advantage from the discovery of materialism, traditional religion, and virtue as forms of sacredness by thinking about how they are embedded in their work and how they affect their work behaviors. They may reflect upon the extent to which the arguably materialistic tendencies of modern organizations, their religion, and their moral values affect their work behaviors. Given that work is central to many religious individuals (e.g. Parboteeah et al., 2009), the results from this dissertation suggest the need to think about the motivations that trigger certain work behaviors. This is especially relevant in the context where religion is considered important to the individuals working in the organization.

## LIMITATIONS

First, it should be acknowledged that the way religiosity is conceptualized here does not conform to how it is conventionally conceived in modern societies, at least the societies that are familiar with the English terms “religion” or “religiosity.” It has been a convention that religion is viewed largely categorically (i.e. Judaism, Christianity, Islam,

Buddhism, Hinduism, and others). To the conventional eyes, religiosity must therefore be related to these “religions.” Therefore, given this non-conformity with the convention, there is a challenge in communicating what this research is about, along with the findings, either with communities of scholars or general public, including “believers.” At the same time, it is good to be reminded that there is perhaps never going to be any consensus even in scholarship (Zinnbauer & Pargament, 2005). Given deep-seated assumptions everyone has about “religiosity,” “spirituality” or even “faith,” there should not be. It is neither necessary nor practical. Rather, there should be an open discussion about how religiosity can be constructed to explain a broader phenomenon. Still, this unconventional way of dealing with religiosity can be considered one limitation of this dissertation. Given that religiosity is here focused on sacredness, some may perceive religiosity and sacredness to be two different things. There, the interchangeable use of “religiosity” and “sacredness” to mean the same thing can be seen as confusing and inconsistent to some.

Second, it is important to acknowledge that the sacred items listed, such as “God” or “money,” should be viewed as simply terms that represent “something” meaningful to people. In other words, they are simply symbolic. I have not attempted to define what “God” is or what “money” is. They mean something to people, who regard or disregard them as sacred. In other words, I do not discuss the essence of “God,” “money,” or any other sacred items or terms, thus falling outside the scope of the study. Therefore, it is incorrect to interpret that “money is inherently bad” or “career is inherently bad.” Rather, sacralizing these terms to such a large extent may not be a good thing from a moral standpoint. In addition, since these terms are not discussed in terms of their essences,

they should not be seen as “equals.” For example, the term “religion” and “divine presence” cannot be seen as “equals,” rather as terms that appear to speak about something similar or associative in meaning.

Third, the online experimental method employed is not a pure experiment in the sense that participants are not isolated in an experimental lab. In Study 6, participants may be affected by a variety of different things that cannot be controlled. Similarly in Study 5, students would potentially be distracted by all other factors such as the presence of other 400 students in the room, which may affect how they behave. In addition, the studies also do not include a control condition, only self-transcendence and self-enhancement conditions.

Fourth, of all the twelve hypotheses developed, only five total hypotheses are supported and they are not supported across samples. That is, different hypotheses are supported in different studies. This lack of support for the hypotheses may be due to several reasons. *First*, it may be related to the use of different samples. The adult sample may yield a more reliable data than the student sample. *Second*, the number of sub-tasks that would measure ethical work behavior in Study 5 (student sample; 7 sub-tasks) is less than the number in Study 6 (adult sample; 10 sub-tasks). It could be 10 sub-tasks enable for the measure of ethical work behavior to be more valid. The additional three sub-tasks could have facilitated more variation in ethical work behavior. *Third*, these forms of sacredness can be thought of dispositions that are somewhat distal in relation to ethical and unethical work behavior, compared to a moral disposition such as moral disengagement propensity (Moore et al., 2012). There may be a more complex



mechanism involved in the relationship between these forms of sacredness and un/ethical work behavior.

Fifth, given the exploratory nature of the sacred items, which affect how we construct the forms of sacredness, it is still very difficult to determine the fixed number of sacred items. Overall, the higher the number of sacred items included usually yields a higher Cronbach's alpha, which is generally desirable. Across the studies, the number of sacred items included differs. For example, sacralizing materialism has 4 items only in Study 1 and 9 items in the following studies. Sacralizing traditional religion has 4 items only in Study 1 and 6 items in Study 6. But the general rule that has been used throughout the studies is that the measure that has a higher Cronbach's alpha is to be used for the subsequent multiple regression analyses, especially when it comes to hypothesis testing. In the future, it seems necessary to figure out the fixed number of sacred items in a given measure of sacredness. More importantly, beyond the fixed number of sacred items to be included, it is the "sacred items" themselves that are the most important. That is, the sacred items that are to be used across situations need to be consistent. This requires another set of explorations.

## FUTURE RESEARCH DIRECTIONS

Organization scholars have benefited from various disciplines, particularly psychology and sociology (Porter, 1996), in their examination of various organizational phenomena. Religion or religiosity is one so-called phenomenon that happens to be multidisciplinary. The psychology of religion has a much different look at

religion/religiosity from the sociology of religion, however interrelated they are. Because of these different traditions, some have attempted to bridge the two perspectives (e.g. Greenwood, 1990; Leuba, 1913). A social psychology of religion is also a different matter (Batson et al., 1993), viewing religion and religiosity essentially somewhat interchangeably. These differences are, I argue, largely ontological and epistemological. One can argue whether religion is “a thing” at all (e.g. Smith, 1961/1992). So it is safe to say that no definition can ever be satisfactory to anybody, even to the author himself or herself (Yinger, 1967; Zinnbauer & Pargament, 2005). Considering this inherent difficulty and the findings from this dissertation, there are several future research directions that scholars would want to pursue. My recommendations are narrowed into two broader approaches (i.e. a more psychological, micro, approach and a more sociological, macro, approach) to the organizational study of religion, religiosity, or spirituality. While a psychological, micro, approach focuses on the individual as the primary unit of analysis, a sociological, macro, approach focuses on the organization as the primary unit of analysis.

### **A Psychological, Micro, Approach**

First, scholars may want to continue working on the notion of *homo religiosus* (DuBose, 2014b), which is an impetus and central aspect of this dissertation. Thus far, it has not seemed to occupy the organizational literature. There are, however, other “competing” views of human beings that have been going on for a while and revisited recently in the literature. The two competing views are usually humans as *homo economicus* (i.e. rational beings) and humans as *homo heuristicus* (i.e. irrational,

meaning-driven, beings). Kluver et al. (2014) recently contrast the two views together and discuss a Durkheimian alternative to the viewing of human beings as *homo duplex*, basically capable of moving from being rational or irrational in the context of moral decision making. Given these, it is curious to see how *homo religious* is discussed in the context of all the competing views, especially in the context of ethical or moral decision-making. While I have attempted to touch upon this briefly in the introduction of this dissertation, a more refined and detailed examination is especially called for.

Second, this dissertation is also inspired by the work of Chan-Serafin et al. (2013) and Bloom (2012), speaking about the good and the bad form of being religious. Generally speaking, this theme is central to the dissertation. However, their focus is more on “religious individuals” as opposed to the kinds of religiosity explored in this dissertation. Therefore, it is curious to explore more about how “religious individuals,” as opposed to “non-religious individuals,” relate to the kinds of sacred matters explored and discovered in this dissertation (i.e. “money,” “career,” “social status”). This speaks to the evidence in Study 1, in that sacralizing “money,” “career” and the likes (a more self-enhancement, “bad,” form of religiosity) is positively related to intrinsic religiosity, which is traditionally how scholars in the psychological literature construct religiosity (e.g. Saroglou et al., 2004). In other words, what is the link between being intrinsically religious and sacralizing things such as “money” or “social status”?

Third, scholars may want to incorporate one of the earlier works on religiosity in the organizational literature, which is religious self-identity (Weaver & Agle, 2002), and combine it with the framework of sacredness as developed here. In other words, what are the “sacred matters” that people associate with their religious self-identity and how they

affect behaviors, ethical or unethical? In addition, this self-identity could also be integrated into the notion of spirituality, which lies in the idea of having a transcendental self-identity (Liu & Robertson, 2011). Across two studies, spirituality has been found to have both moral associations and moral implications.

Fourth, a conventional laboratory experiment should be attempted in studying the effect of situational factors on ethical and unethical work behaviors. Given the precedents in studying ethical and unethical work behaviors (e.g. Shariff & Norenzayan, 2007; Wiltermuth, 2011), the potential to control situations and yield the desired effects may be higher. This is especially called for to establish whether situations would shift the effects of sacredness on ethical and unethical work behavior.

Fifth, one of the speculations coming out of this dissertation is whether younger adults would be more easily affected by situations than older adults. The evidence that forms of sacredness do appear to be related to age supports this line of questioning.

### **A Sociological, Macro, Approach**

First, considering the sacredness framework developed in this dissertation, scholars may want to use “religion” as a framework for thinking about organizations in general. This is explicit in the work of Ashforth & Vaidyanath (2002), viewing organizations as secular religions. It is curious to see how organizational practices, related to whatever it is people in organizations consider sacred, relate to business ethics. For example, how does an organizational goal play out as a sacred matter and how it impacts organizational lives? Therefore, as opposed to looking at “religion” in the traditional way of looking at it, limiting it to “Judaism,” “Christianity,” or “Islam,” “religion” can be viewed more as a

framework for thinking about organizations, thus contributing to organization theory. In addition, given that religion is argued to be a moral collective that binds individuals within (Durkheim, 1912/1965; Graham & Haidt, 2010), religion as a framework is expected to give much insight about the morality of organizational lives, thus potentially addressing the argument for the inherent evil of organizations (e.g. Darley, 1992; Linstead et al., 2014). In so doing, scholars may want to use the instrument developed in this dissertation (i.e. Study 1) to explore sacred matters in the organizational context.

Second, scholars may want to see the connection between sacredness that lies within the realm of the traditional “religions” and sacredness that is embedded within the realm of organizational lives and examine how organizational members rationalize the two forms of sacredness. This is particularly central to organizational lives in countries such as Indonesia, where 99% of the people consider religion to be central or important to their lives (Gallup, 2009). Do people find conflicting motives related to sacred matters created by these two forms of sacredness? If so, how do they rationalize or justify the conflicts? For example, in the case of Turkish business people, it is found that people sometimes have to sacrifice religious beliefs or practices when doing or practicing business (e.g. Uygur, 2009). Since people do live in complex societies, more examinations of the interplay between “traditional religion” and “secular religion” would enable us to better understand religion as a multifaceted phenomenon. In the cosmology of the West especially, the religious and the secular are very much distinguished. But it is not necessarily so in other countries (e.g. Davis & Robinson, 2006). In other words, “religion” is not necessarily viewed as a matter separate from other forms of life; it is the way to do life itself, however various it may behaviorally be enacted. Simply put,

“doing” is in essence “religious,” for better or worse. But even in the West, many are said to struggle between the two worlds of the sacred/secular (e.g. Kim et al., 2012).

## CONCLUSION

In this dissertation, I have attempted to fill the gap in the organizational literature on religion and religiosity by developing a framework that integrates a psychological notion of *homo religiosus* and a sociological notion of the sacred to argue for how “religiosity” relates to ethics, especially in the context of organizations. In several studies, I have attempted to study just this, by seeing “religiosity” from a perspective of sacredness and as inherently an individual disposition.

## REFERENCES

- Abeng, T. (1997). Business ethics in Islamic context: Perspectives of a Muslim business leader. *Business Ethics Quarterly*, 7(3): 47-54.
- Ali, A. J., Camp, R. C., & Gibbs, M. (2000). The ten commandments perspective on power and authority in organizations. *Journal of Business Ethics*, 26: 351-361.
- Allport, G. W., & Ross, J. M. (1967). Personal religious orientation and prejudice. *Journal of Personality and Social Psychology*, 5(4): 432-443.
- Aquino, K., & Reed II, A. (2002). The self-importance of moral identity. *Journal of Personality and Social Psychology*, 83(6): 1423-1440.
- Aquino, K., Reed II, A., Freeman, D., Lim, V. K. G., & Felps, W. (2009). Testing a social-cognitive model of moral behavior: The interactive influence of situations and moral identity centrality. *Journal of Personality and Social Psychology*, 97(1): 123-141.
- Armstrong, K. (1993). *A history of God. The 4000-year quest of Judaism, Christianity and Islam*. New York: Ballantine Books.
- Ashforth, B. E., & Vaidyanath, D. (2002). Work organizations as secular religions. *Journal of Management Inquiry*, 11(4): 359-374.
- Atran, S., & Norenzayan, A. (2004). Religion's evolutionary landscape: Counterintuition, commitment, compassion, communion. *Behavioral and Brain Science*, 27(6): 713-770.

- Baron, R. M., & Kenny, D. A. (1986). The moderator-mediator variable distinction in social psychological research: Conceptual, strategic, and statistical considerations. *Journal of Personality and Social Psychology*, 51(6): 1173-1182.
- Batson, C. D., Eidelman, S. H., Higley, S. L., & Russell, S. A. (2001). "And who is my neighbor?" II: Quest religion as a source of universal compassion. *Journal for the Scientific Study of Religion*, 40(1): 39-50.
- Batson, C. D., Floyd, R. B., Meyer, J. M., & Winner, A. L. (1999). "And who is my neighbor?:" Intrinsic religion as a source of universal compassion. *Journal for the Scientific Study of Religion*, 38(4): 445-457.
- Batson, C. D., Schoenrade, P. A., & Ventis, W. L. (1993). *Religion and the individual*. New York: Oxford University Press.
- Beekun, R. I., & Badawi, J. A. (2005). Balancing ethical responsibility among multiple organizational stakeholders: The Islamic perspective. *Journal of Business Ethics*, 60: 131-145.
- Belk, R. W., Wallendorf, M., & Sherry, Jr., J. F. (1989). The sacred and the profane in consumer behavior: Theodicy on the Odyssey. *Journal of Consumer Research*, 16(1): 1-38.
- Berger, P. L. and T. Luckmann (1966), *The Social Construction of Reality: A Treatise in the Sociology of Knowledge*. Garden City, NY: Anchor Books.
- Bersoff, D. M. (1999). Why good people sometimes do bad things: Motivated reasoning and unethical behavior. *Personality and Social Psychology Bulletin*, 25(1): 28-39.
- Bloom, P. (2012). Religion, morality, evolution. *Annual Review of Psychology*, 63: 179-199.



- Burris, C. T., & Jackson, L. M. (2000). Social identity and the true believer: Responses to threatened self-stereotypes among the intrinsically religious. *British Journal of Social Psychology*, 39: 257-278.
- Caprara, G. V., Alessandri, G., & Eisenberg, N. (2012). Prosociality: The contribution of traits, values, and self-efficacy beliefs. *Journal of Personality and Social Psychology*, 102(6): 1289-1303.
- Carpenter, T. P., & Marshall, M. A. (2009). An examination of religious priming and intrinsic religious motivation in the moral hypocrisy paradigm. *Journal for the Scientific Study of Religion*, 48(2): 386-393.
- Cash, K. C., & Gray, G. R. (2000). A framework for accommodating religion and spirituality in the workplace. *Academy of Management Executive*, 14(3): 124-133.
- Chan-Serafin, S., Brief, A. P., George, J. M. (2013). How does religion matter and why? Religion and the organizational sciences. *Organization Science*, 24(5): 1585-1600.
- Chatman, J. A. (1989). Improving international organizational research: A model of person-organization fit. *Academy of Management Review*, 14(3): 333-349.
- Chen, Y-J., & Tang, T. L-P. (2013). The bright and dark sides of religiosity among university students: Do gender, college major, and income matter? *Journal of Business Ethics*, 115: 531-553.
- Craft, J. (2013). A review of the empirical ethical decision-making literature: 2004-2011. *Journal of Business Ethics*, 117(2): 221-259.
- Dahlsgaard, K., Peterson, C., & Seligman, M. E. P. (2005). Shared virtue: The convergence of valued human strengths across culture and history. *Review of General Psychology*, 9(3): 203-213.

- Darley, J. M. (1992). Social organization for the production of evil. *Psychological Inquiry*, 3(2): 199-218.
- Davis, E. B., Moriarty, G. L., & Mauch, J. C. (2013). God images and God concepts: Definitions, development, and dynamics. *Psychology of Religion and Spirituality*, 5(1): 51-60.
- Davis, N. J., & Robinson, R. V. (2006). The egalitarian face of Islamic orthodoxy: Support for Islamic law and economic justice in seven Muslim-majority nations. *American Sociological Review*, 71: 167-190.
- Davis-Blake, A., & Pfeffer, J. (1989). Just a mirage: The search for dispositional effects in organizational research. *Academy of Management Review*, 14(3): 385-400.
- Demerath, III. N. J. (1999). The varieties of sacred experience: Finding the sacred in a secular grove. *Journal for the Scientific Study of Religion*, 1-11.
- Donahue, M. J. (1985). Intrinsic and extrinsic religiousness: Review and meta-analysis. *Journal of Personality and Social Psychology*, 48(2): 400-419.
- Donaldson, T., & Dunfee, T. W. (1994). Toward a unified conception of business ethics: Integrative social contracts theory. *Academy of Management Review*, 19(2): 252-284.
- Dubose, T. (2014a). *Hermeneutics*. In D. Leeming (Ed.), *Encyclopedia of Psychology and Religion*, (pp. 787-789). Springer (Online).
- DuBose, T. (2014b). *Homo religiosus*. In D. Leeming (Ed.), *Encyclopedia of Psychology and Religion* (pp. 827-830). Springer (Online).
- DuBose, T. (2014c). *Transcendence*. In D. Leeming (Ed.), *Encyclopedia of Psychology and Religion* (pp. 1808-1811). Springer (Online).

- Durkheim, E. (1965). *Elementary forms of religious life* (J. W. Swain, Trans.). New York: Free Press. (Original work published 1912)
- Eweje, G., & Brunton, M. (2010). Ethical perceptions of business students in a New Zealand university: Do gender, age and work experience matter? *Business Ethics: A European Review*, 19(1): 95-111.
- Feagin, J. R. (1964). Prejudice and religious types: A focused study of Southern Fundamentalists. *Journal for the Scientific Study of Religion*, 4: 3-13.
- Ford, R. C., & Richardson, W. D. (1994). Ethical decision-making: A review of the empirical literature. *Journal of Business Ethics*, 13: 205-221.
- Gallup. (2010). Religiosity highest in world's poorest nations. Retrieved April 3, 2014, from <http://www.gallup.com/poll/142727/religiosity-highest-world-poorest-nations.aspx#2>.
- Gardikiotis, A., & Baltzis, A. (2012). 'Rock music for myself and justice to the world!': Musical identity, values, and music preferences. *Psychology of Music*, 40(2): 143-163.
- Geertz, C. (1973). *The interpretation of cultures*. New York: Basic Books.
- Ghorpade, J., Lackritz, J. R., & Moore, R. (2010). Intrinsic religious orientation: The conservative Christian connection. *International Journal for the Psychology of Religion*, 20: 201-218.
- Gino, F., Ayal, S., & Ariely, D. (2013). Self-serving altruism? The lure of unethical actions that benefit others. *Journal of Economic Behavior & Organization*, 93: 285-292.

Gorsuch, R. L., & Venable, G. D. (1983). Development of an “age universal” I-E scale.

*Journal for the Scientific Study of Religion*, 22(2): 181-187.

Graham, J., & Haidt, J. (2010). Beyond beliefs: Religions bind individuals into moral communities. *Personality and Social Psychology Review*, 14(1): 140-150.

Graham, M., McDonald, M. J., & Klaassen, D. W. (2008). A phenomenological analysis of spiritual seeking: Listening to quester voices. *International Journal for the Psychology of Religion*, 18: 146-163.

Greenwood, S. F. (1990). Emile Durkheim and C. G. Jung: Structuring a transpersonal sociology of religion. *Journal for the Scientific Study of Religion*, 29(4): 482-495.

Gundolf, K., & Filser, M. (2013). Management research and religion: A citation analysis. *Journal of Business Ethics*, 112: 177-185.

Haidt, J., & Graham, J. (2007). When morality opposes justice: Conservatives have moral intuitions that liberals may not recognize. *Social Justice Research*, 20(1): 98-116.

Herington, C., & Weaven, S. (2008). Improving consistency for DIT results using cluster analysis. *Journal of Business Ethics*, 80, 499-514.

Hill, P. C., Pargament, K. I., Hood, Jr., R. W., McCullough, M. E., Swyers, J. P., Larson, D. B., Zinnbauer, B. J. (2000). Conceptualizing religion and spirituality: Points of commonality, points of departure. *Journal for the Theory of Social Behaviour*, 30(1): 51-77.

Hoge, D. R. (1972). A validated intrinsic religious motivation scale. *Journal for the Scientific Study of Religion*, 11: 369-376.

Hood, Jr., R. W. (1985). The conceptualization of religious purity in Allport’s typology. *Journal for the Scientific Study of Religion*, 24(4): 413-417.

- Illies, J. J., & Reiter-Palmon, R. (2008). Responding destructively in leadership situations: The role of personal values and problem construction. *Journal of Business Ethics*, 82: 251-272.
- Iyer, R., Koleva, S., Graham, J., Ditto, P., & Haidt, J. (2012). Understanding libertarian morality: The psychological dispositions of self-identified libertarians. *PLoS ONE*, 7(8): 1-23.
- Ji, C-H., C., & Ibrahim, Y. (2007). Islamic doctrinal orthodoxy and religious orientations: Scale development and validation. *International Journal for the Psychology of Religion*, 17(3): 189-208.
- Jost, J. T., Hennes, E. P., Hawkins, C. B., Nosek, B. A., & Gosling, S. D. (2014). Belief in a Just God (and a Just Society): A System Justification Perspective on Religious Ideology. *Journal of Theoretical and Philosophical Psychology*, 34(1): 56-81.
- Kim, D., McCalman, D., & Fisher, D. (2012). The sacred/secular divide and the Christian worldview. *Journal of Business Ethics*, 109: 203-208.
- King, J. E. (2008). (Dis)missing the obvious: Will mainstream management research ever take religion seriously? *Journal of Management Inquiry*, 17, 214–224.
- Kinnier, R. T., Kernes, J. L. & Dautheribes, T. M. (2000). A short list of universal moral values. *Counseling and Values*. 45: 4-16.
- Kluver, J., Frazier, R., & Haidt, J. (2014). Behavioral ethics for homo economicus, homo heuristicus, and homo duplex. *Organizational Behavior and Human Decision Processes*, 123: 150-158.

Koltko-Rivera, M. E. (2006). Rediscovering the later version of Maslow's hierarchy of needs: Self-transcendence and opportunities for theory, research, and unification.

*Review of General Psychology*, 10(4): 302-317.

Kouchaki, M., Smith-Crowe, K., Brief, A. P., & Sousa, C. (2013). Seeing green: Mere exposure to money triggers a business decision frame and unethical outcomes.

*Organizational Behavior and Human Decision Processes*, 121: 53-61.

Kruger, M., & Seng, Y. (2005). Leadership with inner meaning: A contingency theory of leadership based on the worldviews of five religions. *Leadership Quarterly*, 16: 771-806.

Krueger, D. A. (1986). The religious nature of practical reason: A way into the debate.

*Journal of Business Ethics*, 5(6): 511-519.

Lammers, J., Stapel, D. A., & Galinsky, A. D. (2010). Power increases hypocrisy:

Moralizing in reasoning, immorality in behavior. *Psychological Science*, 21(5): 737-744.

Lawrence, P. R. 2004. *The biological base of morality*. In R. E. Freeman & P. H.

Werhane (Eds.), *Business, science, and ethics*: 59-79. Charlottesville, Va.:

Philosophy Documentation Center.

Leuba, J. H. (1913). Sociology and psychology: The conception of religion and magic and the place of psychology in sociological studies: A discussion of the views of Durkheim and of Hubert and Mauss. *American Journal of Sociology*, 19(3): 323-342.

Linstead, S., Marechal, G., & Griffin, R. W. (2014). Theorizing and researching the dark side of organization. *Organization Studies*, 35(2): 165-188.

- Liu, C. H., & Robertson, P. J. (2011). Spirituality in the workplace: Theory and measurement. *Journal of Management Inquiry*, 20(1): 35-50.
- Loe, T., W., Ferrell, L., & Mansfield, P. (2000). A review of empirical studies assessing ethical decision-making in business. *Journal of Business Ethics*, 25: 185-204.
- Maltby, J. (1999). The internal structure of a derived, revised, and amended measure of the religious orientation scale: The 'age-universal' I-E Scale-12. *Social Behavior and Personality*, 27(4): 407-412.
- Maslow, A. (1971). *The farther reaches of human nature*. New York: The Viking Press.
- McDaniel, S. W., & Burnett, J. J. (1990). Consumer religiosity and retail store evaluative criteria. *Journal of the Academy of Marketing Science*, 18(2): 163-171.
- Mentzer, M. (2002). The ethics of displaying workplace piety—or should I be at the boss' prayer breakfast? (Dialogue). *Academy of Management Review*, 27(4) 501-504.
- Mills, C. W. (1959). *The sociological imagination*. London: Oxford University Press.
- Moore, C., Detert, J. R., Trevino, L. K., Baker, V. L., & Mayer, D. M. (2012). Why employees do bad things: Moral disengagement and unethical organizational behavior. *Personnel Psychology*, 65: 1-48.
- Neyrinck, B., Lens, W., Vansteenkiste, M., Soenens, B. (2010). Updating Allport's and Batson's framework of religious orientations: A reevaluation from the perspective of self-determination theory and Wulff's social cognitive model. *Journal for the Scientific Study of Religion*, 49(3): 425-438.
- Norenzayan, A., & Shariff, A. F. (2008). The origin and evolution of religious prosociality. *Science*, 322: 58-62.

- O'Fallon, M. J., & Butterfield, K. D. (2005). A review of empirical ethical decision-making literature: 1996-2003. *Journal of Business Ethics*, 59: 375-413.
- Palazzo, G., Krings, F., & Hoffrage, U. (2012). Ethical blindness. *Journal of Business Ethics*, 109: 323-338.
- Parboteeah, K. P., Hoegl, M., & Cullen, J. B. (2008). Ethics and religion: An empirical test of a multidimensional model. *Journal of Business Ethics*, 80: 387-398.
- Petrican, R., & Burris, C. T. (2012). Am I the Stone? Overattribution of Agency and Religious Orientation. *Psychology of Religion and Spirituality*, 4(4): 312-323.
- Pfeffer, J., & Fong, C. T. (2005). Building organization theory from first principles: The self-enhancement motive and understanding power and influence. *Organization Science*, 16(4): 372-388.
- Piedmont, R. L. (1999). Does spirituality represent the sixth factor of personality? Spiritual transcendence and the five-factor model. *Journal of Personality*, 67(6): 985-1013.
- Porter, G. (2010). Work ethic and ethical work: Distortions in the American dream. *Journal of Business Ethics*, 96: 535-550.
- Porter, L. W. (1996). Forty years of organization studies: Reflections from a micro perspective. *Administrative Science Quarterly*, 41: 262-269.
- Pulfrey, C., & Butera, F. (2013). Why neoliberal values of self-enhancement lead to cheating in higher education: A motivational account. *Psychological Science*, 24(11): 2153-2162.



- Putrevu, S., & Swimberghek, K. (2013). The influence of religiosity on consumer ethical judgments and responses toward sexual appeals. *Journal of Business Ethics*, 115: 351-365.
- Roccas, S. (2003). Identification and status revisited: The moderating role of self-enhancement and self-transcendence values. *Personality and Social Psychology Bulletin*, 29(6): 726-736.
- Sadler-Smith, E. (2012). Before virtue: Biology, brain, behavior, and the "moral sense." *Business Ethics Quarterly*, 22(2): 351-376.
- Saroglou, V. (2002). Religiousness, religious fundamentalism, and quest as predictors of humor creation. *International Journal for the Psychology of Religion*, 12(3): 177-188.
- Saroglou, V. (2011). Believing, bonding, behaving, and belonging: The big four religious dimensions and cultural variation. *Journal of Cross-Cultural Psychology*, 42(8): 1320-1340.
- Saroglou, V., & Cohen, A. B. (2011). Psychology of culture and religion: Introduction to the JCCP special issue. *Journal of Cross-Cultural Psychology*, 42(8): 1309-1319.
- Saroglou, V., Delpierre, V., & Dernelle, R. (2004). Values and religiosity: A meta-analysis of studies using Schwartz's model. *Personality and Individual Differences*, 37: 721-734.
- Schwab, D. P. (1980). Construct validity in organizational behavior. In L. L. Cummings & B. M. Staw (Eds.), *Research In Organizational Behavior* (pp. 3-43). Greenwich, CT: JAI Press.

- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25: 1-65.
- Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, 50(4): 19-45.
- Schwartz, S. H. (2003). A proposal for measuring value orientations across nations. *Questionnaire Package of the European Social Survey*, 259-290.
- Schwartz, S. H., Melech, G., Lehmann, A., Burgess, S., Harris, M., & Owens, V. (2001). Extending the cross-cultural validity of the theory of basic human values with a different method of measurement. *Journal of Cross-Cultural Psychology*, 32(5): 519-542.
- Sedikides, C., & Gebauer, J. E. (2010). Religiosity as self-enhancement: A meta-analysis of the relation between socially desirable responding and religiosity. *Personality and Social Psychology Review*, 14(1): 17-36.
- Senger, J. (1970). The religious manager. *Academy of Management Journal*, 13(2): 179-186.
- Shariff, A. F., & Norenzayan, A. (2007). God is watching you: Priming God concepts increases prosocial behavior in an anonymous economic game. *Psychological Science*, 18(9): 803-809.
- Shariff, A. F., & Norenzayan, A. (2011). Mean Gods make good people: Different views of God predict cheating behavior. *Internal Journal for the Psychology of Religion*, 21: 85-96.

- Singhapakdi, A., Vitell, S. J., Lee, D.-J., Nisius, A. M., & Yu, G. B. (2013). The influence of love of money and religiosity on ethical decision-making in marketing. *Journal of Business Ethics*, 114: 183-191.
- Smith, W. C. (1991). The meaning and end of religion. Minneapolis, MN: First Fortress Press. (Original work published 1962)
- Tenbrunsel, A. E., & Messick, D. M. (2004). Ethical fading: The role of self-deception in unethical behavior. *Social Justice Research*, 17(2): 223-236.
- Tracey, P. (2012). Religion and organization: A critical review of current trends and future directions. *The Academy of Management Annals*, 6(1): 87-134.
- Trevino, L. K., den Nieuwenboer, N. A., & Kish-Gephart, J. J. (2014). (Un)ethical behavior in organizations. *Annual Review of Psychology*, 65: 635-660.
- Trevino, L. K., Weaver, G. R., & Reynolds, S. J. (2006). Behavioral ethics in organizations: A review. *Journal of Management*, 32(6): 951-990.
- Turner, B. S. (1974). Islam, Capitalism and the Weber Theses. *British Journal of Sociology*, 25(2): 230-243.
- Uygur, S. (2009). The Islamic work ethic and the emergence of Turkish SME owner-managers. *Journal of Business Ethics*, 88: 211-225.
- Vitell, S. J., Bing, M. N., Davison, H. K., Ammeter, A. P., Garner, B. L., Novicevic, M. M. (2009). Religiosity and moral identity: The mediating role of self-control. *Journal of Business Ethics*, 88: 601-613.
- Vogel, D. (2001). How green is Judaism? Exploring Jewish environmental ethics. *Business Ethics Quarterly*, 11(2): 349-363.

- Walker, A. G., Smither, J. W., & DeBode, J. (2012). The effects of religiosity on ethical judgments. *Journal of Business Ethics*, 106: 437-452.
- Warren, D. E. (2003). Constructive and destructive deviance in organizations. *Academy of Management Review*, 28(4): 622-632.
- Weaver, G. R., & Agle, B. R. (2002). Religiosity and ethical behavior in organizations: A symbolic interactionist perspective. *Academy of Management Review*, 27(1): 77-97.
- Weber, M. (2005). *The Protestant ethic and the spirit of capitalism* (T. Parsons, Trans.). New York: Routledge. (Original work published 1930)
- Wei, D., & Liu, E. Y. (2013). Religious involvement and depression: Evidence for curvilinear and stress-moderating effects among young women in rural China. *Journal for the Scientific Study of Religion*, 52(2): 349-367.
- Wiltermuth, S. S. (2011). Cheating more when the spoils are split. *Organizational Behavior and Human Decision Processes*, 115: 157-168.
- Whittington, B. L., & Scher, S. J. (2010). Prayer and subjective well-being: An examination of six different types of prayer. *International Journal for the Psychology of Religion*, 20: 59-68.
- Yinger, J. M. (1967). Pluralism, religion, and secularism. *Journal for the Scientific Study of Religion*, 6(1): 17-28.
- Ysseldyk, R., Matheson, K., & Anisman, H. (2010). Religiosity as identity: Toward an understanding of religion from a social identity perspective. *Personality and Social Psychology Review*, 14(1): 60-71.
- Zhong, C-B., & Liljenquist, K. (2006). Washing away your sins: Threatened morality and physical cleansing. *Science*, 313: 1451-1452.

Zinnbauer, B. J., & Pargament, K. I. (2005). *Religiousness and spirituality*. In R. F. Paloutzian & C. L. Park (Eds.), *Handbook of the Psychology of Religion and Spirituality* (pp. 21-42). New York: The Guilford Press.

## APPENDIX A: TABLES

Table 3.1

Exploratory Factor Analysis of Self-transcendence/self-enhancement Items in the  
Schwartz Value Survey (SVS) scale (Varimax; Regression Method)

	Factor 1	Factor 2	
Item 1	<b>0.69</b>		
Item 2	<b>0.56</b>		
Item 3		<b>0.79</b>	
Item 4	<b>0.41</b>		
Item 5	<b>0.48</b>		
Item 6	-0.26	<b>0.63</b>	
Item 7	<b>0.66</b>		
Item 8	<b>0.56</b>		
Item 9	0.21	<b>0.79</b>	
Item 10	<b>0.61</b>	0.23	
Item 11	<b>0.45</b>		
Item 12		<b>0.82</b>	
Item 13	<b>0.63</b>	0.26	
Item 14	<b>0.70</b>	0.17	
Item 15	<b>0.74</b>		
Item 16	<b>0.66</b>	0.18	
Item 17	0.33	<b>0.68</b>	
Item 18	<b>0.67</b>	0.21	
Item 19	<b>0.65</b>	0.23	
Item 20	0.30	<b>0.82</b>	
Item 21	0.54	<b>0.33</b>	*
Item 22	<b>0.72</b>		
Item 23		<b>0.68</b>	
Item 24	0.44	<b>0.34</b>	*
Item 25	<b>0.79</b>		
Item 26	<b>0.62</b>	0.18	
Item 27	<b>0.61</b>		
Item 28	0.24	<b>0.72</b>	

**Note:** \*: Items that deviate. Theoretically, they should be in Factor 2. In addition, the factor loadings for these items are not high enough (below 0.60)

Table 3.2

Exploratory Factor Analysis of Self-transcendence/self-enhancement Items in the Portrait

Values Questionnaire (PVQ) scale (Varimax; Regression Method)

	Factor 1	Factor 2
Item 1	-0.27	<b>0.65</b>
Item 2	<b>0.85</b>	
Item 3	0.18	<b>0.58</b>
Item 4	<b>0.78</b>	0.15
Item 5	<b>0.80</b>	
Item 6	0.13	<b>0.84</b>
Item 7		<b>0.71</b>
Item 8	<b>0.73</b>	0.13
Item 9	<b>0.68</b>	0.14
Item 10	<b>0.87</b>	
Item 11	0.21	<b>0.72</b>
Item 12	<b>0.81</b>	
Item 13	<b>0.84</b>	
Item 14		<b>0.85</b>
Item 15	<b>0.59</b>	
Item 16	0.14	<b>0.69</b>
Item 17	<b>0.66</b>	

**Note:**

Refer to the PVQ scale presented in Appendix C for details about the items.



Table 3.3

Table of Correlations: Correlations Between Sacred Items, Values, Intrinsic Religiosity, and Spirituality

	Mean	SD	1	2	3	4
Self-transcend (1)	4.40	1.03				
Self-enhance (2)	2.86	1.04	0.16			
Intrinsic Rel. (3)	3.55	2.14	0.09	0.02		
Spirituality (4)	4.93	1.24	0.35 **	0.12	0.70 ***	
Item 5	3.76	1.80	0.18	0.35 **	0.18	0.18
Item 11	2.72	1.68	-0.13	0.22 *	0.10	0.08
Item 13	3.17	1.84	0.16	0.30 **	0.13	0.06
Item 16	1.78	1.35	-0.06	0.39 ***	0.26 *	0.13
Item 20	2.41	1.55	0.16	0.32 **	0.22 *	0.15
Item 28	5.03	2.31	0.14	0.05	0.63 ***	0.51 ***
Item 32	3.28	1.80	0.30 **	0.26 *	0.30 **	0.27 *
Item 35	2.50	1.67	0.24 *	0.38 ***	0.31 **	0.22 *
Item 36	1.96	1.41	-0.09	0.35 **	0.11	0.03
Item 42	4.75	2.06	0.26 *	0.10	0.48 ***	0.43 ***
Item 43	3.88	1.94	0.25 *	0.26 *	0.22 *	0.33 **
Item 47	2.19	1.54	0.07	0.35 **	0.20	0.14
Item 48	2.85	1.91	0.09	0.39 ***	0.02	0.00
Item 49	2.44	1.71	0.17	0.44 ***	0.16	0.08
Item 50	2.19	1.63	0.15	0.51 ***	0.22 *	0.14
Item 51	4.06	2.18	0.26 *	0.23 *	0.50 ***	0.47 ***
Item 55	4.26	1.85	0.25 *	0.13	0.29 **	0.31 **
Item 56	3.81	1.89	0.38 ***	0.35 **	0.08	0.19
Item 58	4.00	1.92	0.25 *	0.31 **	0.10	0.14
Item 59	3.69	1.94	0.32 **	0.29 **	0.10	0.12
Item 61	5.10	2.37	0.13	0.06	0.66 ***	0.54 ***
Item 62	2.13	1.57	0.13	0.49 ***	0.00	-0.01

**Notes:**

- The correlations among sacred items are not displayed here, considering that they can be reflected in the Exploratory Factor Analysis in Table 3.4. The correlations among the sacred items themselves are not the concern here. The goal is to streamline the list of sacred items, not to scrutinize each item.
- Consult Appendix C for details about what the items are.

Table 3.4

Exploratory Factor Analysis for the Chosen Sacred Items (Varimax; Regression Method)

SS-Transcend	Factor 1	Factor 2	SS-Enhance	Factor 1	Factor 2
Item 28	<b>0.96</b>		Item 16	<b>0.74</b>	0.29
Item 42	<b>0.73</b>	0.26	Item 20	<b>0.71</b>	0.39
Item 51	<b>0.71</b>	0.40	Item 36	<b>0.72</b>	0.38
Item 61	<b>0.97</b>		Item 50	<b>0.77</b>	0.48
Item 32	0.23	<b>0.65</b>	Item 62	<b>0.60</b>	0.49
Item 43	0.35	<b>0.60</b>	Item 47	0.51	<b>0.69</b>
Item 56	0.21	<b>0.68</b>	Item 48	0.26	<b>0.84</b>
Item 58		<b>0.87</b>	Item 49	0.52	<b>0.74</b>
Item 59		<b>0.84</b>	<i>Item 5</i>	0.25	0.48
<i>Item 55</i>	0.55	0.40	<i>Item 11</i>	0.40	0.20
			<i>Item 13</i>	0.44	0.50
			<i>Item 35</i>	0.52	0.55

**Note:**

- Bold items were included, while italic items were eventually excluded because they have low factor loadings. The choosing of these items was based primarily on the factor loading (above 0.60).
- Consult Appendix C for details about what the items are.

Table 3.5

## Table of Correlations II: Study 1 Pretests

(A)

	Mean	SD	1 ( $\alpha = 0.87$ )	2 ( $\alpha = 0.93$ )	3 ( $\alpha = 0.93$ )	4 ( $\alpha = 0.88$ )
<b>SS-Transcend (1)</b>	4.18	1.43				
<b>SS-Enhance (2)</b>	2.24	1.32	0.40 ***			
Self-transcend (3)	4.40	1.03	0.34 **	0.08		
Self-enhance (4)	2.86	1.04	0.29 **	0.49 ***	0.16	
Intrinsic Rel. (5)	3.55	2.14	0.52 ***	0.21	0.09	0.02
Spirituality (6)	4.93	1.24	0.52 ***	0.14	0.35 **	0.12
Quest (7)	3.63	1.22	0.34 **	0.15	-0.04	0.17
Moral Dis. P. (8)	1.93	0.82	0.08	0.37 ***	-0.38 ***	0.47 ***
Moral ID (9)	3.33	0.76	0.29 **	0.25 *	0.22 *	0.44 ***
Authority (10)	3.56	0.91	0.37 **	0.27 *	0.04	0.46 ***
Fairness (11)	4.53	0.81	0.15	0.01	0.40 ***	0.08
Harm (12)	4.55	0.81	0.24 **	0.05	0.36 ***	-0.11
Ingroup (13)	3.39	1.04	0.41 ***	0.40 ***	0.13	0.42 ***
Purity (14)	3.43	1.33	0.29 ***	0.20	0.03	0.13

Note: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$ 

(B)

	Mean	SD	5 ( $\alpha = 0.97$ )	6 ( $\alpha = 0.93$ )	7 ( $\alpha = 0.91$ )	8 ( $\alpha = 0.91$ )
Intrinsic Rel. (5)	3.55	2.14				
Spirituality (6)	4.93	1.24	0.68 ***			
Quest (7)	3.63	1.22	0.28 **	0.35 ***		
Moral Dis. P. (8)	1.93	0.82	0.10	0.04	0.42 ***	
Moral ID (9)	3.33	0.76	0.38 ***	0.51 ***	0.16	0.16
Authority (10)	3.56	0.91	0.51 ***	0.40 ***	0.11	0.37 ***
Fairness (11)	4.53	0.81	0.08	0.17	0.16	-0.11
Harm (12)	4.55	0.81	0.24 *	0.23 *	0.15	-0.17
Ingroup (13)	3.39	1.04	0.49 ***	0.43 ***	0.14	0.38 ***
Purity (14)	3.43	1.33	0.71 ***	0.51 ***	0.07	0.09

Note: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

(C)

	Mean	SD	9 ( $\alpha = 0.84$ )	10 ( $\alpha = 0.71$ )	11 ( $\alpha = 0.72$ )	12 ( $\alpha = 0.63$ )
Moral ID (9)	3.33	0.76				
Authority (10)	3.56	0.91	0.50***			
Fairness (11)	4.53	0.81	0.30**	0.03		
Harm (12)	4.55	0.81	0.20	0.04	0.71***	
Ingroup (13)	3.39	1.04	0.55***	0.74***	0.03	0.11
Purity (14)	3.43	1.33	0.37***	0.62***	0.00	0.12

Note: \* $p < 0.05$ , \*\* $p < 0.01$ , \*\*\* $p < 0.001$

(D)

	Mean	SD	13 ( $\alpha = 0.81$ )	14 ( $\alpha = 0.87$ )
Ingroup (13)	3.39	1.04		
Purity (14)	3.43	1.33	0.49***	

Table 3.6

Exploratory Factor Analysis, with 2 Factors (Varimax, using regression method), Study 1

	Factor 1	Factor 2
Divine presence-Sac 03		<b>0.89</b>
Private thought, prayer or meditation-Sac 06		<b>0.85</b>
Personal-religious growth-Sac 12		<b>0.89</b>
God or any of its terms-Sac 16		<b>0.92</b>
Economy-Sac 08	<b>0.80</b>	
Science-Sac 09	<b>0.60</b>	
Career-Sac 10	<b>0.87</b>	
Social status-Sac 11	<b>0.82</b>	
Money-Sac 17	<b>0.81</b>	
Clothes I wear-Sac 01	0.60	0.15
Social groups-Sac 02	0.65	0.16
All dealings in life-Sac 04	0.51	0.45
Political party-Sac 05	0.52	0.10
Larger presence of reality-Sac 07	0.34	0.57
Connection to the world-Sac 13	0.39	0.48
The present moment-Sac 14	0.54	0.36
The future-Sac 15	0.72	0.27

**Note:**

All items that are loaded in both factors were not included in either factor in order to completely separate Factor 1 from Factor 2 and vice versa.

Table 3.7

## Table of Correlations: Study 1

## (A) Factor 1, Factor 2, and Values

	Mean	SD	1 ( $\alpha = 0.91$ )	2 ( $\alpha = 0.94$ )	3 ( $\alpha = 0.86$ )	4 ( $\alpha = 0.88$ )
Factor 1 (1)	3.04	1.72				
Factor 2 (2)	4.64	2.14	0.11 **			
ST-value (3)	3.60	1.12	-0.12 **	0.10 *		
SE-value (4)	4.69	0.80	0.45 ***	0.05	0.00	

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

## (B) Factor 1, Factor 2, and Religiosity-related Measures

	Mean	SD	1 ( $\alpha = 0.91$ )	2 ( $\alpha = 0.94$ )	3 ( $\alpha = 0.96$ )	4 ( $\alpha = 0.91$ )
Factor 1 (1)	3.04	1.72				
Factor 2 (2)	4.64	2.14	0.11 **			
Intrinsic (3)	3.52	2.03	0.20 ***	0.74 ***		
Spirituality (4)	4.98	1.15	0.01	0.56 ***	0.58 ***	
Quest (5) ( $\alpha = 0.83$ )	3.62	1.14	-0.04	0.24 ***	0.06	0.30 ***

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

## (C) Factor 1, Factor 2, and Moral Dispositional Measures

	Mean	SD	1 ( $\alpha = 0.91$ )	2 ( $\alpha = 0.94$ )	3 ( $\alpha = 0.80$ )	4 ( $\alpha = 0.86$ )
Factor 1 (1)	3.04	1.72				
Factor 2 (2)	4.64	2.14	0.11 **			
MDP <sup>1</sup> (3)	1.74	0.57	0.22 ***	-0.06		
Moral ID (4)	3.66	0.59	0.12 **	0.28 ***	-0.17 ***	

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

<sup>1</sup> Moral disengagement propensity

## (D) Factor 1, Factor 2, and Moral Foundations

	Mean	SD	1 ( $\alpha = 0.91$ )	2 ( $\alpha = 0.94$ )	3 ( $\alpha = 0.75$ )	4 ( $\alpha = 0.60$ )
Factor 1 (1)	3.04	1.72				
Factor 2 (2)	4.64	2.14	0.11 **			
Authority (3)	3.63	0.98	0.39 ***	0.34 ***		
Fairness (4)	4.70	0.68	-0.10 *	0.02	0.04	
Harm (5)	4.67	0.78	-0.06	0.16 ***	0.08 *	0.62 ***
Ingroup (6)	3.64	0.97	0.42 ***	0.27 ***	0.73 ***	0.07
Purity (7)	0.32	1.30	0.32 ***	0.54 ***	0.73 ***	0.03

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

## (E) Factor 1, Factor 2, and Moral Foundations (Continued)

	Mean	SD	5 ( $\alpha = 0.65$ )	6 ( $\alpha = 0.73$ )	7 ( $\alpha = 0.85$ )
Factor 1 (1)	3.04	1.72			
Factor 2 (2)	4.64	2.14	0.11 **		
Authority <sup>2</sup> (3)	3.63	0.98			
Fairness (4)	4.70	0.68			
Harm (5)	4.67	0.78			
Ingroup (6)	3.64	0.97	0.15 ***		
Purity (7)	0.32	1.30	0.15 ***	0.61 ***	

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

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<sup>2</sup> Dropping one of their items in from several measures for moral foundations yielded a higher alpha. Fairness has a higher alpha (0.72) by excluding the third item from the second questionnaire ("I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing"). Harm is shown to have a higher alpha (0.70) by excluding one of the items ("it can never be right to kill a human being"). Authority has a slightly higher alpha (0.76) by excluding one of the items ("Men and women each have different roles to play in society").

Table 3.8

Multiple Regressions with Factor 1 and Factor 2 as dependent variables and Moral

Foundations as the Independent Variables

	<b>DV</b>	
	Model 1	Model 2
	Factor 1	Factor 2
<b>Moral foundations (IV)</b>		
Constant	1.76 ***	1.76 **
MF-Authority	<b>0.26 ***</b>	-0.05
MF-Fairness	-0.23 .	-0.21
MF-Harm	-0.14	<b>0.34 **</b>
MF-Ingroup	<b>0.52 ***</b>	-0.22
MF-Purity	0.06	<b>0.98 ***</b>

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$



Table 3.9

Multiple Regressions Comparing Religiosity-related Measures with Forms of Sacredness

	DV			
	Model 3 MDP	Model 4 Moral ID	Model 5 SE-value	Model 6 ST-value
<b>IV</b>				
Constant	2.04 ***	2.32 ***	3.91 ***	3.08 ***
Factor 1	0.05 ***	0.04 **	0.21 ***	-0.04 *
Factor 2	-0.02	-0.00	-0.01	-0.02
Intrinsic Rel.	0.01	0.01	-0.03	-0.06
Spirituality	-0.10 ***	0.24 ***	0.01	0.42 ***
Quest	0.08 ***	-0.02	-0.03	-0.06 *
Atheism	-0.20 *	0.24 **	-0.47 **	0.33 **
Agnosticism	0.00	0.02	-0.53 ***	-0.05
Age	-0.06 ***	-0.00	-0.20 ***	0.02
Gender	0.04	-0.12 **	0.16	0.02
Religiosity <sup>+</sup>	-0.01	0.03	-0.03	0.02

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$ <sup>+</sup>: "How religious are you?"

Table 3.10

Exploratory Factor Analysis, with 2 Factors (Varimax, using regression method;

Excluding Atheists and Agnostics), Study 1

	Factor 1	Factor 2
Divine presence-Sac 03	-0.14	<b>0.79</b>
Private thought, prayer or meditation-Sac 06		<b>0.83</b>
Personal-religious growth-Sac 12		<b>0.84</b>
God or any of its terms-Sac 16		<b>0.84</b>
Clothes I wear-Sac 01	<b>0.60</b>	
Social groups-Sac 02	<b>0.64</b>	
Political party-Sac 05	<b>0.53</b>	
Economy-Sac 08	<b>0.82</b>	
Science-Sac 09	<b>0.55</b>	
Career-Sac 10	<b>0.86</b>	
Social status-Sac 11	<b>0.82</b>	
Money-Sac 17	<b>0.79</b>	
All dealings in life-Sac 04	0.45	0.41
Larger presence of reality-Sac 07	0.33	0.50
Connection to the world-Sac 13	0.32	0.47
The present moment-Sac 14	0.47	0.38
The future-Sac 15	0.69	0.26

**Note:**

All items that are loaded in both factors were not included in either factor in order to completely separate Factor 1 from Factor 2 and vice versa.

Table 3.11

## Table of Correlations: Study 1 (No Atheists and Agnostics)

## (A) Factor 1, Factor 2, and Values

	Mean	SD	1 ( $\alpha = 0.90$ )	2 ( $\alpha = 0.90$ )	3 ( $\alpha = 0.86$ )	4 ( $\alpha = 0.88$ )
Factor 1 (1)	3.23	1.70				
Factor 2 (2)	5.47	1.64	-0.02			
ST-value (3)	3.70	1.12	-0.14 **	0.09		
SE-value (4)	4.72	0.80	0.42 ***	-0.09	0.01	

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

## (B) Factor 1, Factor 2, and Religiosity-related Measures

	Mean	SD	1 ( $\alpha = 0.90$ )	2 ( $\alpha = 0.90$ )	3 ( $\alpha = 0.94$ )	4 ( $\alpha = 0.87$ )
Factor 1 (1)	3.23	1.70				
Factor 2 (2)	5.47	1.64	-0.02			
Intrinsic (3)	4.28	1.77	0.11 *	0.60 ***		
Spirituality (4)	5.32	0.95	-0.09	0.33 ***	0.42 ***	
Quest (5) ( $\alpha = 0.84$ )	3.73	1.10	-0.03	0.05	-0.14 **	0.17 ***

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

## (C) Factor 1, Factor 2, and Moral Dispositional Measures

	Mean	SD	1 ( $\alpha = 0.90$ )	2 ( $\alpha = 0.90$ )	3 ( $\alpha = 0.80$ )	4 ( $\alpha = 0.86$ )
Factor 1 (1)	3.23	1.70				
Factor 2 (2)	5.47	1.64	-0.02			
MDP <sup>3</sup> (3)	1.74	0.58	0.21 ***	-0.16 ***		
Moral ID (4)	3.73	0.58	0.11 *	0.23 ***	-0.15 **	

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

<sup>3</sup> Moral disengagement propensity

## (D) Factor 1, Factor 2, and Moral Foundations

	Mean	SD	1 ( $\alpha = 0.90$ )	2 ( $\alpha = 0.90$ )	3 ( $\alpha = 0.70$ )	4 ( $\alpha = 0.62$ )
Factor 1 (1)	3.23	1.70				
Factor 2 (2)	5.47	1.64	-0.02			
Authority (3)	3.86	0.91	0.33 ***	0.15 **		
Fairness (4)	4.69	0.69	-0.05	0.12 *	0.13 **	
Harm (5)	4.71	0.78	-0.04	0.20 ***	0.14 **	0.62 ***
Ingroup (6)	3.85	0.93	0.35 ***	0.04	0.72 ***	0.13 **
Purity (7)	3.73	1.16	0.24 ***	0.32 ***	0.69 ***	0.11 *

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

## (E) Factor 1, Factor 2, and Moral Foundations (Continued)

	Mean	SD	5 ( $\alpha = 0.65$ )	6 ( $\alpha = 0.70$ )	7 ( $\alpha = 0.80$ )
Factor 1 (1)	3.23	1.70			
Factor 2 (2)	5.47	1.64	-0.02 *		
Authority <sup>4</sup> (3)	3.86	0.91			
Fairness (4)	4.69	0.69			
Harm (5)	4.71	0.78			
Ingroup (6)	3.85	0.93	0.20 ***		
Purity (7)	3.73	1.16	0.19 ***	0.53 ***	

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

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<sup>4</sup> Dropping one of their items in from several measures for moral foundations yielded a higher alpha. Fairness has a higher alpha (0.72) by excluding the third item from the second questionnaire ("I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing"). Harm is shown to have a higher alpha (0.70) by excluding one of the items ("it can never be right to kill a human being"). Authority has a slightly higher alpha (0.76) by excluding one of the items ("Men and women each have different roles to play in society").

Table 3.12

Multiple Regressions with Factor 1 and Factor 2 as dependent variables (Excluding Atheists and Agnostics) and Moral Foundations as the Independent Variables

	<b>DV</b>	
	Model 7	Model 8
	Factor 1	Factor 2
<b>Moral foundations (IV)</b>		
Constant	1.70 **	3.15 ***
MF-Authority	0.27	0.01
MF-Fairness	-0.12 .	-0.01
MF-Harm	-0.19	<b>0.35 **</b>
MF-Ingroup	<b>0.48 ***</b>	<b>-0.36 **</b>
MF-Purity	0.03	<b>0.56 ***</b>

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

Table 3.13

Multiple Regressions Comparing Religiosity-related Measures with Forms of Sacredness

(Excluding Atheists and Agnostics)

	DV			
	Model 9 MDP	Model 10 Moral ID	Model 11 SE-value	Model 12 ST-value
<b>IV</b>				
Constant	2.13 ***	2.15 ***	4.21 ***	3.01 ***
Factor 1	0.04 *	0.05 **	0.18 ***	-0.04
Factor 2	-0.04	0.02	-0.00	-0.02
Intrinsic Rel.	0.02	0.01	-0.02	-0.03
Spirituality	-0.12 ***	0.26 ***	0.02	0.42 ***
Quest	0.12 ***	-0.03	-0.03	-0.05
Age	-0.06 **	-0.00	-0.25 ***	0.00
Gender	0.08	-0.11 *	0.12	0.02
Religiosity <sup>+</sup>	-0.01	0.02	-0.03	0.01

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$ <sup>+</sup>: "How religious are you?"

Table 3.14

Multiple Regression with Factor 1/Factor 2 as Dependent Variable

	<b>DV</b>	
	Model 13 Factor 1	Model 14 Factor 2
<b>Religiosity-related Measures (IV)</b>		
Constant	4.15 ***	1.44 ***
Intrinsic Religiosity	0.18 ***	0.55 ***
Quest	-0.03 .	0.24 ***
Spirituality	-0.30 ***	0.15 *
Atheism	-0.72 **	-1.52 ***
Agnosticism	-0.44	-0.73 ***

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

Table 3.15

One-way ANOVA based on Religious Identity, Study 1

(A) Factor 1/Materialism and Factor 2/Traditional Religion

	N	Factor 1 Materialism		Factor 2 Traditional Religion	
		Mean	SD	Mean	SD
Jewish	21	2.33	1.60	4.89	2.01
Catholic	126	3.49	1.77	5.60	1.51
Protestant	80	2.55	1.46	6.02	1.18
Muslim	23	4.47	1.29	6.05	1.34
Buddhist	16	3.70	1.53	4.20	1.94
Hindu	45	4.01	1.64	5.02	1.80
Mormon	3	3.83	1.76	5.08	1.46
Sikh	3	2.25	1.15	4.92	3.39
Atheist	90	2.44	1.75	1.82	1.26
Agnostic	67	2.58	1.47	3.22	1.87
Spiritual	41	2.32	1.35	5.52	1.56
Others	63	3.32	1.65	5.16	1.82

(B) Self-enhancement and Self-transcendence

	N	Self-enhancement		Self-transcendence	
		Mean	SD	Mean	SD
Jewish	21	3.54	0.89	4.66	0.78
Catholic	126	3.78	1.13	4.69	0.81
Protestant	80	3.27	1.11	4.53	0.86
Muslim	23	4.51	0.91	4.99	0.67
Buddhist	16	3.93	1.25	4.85	0.76
Hindu	45	4.19	0.89	4.68	0.85
Mormon	3	4.62	0.92	4.20	0.95
Sikh	3	2.52	0.22	5.07	0.61
Atheist	90	3.33	1.03	4.64	0.73
Agnostic	67	3.18	1.09	4.50	0.89
Spiritual	41	3.47	0.96	4.99	0.58
Others	63	3.62	1.18	4.78	0.76



## (C) Intrinsic Religiosity and Spirituality

	N	Intrinsic Religiosity		Spirituality	
		Mean	SD	Mean	SD
Jewish	21	3.00	1.67	4.89	0.88
Catholic	126	4.16	1.65	5.31	1.04
Protestant	80	5.07	1.61	5.34	0.89
Muslim	23	5.68	1.42	5.64	0.94
Buddhist	16	3.37	1.16	5.25	0.94
Hindu	45	4.03	1.54	5.12	0.79
Mormon	3	5.05	1.25	5.19	1.08
Sikh	3	4.86	2.49	6.10	0.42
Atheist	90	1.16	0.43	3.71	1.02
Agnostic	67	1.74	1.11	4.48	1.09
Spiritual	41	3.69	1.72	5.68	0.91
Others	63	4.20	2.00	5.29	0.98

## (D) Quest Religiosity and Moral Disengagement Propensity

	N	Quest		Moral Disengagement Propensity	
		Mean	SD	Mean	SD
Jewish	21	3.66	1.11	1.78	0.50
Catholic	126	3.69	1.07	1.69	0.54
Protestant	80	3.82	1.14	1.63	0.49
Muslim	23	3.03	1.26	1.55	0.41
Buddhist	16	3.81	1.03	2.02	0.57
Hindu	45	3.77	0.81	1.99	0.74
Mormon	3	3.64	0.38	2.29	0.44
Sikh	3	3.81	0.87	1.29	0.29
Atheist	90	3.03	1.12	1.67	0.51
Agnostic	67	3.76	1.16	1.83	0.59
Spiritual	41	4.18	1.16	1.79	0.59
Others	63	3.68	1.14	1.72	0.63

Table 4.1

Exploratory Factor Analysis, with 3 Factors (Varimax, Regression Method), Virtue Study

	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>
Economy	<b>0.67</b>	-0.14	
Career	<b>0.75</b>		0.12
Social Status	<b>0.81</b>		
Money	<b>0.82</b>	-0.10	
Rewards	<b>0.75</b>		0.13
Dominance	<b>0.70</b>		
Wealth	<b>0.87</b>		
Pride	<b>0.67</b>		0.15
Social Image	<b>0.83</b>		
Divine Presence		<b>0.79</b>	0.15
Private thought, prayer, or meditation		<b>0.73</b>	0.30
Personal-religious growth		<b>0.81</b>	0.18
God or any of its other terms		<b>0.89</b>	0.15
Religion		<b>0.88</b>	
Spiritual life		<b>0.87</b>	0.17
Compassion	0.11	0.15	<b>0.85</b>
Empathy	1.15	0.12	<b>0.82</b>
Mercy		0.35	<b>0.63</b>
Forgiving		0.27	<b>0.73</b>

Table 4.2

Exploratory Factor Analysis, with 3 Factors (Varimax, Regression Method), without

Atheists and Agnostics: Virtue Study

	<b>Factor 1</b>	<b>Factor 2</b>	<b>Factor 3</b>
Economy	<b>0.66</b>	-0.16	
Career	<b>0.75</b>		0.15
Social Status	<b>0.81</b>		
Money	<b>0.82</b>	-0.12	
Rewards	<b>0.73</b>		0.14
Dominance	<b>0.68</b>		
Wealth	<b>0.88</b>		
Pride	<b>0.66</b>		0.15
Social Image	<b>0.83</b>		
Divine Presence	-0.17	<b>0.71</b>	0.15
Private thought, prayer, or meditation		<b>0.69</b>	0.30
Personal-religious growth		<b>0.75</b>	0.18
God or any of its other terms		<b>0.85</b>	0.16
Religion		<b>0.85</b>	
Spiritual life	-0.10	<b>0.85</b>	0.15
Compassion	0.14	0.15	<b>0.84</b>
Empathy	0.16	0.13	<b>0.79</b>
Mercy		0.39	<b>0.61</b>
Forgiving		0.28	<b>0.73</b>

Table 4.3

## Table of Correlations: Virtue Study

## (A) Four-item Factor 1, Factor 2, and Factor 3

	Mean	SD	1 ( $\alpha = 0.86$ )	2 ( $\alpha = 0.90$ )	3 ( $\alpha = 0.87$ )
Factor 1 (1)	3.91	1.55			
Factor 2 (2)	4.75	1.82	-0.11 *		
Factor 3 (3)	5.22	1.36	0.09 *	0.44 ***	

## (B) Nine-item Factor 1, Six-item Factor 2, and Factor 3

	Mean	SD	1 ( $\alpha = 0.93$ )	2 ( $\alpha = 0.94$ )	3 ( $\alpha = 0.87$ )
Factor 1 (1)	3.84	1.45			
Factor 2 (2)	4.69	1.80	-0.05		
Factor 3 (3)	5.22	1.36	0.13 **	0.42 ***	

## (C) Four-item Factor 1, Intrinsic Religiosity, and Spirituality

	Mean	SD	1 ( $\alpha = 0.86$ )	2 ( $\alpha = 0.96$ )	3 ( $\alpha = 0.93$ )
Factor 1 (1)	3.91	1.55			
Int. Rel. (2)	3.23	1.84	-0.05		
Spirit. (3)	4.57	1.23	-0.04	0.55 ***	

## (D) Nine-item Factor 1, Intrinsic Religiosity, and Spirituality

	Mean	SD	1 ( $\alpha = 0.93$ )	2 ( $\alpha = 0.96$ )	3 ( $\alpha = 0.93$ )
Factor 1 (1)	3.84	1.45			
Int. Rel. (2)	3.23	1.84	-0.00		
Spirit. (3)	4.57	1.23	0.00	0.55 ***	

## (E) Four-item Factor 2, Intrinsic Religiosity, and Spirituality

	Mean	SD	1 ( $\alpha = 0.90$ )	2 ( $\alpha = 0.96$ )	3 ( $\alpha = 0.93$ )
Factor 2 (1)	4.75	1.82			
Int. Rel. (2)	3.23	1.84	0.61 ***		
Spirit. (3)	4.57	1.23	0.51 ***	0.55 ***	

## (F) Six-item Factor 2, Intrinsic Religiosity, and Spirituality

	Mean	SD	1 ( $\alpha = 0.94$ )	2 ( $\alpha = 0.96$ )	3 ( $\alpha = 0.93$ )
Factor 2 (1)	4.69	1.80			
Int. Rel. (2)	3.23	1.84	0.62 ***		
Spirit. (3)	4.57	1.23	0.52 ***	0.55 ***	

## (G) Factor 3, Intrinsic Religiosity, and Spirituality

	Mean	SD	1 ( $\alpha = 0.87$ )	2 ( $\alpha = 0.96$ )	3 ( $\alpha = 0.93$ )
Factor 3 (1)	5.22	1.36			
Int. Rel. (2)	3.23	1.84	0.22 ***		
Spirit. (3)	4.57	1.23	0.39 ***	0.55 ***	

## (H) Four-item Factor 1, Self-transcendence, and Self-enhancement

	Mean	SD	1 ( $\alpha = 0.86$ )	2 ( $\alpha = 0.87$ )	3 ( $\alpha = 0.87$ )
Factor 1 (1)	3.91	1.55			
ST-value (2)	4.10	1.03	-0.05		
SE-value (3)	4.50	0.83	0.42 ***	0.12 **	

## (I) Nine-item Factor 1, Self-transcendence, and Self-enhancement

	Mean	SD	1 ( $\alpha = 0.93$ )	2 ( $\alpha = 0.87$ )	3 ( $\alpha = 0.87$ )
Factor 1 (1)	3.84	1.45			
ST-value (2)	4.10	1.03	-0.02		
SE-value (3)	4.50	0.83	0.47 ***	0.12 **	

## (J) Four-item Factor 2, Self-transcendence, and Self-enhancement

	Mean	SD	1 ( $\alpha = 0.90$ )	2 ( $\alpha = 0.87$ )	3 ( $\alpha = 0.87$ )
Factor 2 (1)	4.75	1.82			
ST-value (2)	4.10	1.03	0.11 *		
SE-value (3)	4.50	0.83	0.05	0.12 **	

## (K) Six-item Factor 2, Self-transcendence, and Self-enhancement

	Mean	SD	1 ( $\alpha = 0.94$ )	2 ( $\alpha = 0.87$ )	3 ( $\alpha = 0.87$ )
Factor 2 (1)	4.69	1.80			
ST-value (2)	4.10	1.03	0.11 *		
SE-value (3)	4.50	0.83	0.04	0.12 **	

## (L) Factor 3, Self-transcendence, and Self-enhancement

	Mean	SD	1 ( $\alpha = 0.87$ )	2 ( $\alpha = 0.87$ )	3 ( $\alpha = 0.87$ )
Factor 3 (1)	5.22	1.36			
ST-value (2)	4.10	1.03	0.29 ***		
SE-value (3)	4.50	0.83	0.02	0.12 **	

Table 4.4

Table of Correlations, without Atheists and Agnostics: Virtue Study

(A) Four-item Factor 1, Four-item Factor 2, and Factor 3

	Mean	SD	1 ( $\alpha = 0.86$ )	2 ( $\alpha = 0.86$ )	3 ( $\alpha = 0.86$ )
Factor 1 (1)	3.92	1.53			
Factor 2 (2)	5.17	1.54	-0.15 **		
Factor 3 (3)	5.31	1.30	0.11 *	0.44 ***	

(B) Nine-item Factor 1, Six-item Factor 2, and Factor 3

	Mean	SD	1 ( $\alpha = 0.92$ )	2 ( $\alpha = 0.91$ )	3 ( $\alpha = 0.86$ )
Factor 1 (1)	3.88	1.44			
Factor 2 (2)	5.12	1.53	-0.10 *		
Factor 3 (3)	5.31	1.30	0.15 **	0.43 ***	

(C) Four-item Factor 1, Intrinsic Religiosity, and Spirituality

	Mean	SD	1 ( $\alpha = 0.86$ )	2 ( $\alpha = 0.95$ )	3 ( $\alpha = 0.92$ )
Factor 1 (1)	3.92	1.53			
Int. Rel. (2)	3.69	1.72	-0.08		
Spirit. (3)	4.81	1.14	-0.07	0.47 ***	

(D) Nine-item Factor 1, Intrinsic Religiosity, and Spirituality

	Mean	SD	1 ( $\alpha = 0.92$ )	2 ( $\alpha = 0.95$ )	3 ( $\alpha = 0.92$ )
Factor 1 (1)	3.88	1.44			
Int. Rel. (2)	3.69	1.72	-0.06		
Spirit. (3)	4.81	1.14	-0.04	0.47 ***	

## (E) Four-item Factor 2, Intrinsic Religiosity, and Spirituality

	Mean	SD	1 ( $\alpha = 0.86$ )	2 ( $\alpha = 0.95$ )	3 ( $\alpha = 0.92$ )
Factor 2 (1)	5.17	1.54			
Int. Rel. (2)	3.69	1.72	0.55 ***		
Spirit. (3)	4.81	1.14	0.41 ***	0.47 ***	

## (F) Six-item Factor 2, Intrinsic Religiosity, and Spirituality

	Mean	SD	1 ( $\alpha = 0.91$ )	2 ( $\alpha = 0.95$ )	3 ( $\alpha = 0.92$ )
Factor 2 (1)	5.12	1.53			
Int. Rel. (2)	3.69	1.72	0.55 ***		
Spirit. (3)	4.81	1.14	0.41 ***	0.47 ***	

## (G) Factor 3, Intrinsic Religiosity, and Spirituality

	Mean	SD	1 ( $\alpha = 0.86$ )	2 ( $\alpha = 0.95$ )	3 ( $\alpha = 0.92$ )
Factor 3 (1)	5.31	1.30			
Int. Rel. (2)	3.69	1.72	0.18 ***		
Spirit. (3)	4.81	1.14	0.35 ***	0.47 ***	

## (H) Four-item Factor 1, Self-transcendence, and Self-enhancement

	Mean	SD	1 ( $\alpha = 0.86$ )	2 ( $\alpha = 0.87$ )	3 ( $\alpha = 0.86$ )
Factor 1 (1)	3.92	1.53			
ST-value (2)	4.53	0.82	-0.02		
SE-value (3)	4.16	0.99	0.39 ***	0.18 ***	

## (I) Nine-item Factor 1, Self-transcendence, and Self-enhancement

	Mean	SD	1 ( $\alpha = 0.92$ )	2 ( $\alpha = 0.87$ )	3 ( $\alpha = 0.86$ )
Factor 1 (1)	3.88	1.44			
ST-value (2)	4.53	0.82	0.02		
SE-value (3)	4.16	0.99	0.43 ***	0.18 ***	



## (J) Four-item Factor 2, Self-transcendence, and Self-enhancement

	Mean	SD	1 ( $\alpha = 0.86$ )	2 ( $\alpha = 0.86$ )	3 ( $\alpha = 0.86$ )
Factor 2 (1)	5.17	1.54			
ST-value (2)	4.53	0.82	0.09		
SE-value (3)	4.16	0.99	-0.04	0.18 ***	

## (K) Six-item Factor 2, Self-transcendence, and Self-enhancement

	Mean	SD	1 ( $\alpha = 0.91$ )	2 ( $\alpha = 0.91$ )	3 ( $\alpha = 0.86$ )
Factor 2 (1)	5.12	1.53			
ST-value (2)	4.53	0.82	0.10 *		
SE-value (3)	4.16	0.99	-0.04	0.18 ***	

## (L) Factor 3, Self-transcendence, and Self-enhancement

	Mean	SD	1 ( $\alpha = 0.86$ )	2 ( $\alpha = 0.87$ )	3 ( $\alpha = 0.86$ )
Factor 3 (1)	5.31	1.30			
ST-value (2)	4.53	0.82	0.26 ***		
SE-value (3)	4.16	0.99	0.02	0.18 ***	

Table 4.5

## Multiple Regressions: Virtue Study

(A)

	DV		
	Factor 1 Materialism	Factor 2 Traditional Religion	Factor 3 Virtue
<b>IV</b>			
Constant	2.75 ***	1.81 ***	1.71 ***
Intrinsic Rel.	-0.00	0.46 ***	0.02
Spirituality	-0.04	0.40 ***	0.35 ***
Self-transcendence	-0.16 *	-0.07	0.32 ***
Self-enhancement	0.58 ***	0.03	0.03
Age	-0.22 *	-0.19 *	0.18 *
Gender	-0.01	0.14	0.10

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$ 

(B)

	DV Age
<b>IV</b>	
Constant	1.71 ***
Factor 1	-0.15 ***
Factor 2	-0.08 ***
Factor 3	0.10 ***

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

Table 6.1

Table of Correlations: Correlations between Manipulation Checks Items and Values

(MTurk, American sample, n = 49)

	M-SE1	M-SE2	M-SE3	M-ST1	M-ST2	SE
M-SE1						
M-SE2	0.51 ***					
M-SE3	-0.05	-0.07				
M-ST1	0.38 **	0.35 *	0.01			
M-ST2	0.45 ***	0.46 ***	0.03	0.72 ***		
SE	0.13	0.12	-0.05	-0.19	-0.12	
ST	-0.01	0.15	0.08	0.44 **	0.52 ***	-0.18

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

Table 6.2

Table of Correlations: Correlations between Manipulation Checks Items and Values

(students, Indonesian sample, n = 85)

	M-SE1	M-SE2	M-SE3	M-ST1	M-ST2	SE
M-SE1						
M-SE2	0.28**					
M-SE3	0.40***	0.29**				
M-ST1	-0.03	0.10	0.03			
M-ST2	-0.09	0.05	-0.06	0.12		
SE	0.19	0.19	0.32**	0.09	0.17	
ST	-0.10	0.03	0.01	0.33**	0.21*	0.24**

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

Table 6.3

Table of Correlations: Correlations between Manipulation Checks Items and Values (both samples combined, n = 134)

	M-SE1	M-SE2	M-SE3	M-ST1	M-ST2	SE
M-SE1						
M-SE2	0.52 ***					
M-SE3	0.26 **	0.14				
M-ST1	0.26 **	0.38 ***	-0.00			
M-ST2	0.25 **	0.38 ***	-0.04	0.43 ***		
SE	0.41 ***	0.45 ***	0.15	0.23 **	0.25 **	
ST	0.04	0.19 *	-0.01	0.40 ***	0.37 ***	0.23 **

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

Table 6.4

Means and Standard Deviations for Unethical Behavior

Sample	Mean	SD	N
Indonesian students	3.36	1.96	92
American/MTurks	3.08	1.26	49

Table 6.5

Regression Table with Task 2 (i.e. Description/Word Count) as the Dependent Variable

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>
Constant	33.27***	35.74***	32.84**
Self-transcendence	0.58		0.61
Self-enhancement		0.01	0.11
<b>R<sup>2</sup></b>	0.00	0.00	0.00
<b>Adjusted R<sup>2</sup></b>	-0.02	0.02	-0.04
<b>F</b>	0.08	0.00	0.04
<b>d.f.</b>	1,47	1.47	2,46

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$

Table 6.6

Regression Table with Task 3 (i.e. Voluntary Tasks) as the Dependent Variable

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>
Constant	0.55	8.65***	2.50
Self-transcendence	1.38*		1.28*
Self-enhancement		-0.72	-0.51
<b>R<sup>2</sup></b>	0.12	0.04	0.14
<b>Adjusted R<sup>2</sup></b>	0.10	0.02	0.11
<b>F</b>	6.54	1.86	3.75*
<b>d.f.</b>	1,47	1.47	2,46

Note: \*\*\*:  $p < 0.001$ ; \*\*:  $p < 0.01$ ; \*:  $p < 0.05$



Table 7.1

Exploratory Factor Analysis for Sacred Items, Original (Varimax; Regression), Study 5

	Factor 1 – Materialism ( $\alpha = 0.85$ )	Factor 2 – Traditional Religion ( $\alpha = 0.86$ )	Factor 3 – Virtue ( $\alpha = 0.85$ )
Economy	<b>0.67</b>	-0.22	0.11
Career	<b>0.82</b>		0.17
Social Status	<b>0.82</b>		
Money	<b>0.72</b>	-0.14	
Divine presence	-0.19	<b>0.71</b>	0.14
Private thought, prayer or meditation		<b>0.69</b>	0.32
Personal-religious growth		<b>0.73</b>	0.18
God or any of its terms	-0.15	<b>0.85</b>	0.15
Compassion	0.17	0.16	<b>0.82</b>
Empathy	0.11		<b>0.82</b>
Mercy		0.41	<b>0.59</b>
Forgiving		0.27	<b>0.70</b>

Table 7.2

Exploratory Factor Analysis for Sacred Items, with Added Items (Varimax; Regression),

## Study 5

	Factor 1 – Materialism ( $\alpha = 0.92$ )	Factor 2 – Traditional Religion ( $\alpha = 0.94$ )	Factor 3 – Virtue ( $\alpha = 0.89$ )
Economy	<b>0.64</b>	-0.23	0.15
Career	<b>0.72</b>	-0.11	0.22
Social Status	<b>0.78</b>		
Money	<b>0.81</b>	-0.14	
Rewards	<b>0.68</b>		0.23
Dominance	<b>0.64</b>		
Wealth	<b>0.86</b>		
Pride	<b>0.61</b>		
Social Image	<b>0.79</b>		0.12
Divine Presence	-0.19	<b>0.69</b>	0.17
Private thought, prayer, or meditation		<b>0.66</b>	0.36
Personal-religious Growth		<b>0.78</b>	0.14
God or any of its terms	-0.14	<b>0.84</b>	0.16
Religion		<b>0.90</b>	
Spiritual Life	-0.13	<b>0.85</b>	0.16
Religious Identity		<b>0.87</b>	
Divine Guidance		<b>0.84</b>	0.18
Patience		0.18	<b>0.62</b>
Compassion	0.13	0.15	<b>0.80</b>
Empathy	0.11	0.11	<b>0.76</b>
Mercy		0.43	<b>0.56</b>
Forgiving	0.25		<b>0.75</b>
Thankfulness	0.19	0.20	<b>0.81</b>
Inner strength	0.19	0.15	<b>0.62</b>

Table 7.3

## Table of Correlations: Study 5

## (A) Factors with Original Items

	Mean	SD	1 ( $\alpha = 0.85$ )	2 ( $\alpha = 0.86$ )	3 ( $\alpha = 0.80$ )
Factor 1 (1)	4.12	1.50			
Factor 2 (2)	4.92	1.64	-0.23 ***		
Factor 3 (3)	5.17	1.24	0.19 ***	0.39 ***	

## (B) Factors with Added Items

	Mean	SD	1 ( $\alpha = 0.92$ )	2 ( $\alpha = 0.94$ )	3 ( $\alpha = 0.89$ )
Factor 1 (1)	4.07	1.37			
Factor 2 (2)	4.79	1.64	-0.16 ***		
Factor 3 (3)	5.30	1.21	0.26 ***	0.38 ***	

Table 7.4

Exploratory Factor Analysis for Sacred Items, Original (Varimax; Regression): Study 5

(without Atheists and Agnostics)

	Factor 1 – Materialism ( $\alpha = 0.85$ )	Factor 2 – Traditional Religion ( $\alpha = 0.84$ )	Factor 3 – Virtue ( $\alpha = 0.80$ )
Economy	<b>0.67</b>	-0.16	0.16
Career	<b>0.80</b>		0.20
Social Status	<b>0.83</b>		
Money	<b>0.72</b>	-0.15	
Divine presence	-0.21	<b>0.69</b>	0.11
Private thought, prayer or meditation		<b>0.69</b>	0.28
Personal-religious growth		<b>0.69</b>	0.16
God or any of its terms	-0.12	<b>0.84</b>	0.11
Patience	0.21	0.17	<b>0.54</b>
Compassion	0.17	0.20	<b>0.80</b>
Empathy		0.14	<b>0.85</b>
Mercy		0.48	<b>0.50</b>

Table 7.5

Exploratory Factor Analysis for Sacred Items, with Added Items (Varimax; Regression):

Study 5 (without Atheists and Agnostics)

	Factor 1 – Materialism ( $\alpha = 0.92$ )	Factor 2 – Traditional Religion ( $\alpha = 0.93$ )	Factor 3 – Virtue ( $\alpha = 0.89$ )
Economy	<b>0.66</b>	-0.17	0.14
Career	<b>0.72</b>		0.23
Social Status	<b>0.79</b>		
Money	<b>0.81</b>	-0.13	
Rewards	<b>0.67</b>		0.24
Dominance	<b>0.64</b>		
Wealth	<b>0.87</b>		
Pride	<b>0.63</b>		0.24
Social Image	<b>0.80</b>		0.12
Divine Presence	-0.22	<b>0.65</b>	0.19
Private thought, prayer, or meditation		<b>0.64</b>	0.37
Personal-religious Growth		<b>0.73</b>	0.16
God or any of its terms	-0.12	<b>0.82</b>	0.20
Religion		<b>0.87</b>	
Spiritual Life		<b>0.86</b>	0.14
Religious Identity		<b>0.84</b>	
Divine Guidance		<b>0.82</b>	0.20
Patience		0.17	<b>0.62</b>
Compassion	0.16	0.13	<b>0.80</b>
Empathy	0.13	0.12	<b>0.75</b>
Mercy		0.45	<b>0.54</b>
Forgiving	0.26		<b>0.77</b>
Thankfulness	0.21	0.27	<b>0.80</b>
Inner strength	0.21	0.21	<b>0.59</b>

Table 7.6

## Table of Correlations X: Study 5

## (A) Factors with Original Items

	Mean	SD	1 ( $\alpha = 0.85$ )	2 ( $\alpha = 0.84$ )	3 ( $\alpha = 0.80$ )
Factor 1 (1)	4.12	1.50			
Factor 2 (2)	4.92	1.64	-0.19 ***		
Factor 3 (3)	5.17	1.24	0.21 ***	0.44 ***	

## (B) Factors with Added Items

	Mean	SD	1 ( $\alpha = 0.92$ )	2 ( $\alpha = 0.93$ )	3 ( $\alpha = 0.89$ )
Factor 1 (1)	4.07	1.37			
Factor 2 (2)	4.79	1.64	-0.11 *		
Factor 3 (3)	5.30	1.21	0.29 ***	0.44 ***	

Table 7.7

Hierarchical Linear Regression with Volunteer-amount as the Dependent Variable and  
Traditional Religion and Materialism as the Independent Variables (Study 5)

## (a) Main Effects

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>	<b>Step 4</b>
Constant	6.10***	6.14***	6.03***	6.26***
Traditional Religion	0.02		0.02	0.02
Materialism		0.01	0.01	0.01
Gender				-0.40
<b>R<sup>2</sup></b>	0.00	0.00	0.00	0.01
<b>Adjusted R<sup>2</sup></b>	0.00	0.00	0.00	0.00
<b>F</b>	0.07	0.02	0.05	1.27
<b>(d.f.)</b>	1,419	1,419	2,418	3,416
<b>Change in R<sup>2</sup></b>		0.00	0.00	0.01
<b>Change in adjusted R<sup>2</sup></b>		0.00	0.00	0.00

## (b) ST-over-SE Condition and Interaction Entered

<b>Independent Variables</b>	<b>Step 5</b>	<b>Step 6</b>	<b>Step 7</b>	<b>Step 8</b>
Constant	6.23***	6.24***	6.32***	6.33***
Traditional Religion (A)	0.02	0.01	0.01	-0.02
Materialism (B)	0.01	0.01	-0.13	-0.14
Gender	-0.38	-0.38	-0.39	-0.39
ST-over-SE Condition (C)	0.26	0.15	-0.85	-1.20
Interaction (A*C)		0.02		0.06
Interaction (B*C)			0.27	0.29
<b>R<sup>2</sup></b>	0.01	0.01	0.02	0.02
<b>Adjusted R<sup>2</sup></b>	0.00	0.00	0.01	0.01
<b>F</b>	1.36	1.09	1.74	1.49
<b>(d.f.)</b>	4,415	5,414	5,414	6,413
<b>Change in R<sup>2</sup></b>	0.00	0.00	0.01	0.00
<b>Change in adjusted R<sup>2</sup></b>	0.00	0.00	0.01	0.00

Table 7.8

Hierarchical Linear Regression with Volunteer-amount as the Dependent Variable and  
Virtue and Materialism as the Independent Variables (Study 5)

## (a) Main Effects

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>	<b>Step 4</b>
Constant	5.57	6.14	5.62	5.83***
Virtue	0.11		0.12	0.12
Materialism		0.01	-0.02	-0.02
Gender				-0.40
<b>R<sup>2</sup></b>	0.00	0.00	0.00	0.01
<b>Adjusted R<sup>2</sup></b>	0.00	0.00	0.00	0.01
<b>F</b>	1.77	0.02	0.91	1.88
<b>(d.f.)</b>	1,419	1,419	2,418	3,416
<b>Change in R<sup>2</sup></b>		0.00	0.00	0.01
<b>Change in adjusted R<sup>2</sup></b>		0.00	0.00	0.01

## (b) ST-over-SE Condition and Interaction Entered

<b>Independent Variables</b>	<b>Step 5</b>	<b>Step 6</b>	<b>Step 7</b>	<b>Step 8</b>
Constant	5.82***	5.84***	5.89***	5.89***
Virtue (A)	0.12	0.12	0.11	0.11
Materialism (B)	-0.02	-0.02	-0.02	-0.02
Gender	-0.39	-0.39	-0.39	-0.39
ST-over-SE Condition (C)	0.25	-0.03	-0.82	-0.71
Interaction (A*C)		0.05		-0.03
Interaction (B*C)			0.26	0.27
<b>R<sup>2</sup></b>	0.02	0.02	0.02	0.02
<b>Adjusted R<sup>2</sup></b>	0.01	0.01	0.01	0.01
<b>F</b>	1.79	1.45	2.10	1.71
<b>(d.f.)</b>	4,415	5,414	5,414	6,413
<b>Change in R<sup>2</sup></b>	0.01	0.00	0.00	0.00
<b>Change in adjusted R<sup>2</sup></b>	0.00	0.00	0.00	0.00



Table 7.9

Hierarchical Logistic Regression with Voluntary Act as the Dependent Variable and  
Traditional Religion and Materialism as the Independent Variables (Study 5)

## (a) Main Effects

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>	<b>Step 4</b>
Constant	2.52***	2.62***	2.68**	2.94**
Traditional Religion	0.00		-0.01	-0.01
Materialism		-0.03	-0.03	-0.03
Gender				-0.44
<b>AIC</b>	230	230	232	233

## (b) ST-over-SE Condition and Interaction Entered

<b>Independent Variables</b>	<b>Step 5</b>	<b>Step 6</b>	<b>Step 7</b>	<b>Step 8</b>
Constant	2.65**	2.73**	3.93**	4.23***
Traditional Religion (A)	-0.01	-0.02	-0.02	-0.07
Materialism (B)	-0.03	-0.04	-0.32	-0.33
Gender	-0.40	-0.40	-0.40	-0.40
ST-over-SE Condition (C)	0.56	0.38	-2.08	-2.79
Interaction (A*C)		0.04		0.13
Interaction (B*C)			0.65*	0.68*
<b>AIC</b>	233	235	230	231

Table 7.10

Hierarchical Logistic Regression with Voluntary Act as the Dependent Variable and  
Virtue and Materialism as the Independent Variables (Study 5)

## (a) Main Effects

<b>Independent Variables</b>	Step 1	Step 2	Step 3	Step 4
Constant	2.06**	2.63***	2.20*	2.44**
Virtue	0.08		0.10	0.11
Materialism		-0.03	-0.06	-0.06
Gender				-0.44
<b>AIC</b>	230	230	232	232

## (b) ST-over-SE Condition and Interaction Entered

<b>Independent Variables</b>	Step 5	Step 6	Step 7	Step 8
Constant	2.46*	2.42**	2.41**	2.41**
Virtue (A)	0.10	0.11	0.09	0.09
Materialism (B)	-0.06	-0.06	-0.01	-0.01
Gender	-0.41	-0.41	-0.41	-0.41
ST-over-SE Condition (C)	0.56	-0.32	-2.08	-1.95
Interaction (A*C)		0.17		-0.03
Interaction (B*C)			0.65*	0.66*
<b>AIC</b>	232	234	229	231

Table 7.11

Hierarchical Linear Regression with Unethical Work Behavior as the Dependent Variable  
and Traditional Religion and Materialism as the Independent Variables (Study 5)

## (a) Main Effects

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>	<b>Step 4</b>
Constant	0.19	0.14	0.18	0.18
Traditional Religion	-0.01		-0.01	-0.01
Materialism		0.00	0.00	0.00
Gender				0.01
<b>R<sup>2</sup></b>	0.00	0.00	0.00	0.00
<b>Adjusted R<sup>2</sup></b>	0.00	0.00	0.00	-0.01
<b>F</b>	0.09	0.01	0.05	0.04
<b>(d.f.)</b>	1,415	1,415	2,414	3,412
<b>Change in R<sup>2</sup></b>		0.00	0.00	0.00
<b>Change in adjusted R<sup>2</sup></b>		0.00	0.00	-0.01

## (b) ST-over-SE Condition and Interaction Entered

<b>Independent Variables</b>	<b>Step 5</b>	<b>Step 6</b>	<b>Step 7</b>	<b>Step 8</b>
Constant	0.17	0.15	-0.01	-0.07
Traditional Religion (A)	-0.01	0.00	0.00	0.01
Materialism (B)	0.00	0.00	0.04	0.05
Gender	0.01	0.01	0.01	0.01
ST-over-SE Condition (C)	0.01	0.05	0.32	0.44
Interaction (A*C)		-0.01		-0.02
Interaction (B*C)			-0.08	-0.08
<b>R<sup>2</sup></b>	0.00	0.00	0.00	0.01
<b>Adjusted R<sup>2</sup></b>	-0.01	-0.01	-0.01	-0.01
<b>F</b>	0.03	0.03	0.39	0.35
<b>(d.f.)</b>	4,411	5,410	5,410	6,409
<b>Change in R<sup>2</sup></b>	0.00	0.00	0.00	0.01
<b>Change in adjusted R<sup>2</sup></b>	0.00	0.00	0.00	0.00

Table 7.12

Hierarchical Linear Regression with Unethical Work Behavior as the Dependent Variable  
and Virtue and Materialism as the Independent Variables (Study 5)

## (a) Main Effects

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>	<b>Step 4</b>
Constant	0.55**	0.14	0.50**	0.49*
Virtue	-0.08*		-0.08*	-0.08*
Materialism		0.00	0.02	0.02
Gender				0.01
<b>R<sup>2</sup></b>	0.01	0.00	0.01	0.01
<b>Adjusted R<sup>2</sup></b>	0.01	0.00	0.01	0.01
<b>F</b>	5.24*	0.01	2.86	1.92
<b>(d.f.)</b>	1,415	1,415	2,414	3,412
<b>Change in R<sup>2</sup></b>		-0.01	0.01	0.00
<b>Change in adjusted R<sup>2</sup></b>		-0.01	0.01	0.00

## (d) ST-over-SE Condition and Interaction Entered

<b>Independent Variables</b>	<b>Step 5</b>	<b>Step 6</b>	<b>Step 7</b>	<b>Step 8</b>
Constant	0.49*	0.48*	0.47*	0.47*
Virtue (A)	-0.08*	-0.08*	-0.08*	-0.08*
Materialism (B)	0.02	0.02	0.02	0.02
Gender	0.01	0.01	0.01	0.01
ST-over-SE Condition (C)	0.02	0.09	0.30	0.26
Interaction (A*C)		-0.01		0.01
Interaction (B*C)			-0.07	-0.07
<b>R<sup>2</sup></b>	0.01	0.01	0.02	0.02
<b>Adjusted R<sup>2</sup></b>	0.00	0.00	0.01	0.00
<b>F</b>	1.45	1.16	1.46	1.22
<b>(d.f.)</b>	4,411	5,410	5,410	6,409
<b>Change in R<sup>2</sup></b>	0.00	0.00	0.00	0.00
<b>Change in adjusted R<sup>2</sup></b>	-0.01	0.00	0.00	-0.01

Table 8.1

Exploratory Factor Analysis for Sacred Items, Original (Varimax; Regression): Study 6

	Factor 1 – Materialism ( $\alpha = 0.84$ )	Factor 2 – Traditional Religion ( $\alpha = 0.96$ )	Factor 3 – Virtue ( $\alpha = 0.91$ )
Economy	<b>0.68</b>		
Career	<b>0.78</b>		
Social Status	<b>0.78</b>		
Money	<b>0.77</b>		
Divine presence		<b>0.97</b>	0.17
Private thought, prayer or meditation		<b>0.79</b>	0.28
Personal-religious growth		<b>0.89</b>	0.22
God or any of its terms		<b>0.97</b>	0.16
Compassion	-0.14	0.17	<b>0.90</b>
Empathy		0.14	<b>0.86</b>
Mercy		0.18	<b>0.76</b>
Forgiving		0.30	<b>0.79</b>

Table 8.2

Exploratory Factor Analysis for Sacred Items, with Added Items (Varimax; Regression):

## Study 6

	Factor 1 – Materialism ( $\alpha = 0.93$ )	Factor 2 – Traditional Religion ( $\alpha = 0.97$ )	Factor 3 – Virtue ( $\alpha = 0.91$ )
Economy	<b>0.63</b>		
Career	<b>0.73</b>		
Social Status	<b>0.82</b>		
Money	<b>0.83</b>		
Rewards	<b>0.85</b>		0.23
Dominance	<b>0.78</b>	0.11	-0.15
Wealth	<b>0.85</b>		-0.14
Pride	<b>0.75</b>		0.10
Social Image	<b>0.87</b>		
Divine Presence		<b>0.96</b>	0.15
Private thought, prayer, or meditation		<b>0.79</b>	0.27
Personal-religious Growth		<b>0.90</b>	0.20
God or any of its terms		<b>0.97</b>	0.14
Religion	0.14	<b>0.85</b>	0.11
Spiritual Life		<b>0.89</b>	0.20
Compassion	-0.15	0.19	<b>0.89</b>
Empathy		0.15	<b>0.86</b>
Mercy		0.19	<b>0.76</b>
Forgiving		0.32	<b>0.79</b>

Table 8.3

Table of Correlations: Study 6 (Between Factors)

## (A) Factors with Original Items

	Mean	SD	1 ( $\alpha = 0.84$ )	2 ( $\alpha = 0.96$ )	3 ( $\alpha = 0.91$ )
Factor 1 (1)	3.06	1.47			
Factor 2 (2)	4.04	2.32	0.01		
Factor 3 (3)	5.04	1.61	-0.07	0.42***	

## (B) Factors with Added Items

	Mean	SD	1 ( $\alpha = 0.93$ )	2 ( $\alpha = 0.97$ )	3 ( $\alpha = 0.91$ )
Factor 1 (1)	2.89	1.42			
Factor 2 (2)	3.96	2.25	0.04		
Factor 3 (3)	5.04	1.61	-0.07	0.41***	

Table 8.4

Exploratory Factor Analysis for Sacred Items, Original (Varimax; Regression): Study 6

(without Atheists and Agnostics)

	Factor 1 – Materialism ( $\alpha = 0.84$ )	Factor 2 – Traditional Religion ( $\alpha = 0.95$ )	Factor 3 – Virtue ( $\alpha = 0.90$ )
Economy	<b>0.63</b>		
Career	<b>0.79</b>		
Social Status	<b>0.81</b>		-0.22
Money	<b>0.81</b>		
Divine presence		<b>0.96</b>	0.11
Private thought, prayer or meditation		<b>0.80</b>	0.27
Personal-religious growth		<b>0.90</b>	0.20
God or any of its terms		<b>0.94</b>	0.15
Compassion	-0.11	0.18	<b>0.88</b>
Empathy	0.13	0.18	<b>0.80</b>
Mercy	-0.14	0.12	<b>0.80</b>
Forgiving		0.21	<b>0.82</b>



Table 8.5

Exploratory Factor Analysis for Sacred Items, with Added Items (Varimax; Regression):

Study 6 (Without Atheists and Agnostics)

	Factor 1 – Materialism ( $\alpha = 0.94$ )	Factor 2 – Traditional Religion ( $\alpha = 0.95$ )	Factor 3 – Virtue ( $\alpha = 0.90$ )
Economy	<b>0.59</b>		
Career	<b>0.73</b>		
Social Status	<b>0.81</b>		-0.21
Money	<b>0.86</b>		
Rewards	<b>0.84</b>		
Dominance	<b>0.76</b>	0.18	-0.11
Wealth	<b>0.88</b>		-0.12
Pride	<b>0.74</b>		
Social Image	<b>0.88</b>		
Divine Presence		<b>0.95</b>	
Private thought, prayer, or meditation		<b>0.80</b>	0.25
Personal-religious Growth		<b>0.90</b>	0.17
God or any of its terms		<b>0.95</b>	0.13
Religion	0.21	<b>0.75</b>	
Spiritual Life	-0.14	<b>0.78</b>	0.21
Compassion	-0.13	0.20	<b>0.88</b>
Empathy		0.18	<b>0.79</b>
Mercy	-0.13	0.14	<b>0.78</b>
Forgiving		0.23	<b>0.82</b>

Table 8.6

Table of Correlations: Study 6 (Without Atheists and Agnostics)

## (A) Factors with Original Items

	Mean	SD	1 ( $\alpha = 0.84$ )	2 ( $\alpha = 0.95$ )	3 ( $\alpha = 0.90$ )
Factor 1 (1)	3.12	1.47			
Factor 2 (2)	5.21	1.83	0.02		
Factor 3 (3)	5.37	1.41	-0.10	0.37**	

## (B) Factors with Added Items

	Mean	SD	1 ( $\alpha = 0.94$ )	2 ( $\alpha = 0.95$ )	3 ( $\alpha = 0.90$ )
Factor 1 (1)	2.98	1.43			
Factor 2 (2)	5.13	1.75	0.05		
Factor 3 (3)	5.37	1.41	-0.11	0.36**	

Table 8.7

Hierarchical Linear Regressions with Volunteer-amount as the Dependent Variable and  
Traditional Religion and Materialism as the Independent Variables (Study 6)

## (a) Main Effects

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>	<b>Step 4</b>
Constant	4.57***	7.13***	5.01***	5.36***
Traditional Religion	0.56**		0.56**	0.54**
Materialism		-0.12	-0.16	-0.09
Gender				-1.00
<b>R<sup>2</sup></b>	0.08	0.00	0.09	0.10
<b>Adjusted R<sup>2</sup></b>	0.08	-0.01	0.07	0.07
<b>F</b>	9.05**	0.17	4.64*	3.56*
<b>(d.f.)</b>	1,98	1,98	2,97	3,96
<b>Change in R<sup>2</sup></b>		-0.08	0.10	0.01
<b>Change in adjusted R<sup>2</sup></b>		-0.09	0.08	0.00

## (b) ST-over-SE Condition and Interaction Entered

<b>Independent Variables</b>	<b>Step 5</b>	<b>Step 6</b>	<b>Step 7</b>	<b>Step 8</b>
Constant	4.89***	3.98*	5.46***	4.57*
Traditional Religion (A)	0.57**	0.75**	0.54**	0.74**
Materialism (B)	-0.13	-0.08	-0.32	-0.27
Gender	-1.09	-1.16	-1.04	-1.11
ST-over-SE Condition (C)	1.04	2.44	-0.06	1.31
Interaction (A*C)		-0.35		-0.36
Interaction (B*C)			0.39	0.40
<b>R<sup>2</sup></b>	0.11	0.12	0.12	0.13
<b>Adjusted R<sup>2</sup></b>	0.08	0.08	0.07	0.07
<b>F</b>	3.07*	2.63*	2.52*	2.25*
<b>(d.f.)</b>	4,95	5,94	5,94	6,93
<b>Change in R<sup>2</sup></b>	0.01	0.01	0.00	0.01
<b>Change in adjusted R<sup>2</sup></b>	0.01	0.00	-0.01	-0.01

Table 8.8

Hierarchical Linear Regressions with Volunteer-amount as the Dependent Variable and  
Virtue and Materialism as the Independent Variables (Study 6)

## (a) Main Effects

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>	<b>Step 4</b>
Constant	3.42*	7.13***	3.66*	4.10*
Virtue	0.66*		0.66*	0.63*
Materialism		-0.12	-0.07	0.00
Gender				-1.01
<b>R<sup>2</sup></b>	0.06	0.00	0.06	0.08
<b>Adjusted R<sup>2</sup></b>	0.05	-0.01	0.04	0.05
<b>F</b>	6.43*	0.17	3.22*	2.61
<b>(d.f.)</b>	(1,98)	1,98	(2,97)	(3,96)
<b>Change in R<sup>2</sup></b>		-0.08	0.06	0.02
<b>Change in adjusted R<sup>2</sup></b>		-0.09	0.05	0.01

## (b) ST-over-SE Condition and Interaction Entered

<b>Independent Variables</b>	<b>Step 5</b>	<b>Step 6</b>	<b>Step 7</b>	<b>Step 8</b>
Constant	3.90*	1.97	4.78*	2.86
Virtue (A)	0.62*	1.00**	0.62*	0.98**
Materialism (B)	-0.03	-0.03	-0.38	-0.35
Gender	-1.08	-0.99	-0.98	-0.90
ST-over-SE Condition (C)	0.69	4.82	-1.28	2.84
Interaction (A*C)		-0.82		-0.79
Interaction (B*C)			0.68	0.62
<b>R<sup>2</sup></b>	0.08	0.10	0.09	0.11
<b>Adjusted R<sup>2</sup></b>	0.04	0.06	0.05	0.06
<b>F</b>	2.11	2.20	1.94	2.01
<b>(d.f.)</b>	(4,95)	(5,94)	(5,94)	(6,93)
<b>Change in R<sup>2</sup></b>	0.00	0.02	-0.01	0.02
<b>Change in adjusted R<sup>2</sup></b>	-0.01	0.02	-0.01	0.01

Table 8.9

Hierarchical GLM Analysis with Voluntary act as the Dependent Variable and  
Traditional Religion and Materialism as the Independent Variables (Study 6)

## (a) Main Effects

<b>Independent Variables</b>	Step 1	Step 2	Step 3	Step 4
Constant	0.55	1.36*	0.63	0.77
Traditional Religion	0.21		0.21	0.21
Materialism		-0.01	-0.03	0.00
Gender				-0.36
<b>AIC</b>	103	107	105	107

## (b) ST-over-SE Condition and Interaction Entered

<b>Independent Variables</b>	Step 5	Step 6	Step 7	Step 8
Constant	0.68	0.28	1.08	0.68
Traditional Religion (A)	0.21	0.31	0.20	0.31
Materialism (B)	-0.01	0.02	-0.14	-0.12
Gender	-0.38	-0.43	-0.35	-0.41
ST-over-SE Condition (C)	0.18	0.83	0.67	-0.03
Interaction (A*C)		-0.19		-0.21
Interaction (B*C)			0.29	0.31
<b>AIC</b>	109	110	110	111

Table 8.10

Hierarchical GLM Analysis with Voluntary act as the Dependent Variable and Virtue and Materialism as the Independent Variables (Study 6)

## (a) Main Effects

<b>Independent Variables</b>	Step 1	Step 2	Step 3	Step 4
Constant	-0.76	1.36*	-0.86	-0.71
Virtue	0.44**		0.44**	0.44**
Materialism		-0.01	0.03	0.05
Gender				-0.34
<b>AIC</b>	98	107	100	102

## (b) ST-over-SE Condition and Interaction Entered

<b>Independent Variables</b>	Step 5	Step 6	Step 7	Step 8
Constant	-0.71	-1.28	-0.18	-0.67
Virtue (A)	0.44**	0.57*	0.44**	0.55*
Materialism (B)	0.05	0.06	-0.15	-0.14
Gender	-0.34	-0.31	-0.26	-0.24
ST-over-SE Condition (C)	-0.04	1.07	-1.20	-0.16
Interaction (A*C)		-0.25		-0.22
Interaction (B*C)			0.40	0.38
<b>AIC</b>	104	105	105	106

Table 8.11

Hierarchical Linear Regressions with Unethical Behavior as the Dependent Variable and  
Traditional Religion and Materialism as the Independent Variables (Study 6)

## (a) Main Effects

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>	<b>Step 4</b>
Constant	0.54*	-0.16	-0.09	-0.13
Traditional Religion	-0.01		-0.02	-0.02
Materialism		0.22*	0.23*	0.22*
Gender				0.11
<b>R<sup>2</sup></b>	0.00	0.06	0.06	0.06
<b>Adjusted R<sup>2</sup></b>	-0.01	0.05	0.04	0.03
<b>F</b>	0.04	6.10*	3.06	2.08
<b>(d.f.)</b>	1,98	1,98	2,97	3,96
<b>Change in R<sup>2</sup></b>		0.06	0.00	0.00
<b>Change in adjusted R<sup>2</sup></b>		0.06	-0.01	-0.01

## (b) ST-over-SE Condition and Interaction Entered

<b>Independent Variables</b>	<b>Step 5</b>	<b>Step 6</b>	<b>Step 7</b>	<b>Step 8</b>
Constant	-0.27	-0.34	-0.16	-0.25
Traditional Religion (A)	-0.01	0.01	-0.01	0.01
Materialism (B)	0.20*	0.21*	0.17	0.17
Gender	0.08	0.07	0.09	0.08
ST-over-SE Condition (C)	0.31	0.45	0.10	0.24
Interaction (A*C)		-0.03		-0.04
Interaction (B*C)			0.07	0.07
<b>R<sup>2</sup></b>	0.08	0.08	0.08	0.08
<b>Adjusted R<sup>2</sup></b>	0.04	0.03	0.03	0.02
<b>F</b>	1.92	1.53	1.55	1.29
<b>(d.f.)</b>	4,95	5,94	5,94	6,93
<b>Change in R<sup>2</sup></b>	0.02	0.00	0.00	0.00
<b>Change in adjusted R<sup>2</sup></b>	0.00	-0.01	0.00	-0.01

Table 8.12

Hierarchical Linear Regressions with Unethical Behavior as the Dependent Variable and  
Virtue and Materialism as the Independent Variables (Study 6)

## (a) Main Effects

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>	<b>Step 4</b>
Constant	-0.13	-0.16	-0.88	-0.95
Virtue	0.12		0.14	0.14
Materialism		0.22*	0.23*	0.22*
Gender				0.16
<b>R<sup>2</sup></b>	0.02	0.06	0.09	0.09
<b>Adjusted R<sup>2</sup></b>	0.01	0.05	0.07	0.06
<b>F</b>	2.27	6.10*	4.59*	3.16*
<b>(d.f.)</b>	1,98	1,98	2,97	3,96
<b>Change in R<sup>2</sup></b>		0.06	0.03	0.00
<b>Change in adjusted R<sup>2</sup></b>		0.06	0.02	-0.01

## (b) ST-over-SE Condition and Interaction Entered

<b>Independent Variables</b>	<b>Step 5</b>	<b>Step 6</b>	<b>Step 7</b>	<b>Step 8</b>
Constant	-1.03	-0.67	-0.94	-0.56
Virtue (A)	0.14	0.07	0.14	0.06
Materialism (B)	0.21*	0.21*	0.18	0.17
Gender	0.13	0.11	0.10	0.12
ST-over-SE Condition (C)	0.29	-0.46	0.10	-0.71
Interaction (A*C)		0.15		0.15
Interaction (B*C)			0.07	0.08
<b>R<sup>2</sup></b>	0.10	0.11	0.10	0.11
<b>Adjusted R<sup>2</sup></b>	0.06	0.06	0.06	0.05
<b>F</b>	2.70*	2.33*	2.16	1.95
<b>(d.f.)</b>	4,95	5,94	5,94	6,93
<b>Change in R<sup>2</sup></b>	0.01	0.01	-0.01	0.00
<b>Change in adjusted R<sup>2</sup></b>	0.00	0.00	0.00	0.00



Table 9.1

Summary of the Support for the Hypotheses (Main Effects)

<b>Hypotheses</b>	<b>Study 5</b> (Rutgers' Undergraduate Students)	<b>Study 6</b> (Amazon MTurks)
1 IV = Materialism DV = Ethical Behavior	Not supported	Not Supported
2 IV = Materialism DV = Unethical Behavior	Not Supported	<b>SUPPORTED</b> (Positive)
3 IV = Traditional Religion DV = Ethical Behavior	Not supported	<b>SUPPORTED</b> (Positive; Voluntary-amount)
4 IV = Traditional Religion DV = Unethical Behavior	Not supported	Not supported
5 IV = Virtue DV = Ethical Behavior	Not supported	<b>SUPPORTED</b> (Positive; Voluntary-amount and Voluntary Act)
6 IV = Virtue DV = Unethical Behavior	<b>SUPPORTED</b> (Negative)	Not supported

Table 9.2

Summary of the Support for the Hypotheses (Interaction Effects)

<b>Hypotheses</b>	<b>Study 5</b> (Rutgers' Undergraduate Students)	<b>Study 6</b> (Amazon MTurks)
7 IV = Interaction (ST-over-SE Condition X Materialism) DV = Ethical Behavior	<b>SUPPORTED</b> (Voluntary act as DV)	Not supported
8 IV = Interaction (ST-over-SE Condition X Materialism) DV = Unethical Behavior	Not supported	Not supported
9 IV = Interaction (ST-over-SE Condition X Traditional Religion) DV = Ethical Behavior	Not supported	Not supported
10 IV = Interaction (ST-over-SE Condition X Traditional Religion) DV = Unethical Behavior	Not supported	Not supported
11 IV = Interaction (ST-over-SE Condition X Virtue) DV = Ethical Behavior	Not supported	
12 IV = Interaction (ST-over-SE Condition X Virtue) DV = Unethical Behavior	Not supported	Not supported

Table 9.3

Hierarchical Regression Analysis with Volunteer-amount as the Dependent Variable and

Spirituality as the Independent Variable (Study 5)

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>	<b>Step 4</b>
Constant	-1.02*	-0.04	-1.11*	-0.87
Spirituality	0.22*		0.22*	0.22*
S-enhance Rel.		0.01	0.02	0.02
Gender				-0.37
<b>R<sup>2</sup></b>	0.01	0.00	0.01	0.02
<b>Adjusted R<sup>2</sup></b>	0.01	0.00	0.01	0.02
<b>F</b>	6.00*	0.02	3.03*	3.16*
<b>(d.f.)</b>	1,419	1,419	2,418	3,416
<b>Change in R<sup>2</sup></b>		-0.01	0.01	0.01
<b>Change in adjusted R<sup>2</sup></b>		-0.01	0.01	0.01

Table 9.4

Hierarchical Logistic Regression Analysis with Voluntary act as the Dependent Variable  
and Spirituality as the Independent Variable (Study 5)

<b>Independent Variables</b>	Step 1	Step 2	Step 3	Step 4
Constant	0.74*	2.63***	0.81*	1.08
Spirituality	0.40*		0.40*	0.39*
S-enhance Rel.		-0.03	-0.02	-0.01
Gender				-0.39
<b>AIC</b>	224	230	226	227

Table 9.5

Difference in the means and standard deviations for materialism in Study 5 (student sample) and Study 6 (adult sample)

## (A) Study 5

	N	Original items (p = 0.09)		With Added Items (p = 0.06)	
		Mean	SD	Mean	SD
Jewish	28	4.22	1.59	4.33	1.34
Catholic	111	4.00	1.41	3.93	1.33
Protestant	23	3.49	1.43	3.59	1.37
Muslim	17	3.56	1.18	3.64	1.09
Buddhist	13	3.69	1.06	3.44	1.15
Hindu	63	4.27	1.69	4.32	1.49
Mormon	6	4.46	1.62	3.35	1.70
Sikh	0	N/A	N/A	N/A	N/A
Atheist	30	4.26	1.50	4.14	1.27
Agnostic	36	4.57	1.39	4.35	1.33
Spiritual	8	3.31	1.70	3.19	1.39
Others	86	4.28	1.51	4.22	1.38

## (B) Study 6

	N	Original Items (p = 0.34)		With Added Items (p = 0.26)	
		Mean	SD	Mean	SD
Jewish	2	3.00	1.41	2.67	0.79
Catholic	18	3.39	1.39	3.04	1.21
Protestant	23	3.36	1.46	3.29	1.51
Muslim		N/A	N/A	N/A	N/A
Buddhist	4	2.31	1.55	2.28	1.52
Hindu	3	4.17	1.70	4.26	1.85
Mormon		N/A	N/A	N/A	N/A
Sikh		N/A	N/A	N/A	N/A
Atheist	24	3.02	1.49	2.77	1.39
Agnostic	14	2.86	1.51	2.67	1.48
Spiritual	6	1.92	1.08	1.76	1.02
Others	6	2.63	1.65	2.78	1.50

Table 9.6

Difference in the means and standard deviations for traditional religion in Study 5

(student sample) and Study 6 (adult sample)

(A) Study 5

	N	Original items ( $p < 0.001$ )		With Added Items ( $p < 0.001$ )	
		Mean	SD	Mean	SD
Jewish	28	4.96	1.35	4.86	1.35
Catholic	111	5.44	1.23	5.33	1.32
Protestant	23	5.57	1.37	5.27	1.34
Muslim	17	5.82	1.48	5.81	1.45
Buddhist	13	4.15	1.57	4.14	1.42
Hindu	63	5.48	1.21	5.39	1.27
Mormon	6	4.79	2.20	4.79	2.00
Sikh	0	N/A	N/A	N/A	N/A
Atheist	30	3.59	1.88	3.34	1.76
Agnostic	36	3.70	1.81	3.51	1.70
Spiritual	8	5.69	1.80	5.34	1.85
Others	86	4.51	1.71	4.38	1.66

(B) Study 6

	N	Original Items ( $p < 0.001$ )		With Added Items ( $p < 0.001$ )	
		Mean	SD	Mean	SD
Jewish	2	6.13	0.53	6.00	0.24
Catholic	18	5.02	1.87	4.93	1.85
Protestant	23	5.92	1.27	5.84	1.26
Muslim		N/A	N/A	N/A	N/A
Buddhist	4	4.63	2.59	4.50	2.54
Hindu	3	5.67	2.10	5.61	2.12
Mormon		N/A	N/A	N/A	N/A
Sikh		N/A	N/A	N/A	N/A
Atheist	24	1.94	1.36	1.88	1.33
Agnostic	14	2.43	2.11	2.31	1.94
Spiritual	6	4.83	2.21	4.81	1.75
Others	6	3.29	1.88	3.28	1.54

Table 9.7

Difference in the means and standard deviations for virtue in Study 5 (student sample)

and Study 6 (adult sample)

(A) Study 5

	N	Original items ( $p < 0.001$ )		With Added Items ( $p < 0.001$ )	
		Mean	SD	Mean	SD
Jewish	28	5.30	1.04	5.37	0.99
Catholic	111	5.41	0.96	5.46	0.89
Protestant	23	5.83	0.98	5.58	0.94
Muslim	17	5.53	1.33	5.55	1.34
Buddhist	13	3.56	1.86	3.73	1.73
Hindu	63	5.56	1.04	5.62	0.92
Mormon	6	5.54	1.44	5.62	1.25
Sikh	0	N/A	N/A	N/A	N/A
Atheist	30	5.03	1.33	5.21	1.26
Agnostic	36	5.03	1.33	5.20	1.17
Spiritual	8	6.56	0.50	6.50	0.48
Others	86	4.91	1.53	4.90	1.48

(B) Study 6

	N	Original Items ( $p = 0.09$ )	
		Mean	SD
Jewish	2	6.50	0.00
Catholic	18	5.60	1.13
Protestant	23	5.26	1.50
Muslim	0	N/A	N/A
Buddhist	4	4.63	0.97
Hindu	3	6.67	0.58
Mormon	0	N/A	N/A
Sikh	0	N/A	N/A
Atheist	24	4.50	1.82
Agnostic	14	4.50	1.78
Spiritual	6	5.58	1.35
Others	6	4.38	2.01

Table 9.8

Difference in the means and standard deviations for ethical work behavior in Study 5  
(student sample) and Study 6 (adult sample)

## (A) Study 5

	N	Voluntary-amount (p = 0.35)		Voluntary Act (p = 0.66)	
		Mean	SD	Mean	SD
Jewish	28	6.25	1.99	0.93	0.26
Catholic	111	6.41	1.82	0.95	0.21
Protestant	23	5.91	2.45	0.91	0.29
Muslim	17	5.53	2.76	0.88	0.33
Buddhist	13	7.00	0.00	1.00	0.00
Hindu	63	6.35	1.98	0.94	0.25
Mormon	6	7.00	0.00	1.00	0.00
Sikh	0	N/A	N/A	N/A	N/A
Atheist	30	6.07	2.42	0.87	0.35
Agnostic	36	5.89	2.36	0.92	0.28
Spiritual	8	7.00	0.00	1.00	0.00
Others	86	5.83	2.39	0.88	0.32

## (B) Study 6

	N	Voluntary-amount (p = 0.51)		Voluntary Act (p = 0.67)	
		Mean	SD	Mean	SD
Jewish	2	10.00	0.00	1.00	0.00
Catholic	18	7.17	4.02	0.89	0.32
Protestant	23	7.26	4.39	0.78	0.42
Muslim	0	N/A	N/A	N/A	N/A
Buddhist	4	4.75	4.27	0.75	0.50
Hindu	3	10.00	0.00	1.00	0.00
Mormon	0	N/A	N/A	N/A	N/A
Sikh	0	N/A	N/A	N/A	N/A
Atheist	24	5.71	4.36	0.79	0.41
Agnostic	14	6.79	4.64	0.71	0.47
Spiritual	6	8.33	4.08	0.83	0.41
Others	6	5.00	5.48	0.50	0.55



Table 9.9

Difference in the means and standard deviations for unethical work behavior in Study 5  
(student sample) and Study 6 (adult sample)

	N	Study 5 (p < 0.01)		N	Study 6 (p = 0.57)	
		Mean	SD		Mean	SD
Jewish	28	-0.07	0.26	2	0.00	0.00
Catholic	110*	-0.01	0.74	18	0.72	1.60
Protestant	23	0.43	1.31	23	0.39	1.27
Muslim	17	0.24	0.75	0	N/A	N/A
Buddhist	13	0.77	1.09	4	0.00	0.00
Hindu	62*	0.13	0.38	3	2.00	3.46
Mormon	6	0.00	0.00	0	N/A	N/A
Sikh	0	N/A	N/A	0	N/A	N/A
Atheist	30	0.17	0.65	24	0.42	0.65
Agnostic	35*	-0.03	0.38	14	0.43	1.02
Spiritual	8	-0.13	1.36	6	0.83	2.56
Others	85*	0.38	0.98	6	0.00	0.00

\*One missing data

Table 9.10

Perceived Performance and Perceived Satisfaction as Dependent Variables (Study 5)

<b>Independent Variables</b>	<b>Dependent Variable</b>	
	Perceived Performance	Perceived Satisfaction
Constant	1.99 ***	2.61 ***
Virtue	-0.04	-0.11 *
<b>R<sup>2</sup></b>	0.00	0.01
<b>Adjusted R<sup>2</sup></b>	0.00	0.01
<b>F</b>	1.24	5.74 *
<b>(d.f.)</b>	1,417	1,417

Note: \*:  $p < 0.05$ ; \*\*:  $p < 0.01$ ; \*\*\*:  $p < 0.001$

Table 9.11

Hierarchical Regression Analysis with Perceived Satisfaction as Mediator in the

Relationship between Virtue and Unethical Work Behavior (Study 5)

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>
Constant	0.55 ***	-0.06	0.30
Virtue	-0.07 *		-0.06 *
Perceived Satisfaction		0.10 **	0.10 **
<b>R<sup>2</sup></b>	0.01	0.02	0.03
<b>Adjusted R<sup>2</sup></b>	0.01	0.02	0.03
<b>F</b>	5.24 *	9.09 **	6.51 **
<b>(d.f.)</b>	1,415	1,413	2,412
<b>Change in R<sup>2</sup></b>		0.00	0.01
<b>Change in adjusted R<sup>2</sup></b>		0.00	0.01

Table 9.12

Perceived Performance and Perceived Satisfaction as Dependent Variables, separately

(Study 6)

<b>Independent Variables</b>	<b>Dependent Variable</b>	
	Perceived Performance	Perceived Satisfaction
Constant	1.36 ***	1.59 ***
Materialism	0.26 *	0.24 *
<b>R<sup>2</sup></b>	0.06	0.05
<b>Adjusted R<sup>2</sup></b>	0.05	0.04
<b>F</b>	6.41 *	5.18 *
<b>(d.f.)</b>	1,98	1,98

Table 9.13

Hierarchical Regression Analysis with Perceived Performance as a Mediator in the  
Relationship between Materialism and Unethical Work Behavior (Study 6)

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>
Constant	-0.16	-0.45 *	-0.73 *
Materialism	0.22 *		0.11
Perceived Performance		0.45 ***	0.42 ***
<b>R<sup>2</sup></b>	0.06	0.26	0.28
<b>Adjusted R<sup>2</sup></b>	0.05	0.25	0.26
<b>F</b>	6.10 *	34.62 ***	18.42 ***
<b>(d.f.)</b>	1,98	1,98	2,97
<b>Change in R<sup>2</sup></b>		0.20	0.02
<b>Change in adjusted R<sup>2</sup></b>		0.20	0.01

Table 9.14

Hierarchical Regression Analysis with Perceived Satisfaction as a Mediator in the  
Relationship between Materialism and Unethical Work Behavior (Study 6)

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>
Constant	-0.16	-0.34	-0.68 *
Materialism	0.22 *		0.14
Perceived Satisfaction		0.36 ***	0.33 ***
<b>R<sup>2</sup></b>	0.06	0.18	0.20
<b>Adjusted R<sup>2</sup></b>	0.05	0.17	0.19
<b>F</b>	6.10 *	21.40 ***	12.28 ***
<b>(d.f.)</b>	1,98	1,98	2,97
<b>Change in R<sup>2</sup></b>		0.12	0.02
<b>Change in adjusted R<sup>2</sup></b>		0.12	0.02

Table 9.15

Hierarchical Regression Analysis with Perceived Performance and Perceived Satisfaction  
as Mediators in the Relationship between Materialism and Unethical Work Behavior

(Study 6)

	Step 1	Step 2	Step 4	Step 4
Constant	-0.16	-0.45 *	-0.34	-0.72 *
Materialism	0.22 *			0.11
Perceived Performance		0.45 ***		0.44 **
Perceived Satisfaction			0.36 ***	-0.02
<b>R<sup>2</sup></b>	0.06	0.26	0.18	0.28
<b>Adjusted R<sup>2</sup></b>	0.05	0.25	0.17	0.25
<b>F</b>	6.10 *	34.62 ***	21.40 ***	12.16 ***
<b>(d.f.)</b>	1,98	1,98	1,98	2,96
<b>Change in R<sup>2</sup></b>	0.06	0.20	-0.08	0.10
<b>Change in adjusted R<sup>2</sup></b>	0.05	0.20	-0.08	0.08

Table 9.16

Hierarchical Regression Analysis with Perceived Satisfaction as a Mediator in the

Relationship between Materialism and Perceived Performance (Study 6)

<b>Independent Variables</b>	<b>Step 1</b>	<b>Step 2</b>	<b>Step 3</b>
Constant	1.36	0.24	0.08
Materialism	0.26 *		0.07
Perceived Satisfaction		0.82 ***	0.81 ***
<b>R<sup>2</sup></b>	0.06	0.70	0.71
<b>Adjusted R<sup>2</sup></b>	0.05	0.70	0.70
<b>F</b>	6.41 *	232.60 ***	117.20 ***
<b>(d.f.)</b>	1,98	1,98	2,97
<b>Change in R<sup>2</sup></b>		0.64	0.01
<b>Change in adjusted R<sup>2</sup></b>		0.65	0.00



Table 9.17

## Hierarchical Regression Analysis with Positive Feelings as the Dependent Variable

(Study 5), Forms of Sacredness

	Step 1	Step 2	Step 3	Step 4
<b>Independent Variables</b>				
Constant	5.22 ***	5.16 ***	4.68 ***	4.46 ***
ST-over-SE Condition	0.62 ***	0.62 ***	0.63 ***	0.61 ***
Materialism		0.02		
Traditional Religion			0.11 ***	
Virtue				0.14 **
<b>R<sup>2</sup></b>	0.07	0.07	0.09	0.09
<b>Adjusted R<sup>2</sup></b>	0.07	0.06	0.09	0.08
<b>F</b>	30.23 ***	15.15 ***	21.12 ***	20.19 ***
<b>(d.f.)</b>	1,419	2,418	2,418	2,418
<b>Change in R<sup>2</sup></b>		0.00	0.02	0.00
<b>Change in adjusted R<sup>2</sup></b>		-0.01	0.03	-0.01

	Step 5	Step 6	Step 7
<b>Independent Variables</b>			
Constant	5.15 ***	4.68 ***	4.49 ***
ST-over-SE Condition	1.00 **	0.01	0.06
Materialism	0.02		
Traditional Religion		0.11 ***	
Virtue			0.14 **
Interaction 1	-0.09		
Interaction 2		0.13	
Interaction 3			0.10
<b>R<sup>2</sup></b>	0.07	0.10	0.09
<b>Adjusted R<sup>2</sup></b>	0.06	0.09	0.08
<b>F</b>	10.53 ***	15.35 ***	13.88 ***
<b>(d.f.)</b>	3,417	3,417	3,417
<b>Change in R<sup>2</sup></b>			
<b>Change in adjusted R<sup>2</sup></b>			

Table 9.18

Hierarchical Regression Analysis with Positive Feelings as the Dependent Variable

(Study 6), Forms of Sacredness

	Step 1	Step 2	Step 3	Step 4
<b>Independent Variables</b>				
Constant	4.22 ***	3.41 ***	4.10 ***	4.02 ***
ST-over-SE Condition	1.65 ***	1.54 ***	1.67 ***	1.65 ***
Materialism		0.30 **		
Traditional Religion			0.03	
Virtue				0.04
<b>R<sup>2</sup></b>	0.26	0.32	0.26	0.26
<b>Adjusted R<sup>2</sup></b>	0.25	0.31	0.24	0.24
<b>F</b>	33.69 ***	23.03 ***	16.80 ***	16.81 ***
<b>(d.f.)</b>	1,98	2,97	2,97	2,97
<b>Change in R<sup>2</sup></b>		0.06	-0.06	0.00
<b>Change in adjusted R<sup>2</sup></b>		0.06	-0.07	0.00

	Step 5	Step 6	Step 7
<b>Independent Variables</b>			
Constant	2.86 ***	4.50 ***	4.81 ***
ST-over-SE Condition	2.72 ***	0.96	-0.09
Materialism	0.50 ***		
Traditional Religion		-0.07	
Virtue			-0.12
Interaction 1	-0.41 *		
Interaction 2		0.18	
Interaction 3			0.35
<b>R<sup>2</sup></b>	0.35	0.27	0.29
<b>Adjusted R<sup>2</sup></b>	0.33	0.25	0.26
<b>F</b>	17.46 ***	11.94 ***	12.82 ***
<b>(d.f.)</b>	3,96	3,96	3,96
<b>Change in R<sup>2</sup></b>			
<b>Change in adjusted R<sup>2</sup></b>			

## APPENDIX B: FIGURES

Figure 7.1

Interaction Effect for Voluntary Act (ST vs. SE conditions, Study 5)

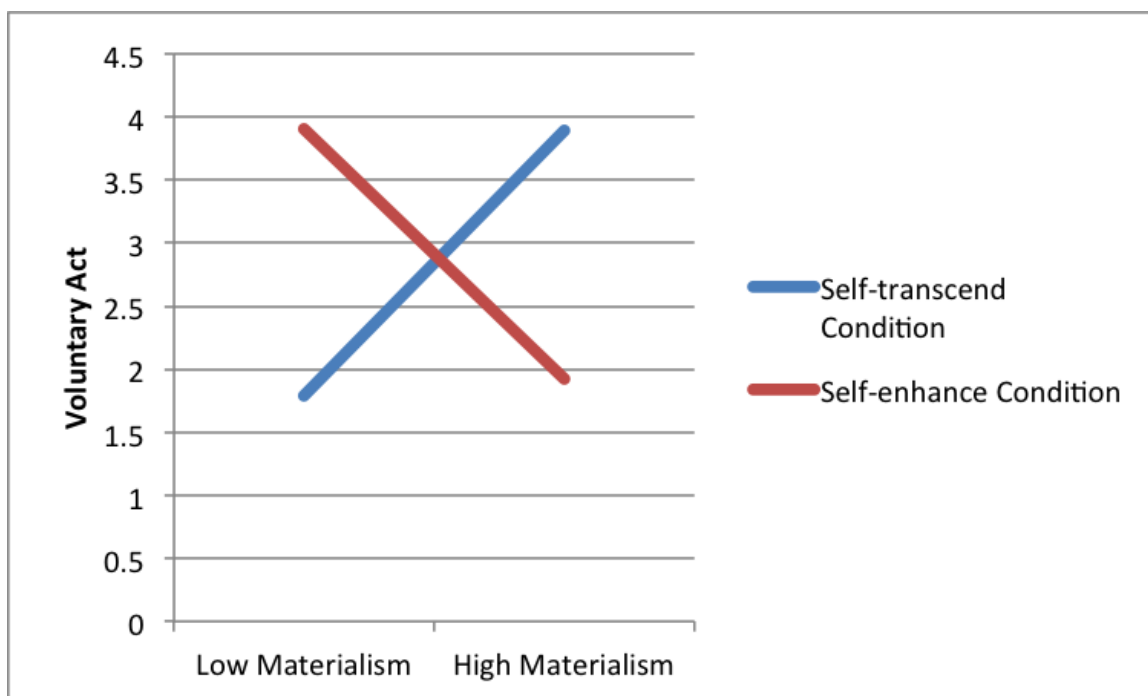


Figure 9.1

Path Diagram of the Relationships between Virtue, Perceived Satisfaction, and Unethical

Work Behavior (Study 5)

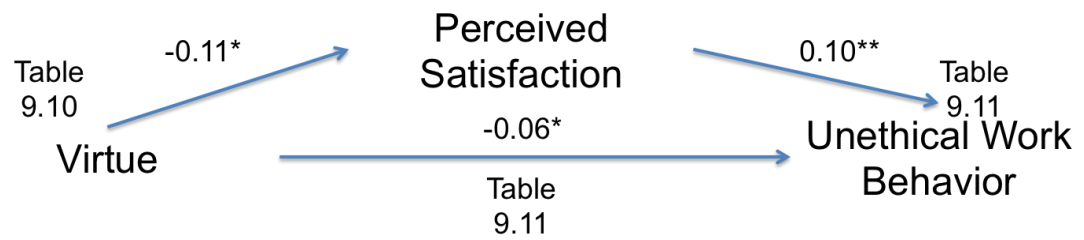
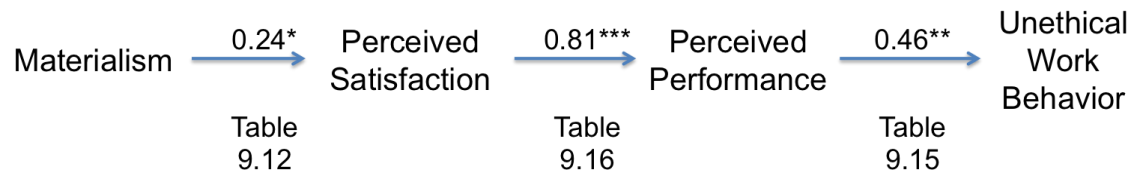


Figure 9.2

Path Diagram of the Relationships between Materialism, Perceived Satisfaction,

Perceived Performance and Unethical Work Behavior (Study 6)



## APPENDIX C: MEASURES

## 1. Sacredness Instrument

### *(a) Anchor*

The following items consist of statements regarding what is considered “sacred.” Things are sacred:

- 1) When they come to us as the expression of powers superior to us and connected with us,
- 2) When there are ways of putting oneself right with these powers, and
- 3) When failure to conform to these ways entails danger

First, think about these criteria. Then, think about each of the items below in terms of these criteria of the sacred and rate how much you consider each to be sacred (from 1 to 7). Note: this is not about what people consider sacred, but what YOU consider sacred.

**1 = the least sacred**

**7 = the most sacred**

### *(b) List of Sacred Items*

1. Workplace
2. School
3. Home
4. Hometown
5. Country
6. Religious Sites (e.g. Churches, Mosques, etc.)
7. Cemeteries
8. Deaths
9. Birthdays
10. Natural occurrences (e.g. full moon, tidal)
11. Natural disasters
12. Sleep time
13. Leisure time
14. Work time
15. Family time
16. Clothes I wear\*
17. Trees and plants
18. Animals
19. Fraternities or sororities
20. Social groups\*
21. School or work rituals
22. Social rituals
23. Secrets between friends or lovers
24. Prophets or Messengers



25. Saint Individuals
26. The kind of work that I do
27. Religious-spiritual guidance
28. Divine presence\*
29. Divine presence in all things and people
30. Restriction of actions
31. Beliefs that my society holds
32. All dealings in life\*
33. Religious institution
34. Religious group
35. University
36. Political party\*
37. Ideology
38. Doctrines
39. Friends
40. Family, including parents and children
41. What people think of me
42. Private thought, prayer, or meditation\*
43. Larger presence of reality\*
44. Questions about the meaning of life
45. Religious scriptures
46. Social gatherings
47. Economy\*
48. Science\*
49. Career\*
50. Social status\*
51. Personal-religious growth\*
52. Established orders or beliefs
53. Doubts and uncertainties
54. Questions about the purpose of life
55. Convictions (e.g. ideological, religious, etc.)
56. Connection to the world\*
57. Answers to any of my existential questions
58. The present moment\*
59. The future\*
60. The past
61. God or any of its other terms\*
62. Money\*
63. Leaders
64. Authorities

Note:

\*The items included in the actual study (i.e. Study 1)

(c) Items included in Study 5 and/or Study 6

1. Being right
2. Unity with Nature
3. Compassion
4. Rewards
5. Empathy
6. Religion
7. Spiritual Life
8. Intelligence
9. Mercy
10. Dominance
11. Democracy
12. Forgiving
13. Identity
14. Wealth
15. Pride
16. Social Image
17. Wisdom
18. Paradise\*
19. Afterlife\*
20. Patience\*
21. Humility\*
22. Democracy\*
23. Religious Identity\*
24. Thankfulness\*
25. Social Image\*
26. Inner Strength\*
27. Divine guidance\*

Note:

\*Added in Studies 5 and/or 6

## 2. Religious Orientations

### *(a) Intrinsic-Extrinsic Religiosity*

(Gorsuch & Venable, 1983; Hoge, 1972; Ji & Ibrahim, 2007; Maltby, 1999)

Please rate your agreement with each statement below (1 is for strongly disagree and 7 is for strongly agree).

1. My faith involves all my life.
2. One should seek God's guidance when making every important decision.
3. In my life, I experience the presence of the Divine.
4. My faith sometimes restricts my actions.
5. Nothing is as important to me as serving God as best as I know.
6. I try hard to carry my religion over into all my other dealings in life.
7. My religious beliefs are what really lie behind my whole approach to life.
8. It doesn't matter so much what I believe as long as I lead a moral life.
9. Although I am a religious person, I refuse to let religious considerations influence my everyday affairs (Although I am religious, I don't let it affect my daily life)
10. Although I believe in my religion, I feel there are many more important things in life.
11. I enjoy reading about religion.
12. I go to church because it helps me to make friends.
13. It doesn't much matter what I believe in so long as I am good
14. Sometimes I have to ignore my religious beliefs because of what people might think of me
15. It is important to me to spend time to private thought and prayer or meditation.
16. I have often had a strong sense of God's presence
17. I pray mainly to gain relief and protection
18. I try hard to live all my life according to my religious beliefs
19. What religion offers me most is comfort in times of trouble and sorrow
20. My religion is important because it answers many questions about the meaning of life.
21. I would rather join a religious scripture (e.g. the Bible, the Qur'an, etc.) study group than a church (or mosque, temple, synagogue) social group.
22. Prayer is for peace and happiness.
23. I go to church, mosque, temple, synagogue (or similar places) mostly to spend time with my friends
24. My whole approach to life is based on my religion
25. I go to church, mosque, temple, or synagogue (or other religious gatherings) mainly because I enjoy seeing people I know there
26. I pray mainly because I have been taught to pray.
27. Prayers I say when I'm alone are as important to me as those I say in church.

28. Although I believe in my religion, many other things are more important in life
29. If not prevented by unavoidable circumstances, I attend services at the Church, Mosque, Temple, or Synagogue (or similar places).
30. Occasionally I find it necessary to compromise my religious beliefs in order to protect my social and economic interest.
31. One reason for my being a member of a Church, Mosque or similar places is that such membership helps to establish a person in the community.

Note:

Only the first seven items were eventually used across studies to measure intrinsic religiosity

*(b) Quest religiosity*

(Batson et al., 1993: 170; Neyrinck et al., 2010)

Please rate your agreement with each statement below (1 is for strongly disagree and 7 is for strongly agree).

1. As I grow and change, I expect my religion also to grow and change.
2. I am constantly questioning my religious beliefs.
3. It might be said that I value my religious doubts and uncertainties.
4. I was not very interested in religion until I began to ask questions about the meaning and purpose of life.
5. For me, doubting is an important part of what it means to be religious.
6. I do not expect my religious convictions to change in the next few years (-)
7. I find religious doubts upsetting (-).
8. I have been driven to ask religious questions out of a growing awareness of the tensions in my world and in my relation to my world.
9. My life experiences have led me to rethink my religious convictions.
10. There are many religious issues on which my views are still changing.
11. God wasn't very important for me until I began to ask questions about the meaning of my own life.
12. Questions are far more central to my religious experience than are answers.

### 3. Values: Self-transcendence and Self-enhancement

#### (a) *Measure 1, the PVQ*

(Pulfrey & Butera, 2013; Schwartz, 2003; Schwartz et al., 2001)

Here we briefly describe some people. Please read each description and think about how much each person is or is not like you.

1 = very much like me	4 = A little like me
2 = like me	5 = Not like me
3 = somewhat like me	6 = Not like me at all

1. It is important to him to be rich. He wants to have a lot of money and expensive things. (PO)
2. He thinks it is important that every person in the world be treated equally. He wants justice for everybody, even for people he doesn't know. (UN)
3. It's very important to him to show his abilities. He wants people to admire what he does. (AC)
4. It is important to him to listen to people who are different from him. Even when he disagrees with them, he still wants to understand them. (UN)
5. It is important to him to help the people around him. He wants to care for other people. (BE)
6. Being very successful is important to him. He likes to impress other people. (AC)
7. It is important to him to be in charge and tell others what to do. He wants people to do what he says. (PO)
8. It is important to him to be loyal to his friends. He wants to devote himself to people close to him. (BE)
9. He strongly believes that people should care for nature. Looking after the environment is important to him. (UN)
10. He believes all the worlds' people should live in harmony. Promoting peace among all groups in the world is important to him. (UN)
11. He thinks it is important to be ambitious. He wants to show how capable he is. (AC)
12. It is important to him to respond to the needs of others. He tries to support those he knows. (BE)
13. He wants everyone to be treated justly, even people he doesn't know. It is important to him to protect the weak in society. (UN)
14. Getting ahead in life is important to him. He strives to do better than others. (AC)
15. Forgiving people who might have wronged him is important to him. He tries to see what is good in them and not to hold a grudge. (BE)
16. He always wants to be the one who makes the decisions. He likes to be the leader. (PO)

17. It is important to him to adapt to nature and to fit into it. He believes that people should not change nature. (UN)

*(b) Measure 2, the SVS*

(Schwartz, 1992, 1994)

Rate each value below “AS A GUIDING PRINCIPLES IN MY LIFE” (using a nine-point scale: of supreme importance (7), very important (6), (unlabeled; 5,4), important (3), (unlabeled; 2,1), not important (0), opposed to my values (-1)

1. \_\_\_ EQUALITY (equal opportunity for all)
2. \_\_\_ INNER HARMONY (at peace with myself)
3. \_\_\_ SOCIAL POWER (control over others, dominance)
4. \_\_\_ PLEASURE (gratification of desires)
5. \_\_\_ FREEDOM (freedom of action and thought)
6. \_\_\_ A SPIRITUAL LIFE (emphasis on spiritual not material matters)
7. \_\_\_ SENSE OF BELONGING (feeling that others care about me)
8. \_\_\_ SOCIAL ORDER (stability of society)
9. \_\_\_ AN EXCITING LIFE (stimulating experiences)
10. \_\_\_ MEANING IN LIFE (a purpose in life)
11. \_\_\_ POLITENESS (courtesy, good manners)
12. \_\_\_ WEALTH (material possessions, money)
13. \_\_\_ NATIONAL SECURITY (protection of my nation from enemies)
14. \_\_\_ SELF-RESPECT (belief in one's own worth)
15. \_\_\_ RECIPROCATION OF FAVORS (avoidance of indebtedness)
16. \_\_\_ CREATIVITY (uniqueness, imagination)
17. \_\_\_ A WORLD AT PEACE (free of war and conflict)
18. \_\_\_ RESPECT FOR TRADITION (preservation of time-honored customs)
19. \_\_\_ MATURE LOVE (deep emotional and spiritual intimacy)
20. \_\_\_ SELF-DISCIPLINE (self-restraint, resistance to temptation)
21. \_\_\_ DETACHMENT (from worldly concerns)
22. \_\_\_ FAMILY SECURITY (safety for loved ones)
23. \_\_\_ SOCIAL RECOGNITION (respect, approval by others)
24. \_\_\_ UNITY WITH NATURE (fitting into nature)
25. \_\_\_ A VARIED LIFE (filled with challenge, novelty, and change)
26. \_\_\_ WISDOM (a mature understanding of life)
27. \_\_\_ AUTHORITY (the right to lead or command)
28. \_\_\_ TRUE FRIENDSHIP (close, supportive friends)
29. \_\_\_ A WORLD OF BEAUTY (beauty of nature and the arts)
30. \_\_\_ SOCIAL JUSTICE (correcting injustice, care for the weak)
31. \_\_\_ INDEPENDENT (self-reliant, self-sufficient)
32. \_\_\_ MODERATE (avoiding extremes of feeling and action)

- 33. \_\_\_ LOYAL (faithful to my friends, group)
- 34. \_\_\_ AMBITIOUS (hardworking, aspiring)
- 35. \_\_\_ BROAD-MINDED (tolerant of different ideas and beliefs)
- 36. \_\_\_ HUMBLE (modest, self-effacing)
- 37. \_\_\_ DARING (seeking adventure, risk)
- 38. \_\_\_ PROTECTING THE ENVIRONMENT (preserving nature)
- 39. \_\_\_ INFLUENTIAL (having an impact on people and events)
- 40. \_\_\_ HONORING OF PARENTS AND ELDERS (showing respect)
- 41. \_\_\_ CHOOSING OWN GOALS (selecting own purposes)
- 42. \_\_\_ HEALTHY (not being sick or physically or mentally)
- 43. \_\_\_ CAPABLE (competent, effective, efficient)
- 44. \_\_\_ ACCEPTING MY PORTION IN LIFE (submitting to life's circumstances)
- 45. \_\_\_ HONEST (genuine, sincere)
- 46. \_\_\_ PRESERVING MY PUBLIC IMAGE (protecting my "face")
- 47. \_\_\_ OBEDIENT (dutiful, meeting obligations)
- 48. \_\_\_ INTELLIGENT (logical, thinking)
- 49. \_\_\_ HELPFUL (working for the welfare of others)
- 50. \_\_\_ ENJOYING LIFE (enjoying food, sex, leisure, etc.)
- 51. \_\_\_ DEVOUT (holding to religious faith and belief)
- 52. \_\_\_ RESPONSIBLE (dependable, reliable)
- 53. \_\_\_ CURIOUS (interested in everything, exploring)
- 54. \_\_\_ FORGIVING (willing to pardon others)
- 55. \_\_\_ SUCCESSFUL (achieving goals)
- 56. \_\_\_ CLEAN (neat, tidy)

#### 4. Spirituality

(Liu & Robertson, 2011)

Please rate your agreement with each statement below (1 is for strongly disagree and 7 is for strongly agree).

1. I believe there is a larger meaning to life.
2. I am concerned about those who will come after me in life.
3. All life is interconnected.
4. There is a higher plane of consciousness or spirituality that binds all people.
5. Humans are mutually responsible to and for another.
6. I love the blooming of flowers in the spring as much as seeing an old friend again.
7. There is an order to the universe that transcends human thinking.
8. It is important for me to give something back to my community.
9. I sometimes feel so connected to nature that everything seems to be part of one living organism.
10. There is a power greater than myself.
11. I am easily and deeply touched when I see human misery and suffering.
12. I believe that on some level my life is intimately tied to all of humankind.
13. I feel that I have a calling to fulfill in life.
14. Life is most worthwhile when it is lived in service to an important cause.
15. I have had moments of great joy in which I suddenly had a clear, deep feeling of oneness with all that exists.
16. I believe that death is a doorway to another plane of existence.



## 5. Moral Identity

(Aquino & Reed, 2002)

Listed below are some characteristics that may describe a person [caring, compassionate, fair, friendly, generous, hardworking, helpful, honest, kind]. The person with these characteristics could be you or it could be someone else. For a moment, visualize in your mind the kind of person who has these characteristics. Imagine how that person would think, feel, and act. When you have a clear image of what this person would be like, answer the following questions.

A 5-point Likert scale (1 = strongly disagree, 5 = strongly agree) is used.

1. It would make me feel good to be a person who has these characteristics.
2. Being someone who has these characteristics is an important part of who I am.
3. A big part of my emotional well-being is tied up in having these characteristics.
4. I would be ashamed to be a person who has these characteristics. (R)
5. Having these characteristics is not really important to me. (R)
6. Having these characteristics is an important part of my sense of self.
7. I strongly desire to have these characteristics.
8. I often buy products that communicate the fact that I have these characteristics.
9. I often wear clothes that identify me as having these characteristics.
10. The types of things I do in my spare time (e.g. hobbies) clearly identify me as having these characteristics.
11. The kinds of books and magazines that I read identify me as having these characteristics.
12. The fact that I have these characteristics is communicated to others by my membership in certain organizations.
13. I am actively involved in activities that communicate to others that I have these characteristics.

## 6. Moral Disengagement Propensity

(Moore et al., 2012)

Please rate your agreement with the statements below (5-point continuum from “strongly disagree” to “strongly agree”).

1. It is okay to spread rumors to defend those you care about.
2. Taking something without the owner’s permission is okay as long as you’re just borrowing it.
3. Considering the ways people grossly misrepresent themselves, it’s hardly a sin to inflate your own credentials a bit.
4. People shouldn’t be held accountable for doing questionable things when they were just doing what an authority figure told them to do.
5. People can’t be blamed for doing things that are technically wrong when all their friends are doing it too.
6. Taking personal credit for ideas that were not your own is no big deal.
7. Some people have to be treated roughly because they lack feelings that can be hurt.
8. People who get mistreated have usually done something to bring it on themselves.

## 7. Moral Foundations

(Haidt & Graham, 2007)

[www.moralfoundations.org](http://www.moralfoundations.org)

Part 1. When you decide whether something is right or wrong, to what extent are the following considerations relevant to your thinking? Please rate each statement using this scale:

[0] = not at all relevant (This consideration has nothing to do with my judgments of right and wrong)

[1] = not very relevant

[2] = slightly relevant

[3] = somewhat relevant

[4] = very relevant

[5] = extremely relevant (This is one of the most important factors when I judge right and wrong)

1. Whether or not someone suffered emotionally
2. Whether or not some people were treated differently than others
3. Whether or not someone's action showed love for his or her country
4. Whether or not someone showed a lack of respect for authority
5. Whether or not someone violated standards of purity and decency
6. Whether or not someone was good at math
7. Whether or not someone cared for someone weak or vulnerable
8. Whether or not someone acted unfairly
9. Whether or not someone did something to betray his or her group
10. Whether or not someone conformed to the traditions of society
11. Whether or not someone did something disgusting
12. Whether or not someone was cruel
13. Whether or not someone was denied his or her rights
14. Whether or not someone showed a lack of loyalty
15. Whether or not an action caused chaos or disorder
16. Whether or not someone acted in a way that God would approve of

Part 2. Please read the following sentences and indicate your agreement or disagreement:

[0]	[1]	[2]	[3]	[4]	[5]
Strongly disagree	Moderately disagree	Slightly disagree	Slightly agree	Moderately agree	Strongly agree

1. Compassion for those who are suffering is the most crucial virtue.
2. When the government makes laws, the number one principle should be ensuring that everyone is treated fairly.

3. I am proud of my country's history.
4. Respect for authority is something all children need to learn.
5. People should not do things that are disgusting, even if no one is harmed.
6. It is better to do good than to do bad.
7. One of the worst things a person could do is hurt a defenseless animal.
8. Justice is the most important requirement for a society.
9. People should be loyal to their family members, even when they have done something wrong.
10. Men and women each have different roles to play in society.
11. I would call some acts wrong on the grounds that they are unnatural.
12. It can never be right to kill a human being.
13. I think it's morally wrong that rich children inherit a lot of money while poor children inherit nothing.
14. It is more important to be a team player than to express oneself.
15. If I were a soldier and disagreed with my commanding officer's orders, I would obey anyway because that is my duty.
16. Chastity is an important and valuable virtue.

## 8. Other Measures

1. How religious are you? (From 1 to 7)\*
2. How religious are you, based on your own definition? (From 1 to 7)\*
3. How religious are you, based on the society's definition? (From 1 to 7)\*
4. Gender (Male or Female)
5. Age
6. Religious Identity (Jewish, Catholic, Protestant, Muslim, Buddhist, Hindu, Sikh, Mormon, Atheist, Agnostic, Spiritual, Others)
7. Nationality (American or Non American)
8. First Language (English or Non English)

\*Note: Only asked in Study 1