THE MODERATING EFFECTS OF ETHICALITY ON BOTH MORALITY AND RELIGIOSITY CONCERNING THE LIKELIHOOD OF TAX EVASION

by

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A Dissertation Presented in Partial Fulfillment of the Requirements for the Degree Doctor of Business Administration

> COLLEGE OF BUSINESS LOUISIANA TECH UNIVERSITY

> > November 2013

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ABSTRACT

The Internal Revenue Service (IRS) defines the estimate of the difference between the federal income tax due each year and the amount voluntarily and timely paid as the "tax gap". In 1981, the Service reports a tax gap of 81.5 billion dollars. In 2006, the most recent IRS data indicates that the tax gap has risen to 345 billion dollars which suggests that tax evasion in the United States remains a growing concern for the federal government. Although various economic and nonpecuniary theories have been developed to investigate tax noncompliance, Jackson and Milliron (1986) and Cruz et al. (2000) suggest that future research should investigate the importance of ideological factors.

Specifically, this study addresses questions concerning the importance of religion and morality with respect to the ethical evaluation of tax evasion intentions. The respondents' levels of religiousness (i.e., intrinsic versus extrinsic), morality (i.e., postconventional reasoning), and ethicality are assessed to develop a structural model of the ideological factors of tax compliance. Primarily, the study finds that higher levels of intrinsic religiousness and postconventional morality are associated with higher evaluations that tax evasion is unethical. Also, increases in intrinsic religiousness are significantly associated with decreases in tax evasion intentions controlling for the effects of ethicality. However, neither extrinsic religiousness nor postconventional morality is related to tax evasion intentions in light of the ethical evaluations.

This study's results may be used by the IRS to introduce the ideological phenomena of religiousness, morality, and ethicality concerning the reduction of the tax gap.

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DEDICATION

In loving memory of my mother,

Beretha Janetta James-Coleman (1941 - 1986)

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ACKNOWLEDGMENTS

Thanks are due to a number of people who have in various ways helped me successfully complete this dissertation. I wish to thank Dr. Thomas Phillips, my dissertation chairperson, both for his invaluable guidance on methodological and theoretical issues, and for his support in helping me move this project forward to completion. Thanks are also due to Dr. Ted Englebrecht who served as a mentor, especially in the area of research, throughout the entire doctoral and dissertation process. For his assistance with the research design and analysis, I thank Dr. Barry Babin. I would also like to thank the faculty, staff, and students of the College of Business at Louisiana Tech University whose assistance made this research possible.

I am thankful to a number of others for their financial, emotional, and/or spiritual support. First, I thank the American Institute of Certified Public Accountants and the PhD Project for their financial support during my doctoral experience. Additionally, I thank Dr. Shane Warrick for his financial and emotional support throughout the doctoral process. I am thankful for the financial and spiritual support of the pastor and members of the Tate Temple Church of God in Christ in Arkadelphia, Arkansas. I am grateful to my father, Barnette, and to my stepmother, Thelma, and to my brothers, Verlon, Bryant, Victor, and Aaron, for their encouragement throughout my life.

I am grateful to my children, Lauren, Taylor, Rachel, Joshua, and Kristina, who have patiently waited for their Dad to finish going to school. Finally, I am deeply grateful to my wife, Angelia, for her sacrifice, love, and support which made completion of this dissertation possible.

CHAPTER ONE

INTRODUCTION

Overview

The Internal Revenue Service (hereafter, IRS or Service) defines the estimate of the difference between the federal income tax due each year and the amount voluntarily and timely paid as the "tax gap" (IRS 2004). In 1981, the Service reports a tax gap of 81.5 billion dollars (Tanzi 1986). In 2006, the most recent IRS data indicates that the tax gap has risen to 345 billion dollars which suggests that tax evasion in the United States remains a growing concern for the federal government (IRS 2011). There are two general schools of thought addressing the question, "why do some individuals evade their legal income tax obligation?" These competing yet complementary groups of theories are motivated by either economic or nonpecuniary concerns. The resulting conceptualizations have led to the inclusion of several tax compliance phenomena for the development of tax research models and tax empirical analyses. Jackson and Milliron (1986) and Young (1994) delineate the following factors as important, but often inconclusive, determinants of tax evasion: (1) age, (2) sex, (3) level of education, (4) level of income, (5) source of income, (6) occupation, (7) influence of peers, (8) social norms, (9) perceptions of fairness, (10) marginal tax rates, (11) complexity of the tax system, (12) interpersonal sanctions, (13) party affiliation, (14) religion, and (15) other ideological factors. Interestingly, Jackson Milliron (1986)and suggest future that research

should investigate the importance of ideological factors which proposes changing the tax system to fit people rather than the converse. After outlining the various economic noncompliance tax factors and behavioral tax evasion phenomena addressing the question of income tax evasion, this chapter proceeds by introducing selected ideological elements that affect tax noncompliance.

Economic Theories

General Deterrence Theory (GDT)

Economists have developed models of deterrence (i.e., GDT) to mitigate tax evasive intentions (Allingham and Sandmo 1972; Srinivasan 1973; Cowell 1985; Klepper and Nagin 1989). Collectively, these models assert propositions that income to be evaded is an optimum function of: (1) visibility of income (i.e., probability of detection), (2) level of penalty, (3) level of income, (4) tax rate structures, and (5) interactive effects. However, these models only assume underreporting of taxable income without tax deduction overreporting. Furthermore, these conceptualizations impose a simple proportional tax rate structure rather than a progressive one.

Empirical research has uncovered some interesting findings. First, GDT research overwhelmingly finds that visibility of income (i.e., third party reporting to the IRS) affects the likelihood of detection and is negatively correlated with admitted tax evasive behavior (Groves 1958, Mason and Calvin 1978; Madeo et al. 1987; Milliron and Toy 1988; Buchheit et al. 2005; Gerxhani and Schram 2006; Alm and McKee 2006; Alm et al. 2009). This finding holds under cases of varying detection rates by tax line item (Klepper and Nagin 1989; Martinez-Vazquez and Rider 2005). In fact, recent IRS data

indicates that approximately 55 percent of the 197 billion dollar individual tax gap is from self-employed taxpayers' understatement of business receipts and/or overstatement of business deductions (IRS 2011). Self-employment earnings and deductions are not highly visible to the Service. Likewise, previous studies are inconclusive, but generally find that penalty level is negatively related to tax noncompliance (Mason and Calvin 1984; Violette 1989; Carnes and Englebrecht 1995). Last, prior research is mixed concerning the income level of taxpayer and the level of tax rates, but both are primarily positively correlated with taxpayer noncompliant behavior (Srinivasan 1973; Spicer and Lundstedt 1976; Clotfelter 1983; Madeo et al. 1987; Alm et al. 1992; Alm and McKee 2006; Alm et al. 2009). Madeo et al. (1987) and Clotfelter (1983) suggest that an unambiguous prediction could not be made for the main effects of income level because of its interaction with source of income (i.e., opportunity). Furthermore, Madeo et al. (1987) also find an interactive effect between the tax rate structure and risk propensity.

Prospect Theory

Prospect theory posits that decisions under risk are inconsistent with the axioms of expected utility theory because individuals value potential gains and losses more than final asset states (Tversky and Kahneman 1974; Kahneman and Tversky 1979; Tversky and Kahneman 1992). Specifically, research finds that subjects are risk-adverse when experiencing pretax filing gain positions and risk-seeking during withholding loss situations. Furthermore, empirical studies find that individuals do not differentiate accurately when considering decisions involving small probabilities or experiencing subadditivity of decision weights (Jackson and Jones 1985; Dusenbury 1994; Reckers et al. 1994; Trivedi et al. 2003; Jackson and Hatfield 2005; Sanders et al. 2008; Boylan

2010). The previous finding may be significant for this study because tax evasion involves a minor chance (i.e., less than one percent) of being caught for most taxpayers.

To summarize, economic theories support the explanatory power of their primary propositions concerning evasive behaviors of taxpayers, especially when taxpayer income is not reported to the IRS by third parties or when pre-filing frame (i.e., overpayment of tax or underpayment of tax) is salient for the taxpayer. Therefore, this study incorporates visibility of underreported taxable income and overreported tax deductions into its research design. Moreover, because of the extremely low likelihood of a tax audit for which Prospect Theory posits that taxpayers will overestimate the risk of audit, the research question changes slightly from "why do some people not comply with tax laws" to "why don't most self-employed individuals evade taxes?" Next, this chapter provides an overview of the various noneconomic behavioral theories to address this new question.

Noneconomic Theories

Fiscal Psychology Theory

Fiscal psychology theory maintains that a taxpayer's belief in the system's fairness is more salient in alleviating noncompliance than the phenomenon posited by both GDT and Prospect Theory (Schmolders 1959). Previous research finds mixed results for the following Fiscal Policy Theory tax factors: (1) tax structure, (2) perceptions of tax equity, (3) tax rate level and structure, and (4) complexity of the tax system (Mueller 1963; Spicer and Lundstedt 1976; Song and Yarbrough 1978; Spicer and Becker 1980; Clotfelter 1983; Mason and Calvin 1984; Arrington and Reckers 1985; Milliron 1985; Long and Swingen 1987; Collins et al. 1992; Hite and Roberts 1992; Porcano and Price

1992; Forest and Sheffrin 2002; Feld and Frey 2007; McGee et al. 2008). This study evaluates hypotheses undergirded by the presumption that fairness and ethicality when interacting with morality and religiousness may affect tax evasion intentions.

Social Norms

In their seminal study concerning the social norms of taxation, Schwartz and Orleans (1967) find that conscience appeals are more effective than sanction threats. However, Violette (1989) finds that taxpayer evasive behavior is significantly influenced by formal legal sanctions rather than informal ones such as appeals to the conscience. Torgler (2002) finds that social and institutional factors matter even when holding GDT variables constant. This indicates that taxpayers have a more refined motivation structure than that assumed by traditional economic theory. Therefore, Alm (1999, p.32) indicates that researchers must consider the "full house" of theories to explain tax noncompliance.

Studies find conflicting results as to the saliency of the following social norm factors: (1) guilt, (2) neutralization of norms, (3) appeal to the conscience, and (4) internalization of norms (Scott and Grasmick 1981; Richards and Tittle 1981; Witte and Woodbury 1985; Hite 1988; Chung and Trivedi 2003; Wenzel 2004; Manly et al. 2005; Hasseldine et al. 2007; Bobek et al. 2007; Blanthorne and Kaplan 2008). This study operationalizes fairness perceptions via the moral equity dimension of the Multidimensional Ethics Scale (MES) and internalization of norms using the intrinsic religiousness measure of the Allport-Ross Religious Orientation Scale (ROS). Bobek et al. (2007) assess the role of social norms in Australia, Singapore, and the U.S. and find that only in the U.S. was there significant correlation between social norms and compliance intentions. Therefore, in the U.S., paying taxes appears to be the social norm.

Furthermore, Rest (1986) indicates that most adults in the U.S. have a maintaining social norm level of moral reasoning and more than eight-five percent of this study's subjects are U.S. citizens.

Theory of Planned Behavior

Because taxpayers must prepare and file an annual tax return themselves or solicit the services of a tax preparer, tax evasion may be considered a planned behavior. Beck and Ajzen (1991) and others collectively posit that the central phenomena of the Theory of Planned Behavior (TPB) are (1) intention to exert effort for individual behaviors, (2) attitudes about chosen behaviors, (3) social norm influences, (4) perceptions of behavioral control, and more recently (5) the impact of moral obligation. Moral obligation has been found to influence behavioral intent beyond that of individual attitudes, perceived abilities, or societal norm concerns (Ajzen 1991; Bobek and Hatfield 2003; Blanthorne and Kaplan 2008).

Considering the extensions of TPB to account for ethical and/or moral ideologies, this study employs explicit research methodologies to account for resulting interactions when measuring tax evasion intentions. Specifically, this study measures ethical evaluation via the MES and moral capacity using the Defining Issues Test (DIT 2) to determine tax compliance intentions. Both of these scales are discussed in the next section of this chapter.

Ideological Philosophies

Multidimensional Ethics Scale (MES)

Founded on a set of normative philosophies, Reidenbach and Robin (R&R 1988, 1990) find significant ethical dimensions for moral equity, relativism, and deontological based contractualism, but not for teleological based utilitarianism or egoism. R&R (1988, p. 877) say that the contractualism dimension "seems to suggest a more formalized set of rules and duties, perhaps based on family and religious training...." Their statement suggests an association between contractualism and religion for some respondents. The model's dimensions remain valid while surveying business professions (R&R 1988, 1990; Reidenbach et al. 1991; Flory et al. 1992; Cruz et al. 2000) and college students (Robin et al. 1996), but an additional dimension (i.e., teleological-utilitarianism) surfaces when surveying less conservative accounting students and accounting academics (Cohen et al. 1993) from the northeast region of the United States.

Empirically, Robin et al. (1996) not only assess the original six-dilemma Defining Issues Test (DIT 1), but also convert DIT 1 dilemmas into MES scenarios and find that the MES outperforms the DIT 1 in assessing ethical evaluations and behavioral intentions of the subjects. Moreover, Cohen et al. (1996) find that the MES is superior to the DIT in predicting the actions of accountants. While Weber (1996) welcomes the contributions of MES to the moral reasoning literature, he criticizes the research regarding its theory confusion, instrument confusion, and positive rather than normative conceptualizations. Nonetheless, he resolves that the MES is a compliment, not a replacement, to the DIT. More recently, Blanthorne and Kaplan (2008) discover significant correlations between MES dimensions and tax compliance behavioral intent.

Religious Orientation Scale

Religion may be defined in terms of cognition (e.g., religious knowledge or belief), affect (e.g., emotion), and behavior (e.g., church affiliation, church attendance, Bible reading, or praying). In their study of churchgoers, Allport and Ross (1967) define four religious orientations: (1) intrinsics who live their religion, (2) extrinsics who use their religion for selfish motives, (3) indiscriminates who have both intrinsic and extrinsic motivations, and (4) antireligious who are neither intrinsic nor extrinsic in nature. Their study indicates that, excluding antireligious people, intrinsics are the least prejudice concerning acceptance of minority groups, indiscriminates are most prejudice, and extrinsics are moderately prejudice.

With regard to reporting peer unethical behavior, Barnett et al. (1996) measure religiousness in unidimensional cognitive terms and ethical judgment via the MES (R&R 1990). Their study finds that religiousness is negatively associated with relativism, but not associated with idealistic behavior such as that associated with the MES moral equity and contractualism dimensions. Concerning taxation and appeals to the conscience, Grasmick et al. (1991) find that threat of shame for intrinsics is a stronger deterrent to tax evasion than embarrassment for extrinsics. Furthermore, Tittle and Welch (1983) find that religiousness predicts conformity to rules uniquely prohibited by religious institutions (e.g., tax evasion), but not necessarily to rules prohibited by society as a whole which reflects the idea of normative dissensus of deviant acts. Moreover, Tittle and Welch (1983, p. 662) state, "A multidimensional index of religiousness would have been desirable, but sufficient data to construct one were unavailable in the data set."

measures in that they are either independent, inversely correlated, or connotatively conflictive (Kohlberg 1981: Getz 1984; Richards and Davison 1992). The DIT is discussed next.

Defining Issues Test (DIT)

Rest et al. (1999) asserts that Kohlberg's core values of cognitive moral development (CMD) consist of (1) a cognitive emphasis, (2) an effortful construction of morality, (3) a developmental approach, (4) a shift in thinking, and (5) a macromorality concept. Within the context of taxation, Kaplan et al. (1997) manipulate sanction type and find that tax evasion intentions are significantly lower for taxpayers who utilize relatively high levels of moral reasoning (i.e., postconventional thinkers) regardless of the level of perceived legal sanctions. In other words, this finding suggests that postconventional reasoners may not be affected by economic deterrent factors similar to that of individuals with lower levels of moral capacity as measured by the DIT. Correspondingly, Troutman et al. (1995) assess student taxpayers and find that the DIT 1 P-score is positively related to tax compliance through its determination of taxpayers' attitude concerning the fairness of the tax system. However, they determine that moral development is not directly related to tax compliance intentions. Furthermore, Trivedi et al. (2003) manipulate probability of detection, social norms, and fairness covaried with moral reasoning and find that students' moral reasoning is positively related to tax compliance. Moreover, student tax compliance is negatively affected by the level of their DIT 1 A-Score. This finding suggests that subjects who are highly anti-establishment or resistant to government have low intentions to comply with the tax system.

However, while administering the updated DIT (DIT 2), Shawver and Sennetti (2009) find that higher DIT 2 P-score students did not evaluate questionable accounting actions as more unethical than low DIT 2 P-score subjects. Moreover, the composite MES score better explains accounting students' ethical choices and is unrelated to the DIT 2 P-score, indicating that the two measures quantify distinct constructs. Given these findings, this study evaluates the complementary aspects of the DIT 2 and MES with respect to tax compliance intentions. Furthermore, the new DIT 2 measure (i.e., N2-score) is assessed in addition to the P-score and/or the A-score.

To summarize, this study combines several of the methodologies of the previously mentioned ideological studies. First, it incorporates the eight-item three-dimension MES to evaluate the ethical evaluation of tax evasion intentions (M&M 1988, 1990; Flory et al. 1992; Henderson and Kaplan 2005). Second, the current study implements peer behavioral assessment to eliminate the "halo effect" or "social desirability bias" (Cohen et al. 1996) and extends the analysis to include subjective social norm evaluations. Third, Cruz et al. (2000) suggests that future research should investigate which is more significant, cognitive moral development or personal values, with respect to the evaluations of ethical dilemmas and behavioral intentions. By incorporating scales for both measures (i.e., morality and religiousness, respectively), this study compares the predictability of moral reasoning and religiosity with respect to tax evasion intentions. Furthermore, this study assesses the complementary nature of the DIT 2 (i.e., morality) and the ROS (i.e., personal religious values) with the MES concerning tax evasion. Fourth, this study considers the interactive effects between the DIT 2 and MES constructs as suggested by Weber (1996). Fifth, the current research administers the DIT 2 to assess

moral capacity as did Shawver and Sennetti (2009) and evaluates the study's results using Structural Equations Modeling (SEM) which is similar to Henderson and Kaplan (2005). Sixth, consistent with Barnett et al. (1996), this study infers associations among religiousness and the moral equity, relativism, and contractualism dimensions of the MES. Seventh, this study uses the ROS to address Tittle and Welch's (1983) concern for the use of a multidimensional measure of religiousness to explain the effects of religion on tax evasion (Gorsuch and McPherson 1989). Last, the association between the DIT 2 and the ROS is evaluated for which prior research predicts or finds inconsistent results (Kohlberg 1981; Getz 1984; Richards and Davison 1992).

Research Questions and Findings

Cruz et al. (2000, p. 239) states, "... future research could investigate whether the effects of personal characteristics such as cognitive moral development or personal values influence their deontological and teleological evaluations of ethical dilemmas, and whether those evaluations in turn influence ethical judgments and intentions." Based on the previous statement, this study examined three complementary research questions. First, do personal religious beliefs matter with respect to the ethical evaluation of tax evasion intentions? Similarly, the second question is whether moral capacity matters regarding the ethical evaluation of tax evasion intentions? The last inquiry considers interactive effects and questions whether cognitive moral development interacts with personal religious beliefs considering the ethical evaluation of tax evasive practices?

Significant findings of the study are as follows. First, addressing the first two questions, the study finds that higher intrinsic religiousness and postconventional morality are associated with higher evaluations of the moral equity dimension of the

MES, regardless of the type of hypothetical tax scenario (i.e., underreporting of income or overreporting of deductions). Second, with respect to the first question, higher extrinsic religious measures are related to lower assessments of moral equity and implied contracts as represented by the MES for the hypothetical income tax case and the combined scenarios, but not for the deduction instance. Third, also considering the first question, increases in intrinsicness are significantly associated with decreases in tax evasion intentions considering the effects of the MES dimensions. However, neither extrinsic religiousness nor postconventional moral reasoning is related to tax evasion intentions when accounting for MES dimensions. Last, in addition to finding moderate factor structure invariance for models combining religiousness with morality, R^{2s} for these models are lower than all other models, especially for higher level postconventional reasoners.

Organization of the Study

In the next chapter, relevant economic and nonpecuniary literature, including ideological research streams, are reviewed. Moreover, hypotheses are developed and posited for the full model. In Chapter Three, the study's experimental methodology is described including the subject types to be sampled, the instruments to be used for the requisite research tasks, and the statistical methods to be employed to validate the study's results. Chapter Four reports the results of the analyses, and Chapter Five summarizes the study and discusses its limitations and extensions.

CHAPTER TWO

LITERATURE REVIEW AND HYPOTHESIS DEVELOPMENT

Overview

There are two general schools of thought addressing the question, "why do some individuals evade their legal obligation to pay federal income taxes?" These competing, yet complementary, groups of theories are the economically based General Deterrence Theory (GDT) and Prospect Theory and behaviorally motivated theories such as Fiscal Psychology Theory, Equity Theory, and others. These conceptualizations have led to the inclusion of several tax compliance phenomena in the development of tax research models and empirical tax studies. Jackson and Milliron (1986) and Young (1994) delineate the following factors as important, but inconclusive, determinants of tax evasion: (1) age, (2) sex, (3) level of education, (4) level of income, (5) source of income, (6) occupation, (7) influence of peers, (8) social norms, (9) perceptions of fairness, (10) marginal tax rates, (11) complexity of the tax system, (12) interpersonal sanctions, (13) political affiliation, (14) religion, and (15) other ideological factors. Interestingly, Jackson and Milliron (1986) suggest that personal ideology may be an important noncompliance determinant which implies changing the tax system to fit taxpayers rather than the converse. After outlining the various economic noncompliance tax factors and behavioral tax evasion phenomena, this chapter proceeds to address the question of how

ideological factors affect tax evasion intentions, for religiousness, for postconventional moral capacity, and for the combination of religiousness and dichotomous levels of postconventional moral reasoning.

General Deterrence Theory

Overview

Becker (1968) develops an economic theory of crime and punishment which derives the optimal level of expenditures for resources to assist law enforcement in not only apprehending and punishing offenders, but also deterring them from committing crime. This theory is grounded on the axioms of expected utility theory and the assertions of optimizing self-interested behavior. Ehrlich (1973) formalizes and tests general deterrence theory (GDT) within the context of individual participation in illegal activities. The model assumes that those who violate certain laws differ systematically from those who abide by the same; however, both respond to economic incentives. Rather than resorting to hypotheses regarding unique personal characteristics and social conditions affecting respect for the law as did previous research, the model conceptualizes the extent to which illegal behavior can be explained by the effect of opportunities given individual preference and self-interests. Since deviant behavior does not automatically provoke a penalty, but comes from the probability of effortful patrol or surveillance, the model accounts for behavior under uncertainty. The study finds a deterrent effect of lawenforcement activity on all crime which mitigates the otherwise resulting social loss. Considering the widening of the tax gap, the study's findings lend support for incorporating GDT to address the question, "why do some people evade their legal obligation to pay federal income taxes."

Analytical GDT Tax Models

Economists have developed models of deterrence to mitigate tax evasion (Allingham and Sandmo 1972; Srinivasan 1973; Cowell 1985; Klepper and Nagin 1989). Collectively, these models assume that persons will submit an honest tax return only if it is optimal for them to do so from a self-interested economic perspective.

First, of the GDT tax models included in this study, Srinivasan (1973) develops the least complex one. His conceptualization derives the optimum proportion of income to be understated as a function of (1) true income, (2) the probability of detection, and (3) the penalty assessed on the understatement of taxable income. Furthermore, the penalty assessed for underreporting taxable income is determined by the level of underreported income which indicates that there is perhaps an interactive relationship between these constructs (Madeo et al. 1987). The model posits a direct relationship between income level and tax noncompliance, but both likelihood of detection and penalty level should have an indirect correlation with tax evasive activities. Similar to the criminology models from which it precedes, Srinivasan's (1973) model determines the optimal allocation of resources towards detection of the criminal offense of tax evasion. However, this less complex model holds annual income constant rather than varying it which is more consistent with the life-time income concept. It also assumes that all taxpayers comply at some level instead of accounting for a set of non-filing taxpayers. Last, the model captures underreporting of taxable income, but ignores overreporting of tax deductions which is another evasive tax practice.

Second, Allingham and Sandmo (1972) develop a more dynamic model to examine various aspects of tax evasion. This model, like that of Srinivasan (1973), is underpinned by criminology theory (Becker 1968), but also includes the finance theory of optimal portfolio investment. Their analytical model resolves issues that Srinivasan's (1973) static model ignores, namely, the interrelationships that exist with other types of economic choices. Specifically, Allingham and Sandmo (1972) model the opportunity to increase returns to cheating inherent in higher tax rates (i.e., higher tax rates yield higher incentives for tax evasion). The model also accounts for individual choices related to a sequence of annual tax declaration decisions similar to those of portfolio investment strategic decisions. However, Allingham and Sandmo (1972) do not structure the effect of nonfinancial penalties like jail sentences, but rather focus merely on pecuniary cost. Additionally, the model ignores the potential for dynamically determined court penalties which depend on the facts and circumstances surrounding those cases, but rather assumes functionally derived sanctions. Last, the model is simplified by considering a proportional rather than a progressive tax structure like that of the U.S. federal income tax system. The results of their study indicate that accounting for static and dynamic aspects of the decision to evade income taxes can allow for a more optimal design of the U.S. federal income tax system.

Third, Cowell (1985) expands Allingham and Sandmo's (1972) GDT model of tax evasion to account for the tradeoff between legal income which is subject to withholding and illegitimate income which is difficult for governmental authorities to detect. This model also assumes that some would be taxpayers who earn illegal income will not file a return at all which addresses a weakness of previous conceptualizations.

The study posits that taxpayers may divert their work efforts to areas not subject to withholding to avoid taxation. This may also help to explain the existence of and shifts to underground economies. Furthermore, their work suggests that an inefficient allocation of the macro labor market could result from taxpayers' selection of this evasive tax strategy.

Last, Klepper and Nagin (1989) develop a tax noncompliance model motivated by previous research's mixed results for both the penalty level and the income tax rate. This model is derived from Taxpayer Compliance Measurement Program (TCMP) data. To account for the previously stated mixed results for penalty level, they incorporate nonmonetary penalties into their model and allow detection probability and penalty to be endogenously determined by tax line item. The resulting factors in their model include: (1) a flat tax structure, (2) detection probability endogenously determined by the audit rate of each tax line item, (3) penalties which include nonmonetary ones, (4) taxpayer risk neutrality, and (5) maximization of expected utility concepts. Because this model employs the use of line item tax effects, it may account for multiple modes of tax evasion activities between tax return line items. Contrary to Allingham and Sandmo (1972), their study does not identify a positive relationship between higher tax rates and tax noncompliance behavior. This suggests that perceived fairness in the income tax system as determined by tax rate structures may not be a resonant issue among taxpayers.

Empirical GDT Studies

GDT assumes that individuals are economic utility maximizers who will evade taxes whenever the marginal benefits exceed the marginal costs of tax noncompliance. The theory's propositions have been the basis of several individual taxpayer and professional tax preparer noncompliance studies, and the theory's deterrent effects have

been found significant (Mason and Calvin 1978; Mason and Calvin 1984; Madeo et al. 1987; Violette 1989; Klepper and Nagin 1989; Reckers et al. 1991; Carnes and Englebrecht 1995; Martinez-Vazquez and Rider 2005; Buchheit et al. 2005; Alm et al. 2009). GDT models (Allingham and Sandmo 1972; Srinivasan 1973; Cowell 1985; Klepper and Nagin 1989) collectively posit the following noncompliance factors and prior research finds mixed results concerning their saliency: (1) the likelihood of detection from the visibility of tax information reported to the IRS, (2) the level of sanctions or penalties imposed on the taxpayer and/or tax preparer, and (3) the taxpayer's level of taxable income.

Visibility of Income

Prior research overwhelmingly finds that visibility of income via IRS third-party information reporting effects the likelihood of detection and is negatively correlated with admitted tax evasive behavior and/or tax noncompliance intentions (Groves 1958, Mason and Calvin 1978; Madeo et al. 1987; Milliron and Toy 1988; Martinez-Vazquez and Rider 2005; Buchheit et al. 2005; Gerxhani and Schram 2006; Alm and McKee 2006; Alm et al. 2009). In his seminal study, Groves (1958) investigates Wisconsin residential landlords and farmers and identifies income source as a significant influence of taxpayer noncompliance. Interestingly, the study documents less noncompliance for reporting fictitious deductions than for omitting income on the income tax returns selected. Motivated by Groves (1958), Mason and Calvin (1978) survey Oregon taxpayers and find that opportunity coupled with the probability of not being apprehended have the strongest correlation with admitted tax evasion. Additionally, Madeo et al. (1987), using a tax model derived from tax professionals, find that source of income is three times more

important in predicting tax compliance than either the penalty level, the tax rate structure, or the taxpayer's level of income. In their study, source of income serves as a proxy for visibility of income to the Service. Furthermore, increases in the probability of audit and information reporting are hypothesized and found to dissuade tax noncompliance (Milliron and Toy 1988).

In more recent studies, Buchheit et al. (2005) find that reduced detection risk caused by lower documentation requirements results in taxpayers overstating legal deductions for charitable contributions. Martinez-Vazquez and Rider (2005) find that increased enforcement effort (i.e., probability of detection) in one mode of tax evasion has a net positive effect on tax compliance even though it has a negative effect on nontargeted modes of tax evasion. This result supports Klepper and Nagin's (1989) propositions delineated in their line item analytical model of tax evasion. Multiple modes of tax evasion by tax line item present a means for taxpayers to conceal income tax evasion efforts. Moreover, Martinez-Vazquez and Rider (2005) suggest, among other things, that the government need only increase income subject to third-party reporting by a small amount to exponentially increase tax compliance. Alm and McKee (2006) find that the increase in compliance for participants who have been informed that they will be audited is more than offset by the decrease in compliance for subjects who have been informed that they will not be audited. Gerxhani and Schram (2006) compare individuals' tax evasive behaviors before and after a country's transition from communism to capitalism. Their experiment indicates that subjects seem to choose a source of income that takes the possibility of tax evasion into account which can lead to an inefficient allocation of the labor market. These results may support Cowell's (1985) tax model

predictions of preferences for income that is not reported to the government to increase tax evasion opportunities and overall income. Last, Alm et al. (2009) conduct an experiment which manipulates the level of earned income matched to recipients by the IRS and the probability of audit. The study finds that higher unmatched earned income and lower audit probabilities lead to higher levels of tax evasion. Alm et al. (2009) also find, as did Madeo et al. (1987), that the income source is overwhelmingly more important than other deterrence variables studied for predicting tax compliance.

Penalty Level

Prior research generally, but inconclusively, finds that the penalty level is negatively related to tax noncompliance as posited by GDT tax models (Mason and Calvin 1984; Violette 1989; Carnes and Englebrecht 1995). Mason and Calvin (1984), during their interview of adult taxpayers, find that sanction fear is a stronger incentive to obey tax laws than the taxpayers' satisfaction with the tax system. Furthermore, in his experiment with adult night class students, Violette (1989) finds that communicating existing legal sanctions may increase tax compliance, but publicly listing tax violators, a noneconomic form of social stigma or guilt, does not reduce tax evasion. Previous studies set detection and penalty rates significantly higher than actual rates. However, even when penalty and detection rates are manipulated reflecting actual levels, Carnes and Englebrecht (1995) find that deterrent effects of sanctions remain significant.

However, in their survey of Oregon residents, Mason and Calvin (1978) find that the deterrent effect of penalties or sanctions seems uncertain concerning admitted evasion practices. Additionally, Madeo et al. (1987) derive a model based on responses from tax professionals and test it against IRS TCMP data from a period in which marginal tax

rates are as high as seventy percent. Their study finds that increasing penalties are only an effective deterrent for steeply progressive income tax systems rather than moderately progressive or proportional tax systems. This result suggests that penalty sanctions are only necessary when the tax system is perceived to be unfair (i.e., steeply progressive tax rates).

Income Level

Prior studies primarily, but inconsistently, indicate that the level of taxpayer's income has a positive correlation with noncompliant behavior (Srinivasan 1973; Spicer and Lundstedt 1976; Clotfelter 1983; Madeo et al. 1987; Alm et al. 1992; Troutman et al. 1995; Alm and McKee 2006; Alm et al. 2009). Initially, Srinivasan's (1973) model posits this positive relationship between income level and tax noncompliance. Moreover, Clotfelter (1983) notes that an income level-tax evasion positive relation exists, but offers conjectures that high income taxpayers are less compliant simply because of the interaction with higher opportunities to evade or changes in risk propensities as income level increases. Similarly, when considering interactions with risk adverseness, Alm and McKee (2006) find that low- and middle-income taxpayers increased their reported taxable income when informed that they were likely to be audited, but higher-income taxpayers continue to underreport taxable income at a significant level. More recently, in their experiment with student subject which manipulated income visibility to the IRS, Alm et al. (2009) confirm the general relationship and find that higher earned income levels of subjects lead to higher levels of tax evasion intentions.

However, some studies find either a negative correlation between level of income and tax noncompliant behavior or no income level affect at all (Mason and Calvin 1978;

Mason and Calvin 1984; Cowell 1985; Witte and Woodbury 1985; Madeo et al. 1987; Collins et al. 1992; Troutman et al. 1995). In their studies of Oregon taxpayers, Mason and Calvin (1978, 1984) find a higher level of tax evasion for people with lower income levels (i.e., a negative correlation between income level and tax noncompliance). Also, Cowell (1985) tests his TCMP derived model and the results contradict Srinivasan's (1973) model predictions in that Cowell (1985) does not find a significant relationship between the level of income and tax evasion practices. Troutman et al. (1995) find similar results in their survey of students. Witte and Woodbury (1985) find that middle-income taxpayers are most compliant and both low- and high-income level taxpayers are relatively noncompliant in comparison representing a curvilinear relationship. This nonlinear relationship between taxpayer income level and tax evasion behavior may account for the inconclusive results of previous studies. As a result of mixed previous results, Madeo et al. (1987) suggest that an unambiguous prediction could not be made for the main effects of income level because of its interaction with source of income (i.e., opportunity). Furthermore, they are not able to posit hypotheses concerning the effects of the tax rate structure because of its interaction with income level and risk propensity. Additionally, Collins et al. (1992) find inconclusive results with regard to the correlation between income level and noncompliance behavior in their study of households from the Southwest and the Northeast regions of the United States.

A more recent archival study concerning the level of income sheds light on these mixed results. Johns and Slemrod (2010) use a newly available data source from the Service to assess the distributional consequences of U.S. federal income tax noncompliance. Their study finds that the ratio of aggregate misreported income to true

income generally increases with the level of taxpayer income, but it peaks among taxpayers with adjusted gross incomes in the 99.0 to 99.5 percentiles. However, they find that the ratio of underreported tax to true tax is highest for lower-income taxpayers. These mixed results indicate that income level is an area of fruitful future research that may be clarified by behavioral theories. Moreover, the inconclusive findings concerning level of taxpayer income suggests that researchers might include income level as a control variable in future studies.

Prospect Theory

Overview

Prospect theory posits that decision-making under risk is inconsistent with the axioms of expected utility theory in that individuals value potential marginal gains and losses rather than final asset states (Tversky and Kahneman 1974; Kahneman and Tversky 1979; Tversky and Kahneman 1992). Prospect theory may address the risk propensity concern raised by prior research with respect to interactive effects. The utility function derived from Prospect Theory is concave for gains and convex for losses rather than linear. Specifically, subjects are risk-adverse for gain frame points of reference and risk-seeking for loss vantage points which indicate that individuals have more disutility for losses than utility for gains.

Furthermore, individuals' decision weight perceptions replace those of actual probabilities. Specifically, individuals do not differentiate accurately between small chance choices (i.e., subadditivity of decision weights), but focus instead on magnitude of gamble which contradicts relevant axioms of expected utility. This idea is significant

because the context of the tax evasion problem for many taxpayers involves minor chance of getting caught (e.g., less than one percent). The subadditivity of decision weights caused by overestimating small detection probabilities may explain why many people do not evade taxes as often as expected utility theory and GDT predict. Moreover, people overweigh certain outcomes (i.e., certainty effect) for a definite amount of taxes due compared with some probability that a greater amount will be paid because of an additional penalty assessment if caught evading taxes. To summarize, the concept of subadditivity of decision weights posits that a very low or certain detection rate may cause taxpayers to reduce tax noncompliance more than expected utility theory predicts.

Empirical Studies

Empirical research grounded in Prospect Theory has explained the hypothesized effects of withholding frame reference points and very low audit detection rates concerning the subadditivity of decision weights in light of tax evasion (Jackson and Jones 1985; Dusenbury 1994; Reckers et al. 1994; Trivedi et al. 2003; Jackson and Hatfield 2005; Sanders et al. 2008; Boylan 2010).

Withholding Frame

Two early experimental studies investigate Prospect Theory's assertions concerning withholding frame. First, Dusenbury (1994) observes experienced taxpayers and finds that subjects select riskier filing positions and report less income in payment due (i.e. loss frame) cases than in refund (i.e., gain frame) scenarios. Furthermore, participants select riskier options in a nontax loss frame context than in a tax loss frame environment indicating that subjects respond differently within tax settings as compared with nontax ones. Also, the study reveals that taxpayers with more filing experience

preferred riskier filing positions than less experienced taxpayers in both the tax due and refund reference points. This finding suggests that there is a direct relationship between filing experience or perhaps age and tax noncompliance. Second, Reckers et al. (1994) manipulate tax rates (i.e., high and low) and withholding frame (i.e., refund or tax due) and find that subjects who do not view tax evasion as an ethical issue are influenced by framing as posited by Prospect Theory. However, when subjects are morally opposed to cheating on taxes in any amount, withholding position is irrelevant which is contrary to the tenets of Prospect Theory. The results of this study indicate that noneconomic factors based on psychology, sociology, and/or ideology may explain the inconsistent findings of prior tax compliance research.

In more recent studies, researchers uncover interesting findings. First, Trivedi et al. (2003) measure risk preference of participants and perform an experiment wherein the subject pay tax on an income endowment for which the recipient puts forth little or no effort to acquire. Their study finds a negative cause-effect relationship between risk-aversion and tax noncompliance. Complementarily, Boylan (2010) finds that when the taxpayer is given an income endowment, taxpayer compliance increases following an audit. However, when taxable income is earned and requires comparatively large amounts of time and energy to generate, taxpayer compliance decreases following an audit. If the reference point is after-tax income in Trivedi et al. (2003), then the respondent may believe that paying tax is a national duty (i.e., endowed income effect) and would be risk-averse concerning tax noncompliance. However, if the reference point is before-tax income, then the subject may believe that paying tax is a loss (i.e., earned income effect) and could be risk-seeking concerning tax evasive strategies.

Next, Jackson and Hatfield's (2005) experimental results indicate that taxpayers who owe additional taxes consider a pending conservative tax deduction as a threat of loss because their final state may still be a loss; whereas, those same taxpayers would view a pending aggressive tax deduction as an opportunity for gain. Conversely, taxpayers who are due a tax refund consider a pending conservative tax deduction as an opportunity for gain in that they are likely to retain their positive position. However, those same taxpayers would perceive a pending aggressive tax deduction as a threat of loss in light of the potential cost associated with the probability of detection. With regard to the Jackson and Hatfield's (2005) opportunity versus threat perspective, Sanders et al. (2008) perform an experiment among businesses and find that sanction manipulation is more effective among taxpayers in a declining revenue state (i.e., loss frame) than in an increasing revenue state (i.e., gain frame). Perhaps this finding stems from the idea that risk seeking loss frame taxpayers are more likely to evade taxes than risk adverse gain frame ones. This outcome partially supports Prospect Theory which asserts that subjects will be risk seeking for losses; however, this risky attitude is diminished when the taxpayer is made aware of tax evasion sanctions (i.e., GDT effects).

Subadditivity of Decision Weights

Although most of the prior studies incorporating Prospect Theory to explain their findings are based on withholding frame concepts, an early experimental study of subadditivity of decision weights highlights interesting results. Jackson and Jones (1985) compare the level of detection risk with the magnitude of the penalty level and determine that the penalty is more salient, especially when the probability of occurrence is extremely low (i.e., when subadditivity of decision weights exists). Moreover, consistent

with Prospect Theory (Kahneman and Tversky 1979), Jackson and Jones (1985) also find that those taxpayers are risk seekers for potential losses.

To summarize, economic theories generally, but inconclusively, support their primary propositions concerning evasive behaviors of taxpayers, especially when taxable income is not reported to the IRS by third parties or when pre-filing frame is salient for taxpayer. Therefore, this study incorporates visibility of underreported taxable income and overreported tax deductions into its research design. Moreover, because of invisibility of some types of income (i.e., self-employment income) and the low likelihood of a tax audit for many taxpayers, the research question changes slightly from "why do some individuals evade their legal income tax obligation to pay income taxes" to "why don't most individuals evade income taxes when their income is not visible to the Service?" Next, this study employs various noneconomic behavioral theories to address this significantly different question.

Fiscal Psychology Theory

Overview

Contrary to economic models of tax evasion, Schmolders (1959) studies the motivational and emotional layers of taxpayers' minds in his development of a theory of fiscal psychology. Soon after World War II, professional interviewers cross-examine a large sample of West Germans from all walks of life regarding their general tax-mindedness. The study finds that tax evasion is unfamiliar to most, and many believe that only businessmen and professions are able and willing to evade taxes (i.e., opportunity). This study also finds that tax resistance starts only after a certain threshold of taxation has

been surpassed. Fiscal psychology theory maintains that a taxpayer's belief in the tax system's fairness is more salient in alleviating noncompliance than the penalty structure and risk as posited by both GDT and Prospect Theory, respectively.

Empirical Studies

Studies grounded in Fiscal Psychology Theory hypothesize that decreasing the tax rate, the level of sanctions, and the probability of audit will increase tax compliance through improved taxpayer sentiment and tax system fairness perceptions. Comparatively, decreasing deductions permitted reduces perceived tax system complexity and is hypothesized to increases tax compliance (Porcano 1984, Milliron and Toy 1988). However, a decrease in allowed deductions for low- or middle-class taxpayers may be perceived as inequitable (Milliron 1985) and result in reduced tax compliance. Based on distributive justice to increase equity and to deter tax evasion, Porcano (1984) surveys graduate students and indicates that, from an equity perspective, taxpayer need and ability to pay are the most significant variables that should be utilized when formulating tax policies as opposed to self-interest motivations of the taxpayer-government exchange. Also, the study finds support for the idea that negative tax is appropriate for low-income taxpayers, and respondents favor extending the earned income credit to this group of taxpayers whether they have dependents or not.

Milliron and Toy (1988) investigate seven key features of tax compliance: (1) deductions permitted, (2) IRS information services, (3) information reporting, (4) preparer penalties, (5) taxpayer penalties, (6) probability of audit, and (7) tax rates. Their study finds that CPA subjects considered reducing tax rates to be the most important feature for mitigating noncompliance. Furthermore, the study determines that subjects

preferred an overall compliance system with a flatter tax structure that maintains or reduces the applicable penalty. These results are consistent with the propositions of Fiscal Psychology Theory, which assert that the taxpayer's belief in the tax system, not increasing penalties, is the solution for reducing evasive tax behavior (Song and Yarbrough 1978, Collins et al. 1992).

Song and Yarbrough (1978) conduct personal interviews with some subjects while others respond to a self-administered questionnaire to measure their general attitudes towards taxation. The study finds that North Carolina taxpayers in a college town are dissatisfied with the federal income tax burden placed by the government on the middle-class. Moreover, the study's participants believe that the government provides unequal opportunities among taxpayers for reducing their individual tax burdens. However, most respondents have faith in the administrative efficiency of the taxing authority, believe that they pay the same amount of tax as others in similar situations, receive a similar benefit as taxes paid, and feel that people should pay taxes according to their ability. Collins et al. (1992) mail a random survey to households in the Southwest and the Northeast regions of the United States and evaluate the results of a contingency model of tax noncompliance. The study finds that return complexity, tax evasion opportunity, and tax system unfairness are significant and positively related to noncompliant tax behavior for all contingency subgroups. Their dependency model improves predictions compared with those of less dynamic models, but subgroups vary significantly making it difficult for the government to implement a single strategy to minimize tax evasive behavior. However, Arrington and Reckers (1985), in their pursuit to uncover a link between noneconomic factors and tax evasion, find that student subjects' views regarding the equity of national revenue and expenditure programs did not influence their responses concerning tax evasion. This result is contrary to the predictions of Fiscal Psychology Theory perhaps because there may be insufficient subject perception variation for students. Hence, student subjects may not be an appropriate surrogate for adult taxpayers when predicting tax evasion.

Based on the mixed results from the preceding discussion, the following Fiscal Policy Theory factors appear to be important: (1) fiscal policy and the tax system, (2) fairness perceptions, (3) tax rate level, and (4) tax system complexity. Next, this chapter addresses each of these factors in turn citing relevant empirical research as supporting evidence.

Fiscal Policy and the Tax System

In an early Fiscal Policy Theory study, Mueller (1963) interviews taxpayers and reports several significant outcomes. First, large majorities of Americans have favorable attitudes toward a number of major government expenditure programs and did not favor less spending. Second, respondents exhibit a high level of support for spending to help the elderly and the needy and to educate Americans, but little support for spending to help other countries, to support agriculture, or to explore space. Third, concerning government programs which subjects indicate should receive more spending, the list did not change much when asked whether they would pay more taxes to support the programs. Fourth, debt reduction is favored by many, but interestingly it has less priority in most people's minds than the expansion of a number of government programs. Fifth, when asked for their preferences of money allocations if defense spending is reduced, most respondents favor spending more on other programs (i.e., welfare, public

construction, education, etc.) rather than reducing debt or cutting taxes; however, wealthier individuals favor the latter. Sixth, contrary to intuition, upper income groups do not favor extension of government programs less than lower income groups, but upper income groups favor spending on different programs. Seventh, many people favor greater expenditures to programs from which they are not likely to reap direct personal benefit which contradicts exchange theory. Last, age differences are small, but people over fifty-five years of age prefer less government spending, lower taxes, and reduced budget deficits.

Fairness Perceptions

Spicer and Lundstedt (1976) conduct a survey and find that perceived inequities in the taxpayer-government exchange (i.e., exchange theory) and the number of tax evaders known by the taxpayer (i.e., neutralization of social norms) are positively related to the likelihood of tax evasion. The results indicate that including psychological and sociological variables adds new and useful insights to the study of economic behavior for tax compliance. Specifically, perceived inequity, personally knows tax evader, and previously audited by the IRS are positively related to tax noncompliance intentions; whereas, age and income demographic variables are uncharacteristically negatively related. Furthermore, Lewis (1979) conducts interviews to measure different aspects of tax mentality and discovers several important findings concerning perceived tax fairness. First, people with higher incomes feel that legal tax avoidance is fair while those with lower incomes do not. Second, wealthy taxpayers do not believe that they have an unfair advantage because of loopholes; whereas, low-income earners belief the well-off have disproportionate opportunities for tax evasion. Third, people with higher incomes feel

that small amounts of tax evasion should be treated leniently, but lower income taxpayers do not. Fourth, in opposition to lower income earners, higher ones believe that the progressive tax system is unfair. Last, the relationship between taxation and services received through public expenditures (exchange theory) is not an important part of tax mentality. In essence, the study's results collectively suggest explanations for the generally positive relationship between level of income and tax evasion intentions despite the findings of Spicer and Lundstedt (1976).

Additionally, concerning fairness perceptions, Hite and Roberts (1992) conduct a survey to determine whether the Tax Reform Act of 1986 was successful in improving public perceptions of fairness and economic growth as described by Adam Smith as factors of an effective system of taxation. The study finds that perceptions of fairness, simplicity and helpfulness to the economy are negatively related to tax noncompliance. Furthermore, perceptions of fairness better explained the participants' reactions to tax system changes than did economic self-interest. Relatedly, Klepper and Nagin (1989) test an empirical model and find, among other things, that individuals with poor opportunities for noncompliance perceive the tax system as inequitable.

In two more recent studies, fairness is assessed referencing taxpayer-government behavioral relationships. First, Feld and Frey (2007) find that tax paying citizens are willing to honestly declare income even if they do not receive a full public good equivalent in return for their tax payments as long as the political process is perceived to be fair and legitimate. Furthermore, friendly treatment of taxpayers by the taxing authority in the tax audit processes reduces future tax noncompliance compared with more hostile treatment of taxpayers. Second, McGee et al. (2008) survey university

students from Hong Kong and the United States and find that ethical scores differ by country, but that the strongest arguments justifying tax evasion are in instances where the government is corrupt or where the tax system seems unfair. Conversely, the weakest arguments for validating tax evasive practices occur when taxpayers rationalize their actions based on their admitted selfish motivations.

Tax Rate Level

Compared with a control group, Spicer and Becker (1980) find that the percent of evasion is highest among those who are told that their tax rates are higher than average and noncompliance is lowest among those informed that their tax rates are lower than average. The study's results support inequity theory which predicts that victims of inequity experience anger and evade taxes because they pay higher than average tax rates. Furthermore, inequity theory asserts that beneficiaries of inequity feel guilt and refrain from tax noncompliance which further explains why some would be taxpayer evaders comply with the tax system.

In an archival study using the IRS TCMP database, Clotfelter (1983) finds that taxpayers equate lower marginal tax rates with a fairer tax system. More importantly, perhaps because of this mental assessment, they decreased their level of tax evasion intentions. This finding is significant because increasing marginal tax rates may drive more of the economy underground which has the potential to reduce tax revenue receipts and to widen the tax gap (Cowell 1985). Moreover, Porcano and Price (1992) survey taxpayers and tax preparers and find that practitioner perceived tax rate structures and constrained deductions as less fair than that of the overall tax system which might contribute to tax preparer tax aggressiveness.

Mason and Calvin (1984) interview adults responsible for keeping tax records and find that dissatisfied honest taxpayers are unwilling to employ noncompliance tactics to cope with feelings of inequity. Moreover, a higher proportion of dissatisfied honest taxpayers compared with that of dissatisfied dishonest taxpayers believe that people cheat because tax rates are too high. However, deterioration in public confidence in tax system is not associated with an increase in admitted income tax evasion, but may be in the long run if social norms concerning tax noncompliance are neutralized in the United States.

Tax System Complexity

Milliron (1985) uses multidimensional scaling (MDS) for her exploratory study of tax complexity factors. The study finds that subjects view complexity and equity as inversely related features of the tax system independent of demographic and attitudinal control variables. Explicitly, four dimensions of tax complexity surfaced which include: (1) the nature of the topic, (2) the quantitativeness of applying the tax law, (3) the vulnerability of law to misuse, and (4) the readability of tax passage. The general perception across taxpayers is that simplifying the tax law is consistent with improving equity. However, efforts to improve fairness by refining tax laws to account for variations in personal and economic circumstances increases complexity. Similarly, Long and Swingen (1987) administer a questionnaire to professional tax preparers and use exploratory factor analysis to reveal factors of tax complexity for selected tax return line items. The most salient of these complexity factors are (1) excessive details, (2) numerous calculations, (3) confusing forms, and (4) ambiguity.

From a different perspective, Porcano and Price (1992) survey taxpayer and tax preparers and find that they differ substantially in perceptions in that tax practitioners

have a higher fairness rating for the overall tax system. Conversely, findings among taxpayers indicate that equity and complexity perceptions may have a major impact on their compliance behavior. Additionally, taxpayers only perceive taxing unemployment compensation as less fair than their assessment of the overall tax system. Yet, both taxpayers and tax practitioners perceive providing relief to needy as a very fair criterion for assessing the tax system and consider equal treatment of taxpayers in similar situations as a judgment criterion most frequently linked to tax provision fairness. However, in a more recent study, Forest and Sheffrin (2002) find that simplifying the tax system may not be an effective deterrent to tax evasion because taxpayers do not necessarily consider a complex tax system as an unfair one which supports the conjecture of Milliron (1985). Furthermore, Pope and Mohdali (2010) give greater weight to ideological factors such as religiousness and spirituality in determining the extent to which people meet their legal tax obligations because of personal perceptions of fairness.

This study posits hypotheses undergirded by the presumption that fairness and equity perceptions when interacting with moral capacity and religiousness may have a significant effect on tax evasion intentions. This idea is explored in more depth after a discussion of impact of social norms and the theory of planned or reasoned behavior.

Social Norms and the Theory of Planned Behavior

Social Norms Overview

In their seminal study concerning the payment of federal income taxes, Schwartz and Orleans (1967) perform an experiment to compare the effectiveness of sanctions with that of appeals to the conscience. They find that conscience appeals are more effective

than sanction threats perhaps because those appeals induce a moralistic attitude towards tax compliance. However, the tax evasion effect for conscience appeals and sanction threats are both significantly different from that of the control group indicating that each possesses explanatory power. Moreover, conscience appeals seem to produce less social loss through resistance which may be caused by the taxpayer's sense of civic responsibility compared with that of the threat of punishment. In opposition to the findings of Schwartz and Orleans (1967), Violette (1989) conducts an experiment manipulating sanction communication type from formal (i.e., legal penalty threats) to informal (i.e., guilt and appeal to conscience) and finds that taxpayer evasive behavior is not affected by informal sanction communication, but significantly minimized via formal legal sanctions. This result suggests that formal penalties may increase taxpayers' perceptions of the likelihood of getting caught or other deterrent phenomenon.

To assess the impact of social norms on tax morale and tax evasive behavior, Torgler (2002), in his descriptive review of prior literature, defines social norms as consisting of prescribed behaviors which must be shared by other people and sustained by others' approval or disapproval through the informal social sanction of reciprocity. The study finds that individuals who comply tend to view tax evasion as immoral. In societies, like the United States, which have a strong sense of social cohesion, tax compliance may be higher if a moral or social appeal is made to the taxpayer rather than an economic threat. However, individuals with tax evaders as friends are more likely to not comply themselves because their social norms have been neutralized. Overall, the study finds that holding GDT influences constant, social and institutional factors matter. This indicates that taxpayers have a more refined motivation structure than that assumed

by traditional economic theory; therefore, researchers must consider the "full house" of theories to explain tax noncompliance (Alm 1999, p. 32).

Social Norm Empirical Studies

In light of the previously discussed literature, the following social norm factors appear salient: (1) Guilt, (2) Neutralization of Norms, (3) Appeal to Conscience, and (4) Internalization of Norms. This study describes these factors in ascending order of commitment to the maintenance of social norms with guilt referencing the weak-end and internalized norms anchoring the strong-end of the continuum. Next, this section addresses each of these factors, in turn, citing relevant empirical research as supporting evidence.

Guilt

Scott and Grasmick (1981) develop and test an analytical model of utilitarian cost-benefit theory with respect to tax noncompliant behavior. On one hand, the study finds that, at high levels of inhibition caused by the threat of legal sanctions, injustice motivations are not strongly related to noncompliance behavior. Specifically, individuals who are outraged about social injustice are inhibited from tax evasive behavior because of pecuniary perceptions. On the other hand, at a low level of inhibition because of mere guilt feelings, a significant relationship occurs between injustice motivation and noncompliance behavior. Furthermore, in the absence of inhibition from legal sanctions or guilt feelings, higher social injustice motivation is related to a greater likelihood of noncompliant tax behavior. These results suggest that feelings of guilt interact with social injustice perceptions to cause tax noncompliance only when the threat of penalty is low.

One's peers could provide motivation to comply with tax laws if feelings of guilt or reciprocity deter tax noncompliance. However, if taxpayers' peers are tax evasive themselves, then taxpayers' social norms concerning tax compliance may be neutralized which could cause them to evade taxes. In light of peer influence, Witte and Woodbury (1985) derive an empirical model from actual tax return data and find higher rates of evasion when the taxpayer's community and peer groups are noncompliant. However, Hite (1988) conducts an experiment using prospective jurors and discovers that peer compliance-noncompliance experimental manipulations do not directly affect self-reported tax evasion intentions. These mixed findings indicate the need to conduct future studies to determine the effectiveness of guilt for mitigating tax noncompliance intentions as it relates to social norms.

Appeals to the Conscience

Given the inconclusive prior research results for appeals to the conscience, Chung and Trivedi (2003) measure the effect of friendly persuasion and gender on tax evasion intentions. The researchers have participants in the friendly persuasion group first generate and then read a list of reasons why they should comply with the tax laws. The study contributes two significant results to the literature. First, consistent with previous research, the authors find that women are less tax evasive than men. The second result is much more interesting. Women in the friendly persuasion group report significantly higher amounts of income compared with that of men in the same group; however, there is not a significant difference in tax evasion intentions in the control group of men and women. These findings indicate that appeals to conscience may have a positive effect on income tax compliance, especially for women.

In an effort to evaluate tax non-filers' motivations to complete their returns through amnesty programs, Manly et al. (2005) assess respondents reactions to enforcement efforts through federal-state data sharing programs. These efforts emphasize deterrence through the threat of income visibility to the IRS and friendly persuasion through tax amnesty communications which accentuate social norms. The study finds that tax amnesty programs encourage taxpayers who want to avoid penalties and feel morally or socially obligated to pay taxes; whereas, letters from data-sharing programs increase amnesty participation by self-employed and higher income taxpayers. These results indicate that both enforcement measures (i.e., data sharing program letters) and outreach efforts (i.e., amnesty programs) may be effective means of capturing non-filers because these methods appealed to different types of taxpayers. Furthermore, federal-state data sharing programs attract compliance from two types of taxpayers for which previous research suggests are highly evasive: the self-employed and the wealthy. In a more recent study, Hasseldine et al. (2007) manipulate type of appeal at five levels on a continuum from normative appeal to sanction appeal to test the actual evasive behavior of selfprepared and paid-preparer sole proprietors in the United Kingdom. The study finds that taxpayers reported increases in gross revenues and net income after receipt of the normative appeal or sanction appeal. Interestingly, the researchers find that the sanction letters are generally more effective than the normative citizenship appeal letters for reporting income which further highlights the inconsistency of normative versus sanction appeal results.

Neutralization of Norms

In their study of adults in the United States, Richards and Tittle (1981) find that women perceive tax noncompliance detection risk higher than do men. Specifically, women perceive tax noncompliance of others lower than do men indicating that men's social norms are probably neutralized more than that of women. Hence, males are more noncompliant than females; however, women are closing this tax evasion gap via an apparent neutralization of their social norms. Moreover, this effect has seemingly occurred over time perhaps not only due to women's perceptions of others' tax compliance, but also potentially interacting with their changing role in society.

Internalization of Norms

Wenzel (2004) investigates the moderating and mediating effects of personal and social norms on GDT. Schmolders' (1959) argument that research needs to incorporate noneconomic factors such as norms, fairness, and morality in order to better understand tax compliance, rather than mere economic self-interest as posited by GDT, motivates this study. Wenzel (2004) and other studies measure personal norms, social norms, and ethical beliefs and find that internalized norms of tax honesty and ethics moderate the effects of GDT concerning the underreporting of taxable income (Reckers et al. 1994, Blanthorne and Kaplan 2008). This suggests that the deterrent effects of GDT only occur when individual ethics are relatively weak.

Bobek et al. (2007) define social norms as rules and standards that are understood by members of group that guide and/or constrain social behavior without the force of law. Moreover, social norms are categorized on a continuum from more general societal influences to more personal influences or internalized norms. First, beginning on the more general end of this spectrum, descriptive norms are casually observed standards of others' behavior. Next, injunctive norms specify individual behavior with respect to group expectations. Following injunctive norms, subjective norms relate to expectations of referent others (e.g., family and friends). Last, personal norms are one's self-based standards or internalized expectations of appropriate behavior. Bobek et al. (2007) find that internalized personal and subjective norms are more important than descriptive and injunctive norms for explaining subjects' tax noncompliance intentions. Furthermore, descriptive norms are not found to be significantly related to the subject's tax evasion intentions under any circumstance.

Since studies find mixed results for the effect of guilt, neutralization of norms, appeal to conscience, and internalization of social norms as predictors of tax noncompliant behavior, future research should address this concern. It appears that these studies measure norms and fairness by means that are not well tested in the literature. Therefore, this study assesses fairness and equity using the Multidimensional Ethics Scale (MES) as it assesses the likelihood of taxpayer noncompliance. Furthermore, this study measures the internalization of religious beliefs based on the intrinsic and extrinsic orthogonal measures of the Religious Orientation Scale (ROS). Internalization of moral beliefs is measured based on the level of postconventional reasoning as assessed by the Defining Issues Test (DIT 2). Moreover, subjective norms and peer influences are considered while assessing the likelihood of tax evasion intentions.

Theory of Planned Behavior Overview

Ajzen (1991) and Beck and Ajzen (1991) posit that the central phenomenon of the Theory of Planned Behavior (TPB) is the intention of an individual to exert effort for

given behavior. TPB extends the Theory of Reasoned Action which asserts that the determinants of the intention to put forth effort are the evaluations of alternative behaviors (i.e., opportunities) and subjective social norms (Ajzen and Fishbein 1977). In addition to behavioral evaluations and social norms as precursors of intentions, TPB posits that behavioral control or the relative ease or difficulty of overcoming past or anticipated obstacles is a significant predictor of behavioral intentions. The theory predicts that more favorable behavioral attitudes, higher levels of subjective norms, and greater perceived behavioral control, result in a stronger intention to perform the behavior in question. Hence, intention depends on a person's real or perceived access to resources, his or her assumed ability, and one's supposed cooperation of others to determine the probability of successful completion of the desired outcome or behavior.

Reckers et al. (1994, p. 826) states, "...prior research (investigating tax rate effects and/or prospect theory's framing effects) has been inconclusive in that the moral beliefs of some subjects may have overridden other factors affecting tax compliance." Considering the interactive effects of morality, Bobek and Hatfield (2003) extend TPB. Moral orientation is expected to be an important determinant of behavioral intent beyond the influences of the individual's behavioral attitudes, abilities, and/or societal norm concerns. The results of this and other studies are discussed in the next sections.

TPB Empirical Studies

Non-Taxation Study

In their empirical study of students concerning cheating, stealing, and lying, Beck and Ajzen (1991) find that TPB predicts deviant intentions with a high degree of accuracy and with moderate success foretells actual behavior. Furthermore, TPB is more

successful in predicting cheating than shoplifting or lying perhaps because their participants had more experience cheating or maybe because shoplifting and lying come more impulsively rather than as planned actions. Regardless, adding perceived moral obligations to the prediction equation improves the theory's ability to explain subjects' lying behaviors, but does not help predictions for deviant acts of cheating or shoplifting. Because TPB is more successful in predicting cheating than other behaviors, the theory's constructs may be significantly associated with tax evasion intentions.

Taxation Studies

Bobek and Hatfield (2003) first determine the beliefs that underlie taxpayers' attitudes and then ask subjects to respond to three tax compliance scenarios. This study has several interesting findings. First, the model which includes moral obligation, measured by the perceived moral wrongness of the action, significantly explains tax noncompliance in all of the scenarios evaluated. Second, if moral obligation is low, almost all of subjects cheat. Third, when moral obligation is very high, a significant amount of cheating still occurred which is contrary to the finding of Reckers et al. (1994). This finding suggests that interaction effects of moral obligation, possibly with fairness perceptions, appear to be more complex than originally hypothesized. Fourth, virtually no cheating occurs only when moral obligation is high and perceived behavioral control (i.e., opportunity) is reduced but not completely eliminated. Fifth, guilt and concern for legality of behavior directly relate to tax compliance intentions, and the informal concern for illegality is greater than that of formally incurring a legal penalty which contradicts Violette (1989). Last, taxpayers' attitudes and perceived social pressures are influential in

all scenarios. The study suggests that social influences and perceived behavioral control may improve voluntary compliance more than ethical beliefs and moral obligation.

In their survey of mostly flea-market vendors, Blanthorne and Kaplan (2008) uncover several interesting results concerning the relationship among opportunity, social norms, and ethical behavior concerning self-reported tax noncompliance behavior and hypothetical tax evasion intentions. First, the study indicates that ethics partially mediates the relationship between opportunity and self-underreporting behavior. Specifically, taxpayers with high opportunity to underreport income judge underreporting to be less unethical than those with low opportunity to underreport income which is consistent with previous research (Schmolders 1959; Lewis 1979). Moreover, beliefs that underreporting income is unethical are negatively associated with self-reported noncompliant tax behavior. Furthermore, controlling for ethical beliefs, opportunity has a significant positive relationship with taxpayers' self-underreporting tax behavior. Second, ethics partially mediates the opportunity-behavioral intention relationship. Explicitly, underreporting ethics is negatively associated with underreporting intentions at a similar magnitude as self-underreporting tax behavior. Moreover, controlling for ethical beliefs, there is a direct relationship between opportunity and underreporting intentions but weaker than that of self-underreporting behavior. Last, ethical beliefs fully mediate the social norm-tax behavior relationship. More precisely, social norms have a significant direct relationship with underreporting ethics; however, controlling for ethics, the relationship between social norms and self-underreporting behavior is not significant. This result indicates that individuals internalize social norms which indirectly affect tax evasion intentions and actual underreporting decisions. However, contrary to

expectations, taxpayers with a high opportunity to underreport income do not judge social norms for underreporting less unethical than those with a low opportunity for tax evasion.

Considering TPB for ethical and moral interactions of taxpayers, this study employs explicit research methodologies to account for these interactions when measuring tax evasion intentions. Specifically, this study measures the ethical evaluation of tax evasion intentions via the MES which is discussed in the next section of this chapter. Also, this study assesses moral capacity using the Defining Issues Test (DIT 2) which is discussed in a later section of this chapter.

Ethical Evaluation

As the prior sections of this study have indicated, internalized personal norms are powerful predictors and/or moderators of tax evasion intentions. Specifically, there appears to be a negative relationship between personal norms and tax noncompliance. After considering the effects of ethical evaluation, the remainder of this chapter outlines the relationships between personal norms as indicated by religious orientations and moral capacity as they relate to the ethical evaluation of tax evasion intentions.

Multidimensional Ethics Scale

In an initial development of their model of ethical behavior founded on normative philosophies of deontology, utilitarian teleology, egoist teleology, relativism, and justice, Reidenbach and Robin (R&R 1988) survey students in a basic marketing course. Subjects are provided contextual stimuli to evoke their ethical evaluation processes. The Multidimensional Ethics Scale (MES) investigates not only one's detailed ethical beliefs, but also one's reasons for his or her beliefs. The subjects assess the probability that they

would act in the same manner as the person in the hypothetical unethical scenario after rating twenty-nine items associated with the aforementioned normative philosophies. The study's significant factors satisfy the tests of consistency and reliability normally performed to validate similar scales and result in an eight item instrument with three independent dimensions. The subsequent dimensions are justice based moral equity, contextual based relativism, and deontological based contractualism. Factors grounded in teleological-utilitarianism, which focus on societal cost-benefits, and teleological-egoism, which measure selfish motivations, prove not to be significant. To summarize, individuals tend to rely on a broad sense of moral equity dominated by concerns for fairness and justice, tempered by relativistic behaviors and implied social contract deontological ideas. However, results do not support the contention that individuals are affected by the consequences of teleology.

Furthermore, no one philosophy is assumed for ethical evaluation and decision-making. Rest et al. (1999) suggests that individuals mature from personal interest thinking to society maintaining and postconventional moral reasoning. Postconventional thinkers are concerned about maintaining an ideal societal structure for all members of a community which must be open to scrutiny. The dominance of the ideas of fairness and justice in the moral equity dimension of the MES is rooted in Kohlbergian and Neo-Kohlbergian notions that these concepts are involved in all ethical decision-making regardless of the individual's stage of moral development. Interestingly, R&R (1988, p. 877) say that the contractualism dimension "seems to suggest a more formalized set of rules and duties, perhaps based on family and religious training...." Their statement

suggests an association between contractualism and religious orientation for some respondents.

Moreover, the model is tested surveying business professions (R&\$ 1990), retail marketing professionals (Reidenbach et al. 1991), and business and nonbusiness students in a basic economics course (Robin et al. 1996). R&R (1990) find that the multidimensional scale is a significantly better predictor for most unethical scenarios compared with univariate measures of ethicality. In addition to subjects assessing their likelihood of making the same decision as the protagonist in the scenario, the respondents evaluate the probability that their peers would make such a judgment. This method of evaluation minimizes the bias often evident in self-reports of deviant behavior (i.e., the "halo effect" which asserts that respondents evaluate themselves more favorably than actual) and incorporates the concept of subjective social norms of referent others. R&R (1990) suggest that the moral equity dimension focuses on the inherent fairness, justice, goodness, and rightness of decisions. The relativistic dimension seems to indicate that societal and cultural guidelines define our ethical beliefs rather than individual concerns. Furthermore, R&R (1990) indicate that the moral equity dimension may be defined by the broad relativism dimension in that each dimension has overlapping items of differing moral philosophies. Last, the contractualism dimension is purely deontological and incorporates the idea of implied social contracts with institutions and society including implicit notions of fair play and truth telling. R&R (1991) find that the three dimensions remain significant for most of their experimental trials; however, a few trials indicate that moral equity and relativism combine into one large dimension while contractualism remains independent.

In addition to administering the MES, Robin et al. (1996) not only assess the original six-dilemma Defining Issues Test (DIT 1), but also convert the DIT 1 dilemmas into MES-like scenarios to compare students' evaluations of the contextual differences of the settings. Two DIT 1 scores are assessed in this study: the P-score and the U-score. Briefly, the P-score measures the percentage of moral thinking at the highest moral reasoning stages (i.e., postconventional morality) and the U-score evaluates the utilization of moral reasoning in the decision making process. It appears that DIT scenarios are direct, single issue stories about a potentially unethical situation and contain few complexities; while the MES scenarios offer alternative problems and possible rationalizations for acting unethically. Presumably because cognitive moral development (CMD) measures (i.e., the P-score and the U-score) are designed to measure moral cognition rather than behavior, the MES outperforms the DIT 1 in assessing the subjects' ethical evaluation and behavioral intent. Specifically, the moral equity dimension is most significant, but both the relativism and contractualism factors of the MES individually outperform the CMD measures. Furthermore, the MES outperforms the DIT 1 even when predicting the behavioral intentions of the DIT 1 scenarios.

MES Empirical Studies

Non-Taxation Studies

Since R&R (1988, 1990) survey marketing student and marketing professional subjects from conservative Southern states, Cohen et al. (1993) question the generalizability of the study's results. Cohen et al. (1993) replicate R&R's (1988, 1990) study substituting more liberal Northeastern state participants for the more conservative Southern ones. Like that of R&R (1988, 1990), the study finds that the multivariate scale

has better explanatory power than univariate ethics measure for the marketing scenarios; however, the finding does not persist for accounting contextual scenarios. Furthermore, the teleological-utilitarian construct which relates to a "cost-benefit" or a "greater good" approach to ethical evaluation emerged for more conservative accounting academics evaluating accounting scenarios, somewhat contradicting R&R (1988, 1990). This finding suggests that since cost-benefit analysis is the cornerstone of accounting decision making, the utilitarian dimension may be important for accounting academics and not marketing academics.

However, in their national questionnaire of accountants, Flory et al. (1992) find results that confirm R&R's (1988, 1990) three MES dimensional findings for accounting ethical decision-making. Flory et al. (1992) use four realistic accounting context MES scenarios to examine how accountants make ethical decisions. Since accounting is centered on the establishment of pragmatic, rule-oriented codes intended to regulate public practice, philosophical discussions about good and evil are largely avoided. Consistent with this idea, their study finds that the three dimensions (i.e., moral equity, relativism, and contractualism) capture a substantial amount of the decision dynamics used by accountants to make ethical judgments in a financial context.

In another study, Cohen et al. (1998) compare subjects based on gender and university major (i.e., accounting versus non-accounting). The research finds that women and accounting students are more likely to evaluate questionable actions as more unethical and less likely to state an intention to perform the unethical action than male and non-accounting student respondents, respectively.

Taxation Studies

Cruz et al. (2000) study tax practitioners from two of the big five accounting firms and find factor support for R&R (1990)'s moral equity, relativism, and contractualism dimensions along with Cohen et al. (1993)'s utilitarian dimension. However, the utilitarian dimension is not significant for any of their tax dilemmas with respect to ethical evaluation, and only important in one case for behavioral intentions of the subject. This finding also somewhat refutes Cohen et al. (1993)'s claim that costbenefit utilitarian reasoning is central to accountants' moral reasoning and may question the overall fairness of the tax system. Furthermore, the MES, compared with univariate measures, appears to be most useful in situations that pose relatively difficult tax ethical dilemmas for the respondents.

While administering a questionnaire to adults, Henderson and Kaplan (2005) assess the relationships among ethical orientations, ethical evaluations, and tax compliance behavior using Structural Equations Modeling (SEM). Subjects complete the MES including two tax scenarios based on cases used by Kaplan et al. (1997), an ethical orientation deontological-teleological scale, global tax ethical beliefs assessment, and tax system fairness assessment to provide interesting research findings. First, participants moderately believe that tax evasion is wrong in any amount and taxes are necessary to keep the society running smoothly, but somewhat disbelieve tax laws are enacted and administered fairly. Second, in predicting tax compliance, moral equity is positively related to tax compliance and has a larger effect for the expense scenario than the income case, even though the income case is also positively related to tax compliance and significant. Third, relativism and contractualism are only significant for the tax expense

case; whereas, all dimensions are important when evaluating the taxable expense and taxable income cases simultaneously. Last, there is a direct relationship among ethical orientation and ethical evaluation and tax compliance; however, ethical orientation is only indirectly associated with tax compliance behavior through ethical evaluation. Overall, the study finds that ethical orientation is a complementary antecedent to MES dimensions.

Religious Orientation

Religion may be defined in terms of cognition (e.g., religious knowledge or beliefs), affect (e.g., emotion), and behavior (e.g., church affiliation, church attendance, reading about religion, or praying).

Beliefs and Emotions as Measures of Religiousness

Barnett et al. (1996) surveys business students to assess relationships between religiousness and ethical ideology, ethical ideology and ethical judgments, and ethical judgments and intentions to report peer wrongdoing. The study measures religiousness in cognitive and affect terms, rather than a behavioral standpoint such as church attendance. Furthermore, ethical ideology is measured using Forsyth's (1980) Idealism-Relativism Scale, ethical judgment is measured via R&R's (1990) MES instrument, and behavioral intent is measured considering Ajzen and Fishbein (1980) Theory of Reasoned Action. The study finds that religiousness is negatively associated with relativism, but not associated with idealism. Moreover, idealism is positively associated with judgments that peer reporting is ethical suggesting that idealists are concerned about others and believe that peer unethical action might harm the society. Also, relativism is negatively

associated with judgments that peer reporting is ethical perhaps because relativists believe that it is impossible to make accurate ethical judgments about another's behavior without knowing all circumstances that led to the behavior. Last, judgments that peer reporting is highly ethical is associated with stronger behavioral intentions to report a peer's unethical behavior. This finding is consistent with the Theory of Reasoned Action (Ajzen and Fishbein 1977) or the Theory of Planned Behavior (Ajzen 1991). Concerning this study, Barnett et al.'s (1996) findings link religiousness to MES dimensions (i.e., moral equity, relativism, and contractualism).

Church Attendance and Church Affiliation as Measures of Religiousness

Non-Taxation Studies

During their study which surveys students entering junior- and senior-high school, Hirschi and Stark (1969) measure religiousness via church attendance because it serves as a surrogate that internalizes moral values, legitimizes legal authority, and reinforces the concept of supernatural punishment and rewards. They find that church attendance and belief in the supernatural are not deterrents to juvenile delinquency. This finding may be the result of children not internalizing their religious beliefs, but simply casually identifying with the beliefs of their parents. However, these children are slightly more likely to respect conventional authority.

McDaniel and Burnett (1990) conduct a national mail survey and compare religious commitment, measured via cognitive and behavioral attributes including church attendance, with religious affiliation to assess consumer behavior concerning retail market attributes. McDaniel and Burnett (1990, p. 103) define religion as "a belief in God

accompanied by a commitment to follow principles believed to be set forth by God." For all levels of religious commitment, the study finds a consistent positive relationship with importance placed on sales personnel friendliness and helpfulness, but inconsistent associations with product quality and availability of credit at some levels of religious commitment. To the contrary, religious affiliation is not supported at any level indicating that it may not be important in the United States. The authors suggest that while the typical consumer is in a state of flux, religiousness may tend to be stable over a reasonable period of time which can serve as a basis for marketing strategies.

Conroy and Emerson (2004) study the effect of religiousness as measured by church attendance and ethical and religious curricula on students' ethical attitudes. Their study finds that church attendance significantly correlated with ethical perceptions while ethical and religious courses do not. Specifically, church attendance generally reduces the acceptability levels of the unethical vignettes assessed in the study. However, for one scenario, church attendance unexpectedly increases acceptability when a male candidate is hired over equally qualified female applicant since the supervisor thinks that employees would resent being supervised by woman. The authors suggest that this extraneous result could either be because males dominate church leadership or religiousness is correlated with tradition. Nonetheless, in response to the study's findings, the authors state (p. 384), "...perhaps believers in God are less willing to act unethically because they believe that an omniscient God will 'catch' them in the act - or by extension, know their unethical thoughts or attitudes." With respect to other important factors, the study finds that subjects who are female, non-white, over 23, or graduate students generally have reduced acceptability levels for the unethical vignettes. The

authors suggest that these demographic characteristics may be used as control variables for future studies of the effect of religiousness on ethical evaluation.

Taxation Studies

Tittle and Welch (1983) extract data from interviews of residents of Iowa, New Jersey, and Oregon to determine whether religiousness, measured by church attendance, inhibits nine different deviant behaviors within various contexts. The contextual properties include: (1) normative dissensus among respondents concerning the morality of deviant acts, (2) social integration with the community, (3) perceived conformity with respect to committing deviant acts, (4) aggregate religiousness as measured by religious affiliation, and (5) status inequity as measured by dispersion of a socio-economic status (SES) variable. The study finds that tax evasion is the only of nine deviant behaviors significant for all five contextual characteristics. Moreover, the extent to which religiousness influences conformity varies directly with general normative dissensus. These findings may suggest that religiousness predicts conformity to rules uniquely prohibited by religious institutions (e.g., tax evasion), but not to rules prohibited by society as a whole which reflects the effect of normative dissensus. Furthermore, Tittle and Welch (1983, p. 662) state, "A multidimensional index of religiousness would have been desirable, but sufficient data to construct one were unavailable in the data set." This study incorporates the use of a multidimensional measure of religiousness (i.e., intrinsic and extrinsic religiousness) which is discussed in the next section of this chapter.

Torgler (2006) conducts a multivariate archival analysis of data from the World Values Survey and finds that religiousness as measured by church attendance is associated with rising tax morale, even when government corruption, trustworthiness, and

demographic and economic factors are controlled. Specifically, the study finds that being an active member of a church group increases one's probability of believing that tax evasion is never justifiable. This more recent finding suggests that tax evasion is less likely for persons with higher levels of church attendance or other religious behavioral attributes.

Similarly, in a current archival tax study, Boone et al. (2013) measure religiousness as the fraction of the U.S. county-wide population that claims affiliation with an organized religion. The study predicts and finds that religiousness is positively related with tax compliance for both corporations and individuals. Concerning individual taxpayers, the authors assert that perhaps their findings are the result of the religious person's higher level of risk aversion and potentially their perceived guilt from the violation of religious-based social norms. Their result is consistent with that of Witte and Woodbury's (1985) finding that higher rates of tax evasion occur when the taxpayer's community and peer groups are noncompliant. However, Boone et al. (2013)'s finding contradict that of Tittle and Welch (1983) which suggests that societal normative dissensus affords religion a greater influence on tax compliance intentions.

Religious Orientation Scale

Non-Taxation Studies

In their study of churchgoers, Allport and Ross (1967) define two measures which produce four orientations of religiousness in their development of the Religious Orientation Scale (ROS). First, people with an extrinsic orientation find religion useful for providing security and solace, sociability and distraction, and status and self-justification. These persons turn to God, but not away from selfish motivations. Second,

intrinsic religious people embrace and internalize a creed. Allport and Ross (1967, p. 434) characterizes these two poles of the religious continuum by stating, "...the extrinsically motivated person uses his religion, whereas the intrinsically motivated lives his religion." The third and fourth religious orientations are indiscriminately proreligious (hereafter, indiscriminates) and antireligious. These religious orientations are simply extensions based on mean evaluations of the intrinsic-extrinsic measures. Indiscriminates highly endorse all items that seem favorable to religion in any sense (i.e., both extrinsic and intrinsic items); whereas, antireligious people disagree with items on both intrinsic and extrinsic scales. Since their study surveys churchgoers, none of the participants are categorized as antireligious. However, of the remaining religious types, their study indicates that intrinsics are the least prejudice concerning acceptance of minority groups, indiscriminates are most prejudice, and extrinsics are moderately prejudice. These findings support the authors' hypothesized religious characterizations.

In his meta-analysis of the factors of religiousness (i.e., intrinsic, extrinsic, indiscriminate, and antireligious), Donahue (1985) assesses their correlations with other constructs and highlights several important findings. First, intrinsic religiousness is uncorrelated rather than negatively correlated with prejudice across most anti-black measures, but extrinsic religiousness is positively correlated with this prejudice measure. These findings partially support Allport and Ross (1967) in that Donahue (1985) finds support for extrinsic outcomes, but not for intrinsic ones. Second, extrinsic religiousness is positively correlated with religious close-mindedness, but intrinsic religiousness is uncorrelated with such dogmatic attitudes. Third, extrinsic religiousness tends to be positively correlated with negatively evaluated characteristics and uncorrelated with other

measures of religious belief and commitment; whereas, intrinsic religiousness tends to be uncorrelated with negatively evaluated characteristics and positively associated with other measures of religiousness. Fourth, intrinsic and extrinsic factors are orthogonal dimensions rather than a continuum as originally assessed by Allport and Ross (1967). Last, the ROS based on median splits of the two scales is of little use when the dependent variable is religious in nature, but various nonreligious variables produce results that may correspond to findings of curvilinearity observed with other measures of religiousness.

Gorsuch and Venable (1983) develop an "Age Universal" ROS scale and find that it compares favorably to the original ROS scale for adults and children with a fifth grade reading level or higher. Gorsuch and McPherson (1989) refine the "Age Universal" ROS scale by studying middle school, junior high school, high school, and college students to assess the subdivision of the ROS extrinsic construct into three components: personally oriented extrinsicness, socially oriented extrinsicness, and reverse intrinsicness. Their results indicate that reliabilities are equal to or better than those of the original scales. Furthermore, the reversed intrinsic items seem to indicate something other than religion is important while increasing the level of overall reliability of intrinsicness while counterbalancing the intrinsic scale against acquiescence bias. Concerning the two new "E-scale" measures, Gorsuch and McPherson (1989, p. 353) state that they are "empirically distinctive.... However, the scales need further work to determine whether or not they differentially predict criteria."

Taxation Study

Grasmick et al. (1991) describe people who have a strong religious identity salience or internalized religious convictions as intrinsic, and those who are involved in a

social network based on religion as extrinsic. They interview adults and find that the threat of shame emanating from religious identity salience (i.e., intrinsics) is a stronger deterrent to cheating on taxes than embarrassment of those involved in a social network (i.e., extrinsics); however, both religious types are significant. Furthermore, religiousness measured by identity salience or church attendance has a greater negative effect on inclination to cheat on taxes than do gender, race, socio-economic status, and political conservatism. Overall, this study indicates that intrinsic religious persons and persons with higher levels of church attendance tend to have higher tax compliance intentions.

Religious Orientation Scale (ROS) and Multidimensional Ethics Scale (MES)

Multidimensional ethic philosophies encompass ideas of fairness, justice, social contracts, obligations, consequences, and greatest goods which can be found in the Bible, the Koran, the writings of Buddha, and in other religious or spiritual written works. Two studies relate the ROS with the MES. First, Clark and Dawson (1996) investigate the influence of religiousness in the formation of ethical judgments for business activities. The study provides an initial framework relating the orthogonal religious measures (i.e., intrinsicness and extrinsicness) with the moral equity dimension of the MES. They find that intrinsics rated the unethical actions of the protagonists in the scenarios as more unethical than extrinsics, but interestingly less unethical compared with non-religious participants. The authors offer several explanations of the variation between intrinsics and non-religious participants. First, intrinsics may perceive fewer viable alternatives and evaluate the consequences of those alternatives differently. Second, intrinsics may tend to be more concerned with interpersonal relationships and social customs (i.e., utilitarian

norms). Third, intrinsics may place higher values on forgiveness and obedience and therefore internalize less demanding duty and justice conceptualizations. Last, intrinsics may experience conflicts between teleological work ethic coupled with its commensurate benefits and deontological future orientation which rejects the importance of material things. Perhaps these conflicts cause intrinsics to be less concerned with and therefore less condemning of minor unethical lapses especially in moderately unethical circumstances.

Second, Wiebe and Fleck (1980) find that intrinsic religious persons tend to be more moral, more conscientious, and more disciplined suggesting that intrinsic religious commitment may affect ethical judgments. In light of this finding, Knotts et al. (2000) study religiousness (i.e., ROS intrinsic scale only) among other factors that may affect the ethical decision-making process (MES moral equity dimension only). Their research finds that females, business students, and intrinsics judged MES scenario actions as more unethical which partially contradicts Clark and Dawson (1996). With respect to religious commitment, the authors say, "Therefore, these results suggest the need for greater attention to religiousness and its influence on ethical decision-making" (Knotts et al. 2000, p. 162).

To address the concern of Knotts et al. (2000), this study relates both the intrinsic and extrinsic orthogonal measures of the ROS with all three dimensions of the MES (i.e., moral equity, relavatism, and contractualism). Based on the author's review of prior literature, this relationship has not been examined for tax compliance.

Moral Reasoning

Cognitive Moral Development (CMD)

Kohlberg (1981) asserts that morality is a philosophical or an ethical rather than a behavioral concept. Furthermore, an adequate psychological explanation of cognition or of morality must include an explanation of the universality of these concepts throughout humanity. Consistent with this idea, Kohlberg derives his theory from the works of Kant and Rawls. First, Kantian morality assumes a moral judgment based on conformity to an ideal norm, instead of one that adheres to particular circumstances or cultures. Second, Rawls' moral philosophy asserts that inequality is only justified if it is acceptable to the person in the most disadvantaged position. The sentiment of this view is similar to that of the Golden Rule (i.e., "one should treat others the way that he or she would prefer to be treated") which is observed by many of the world's religions. This study discusses the implications of religion as it relates to morality later in this chapter.

Contrarily, relativists believe that there are no universal human values because each culture or society determines its own moral values. Although rational ethics may be considered prescriptive in that it is guided by rational standards, relativism is generally a descriptive doctrine. Kohlberg (1981) states that the naturalistic fallacy results from the attempt to derive prescriptive statements from descriptive ones. He emphasizes that even if there are observed cultural or societal differences in moral judgment, there are moral principles that can reconcile these differences and lead to consensus. Kohlberg (1981) suggests twenty-nine categories of morality consisting of modal elements (e.g., obeying or consulting), value elements (e.g., seeking rewards or avoiding punishment), and societal norms (e.g., preservation of life).

Rest et al. (1999) asserts that Kohlberg's core values of Cognitive Moral Development (CMD) consist of (1) a cognitive emphasis, (2) an effortful construction of morality, (3) a developmental approach, (4) a shift in thinking, and (5) a macromorality concept. First, a cognitive emphasis is asserted because one must understand how people make sense of the world (i.e., their worldview) in order to comprehend their moral behavior. Second, the individual's construction of his or her basic categories of morality (e.g., justice, duty, right, and social order) are aggressively self-constructed, not passively absorbed through their cultural surroundings. Moreover, the highest level of moral development constructs a moral point of view by imaginatively taking the roles of all the participants in the dilemma with all the contextual information available to each person (Rest et al. 1999). Third, development of moral judgment evolves from simple to complex with gradual transition periods. Fourth, a shift in thinking occurs from conventional maintenance of social norms to postconventional ideas for which rules, roles, laws, and institution serve some sharable concept of cooperation which must be open to scrutiny. Last, postconventional moral reasoning is macromorality or man's interaction with formal institutions of society rather than man's micromoral face-to-face interaction with people of close relations. A specific postconventional macromoral concern is equity in economics which includes paying a fair amount of taxes to the government for the support of public institutions which is the central theme of this study.

However, critics of CMD object to the view that the most advanced moral thinking is independent individual cognition apart from others who may have a stake in the moral decision. Furthermore, opponents cite that stage three, seeking interpersonal concordance, is unjustly portrayed as being primitive to stage six, loyalty to abstractions

or societal institutions. Munsey (1980) rejects CMD in that the philosophy asserts principlism of one rule or one method of reasoning over others. Specifically, CMD favors a "bottom up" morality based on theories of justice instead of a "top down" common morality of the community or relativism. However, Rest et al. (1999) note that, in a democratic society like the United States, open discussion, debate, and disagreement are inevitable and can lead to societal justice rather than Kohlberg's fear—mindless conformity to the status quo.

Levels (Schemas) and Stages of CMD

Prior research summarizes Kohlbergian and Rest's Neo-Kohlbergian moral stages of development and indicates each stage's motivation for action (Munsey 1980; Rest et al. 1999; Bebeau and Thoma 2003) including faith or religious motivations (Kohlberg 1981). Rest et al. (1999) concludes that the Defining Issues Test (DIT) which operationalizes CMD empirically supports only three schemas which are combinations of five of the six Kohlbergian stages. Furthermore, the three DIT schemas allow researchers to describe the developmental aspect of moral judgment and the construction of basic moral concepts. These DIT schemas are described in addition to Kohlberg's moral stages. Also, Kohlberg (1981) describes faith stages that parallel moral ones which are also addressed in this section.

Stages One and Two

First, the preconventional level has two stages which indicate a person's responsiveness to cultural rules and labels of right or wrong based on one's self-interest. In stage one, action is motivated by avoidance of punishment and conscience is the fear of punishment. Physical outcomes determine an action's rightness or wrongness

regardless of the moral value of these consequences. Concerning the parallel faith stage, responsiveness to God's rules replaces that of societal laws. In stage two, action is motivated by desire for reward or benefit in mutual exchanges. Right actions consist of what maximizes the individual's utility and occasionally the utility of others. For the complementary faith stage, exchanges between God and mankind supplant those between individuals. Clearly, the theory underlying preconventional action is associated with the preventative effects of general deterrence theory (GDT) in that punishment is avoided or self-interest is sought and morality is disregarded. Therefore, persons with an affinity to preconventional behaviors should not evade taxes when deterrence factors are high and should be noncompliant when these factors are low or absent. Furthermore, the preconventional level seems to be theoretically related to the teleological egoism orientation which asserts that individual morality is grounded on cost-benefit consequences to actions in light of the individual's selfish interests. However, preconventional thinking is primarily found in adolescents and seldom observed in adults who are the focus of this study.

Stages Three and Four

Second, the conventional level considers the individual's expectations of family, group, and nation as valuable from the perspective of maintaining a good society regardless of individual consequences. It seems to be interconnected with the teleological utilitarian "greatest good" or a relativistic theoretical orientation. Conventional moral thinking is the morality of maintaining social norms because persons at this level believe that these norms are the most appropriate way of doing things in society. This cognitive style embraces micromoral concepts which include: (1) displaying courtesy and

helpfulness to others; (2) caring in intimate relationships; (3) observing personal events of friends and family; (4) being punctual for appointments; and (5) generally acting in a decent, responsible, empathic way in one's daily dealing with others. This level also has two stages. In stage three, action is motivated by the actual or imagined disapproval of others (e.g., guilt for committing actions that are contrary to social order). Good behavior is defined as what pleases or helps others and is approved by society. The corresponding faith stage substitutes the disapproval of others for that of God. Furthermore, guilt feelings are magnified at this stage because God is now considered a personal friend as well as an all knowing eternal being.

In stage four, action is motivated by anticipation of dishonor or failure as perceived by one's social group. Right behavior consists of doing one's duty, showing respect for authority, and maintaining social order. The related faith stage asserts that moral rules are internalized and driven by one's conscience. The action basis of the conventional level moves an individual from GDT motivations towards the sentiments and loyalties described by Fiscal Psychology Theory (i.e., fairness). Specifically, since social norms have been found to moderate the deterrent effects of GDT (Reckers et al. 1994, Wenzel 2004, Blanthorne and Kaplan 2008), persons with strong conventional behaviors may be more likely than preconventional thinkers to be tax compliant irrespective of deterrent levels. Furthermore, social institutions reinforce this attitude by mediating conflicting claims, promoting the common good, and codifying such practices into institutionalized laws such as those found in the Internal Revenue Code.

Stages Five and Six

Last, at the postconventional level, a clear effort is made to define moral values and principles that have validity and application apart from the authority of the groups holding these principles (i.e., family, peers, and nation) in order to proactively create, rather than maintain, a just society. This type of moral thinking holds a macromoral point of view which includes: (1) rights and responsibilities of free speech, (2) due-process rights of the accused, (3) nondiscriminatory work practices, (4) freedom of religion, and (5) equity in economic and educational opportunities. Because Kohlbergian Theory is concerned with the possibility of establishing a system of cooperation at a society-wide level, such as that required for a country's system of taxation, impartiality or fairness among participants is demanded. The postconventional level has two stages. In stage five, action is motivated by concern for maintaining respect for equals, for the community, and for one's self based on reasons of justice rather than those of emotion. The comparable faith stage posits that God and man will combine to create a community in which dignity and freedom prosper. This stage separates postconventional thinkers from conventional reasoners, where the former are rational moral agents aware of fundamental universal rights which a moral society must protect for all of its members and the latter are biased by loyalties to associated persons and groups.

In stage six, action is motivated by concern about self-condemnation for violating one's internalized principles and integrity. The individual is concerned with self-determined universal principles of justice, with reciprocity and equality of human rights, and with dignity of human life. For the parallel faith stage, there exists a natural or common law which unites principles of justice with the ultimate. Additionally, Kohlberg

(1981) suggests a seventh moral stage based on the sentiments of the sixth religious stage. This ultimate moral stage is not only concerned about integrity and oneness with people and all of life, but also the confrontation and defeat of despair which universal principle awareness alone is unable to conquer. The actions of the postconventional level embody the philosophy of Fiscal Psychology in that perceptions of fairness and justice are important in both. Low penalty and tax rate structures have been found to indicate a fair tax system. Therefore, persons with postconventional tendencies should be tax compliant only when the tax system's penalties, rates, and other tax structure factors are perceived to be fair; otherwise, they will likely evade taxes.

Defining Issues Test

The Defining Issues Test (DIT 1 or DIT 2) operationalizes the measurement of moral capacity and has been administered in over four hundred studies (Bebeau and Thoma 2003). The DIT activates and assesses moral schemas in terms of importance judgments. The instrument uses a bottom-up fragment strategy to state just enough of argument to activate one's moral schema with a top-down method of not stating too much to encourage concept-driven processing (Rest et al. 1999). Lawrence (1978) suggests that less developed subjects do not select high-staged items because they do not comprehend them, and more developed subjects do not select low-staged items because they prefer high-staged ones. The DIT schemas, personal interest, maintaining norms, and postconventional, capture the essence of Kohlbergian stages, but are somewhat different. The personal interest schema of development (i.e., Kohlberg's stages two and three) is concerned with teleological egoism; whereas, the maintaining norms schema (i.e., Kohlberg's stage four) is associated with relativism. Furthermore, the postconventional

schema (i.e., Kohlberg's stages five and six) emphasizes society-creating with a deontological justice orientation. Therefore, the DIT is able to distinguish between maintaining norms and postconventional thinking. On one hand, maintaining norms reasoning involves doing one's duty guided by the authoritarianism of governmental control. On the other hand, society-creating postconventional reasoning recognizes that the law may be inequitable, should be open to scrutiny, and should appeal to a sharable social ideal.

The newer DIT instrument (i.e., DIT 2) updates the dilemmas and items used to activate moral reasoning. Furthermore the DIT 2 is shorter than the original DIT 1 and fewer subjects are purged during its reliability checks. The validity and reliability of the DIT 1 and DIT 2 have been robustly tested. First, their measures differentiate groups assumed to be of greater or lesser expertise in moral reasoning (i.e., formal moral education improves scores). Second, an upward change in longitudinal studies is evident in that each higher level of education increases P-scores by about ten points indicating that higher levels of education challenge subjects to reexamine their perception of the moral basis of society. Third, higher P-scores are associated with advanced comprehension of moral concepts, higher job performance, and greater ability to reconstruct moral arguments, but they are not necessarily related to moral action or behavior. Fourth, to improve the measure's predictability, the N2-score has been developed for the DIT 2 and has greater internal reliability than that of the P-score. The N2-score measures the extent to which the subject ranks postconventional items highly while avoiding rating personal interest items as important.

To address the concern that the DIT is biased towards liberals, McGeorge (1975) asks first-year teachers college students to respond to the DIT as if they are either liberal or conservative. The study's results indicate that the students are not able to fake high DIT 1 P-scores, but are able to fake low ones. However, there is some concern about the scale's ability to significantly predict political attitudes, political choices, and societal participation (Bailey et al. 2010). To compensate for political concerns, the DIT 2 includes a measure of political identification and religious attitudes to produce an orthodoxy-progressivism scale which accounts for about two-thirds of the variance on positions of divisive public policy issues such as abortion, school prayer, gay and lesbian rights, women rights, and free speech. Bebeau and Thoma (2003) suggest that understanding the development of moral judgment is crucial to comprehending the great ideological divide between conservatism and liberalism.

When questioning whether the Kohlbergian CMD philosophy should be abandoned by accountants, Bailey et al. (2010) analyze prior research and find mixed results concerning the Kohlbergian approach and DIT results for accountants. First, principled reasoning is important for accountants, but accounting students and professional accountants' P-scores are generally below that of adults with similar levels of education. Second, there is only a small effect that the DIT measures political ideology rather than identifies moral capacity for accountants. Third, women tend to score higher than their male counterparts on the DIT for which the authors suggest that future research should include gender as a covariate. Last, the study finds that prior research is inconclusive concerning the mismeasurement of accountants' ethical judgment.

DIT Empirical Studies

Fisher (1997, 1999) develops and tests a tax specific DIT. First, Fisher (1997) surveys high school students, undergraduate and graduate college students, faculty, and university staff and administrators to develop a DIT instrument with a tax framework called the Tax Context Issues Test (TCIT). Since the author posits that stage three reasoning is more likely to cheat on taxes than stage four thinkers, the study calculates a T-score as the sum of stages four through six whereas the DIT P-score only sums stages five and six in its calculation. However like the DIT, the TCIT assesses issue statements from stage two through stage six presenting lower stage items earlier, includes an antiestablishment assessment (i.e., the A-score measures the condemnation of the traditional for the arbitrary) and a meaningless measure (i.e., the M-score assesses the attractiveness of ambiguous wording). Moreover, validity and reliability test for the TCIT are comparable to those of the DIT. For the TCIT, the study finds that the mean level of moral reasoning is equivalent to that of the DIT, persons with more education display higher levels of moral reasoning, and the mean level of moral reasoning is higher for females than males. However, the moral reasoning concerning taxpaying contexts seems less advanced than that of the social dilemmas measured by the DIT. This difference in reasoning may surface because of the greater difficulty of observing the effects of taxpaying behavior on the welfare of others or because persons perceive issues of the DIT on a higher moral plane than those of the TCIT.

Second, Fisher (1999) conducts an experiment with business students manipulating penalty level and congressional intent of the tax law to assess the TCIT's (Fisher 1997) ability to predict tax evasion. The study finds that the likelihood of tax

noncompliance for subjects receiving the penalty treatment is less than that of subjects receiving the intent of law treatment. Moreover, for tax evasion, the penalty treatment has a greater effect on low level moral reasoners and the intent of law treatment has a greater effect on postconventional moral thinkers indicating that moral reasoning has a moderating effect on GDT factors. However, because the TCIT score combines maintaining norms thinking with postconventional reasoning, the study's finding may not be comparable with other DIT studies.

In an experiment of first year MBA students, Kaplan et al. (1997) manipulate type of sanction (i.e., legal versus appeal to conscience) to assess the moderating effects of the DIT 1 P-score on the likelihood of tax noncompliance. The study finds that tax evasion intentions are significantly lower for taxpayers who utilize postconventional moral reasoning. Furthermore, for taxpayers utilizing relatively low levels of moral reasoning, tax evasion intentions are significantly lower among those who receive legal sanction communication than those receiving either no educational communication or appeal to conscience communication. However, tax evasion intentions are not significantly lower among those postconventional thinkers who receive appeal to conscience communication as opposed to those receiving no educational communication. Perhaps the most interesting finding is that legal sanction communication has no effect on the tax evasive behavior of postconventional moral reasoners which further indicates that morality moderates the effects of GDT.

Last, Troutman et al. (1995) assess student taxpayers and find that higher DIT 1 P-scores are related to higher levels of tax compliance only through tax system fairness perceptions. However, they determine that moral development, income level, and age are not directly related to tax compliance intentions. Furthermore, Trivedi et al. (2003) manipulate audit level, peer reporting information, and tax inequity covaried with moral reasoning among other variables and find, ceteris paribus, that students' DIT 1 P-scores are positively related to tax compliance. Furthermore, student tax compliance is negatively affected by the level of their DIT 1 A-Score (i.e., anti-establishment score). These results are encouraging concerning the potential use of the DIT measures for future tax compliance research as a moderating or interacting variable.

Ethical Evaluation and Moral Capacity

Cohen et al. (1996) relate the MES to the DIT 1 for auditing professionals and find that the MES outperforms the DIT 1 in assessing moral development and predicting moral behavior. While Weber (1996), in his commentary of Cohen et al. (1996), welcomes the contributions of the MES to the assessment of individuals' moral reasoning; he criticizes the research regarding theory confusion, instrument confusion, and the theoretical basis of the MES. First, Weber believes that theory confusion is apparent when Cohen et al. (1996) equate Kohlberg's and Rest's theories to the MES. Weber (1996, p. 518) states, "While moral equity may provide an excellent foundation for the development of the MES, condemning Kohlberg or Rest for their failure to ground their CMD theories on this construct or for developing instruments that do not emphasize this cognitive moral reasoning element is inappropriate." The reasons concerning the first criticism are made more clear by the second concern—instrument confusion. The DIT is neither equal to the MES, nor is it intended to be. According to Weber (1996), the MES has no a priori normative moral philosophy; therefore, it allows individuals to apply their own previously learned perceptions of fairness or justice when making ethical

judgments. However, the DIT is primarily based on the ideological philosophy of Kantian deontology or a duty to act the "right" or "just" way regardless of the circumstances. Last, the third critique highlights a concern stemming from the second observation: the fear that the MES allows respondents to create their personal perception of what is fair and just which suggests that ethics research should be normative rather than positive. Kohlberg (1981) refers to this as the naturalistic fallacy. Specifically, Reidenbach and Robin (1988) consistent with CMD theory group the statements "acceptable to my family" and "unacceptable to my family" as relativistic; however, factor analysis results of the subjects' responses seem to inappropriately group these items with normative moral equity or justice. Concerning the other dimensions of the MES, Forsyth (1980) finds that neither idealism (i.e., MES contractualism dimension) nor relativism as measured by his Ethics Position Questionnaire is related to the DIT 1 P-score. Therefore, the MES dimensions (i.e., moral equity, relativism, and contractualism) appear to be independent of the DIT. Moreover, Weber (1996) resolves that the MES is a compliment, not a replacement, to the DIT and Neo-Kohlbergian Theory.

In a more recent study, Shawver and Sennetti (2009) survey undergraduate students in an introductory accounting course and measure their ethical behavior using the MES and the DIT 2 to assess whether accounting ethics should be taught at the university level. The study has a number of thought-provoking results. First, higher DIT 2 P-score students did not evaluate questionable accounting actions as more unethical than low DIT 2 P-score subjects. This outcome reinforces previous findings that the DIT may be incapable of predicting behavioral intentions. Second, consistent with Cohen et al. (1996), the MES constructs of moral equity, relativism, egoism, utilitarianism, or

contractualism and the composite MES score explain the ethical and unethical choices by accounting students better than the DIT 2 P-score. Last, the study indicates that the composite MES score is not related to the DIT 2 P-score suggesting that the two measures quantify distinct constructs which is consistent with Weber (1996).

Morality and Religiousness

Kohlberg (1981) distinguishes morality from religiousness in that the purpose of moral thinking is to resolve competing claims on the basis of moral norms; however, religious reasoning defines life and morality beyond human experiences (i.e., reliance on God to live a moral life). Although morality differs from religiousness, Kohlberg defines common attributes of both constructs. These common attributes are the foundation of Natural Law Theory which is discussed later in this section. Moreover, Kohlberg distinguishes faith from religion in that the former is an abstract universal quality of knowing; whereas, the latter is an expression of former in which concerns about the ultimate are made clear. Kohlberg (1981) parallels moral reasoning stages with those of religious thinking (i.e., faith thinking) for which the motivation for action have previously been addressed in this chapter. Nonetheless, the study finds that differences only occur in the higher stages with the moral reasoning being rated more highly. This result suggests that the development of higher levels of moral reason precede that of higher levels of religious thinking. Therefore, religious reasoning maybe derived from moral reason.

On one extreme, Fundamentalists or Divine Command theorists posit that morality is ultimately defined by divine commands revealed by some document of ultimate revelation (e.g., The Bible or Koran). On the other extreme, Freud's Emotivistic

or Agnostic Theory posits that morality and religion are simply irrational illusions or human fantasies. Freud asserts that moral judgments only offer emotional approval or disapproval; therefore, they have no meaning as statements of truth or falsity. However, Freud contends that scientific judgments have meaning because they are predictors of observable data. A more neutral position, Natural Law Theory, posits that there are universal or natural principles of justice and morality developed through Socratic reasoning that should guide all societies. Furthermore, these principles are independent of specific religious revelation or faith. Kohlberg provides an exemplar of Natural Law Theory in a statement by Martin Luther King from a Birmingham jail. King says (Kohlberg 1981, p. 319), "There is a moral responsibility to disobey unjust laws, though one must do so openly, lovingly and with a willingness to accept the penalty."

Previous studies indicate that morality as measured by the DIT is not equivalent to various religiousness measures especially for subjects with conservative religious beliefs (Kohlberg 1981; Getz 1984; Rest et al. 1986; Richards and Davison 1992). Kohlberg (1981) believes that religious orientation is mostly independent of moral development in that the former focuses on religious doctrine which may be biased and the latter strives for an ideal norm. Furthermore, Rest et al. (1999) note that a limitation of the Kohlbergian Approach is that it neglects the role of religion in the formation of moral thinking. Getz (1984), in her review of the relevant literature, finds an inverse relationship between principled moral reasoning and conservative religious beliefs for most studies. However, Getz (1984) does not find conclusive evidence concerning the relationship between religious orientations (e.g., intrinsic and extrinsic) and moral judgment. Getz (1984, p. 107) states, "Those who were intrinsically oriented clearly

tended to take seriously the moral teachings typical of their particular congregation." This observation suggests that intrinsic religious subjects may behave differently than other religious people and that their religion may intensify their behavioral preferences. Furthermore, Rest et al. (1986) note that the divine origin of moral absolutes for religious persons may cause them to not rely on their own intellect for making moral judgments; therefore, religious people may refrain from principled moral thinking.

In their study of conservative religious subjects, Richards and Davison (1992) find that some stage four and anti-establishment DIT items have religious connotations. The authors suggest that these implied spiritual tones activate conservative religious people's moral schema causing them to select these conventional items rather than postconventional ones. Furthermore, they find that some postconventional items have negative religious undertones for conservative religious subjects triggering them to reject these items in favor of lower stage items. Richards and Davison (1992) suggest that the weakness of Kohlbergian Theory is that it assesses information in light of justice considerations, to the exclusion of other philosophies such as care, moral duty, benevolence, compassion, self-realization, honor, and liberty.

To summarize, this study incorporates several of the methodologies of the previously mentioned ideological studies. First, it uses the R&R (1988, 1990) eight-item three-dimension MES (i.e., moral equity, relativism, contractualism) to evaluate tax evasion intentions using both evasive income and deduction cases (Henderson and Kaplan 2005; Kaplan et al. 1997). Second, the current study implements a peer behavioral assessment to eliminate the "halo effect" (i.e., reduce the bias of self-reports of deviant behavior) and incorporate subjective norms. Third, Cruz et al. (2000, p. 239)

states, "... future research could investigate whether the effects of personal characteristics such as cognitive moral development or personal values influence their deontological and teleological evaluations of ethical dilemmas, and whether those evaluations in turn influence ethical judgments and intentions." Consequently, this study assesses the complementary nature of the DIT 2 and the ROS with the MES concerning tax evasion intentions. Furthermore, this study considers the interactive effects between the DIT 2 and MES constructs as suggested by Weber (1996). Additionally, the current research administers the DIT 2 to assess moral orientation as did Shawver and Sennetti (2009) and evaluates the study's results using SEM which is consistent with Shawver and Sennetti (2009) and Henderson and Kaplan (2005). Last, this study extends Henderson and Kaplan (2005) by substituting the orthogonal religious scales (i.e., intrinsic and extrinsic) for the orthogonal ethical orientation measures (i.e., deontology and teleology) and evaluating the interactive effects of the DIT measures (i.e., P-score and N2-score).

Development of Hypotheses

Cruz et al. (2000, p. 239) states, "... future research could investigate whether the effects of personal characteristics such as cognitive moral development or personal values influence their deontological and teleological evaluations of ethical dilemmas, and whether those evaluations in turn influence ethical judgments and intentions." Based on the previous statement, this study examines three complementary research questions. First, do personal religious beliefs matter with respect to the ethical evaluation of tax evasion intentions? Similarly, the second question is whether moral capacity matters regarding the ethical evaluation of tax evasion intentions? The last query considers interactive effects and questions whether cognitive moral development interacts with

personal religious beliefs considering the ethical evaluation of tax evasive practices? In order to appropriately address these questions, the study's constructs must be defined.

First, McDaniel and Burnett (1990, p. 103) define religion as "a belief in God accompanied by a commensurate commitment to follow principles believed to be set forth by God." Similarly, Kohlberg distinguishes faith from religion in that the former is an abstract universal quality of knowing; whereas, the latter is an expression of the former in which concerns about the ultimate are made clear. Second, Forsyth (1980) develops an ethical ideology taxonomy based on two factors of ethical evaluation: (1) the extent to which one replaces universal moral rules with relativism and (2) the degree to which one focuses on idealism. Idealism and relativism are purported to be orthogonal measures with characteristics similar to those of deontology and teleology, respectively. Third, Kohlbergian morality and Rest's Neo-Kohlbergian morality are derived from Kant and Rawls (Munsey 1980; Kohlberg 1981; Rest et al. 1999; Bebeau and Thoma 2003). Kantian deontological philosophy assumes that moral judgment is based on conformity to an ideal norm or a duty to act the "right" or "just" way, regardless of the teleological circumstances. Moreover, Rawls' moral philosophy asserts that inequality is only justified if it is acceptable to the person in the most disadvantaged position.

Religion may be defined in terms of cognition (e.g., religious knowledge or belief), affect (e.g., emotion), and behavior (e.g., church affiliation, church attendance, Bible reading, or praying). Tittle and Welch (1983) indicate that a multidimensional scale of religiousness may have improved their study. Therefore, this study measures religiousness via the multidimensional Religious Orientation Scale (Allport and Ross 1967; Gorsuch and McPherson 1989). Allport and Ross (1967, p. 434) characterize two

constructs of the scale by stating, "...the extrinsically motivated person uses his religion, whereas the intrinsically motivated lives his religion." Moreover, Getz (1984, p. 107) states, "Those who were intrinsically oriented clearly tended to take seriously the moral teachings typical of their particular congregation." Furthermore, Grasmick et al. (1991) in their tax compliance study describe people who have a strong religious identity salience or internalized religious convictions as intrinsic, and those who are involved in a social network based on religion as extrinsic. Also, Tittle and Welch (1983) suggest that religiousness predicts conformity to rules uniquely prohibited by religious institutions (e.g., tax evasion), but not to rules prohibited by society as a whole.

The first stage of the ideological model of tax evasion indicates that religiousness directly influences the ethical evaluation of one's tax reporting decisions (see Figures 1-7).

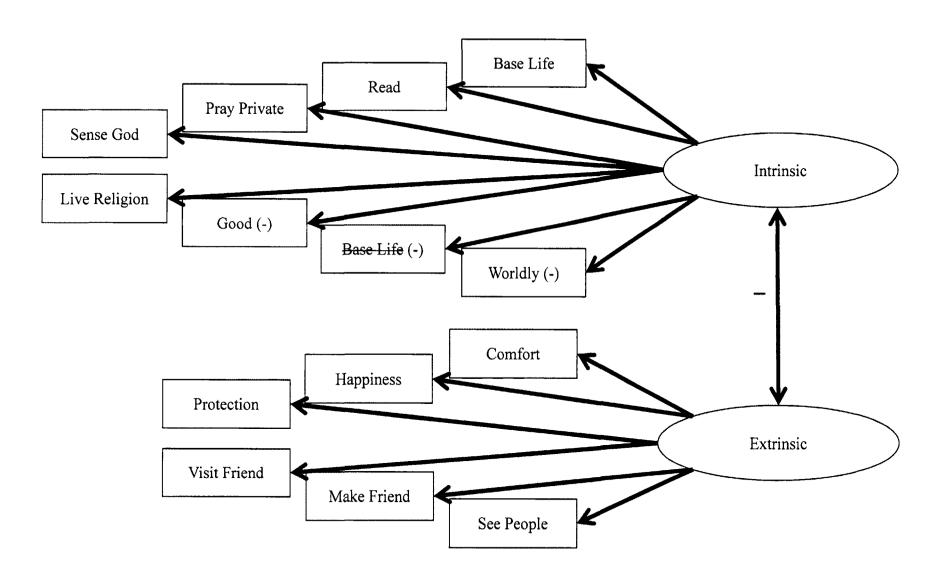


Figure 1 Measurement Model of the Religious Orientation Scale (ROS)

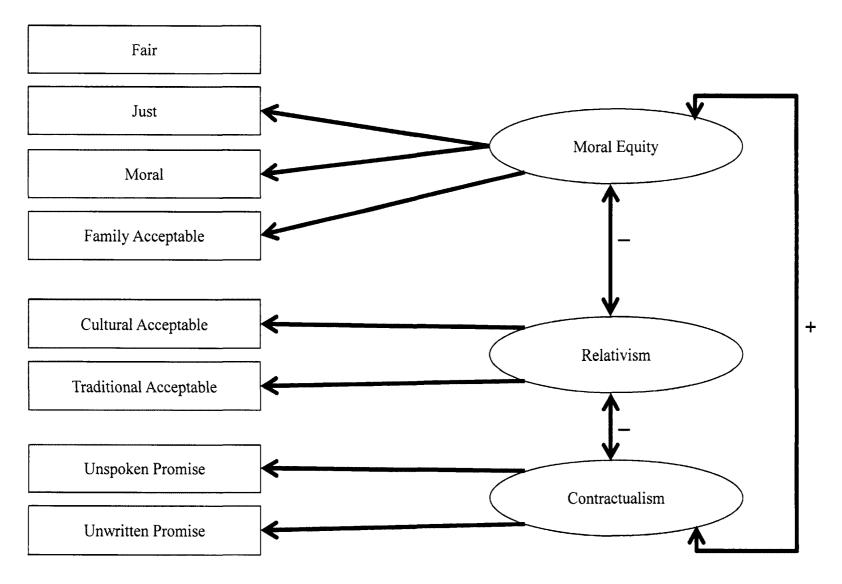


Figure 2 Measurement Model of the Multidimensional Ethics Scale (MES)

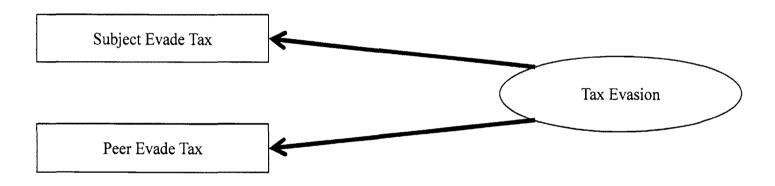


Figure 3 Measurement Model of Multidimensional Ethics Scale (MES) Tax Evasion Intentions

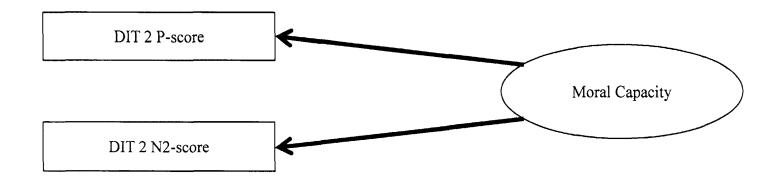


Figure 4 Measurement Model of the Defining Issues Test (DIT 2) Moral Capacity

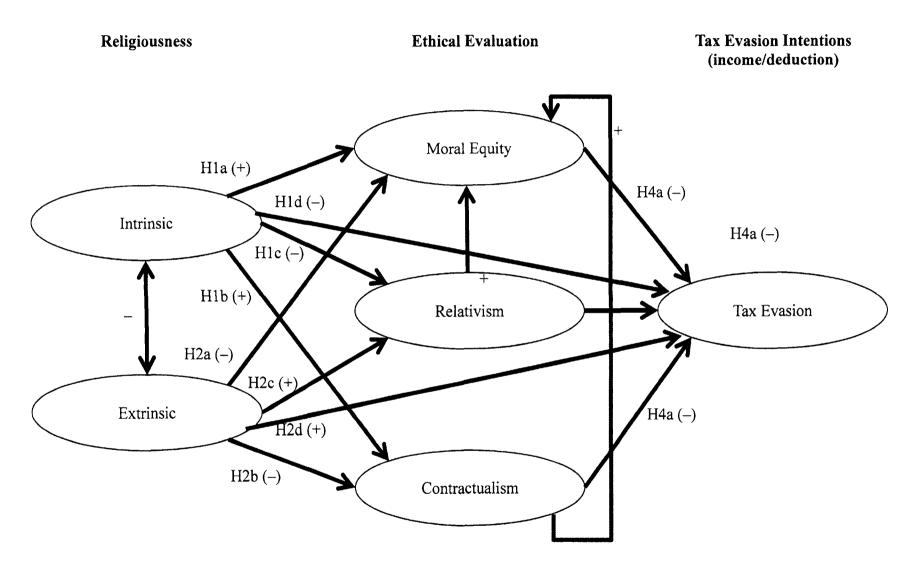


Figure 5 Hypothesized SEM of the Effect of the ROS on the Ethical Evaluation of Tax Evasion Intentions (Model 1)

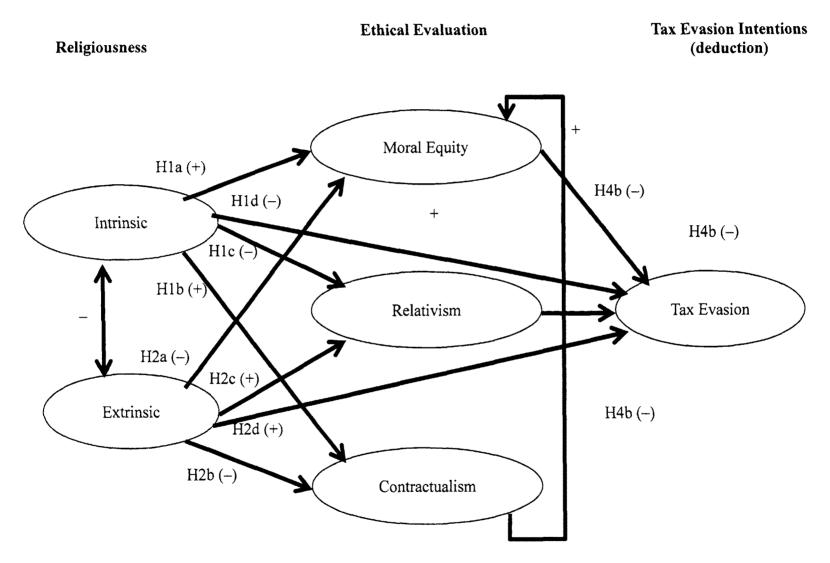
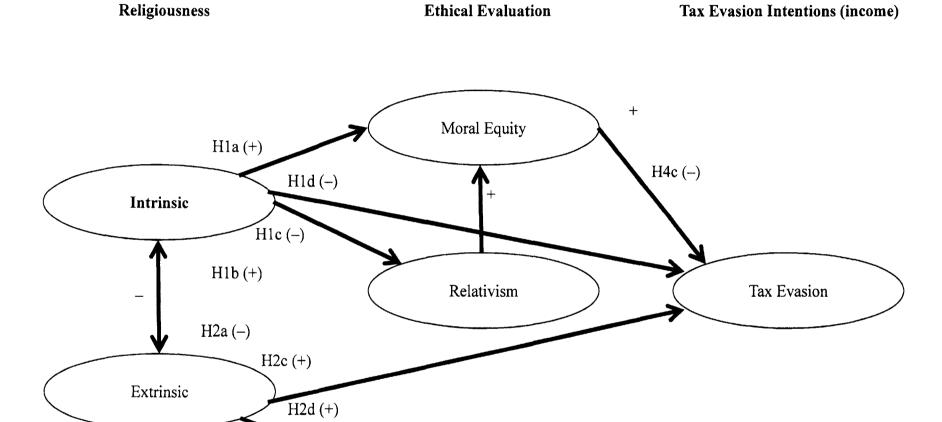


Figure 6 Hypothesized SEM of the Effect of the ROS on the Ethical Evaluation of Tax Evasion Intentions (Model 2)



Ethical Evaluation

Figure 7 Hypothesized SEM of the Effect of the ROS on the Ethical Evaluation of Tax Evasion Intentions (Model 3)

Contractualism

H2b (-)

Furthermore, Donahue (1985) finds that intrinsic and extrinsic factors are orthogonal dimensions rather than a continuum as originally posited, and Cruz et al. (2000) suggest that these respective religious factors may have deontological and teleological characteristics. This conceptualization is similar to that of the aforementioned idealism-relativism characteristics as posited by Forsyth (1980). The distinction between "intrinsics" and "extrinsics" indicates that the former "live" their religion while the latter "use" their religion is consistent with deontology and teleology, respectively. Tax and non-tax studies generally find that intrinsic religiousness or a deontological perspective is directly related to both the moral equity dimension of the MES (Collins and Daniel 1996; Knotts et al. 2000; Henderson and Kaplan 2005) and the contractualism dimension of the MES (R&R 1988; Henderson and Kaplan 2005), but inversely related to the relativism dimension of the MES and tax evasion intentions (Grasmick et al. 1991; Barnett et al. 1996; Clark and Dawson 1996). However, insignificant correlations are also found between intrinsic religiousness or a deontological perspective and the relativism dimension of the MES (Henderson and Kaplan 2005), the contractualism dimension of the MES (Barnett et al. 1996), and tax evasion intentions (Donahue 1985; Henderson and Kaplan 2005).

Considering the previous research with respect to intrinsic religiousness or a deontological perspective, the following hypotheses are offered:

- H1a: Intrinsic religiousness is positively related to the moral equity dimension of the MES.
- **H1b**: Intrinsic religiousness is positively related to the contractualism dimension of the MES.
- **H1c**: Intrinsic religiousness is negatively related to the relativism dimension of the MES.

H1d: Intrinsic religiousness is negatively related to tax evasion intentions as assessed by the MES and has a larger negative effect than extrinsic religiousness.

Tax and non-tax studies have found inverse correlations between extrinsic religiousness or a teleological perspective and both the moral equity and the contractualism dimensions of the MES (R&R 1988; Clark and Dawson 1996; Henderson and Kaplan 2005), and a direct association with the relativism dimension of the MES (Henderson and Kaplan 2005). Moreover, Grasmick et al. (1991) find that extrinsic religiousness or a teleological perspective and tax evasion intentions are indirectly related; whereas, However, Donahue (1985) and Henderson and Kaplan (2005).

Considering the previous research with respect to extrinsic religiousness or a teleological perspective, the following hypotheses are offered:

- **H2a**: Extrinsic religiousness is negatively related to the moral equity dimension of the MES.
- **H2b**: Extrinsic religiousness is negatively related to the contractualism dimension of the MES.
- **H2c**: Extrinsic religiousness is positively related to the relativism dimension of the MES.
- **H2d**: Extrinsic religiousness is negatively related to tax evasion intentions as assessed by the MES and has a smaller negative effect than intrinsic religiousness.

The DIT 2 P-score and N2-score are both often used to evaluate moral capacity as assessed by the DIT. The DIT 2 P-score measures the percentage that the respondent selects postconventional items; whereas, the N2-score measures the extent to which the subject ranks postconventional items highly while avoiding rating personal interest items as important. The N2-score has greater internal reliability than that of the P-score. Furthermore, the DIT 2 measures three different schemas: (1) personal interest, (2)

maintaining norms, and (2) postconventional. With respect to the lower levels of development, the personal interest schema (i.e., Kohlberg's stages two and three) is concerned with teleological egoism; whereas, the maintaining norms schema (i.e., Kohlberg's stage four) is associated with relativism. Forsyth (1980) finds that neither idealism (i.e., MES contractualism dimension) nor relativism as measured by his Ethics Position Questionnaire is related to the DIT 1 P-score.

Concerning the highest level of development, the postconventional schema (i.e., Kohlberg's stages five and six) emphasizes society-creating with a justice orientation. Postconventional thinkers view rules, roles, laws, and institution as serving some sharable concept of cooperation (Rest et al. 1999). In particular, postconventional reasoners are concerned about maintaining an ideal societal structure for all members of society which must be open to scrutiny. Riedenbach and Robin (1988) develop the moral equity dimension of the MES based on a justice perspective similar to that of the DIT and Kohlbergian Theory. Studies have found that the MES outperforms the DIT in predicting behavioral intent (Cohen et al. 1996; Shawver and Sennetti 2009). However, Weber (1996) indicates that the DIT is neither equal to the MES, nor is it intended to be. Moreover, Weber resolves that the MES may be a compliment (e.g., justice orientation), not a replacement, to the DIT and Kohlbergian Theory. Based on the author's review of the literature, Weber's complementary assertion has not been tested.

Last, Kohlberg (1981) asserts that morality is a philosophical or an ethical rather than a behavioral concept; therefore cognitive moral development and the DIT may not accurately measure behavioral intent or action. Concerning the DIT P-score and the prediction of behavioral intent, previous research has not only found that higher P-scores

are related to lower tax evasion intentions (Kaplan et al. 1997; Fisher 1999; Trivedi et al. 2003), but also found no relation between P-scores and tax evasion intentions (Troutman et al. 1995; Shawver and Sennetti 2009).

Considering the previous research with respect to moral capacity, the following hypotheses are offered:

H3a: Postconventional moral capacity is positively related to the moral equity dimension of the MES.

H3b: Postconventional moral capacity is not related to the contractualism dimension of the MES.

H3c: Postconventional moral capacity is not related to the relativism dimension of the MES.

H3d: Postconventional moral capacity is not related to tax evasion intentions as assessed by the MES.

Regarding the MES and ethical evaluation, individuals tend to rely on a broad sense of moral equity dominated by concerns for fairness and justice, tempered by relativistic and implied social contract deontological dimensions. Prior research generally finds that all three MES dimensions (i.e., moral equity, relativism, and contractualism) are indirectly related to the evaluation of unethical behavior, such as tax evasion intentions (R&R 1988, 1990; Cohen et al. 1996; Henderson and Kaplan 2005). However, Henderson and Kaplan (2005) assess both the underreporting of taxable income and the overreporting of tax deductions and find that the latter is rated more unethical than the former for actual taxpayers. Furthermore, the income scenarios are not significant for the relativism and contractualism dimensions of the MES; however, when both income and deduction cases are simultaneously evaluated, all MES dimensions are significant. Their result concerning the disparity between income and deductions is similar to that of

Groves (1958) which finds that farmers and landlords are reluctant to overreport deductions as compared with underreporting income.

Considering the previous research with respect to ethical evaluation, the following hypotheses are offered:

H4a: When income and deduction scenarios are simultaneously evaluated, all three MES dimensions (i.e., moral equity, relativism, and contractualism) will be negatively related with tax evasion intentions.

H4b: When deduction scenarios are independently evaluated, all three MES dimensions (i.e., moral equity, relativism, and contractualism) will be negatively related with tax evasion intentions.

H4c: When income scenarios are independently evaluated, only the moral equity dimension of the MES will be negatively related with tax evasion intentions.

Last, Kohlberg (1981) distinguishes morality from religiousness in that the purpose of the former is to resolve competing claims on the basis of moral norms; however, the latter defines life and morality beyond human experiences. This distinction suggests that the development of moral reasoning precede that of religious thinking. Specifically, perhaps religious reasoning takes longer to develop than moral reasoning. Rest et al. (1999) note that a limitation of the Kohlbergian Approach is that it neglects the role of religion in the formation of moral thinking. Explicitly, Richards and Davison (1992) suggest that the weakness of Kohlbergian Theory is that it assesses information in light of justice considerations, to the exclusion of other philosophies such as care, moral duty, benevolence, compassion, self-realization, honor, and liberty. Moreover, Getz (1984) does not find conclusive evidence concerning the relationship between religious orientations (e.g., intrinsic and extrinsic) and moral judgment as indicated by the DIT P-score. Interestingly, Richards and Davison (1992) find that some maintaining norms and

anti-establishment DIT items have attractive religious connotations; whereas, some postconventional DIT items have negative religious undertones. Because of these embedded religious connotations, they suggest that intrinsically religious persons will tend to reject postconventional items in favor of conventional or preconventional ones. Previous research indicates that the ROS and the DIT are distinct measures of religiousness and moral capacity, respectively. Perhaps these unique measures may combine to better predict behavioral intent (e.g., tax evasion intentions) than either single measure alone. Based on the author's review of the literature, the ROS (intrinsic and extrinsic religiousness) constructs have not been compared with those of the DIT 2 (P-score, N2-score, etc.) concerning the prediction of behavioral intent.

Considering the previous research indicated above, with respect to the association between religiousness (i.e, ROS) and moral capacity (i.e., DIT 2) and the prediction of behavioral intent, the following research question is offered:

RQ: The model of the ideological factors of tax compliance will improve when considering the ROS (i.e., intrinsic and extrinsic religiousness) in addition to the DIT (i.e., P-score, N2-score, etc.) above that of the single construct alone (i.e., ROS or DIT).

CHAPTER THREE

METHODOLOGY

Overview

To test each of the research hypotheses, this study surveyed undergraduate and graduate business and non-business students using a three-part questionnaire. The first part contained two hypothetical tax compliance cases (i.e., underreported income and overreported deductions) and was used to assess the subjects' agreement, or lack thereof, with the unethical action described in the scenarios as determined by the Multidimensional Ethics Scale (MES). The sequence of the cases (i.e., income and deduction) was presented in the same order for each participant. The second part assessed their levels of intrinsic and extrinsic religiousness as measured by the Religious Orientation Scale (ROS). The last part measured the subjects' level of moral capacity as indicated by the P-score and N2-score derived from the Defining Issues Test (DIT 2). Each participant received each part of the questionnaire in the same order (i.e., MES, ROS, and DIT 2).

The Questionnaires

Multidimensional Ethics Scale

First, subjects evaluated two hypothetical tax evasion scenarios via the MES as shown in Appendix A. The tax scenarios employed income and deduction items that are

not easily verified by the IRS for which prior research overwhelmingly finds that this invisibility increases the likelihood of tax evasion (Madeo et al. 1987). Furthermore, these scenarios were previously tested by Kaplan et al. (1997) and Henderson and Kaplan (2005), allowing this study's results to potentially be comparable with those studies. The income scenario described selling a business computer to a friend and not reporting the taxable gain from the sale; whereas, personal meal and entertainment expenses are illegally deducted for business purposes in the deduction case. In each of the scenarios, subjects judged the ethical context based on three dimensions (i.e., moral equity, relativism, and contractualism) and rated on a seven-point scale. These evaluations serve as both dependent and independent variables in the assessment of the structured equation model for this study.

Additionally, participants indicated their (and their peers) probability of acting in the same unethical manner as the protagonist in the scenario on a seven-point scale anchored by "high" (scored 1) and "low" (scored 7). Hence, larger scores indicated disagreement with the unethical behavior. These evaluations served as univariate dependent measures of behavioral intent. Respondents indicated the degree to which the person described in the scenario acted ethically on a seven-point scaled anchored by "ethical" (scored 1) and "unethical" (scored 7). Again, larger scores suggested increased disagreement with the unethical behavior. This measure served as a univariate dependent measure of ethical evaluation that can be compared with the multivariate measure of ethical evaluation. Last, subjects indicated their perception of the likelihood of getting caught evading taxes on a seven-point scale anchored by "high" (scored 1) and "low" (scored 7). Based on general deterrence theory (GDT), higher scores indicated a greater

likelihood of evading taxes. This measure is used to control for the visibility of income to the IRS which prior research indicates is the most important factor for determining tax compliance behavior. Confirmatory Factor Analysis (CFA) results and previous research indicate that the MES dimensions (i.e., moral equity, relativism, and contractualism) are significantly correlated which is represented in all structural models (i.e., Models 1-9). When observing the means and standard deviations of the aforementioned measures, neither end-loading nor low item variance appears to be a concern for the sample (Flory et al. 1992). Furthermore, large standard deviations suggest that the scenarios are truly ethical dilemmas for the respondents as a whole.

Religious Orientation Scale

Second, subjects provided demographic information and, afterwards, completed a questionnaire to indicate their religious orientation by responding to scale items as shown in Appendix B. Gorsuch and McPherson (1989) refine the Allport and Ross (1967) religious orientation scale (ROS) by subdividing the ROS extrinsic construct into three components: personally oriented extrinsicness, socially oriented extrinsicness, and reverse intrinsicness. Gorsuch and McPherson (1989) indicate that the best single measures for personal and social extrinsicness are "What religion offers me most is comfort in times of trouble and sorrow" and "I go to church mainly because I enjoy seeing people I know there," respectively. Furthermore, the strongest predictor of reverse intrinsicness is "It doesn't matter what I believe so long as I am good." The reversed intrinsic items are combined with original intrinsic scale items increasing the level of overall reliability of intrinsicness while counterbalancing the intrinsic scale against acquiescence bias (see Tables 1-8).

Table 1

Ethical Evaluation Demographic and Descriptive Statistics for Models 1-3

	N	Minimum	Maximum	Mean	Std. Deviation
AGE	181	18	69	24.19	8.087
SEX(M)	181	0	1	.55	.499
I JUST	181	1	7	4.45	2.080
I FAIR	181	1	7	4.09	2.051
I RIGHT	181	1	7	5.08	1.779
I FAMILY	181	1	7	3.79	2.155
I TRAD	181	1	7	3.61	2.102
I CULTURE	181	1	7	3.11	1.807
I_CONTRACT	181	1	7	4.38	2.042
I_PROMISE	181	1	7	4.19	2.065
I FRIENDS	181	1	7	5.20	1.833
I_SUBJECT	181	1	7	4.15	2.269
D JUST	181	1	7	5.83	1.505
D FAIR	181	1	7	5.77	1.468
D [_] RIGHT	181	1	7	6.19	1.134
D FAMILY	181	1	7	5.46	1.724
D ^T RAD	181	1	7	4.93	1.811
D CULTURE	181	1	7	4.47	1.864
D_CONTRACT	181	1	7	4.96	1.973
D_PROMISE	181	1	7	5.00	1.944
D FRIENDS	181	1	7	3.78	1.931
D SUBJECT	181	1	7	2.98	2.196
JUST	181	1	7	5.14	1.534
FAIR	181	1	7	4.93	1.523
RIGHT	181	1	7	5.64	1.264
FAMILY	181	İ	7	4.62	1.652
TRAD	181	1.0	7.0	4.27	1.706
CULTURE	181	1.0	7.0	3.80	1.619
CONTRACT	181	1.0	7.0	4.71	1.705
PROMISE	181	1	7	4.59	1.749
FRIENDS	181	1	7	4.49	1.553
SUBJECT	181	1	7	3.56	1.695
Valid N (listwise)	181				

Table 2

Ethical Evaluation Demographic and Descriptive Statistics for Models 4-6 and Models 7-9 (All Subjects)

	N	Minimum	Maximum	Mean	Std. Deviation
AGE	128	18	69	24.63	8.855
SEX(M)	128	0	1	.53	.501
I_JUST	128	1	7	4.49	2.047
I_FAIR	128	1	7	4.07	1.981
I_RIGHT	128	1	7	5.30	1.638
I_FAMILY	128	1	7	3.79	2.128
I_TRAD	128	1	7	3.60	2.079
I_CULTURE	128	1	7	2.94	1.724
I_CONTRACT	128	1	7	4.44	2.023
I_PROMISE	128	1	7	4.27	2.069
I_FRIENDS	128	1	7	5.36	1.760
I_SUBJECT	128	1	7	4.23	2.232
D_JUST	128	1	7	5.76	1.571
D_FAIR	128	1	7	5.74	1.497
D_RIGHT	128	1	7	6.22	1.108
D_FAMILY	128	1	7	5.47	1.716
D_TRAD	128	1	7	4.84	1.911
D_CULTURE	128	1	7	4.34	1.905
D_CONTRACT	128	1	7	4.88	2.053
D_PROMISE	128	1	7	4.91	2.033
D_FRIENDS	128	1	7	3.79	1.893
D_SUBJECT	128	1	7	2.41	1.825
JUST	128	1	7	5.13	1.561
FAIR	128	1	7	4.91	1.530
RIGHT	128	1	7	5.76	1.204
FAMILY	128	1	7	4.63	1.656
TRAD	128	1.0	7.0	4.219	1.732
CULTURE	128	1.0	7.0	3.641	1.595
CONTRACT	128	1.0	7.0	4.660	1.755
PROMISE	128	1	7	4.59	1.836
FRIENDS	128	1	7	4.57	1.489
SUBJECT	128	1	7	3.32	1.701
Valid N (listwise)	128				

Table 3

Ethical Evaluation Demographic and Descriptive Statisticsfor Models 7-9 (High Moral Capacity)

	N	Minimum	Maximum	Mean	Std. Deviation
AGE	64	19	60	24.84	8.429
SEX(M)	64	0	1	.58	.498
I_JUST	64	1	7	4.91	1.925
I_FAIR	64	1	7	4.58	1.950
I_RIGHT	64	1	7	5.52	1.681
I_FAMILY	64	1	7	4.16	2.110
I_TRAD	64	1	7	3.89	2.032
I_CULTURE	64	1	7	3.11	1.691
I_CONTRACT	64	1	7	4.69	1.975
I_PROMISE	64	1	7	4.48	1.992
I_FRIENDS	64	1	7	5.38	1.628
I_SUBJECT	64	1	7	3.91	2.252
D_JUST	64	1	7	5.84	1.417
D_FAIR	64	3 3	7	5.95	1.201
D_RIGHT	64	3	7	6.36	.915
D_FAMILY	64	1	7	5.52	1.643
D TRAD	64	1	7	4.91	1.779
D_CULTURE	64	1	7	4.36	1.872
D_CONTRACT	64	1	7	5.08	1.986
D_PROMISE	64	1	7	4.89	2.063
D_FRIENDS	64	1	7	4.00	1.826
D_SUBJECT	64	1	7	2.44	1.790
JUST	64	2.0	7.0	5.38	1.464
FAIR	64	2.0	7.0	5.27	1.412
RIGHT	64	3	7	5.94	1.146
FAMILY	64	1	7	4.84	1.640
TRAD	64	1.5	7.0	4.40	1.589
CULTURE	64	1.0	7.0	3.73	1.527
CONTRACT	64	1	7	4.88	1.666
PROMISE	64	1	7	4.69	1.751
FRIENDS	64	2	7	4.69	1.390
SUBJECT	64	1.0	7.0	3.17	1.751
Valid N (listwise)	64				

Table 4

Ethical Evaluation Demographic and Descriptive Statistics for Models 7-9 (Low Moral Capacity)

	N	Minimum	Maximum	Mean	Std. Deviation
AGE	64	18	69	24.42	9.323
SEX(M)	64	0	1	.48	.504
I_JUST	64	1	7	4.08	2.095
I FAIR	64	1	7	3.56	1.893
I_RIGHT	64	1	7	5.08	1.577
I_FAMILY	64	1	7	3.42	2.099
TRAD	64	1	7	3.31	2.100
I_CULTURE	64	1	7	2.77	1.752
I_CONTRACT	64	1	7	4.19	2.054
I_PROMISE	64	1	7	4.06	2.137
I_FRIENDS	64	1	7	5.34	1.896
I_SUBJECT	64	1	7	4.55	2.182
D_JUST	64	1	7	5.67	1.719
D_FAIR	64	1	7	5.53	1.727
D_RIGHT	64	1	7	6.08	1.264
D_FAMILY	64	1	7	5.42	1.798
D_TRAD	64	1	7	4.77	2.045
D_CULTURE	64	1	7	4.33	1.952
D_CONTRACT	64	1	7	4.69	2.115
D_PROMISE	64	1	7	4.92	2.018
D_FRIENDS	64	1	7	3.58	1.950
D_SUBJECT	64	1	7	2.39	1.874
JUST	64	1	7	4.88	1.626
FAIR	64	1	7	4.55	
RIGHT	64	1	7	5.58	1.242
FAMILY	64	1	7	4.42	1.658
TRAD	64	1.0	7.0	4.04	1.859
CULTURE	64	1.0	7.0	3.55	1.666
CONTRACT	64	1.0	7.0	4.44	1.825
PROMISE	64	1	7	4.49	1.926
FRIENDS	64	1	7	4.46	1.584
SUBJECT	64	1	7	3.47	1.650
Valid N (listwise)	64				

Table 5

Religiousness Descriptive Statistics for Models 1-3

	N	Minimum	Maximum	Mean	Std. Deviation
11	181	0	7	5.28	1.967
2ES	181	0	7	3.06	1.889
3IR	181	0	7	4.93	2.137
4I	181	0	7	5.55	1.809
5I	181	0	7	5.05	2.088
6EP	181	0	7	4.11	1.983
7I	181	0	7	4.81	2.137
8EP	181	0	7	4.57	2.209
9EP	181	0	7	4.88	1.907
10IR	181	0	7	4.31	2.225
11ES	181	0	7	2.08	1.518
12I	181	0	7	4.24	2.187
13IR	181	0	7	4.10	2.298
Valid N (listwise)	181				

Table 6

Religiousness Descriptive Statistics for Models 7-9 (All Subjects)

1	N	Minimum	Maximum	Mean	Std. Deviation
11	128	0	7	5.15	2.016
2ES	128	0	7	3.09	1.880
3IR	128	0	7	5.02	2.142
4I	128	0	7	5.47	1.844
5I	128	0	7	5.00	2.107
6EP	128	0	7	3.97	2.008
7I	128	0	7	4.75	2.122
8EP	128	0	7	4.53	2.155
9EP	128	0	7	4.79	1.902
10IR	128	0	7	4.40	2.182
11ES	128	0	7	2.09	1.506
12I	128	0	7	4.24	2.091
13IR	128	0	7	4.16	2.285
Valid N (listwise)	128				

Table 7

Religiousness Descriptive Statistics for Models 7-9 (High Moral Capacity)

	N	Minimum	Maximum	Mean	Std. Deviation
11	64	0	7	4.94	2.046
2ES	64	0	7	3.00	1.984
3IR	64	0	7	4.58	2.376
4I	64	0	7	5.02	2.097
51	64	0	7	4.72	2.271
6EP	64	0	7	3.80	2.132
7I	64	0	7	4.52	2.282
8EP	64	0	7	4.06	2.281
9EP	64	0	7	4.48	1.944
10IR	64	0	7	4.38	2.020
11ES	64	0	7	2.14	1.698
12I	64	0	7	4.16	2.125
13IR	64	0	7	3.98	2.236
Valid N (listwise)	64				

Table 8

Religiousness Descriptive Statistics for Models 7-9 (Low Moral Capacity)

	N	Minimum	Maximum	Mean	Std. Deviation
1 I	64	0	7	5.36	1.979
2ES	64	0	7	3.19	1.781
3IR	64	1	7	5.47	1.790
41	64	1	7	5.92	1.429
5I	64	0	7	5.28	1.906
6EP	64	0	7	4.14	1.876
7I	64	0	7	4.98	1.939
8EP	64	0	7	5.00	1.927
9EP	64	0	7	5.09	1.823
10IR	64	0	7	4.42	2.349
11ES	64	0	7	2.03	1.297
12I	64	0	7	4.33	2.071
13IR	64	0	7	4.33	2.337
Valid N (listwise)	64				

Both Gorsuch and McPherson (1989) and Allport and Ross (1967) include these original intrinsic religious items in their overall constructs. Gorsuch and McPherson (1989) indicate that the best univariate measure of intrinsicness is "My whole approach to life is based on my religion." This study employs the univariate measures of social extrinsicness and reverse intrinsicness, while maintaining the multivariate assessments of personal extrinsicness and intrinsic religiousness (Allport and Ross, 1967; Gorsuch and McPherson, 1989). Confirmatory factor analysis indicates that the single measures are essentially the same as the multiple measures; furthermore, the scale reduction adds to the model parsimony. As such, Models 1-3 which assess the hypothesized model of tax evasion with respect to religiousness and ethical evaluation appear in Figures 5-7, respectively.

The Defining Issues Test

Last, each subject responded to survey items concerning five different social problems (Defining Issues Test—DIT 2, sample shown in Appendix C). The DIT activates moral schemas by rating and rankings issues in terms of importance judgments. If subjects encounter items that both make sense and tap into their preferred schema (i.e., activates schema), then those items should be rated and ranked highly. However, if subjects encounter items that either do not make sense or seem simplistic and unconvincing, then those items should receive a low rating and not be ranked highly. The DIT presents just enough of a line of argument to activate a schema, but not so much that the subject substitutes the meaning of the information presented for the meaning of the schema already in the subject's mind. Respondents scoring at higher levels of

postconventional moral reasoning select items exhibiting a shareable ideal of cooperation for all members of society which should be open to scrutiny.

The current version of the DIT (DIT2) includes two moral judgment scores for which this study employs. First, the P-score refers to the extent to which a subject prefers postconventional moral thinking as indicated by the fifth and sixth stages of moral reasoning (Bebeau and Thoma 2003). For each dilemma, participants receive four points, three points, two points, and one point for the most, second most, third most, and fourth most important postconventional item, respectively. Of the twelve items to be rated, three or four items correspond to the four item rankings representing the postconventional schema. Therefore, the P-score represents the percent of the postconventional moral thinking that the participant ranked highly and can range from zero to 95. Second, the N2-score has two components: two-thirds of the extent that the subject prefers postconventional moral reasoning (i.e., the P-score) less one-third of the degree preconventional moral reasoning receives higher ratings.

Hypothesized structural models (i.e., Model 4, Model 5, and Model 6) of tax evasion regarding postconventional reasoning are assessed based on the participants' DIT 2 P-scores and N2-scores. Furthermore, participants are dichotomized into above and below mean groups to assess the combined DIT 2 and ROS models (i.e., Model 7, Model 8, and Model 9). Bebeau and Thoma (2003) indicate that the median level DIT 2 P-score for college students is approximately forty-five; however, no such measure is provided for the DIT 2 N2-score. For measures like the DIT 2 P-score and the N2-score, Shadish et al. (2002) indicate that dichotomizing the measure's scores (e.g., postconventional and non-postconventional) strengthens the study's internal validity. This cutoff seems

appropriate given the study's hypotheses concerning association of DIT 2 scores with variation in both ethical evaluation and intention to evade taxes.

Statistical Analyses

Factor analysis was conducted to validate the factor loadings for the ROS and MES item measures and the results were similar to prior research. Furthermore, the factor analytical process was performed for the combined DIT 2 P-score and N2-score construct representing postconventional reasoning. All factor items loaded reasonably high with their hypothesized construct indicating strong convergent validity while remaining unrelated to other model constructs indicating discriminant validity.

Furthermore, Structured Equation Modeling (SEM) was conducted to identify significant empirical paths for Models 1 – 9 as shown in Figures 8 – 23. A similar methodology was used in previous research to study religiousness, ethical evaluation, and/or tax evasion intentions (Barnett et al. 1996; Henderson and Kaplan 2005; Blanthorne and Kaplan 2008). Path significance is tested from both the first-order intrinsic and extrinsic religiousness scales and the postconventional reasoning construct as measured by the DIT 2 P-score and N2-score (Models 4 – 6 as indicated in Figures 14 – 16, respectively) to ethical evaluation as determined by dimensions of the MES (i.e., moral equity, relativism, contractualism). Furthermore, the combined effect of postconventional reasoning and religiousness on ethical evaluation is tested in Models 7 – 9 as depicted in Figure 18. Last, all models (Models 1 – 9 as indicated in the aforementioned figures) tested the relationships from the ethical evaluation construct dimensions (i.e., moral equity, relativism, and contractualism) to tax evasion intention.

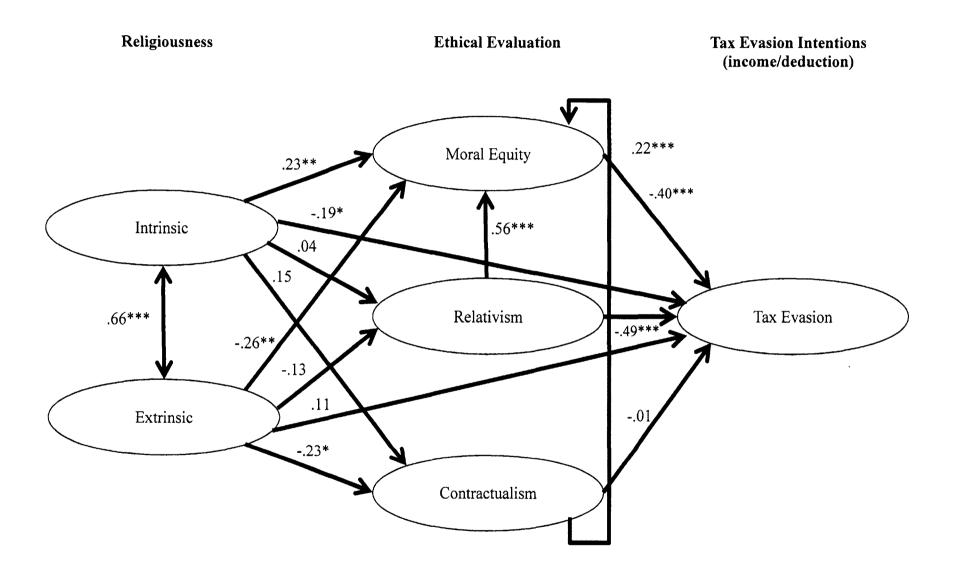


Figure 8 SEM Estimates of the Effect of the ROS on the Ethical Evaluation of Tax Evasion Intentions (Model 1)

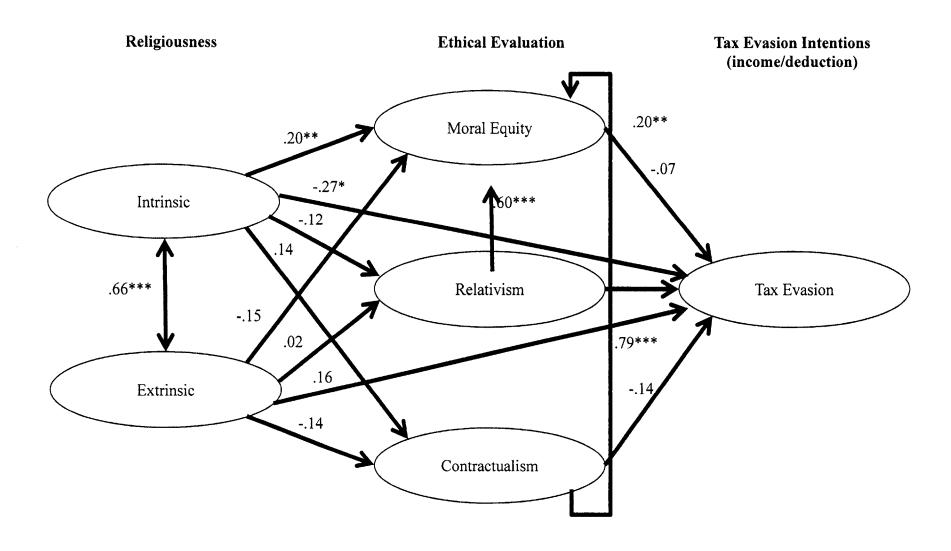


Figure 9 SEM Estimates of the Effect of the ROS on the Ethical Evaluation of Tax Evasion Intentions (Model 2)

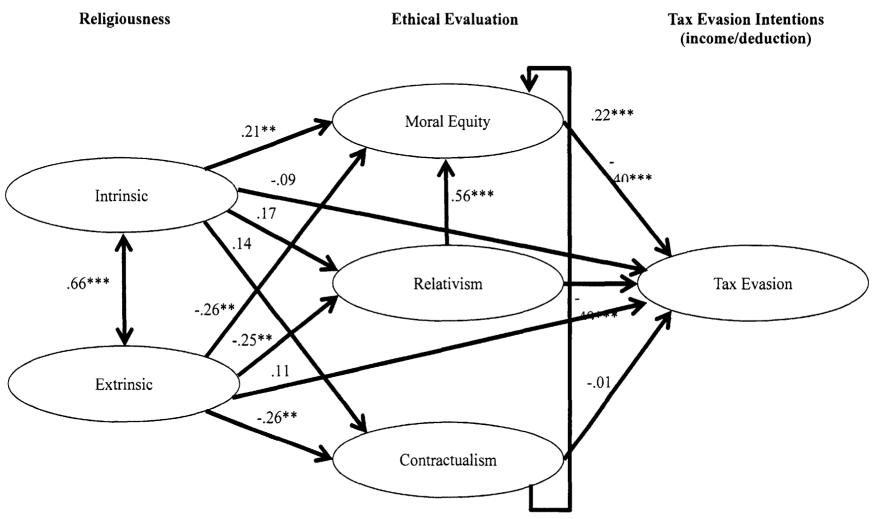


Figure 10 SEM Estimates of the Effect of the ROS on the Ethical Evaluation of Tax Evasion Intentions (Model 3)

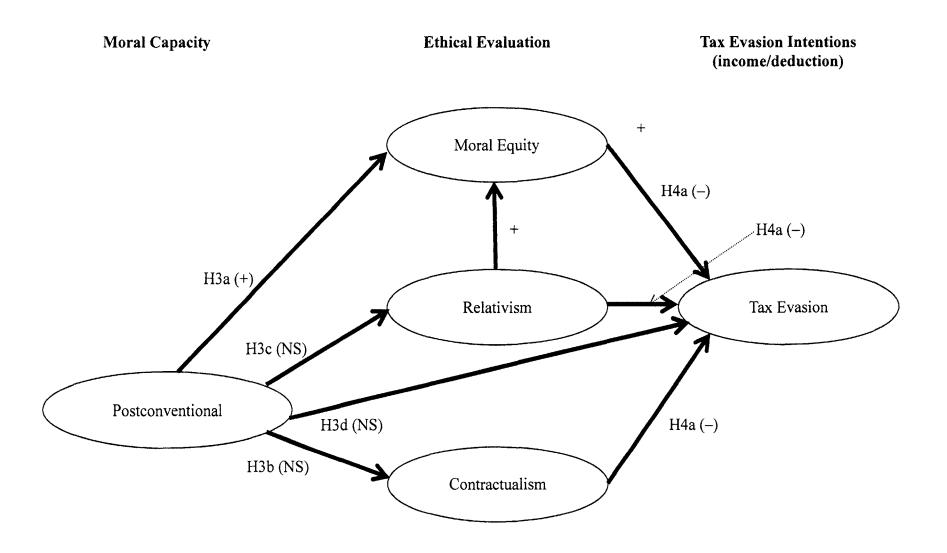


Figure 11 Hypothesized SEM of the Effect of the DIT 2 on the Ethical Evaluation of Tax Evasion Intentions (Model 4)

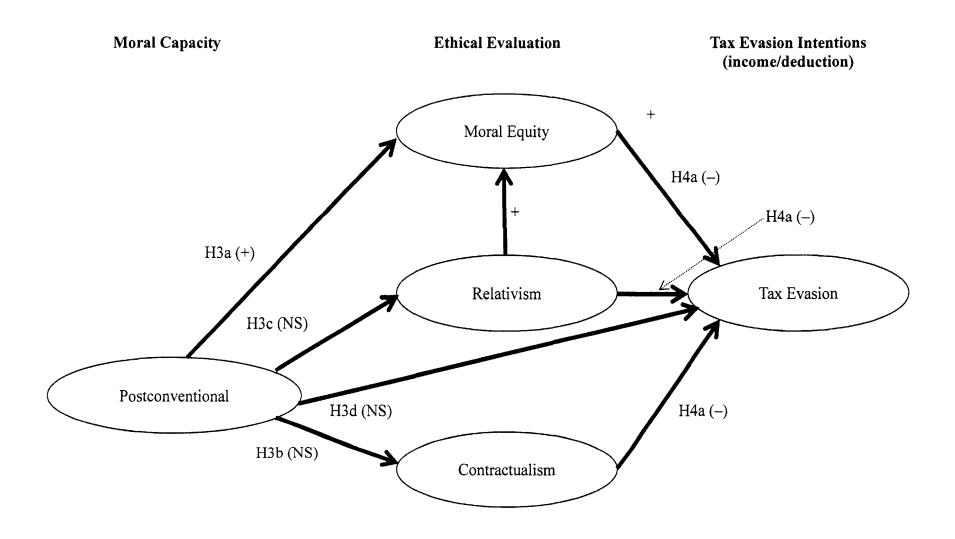


Figure 12 Hypothesized SEM of the Effect of the DIT 2 on the Ethical Evaluation of Tax Evasion Intentions (Model 5)

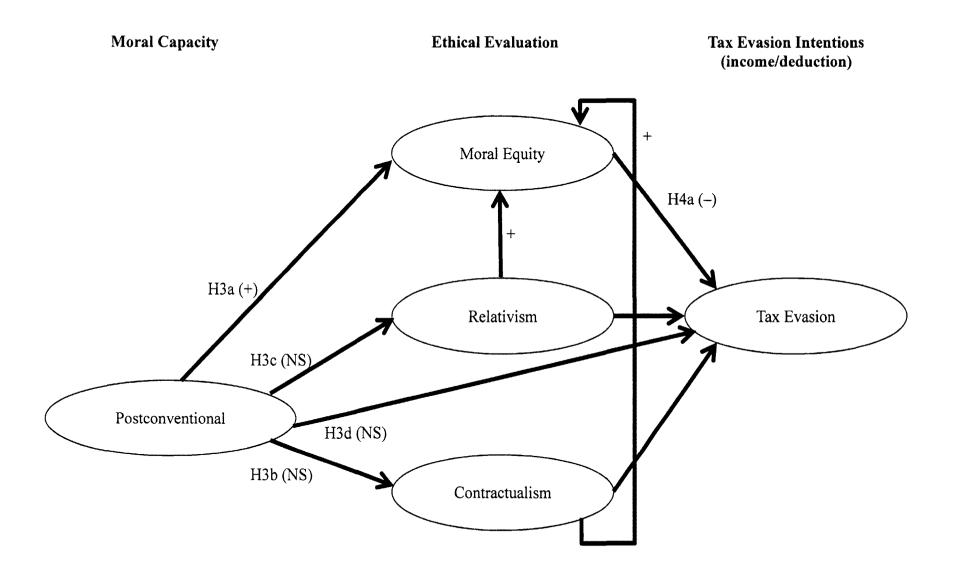


Figure 13 Hypothesized SEM of the Effect of the DIT 2 on the Ethical Evaluation of Tax Evasion Intentions (Model 6)

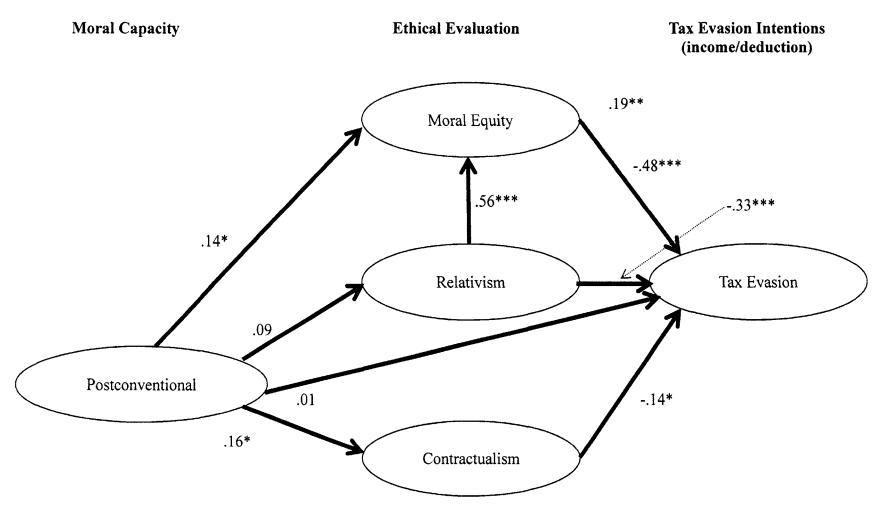
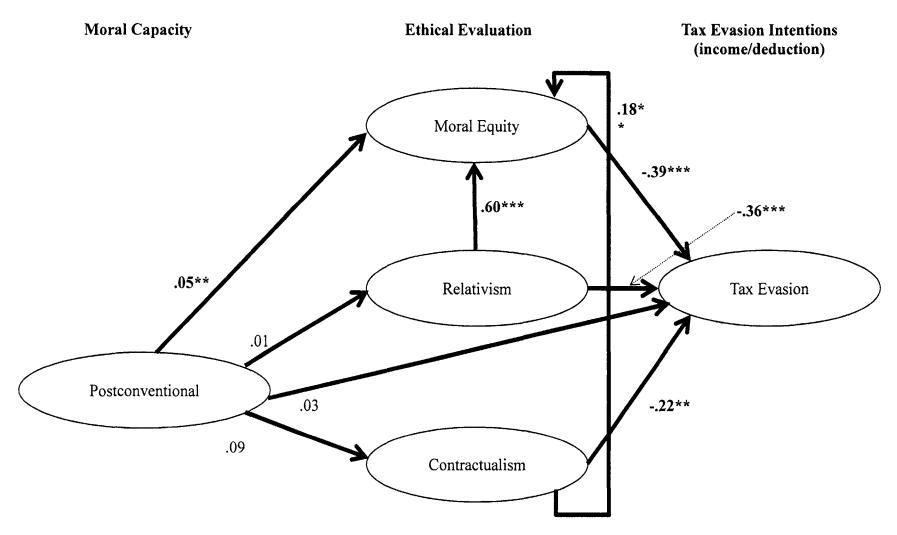


Figure 14 SEM Estimates of the Effect of the DIT 2 on the Ethical Evaluation of Tax Evasion Intentions (Model 4)



*, **, *** significant at the .10, .05, and .01 levels, respectively.

Figure 15 SEM Estimates of the Effect of the DIT 2 on the Ethical Evaluation of Tax Evasion Intentions (Model 5)

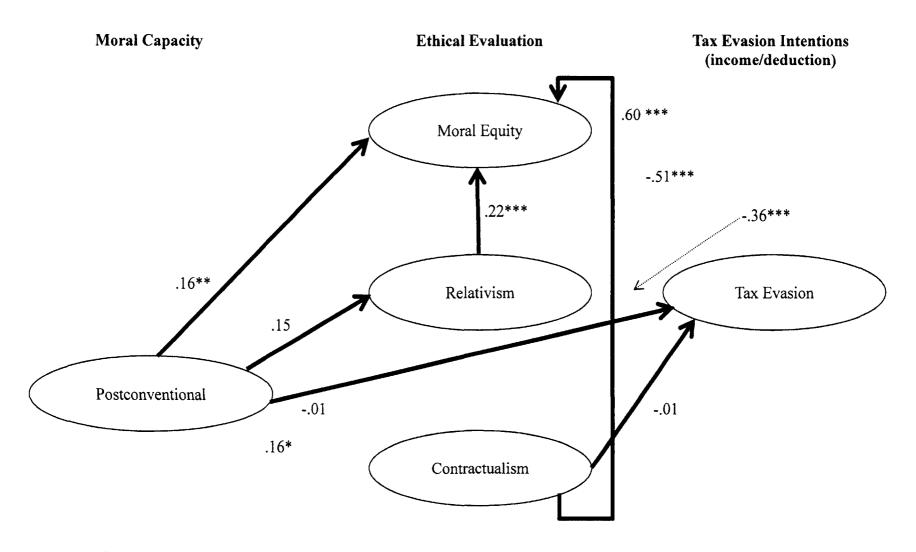
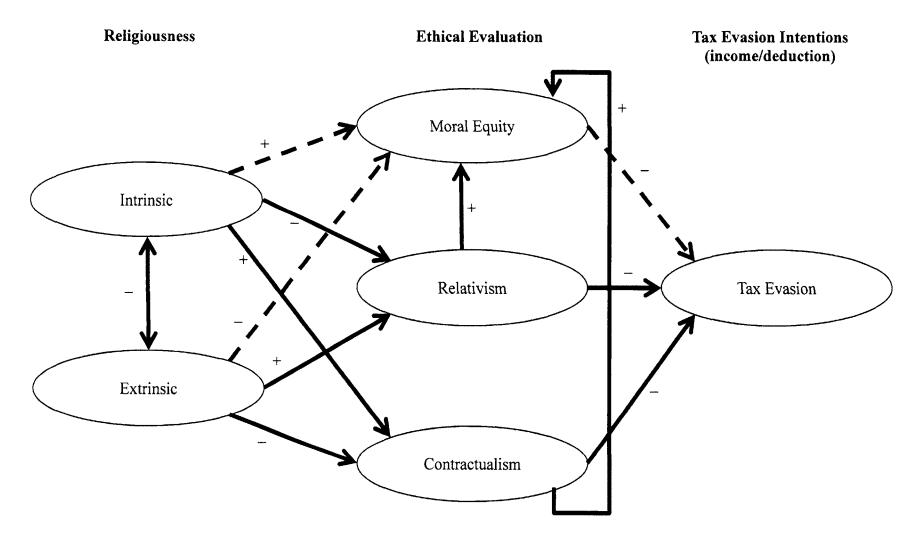
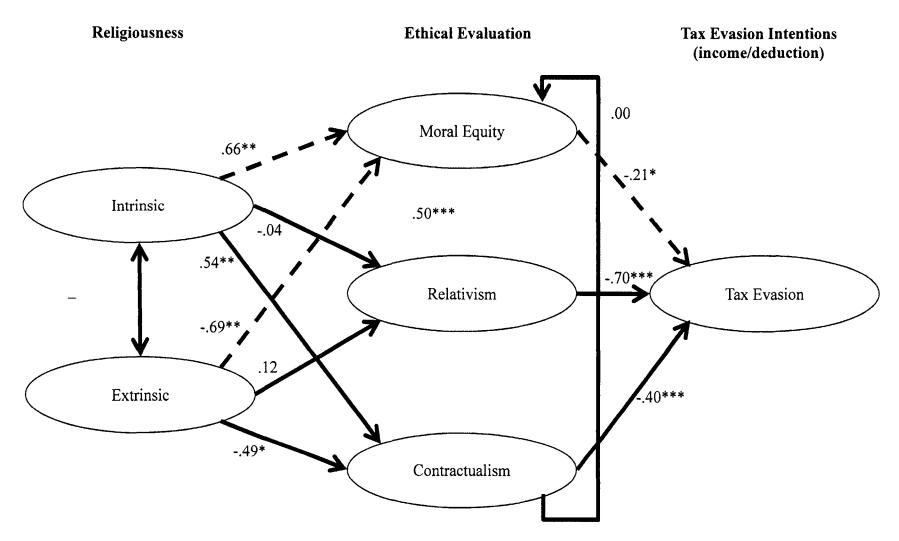


Figure 16 SEM Estimates of the Effect of the DIT 2 on the Ethical Evaluation of Tax Evasion Intentions (Model 6)



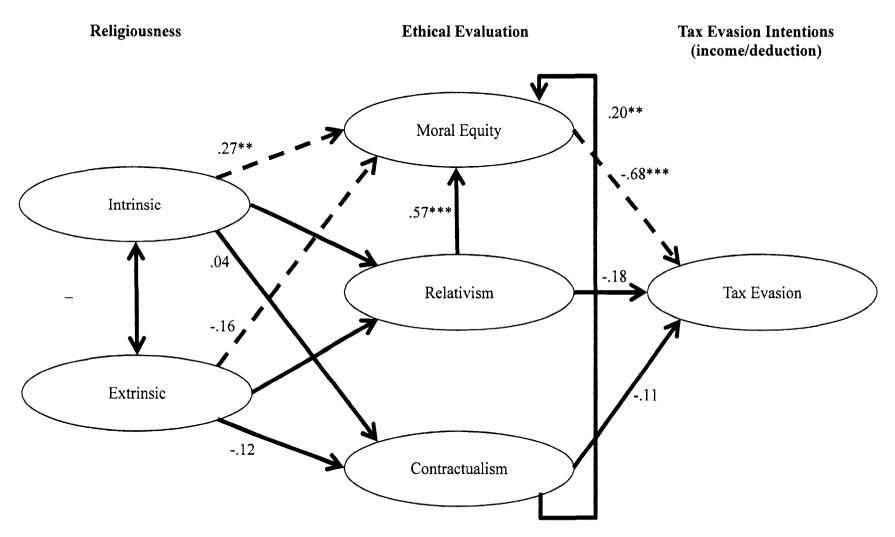
(Note: Dashed lines indicate relationships with hypothesized Moral Capacity differences.)

Figure 17 Hypothesized SEM of the Effect of ROS on the Ethical Evaluation of Tax Evasion Intentions (Models 7 – 9)



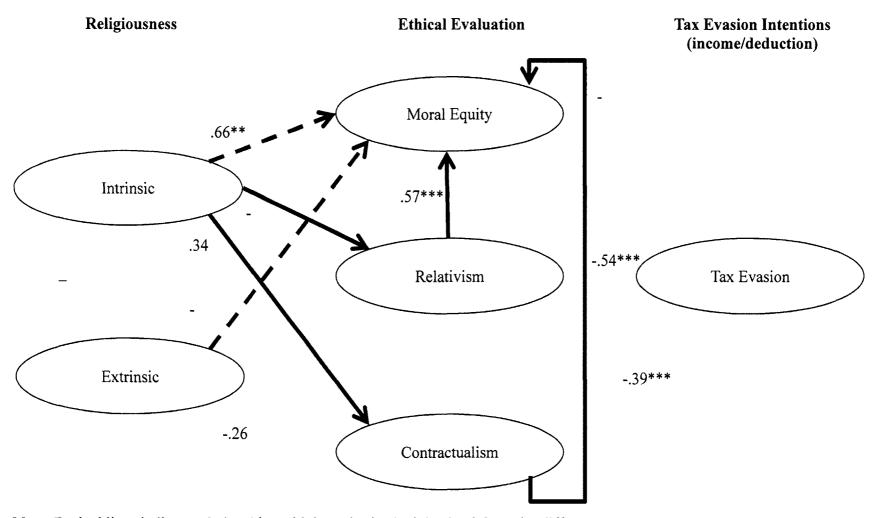
(Note: Dashed lines indicate relationships with hypothesized High Moral Capacity differences.)

Figure 18 SEM Estimates of the Effect of the ROS on the Ethical Evaluation of Tax Evasion Intentions (Model 7a)

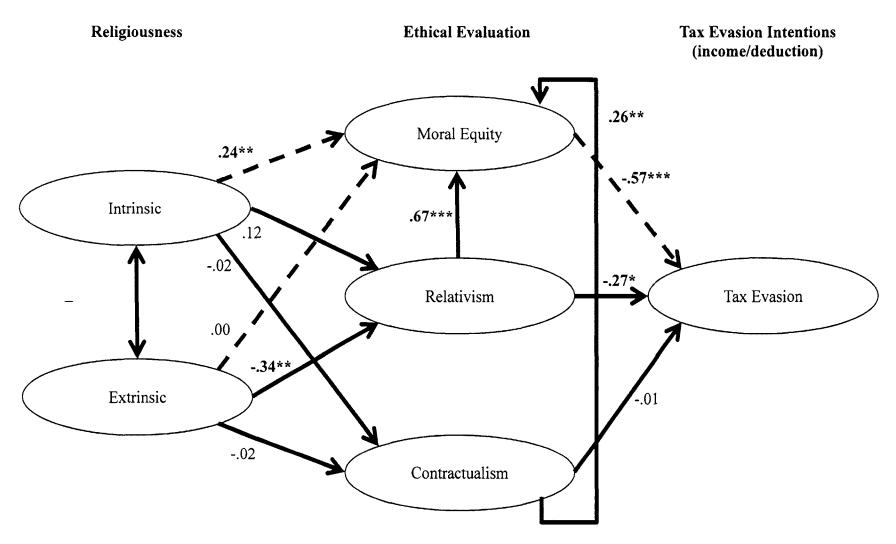


(Note: Dashed lines indicate relationships with hypothesized Low Moral Capacity differences.)

Figure 19 SEM Estimates of the Effect of the ROS on the Ethical Evaluation of Tax Evasion Intentions (Model 7b)



(Note: Dashed lines indicate relationships with hypothesized High Moral Capacity differences.)



(Note: Dashed lines indicate relationships with hypothesized Low Moral Capacity differences.)

Figure 21 SEM Estimates of the Effect of the ROS on the Ethical Evaluation of Tax Evasion Intentions (Model 8b)

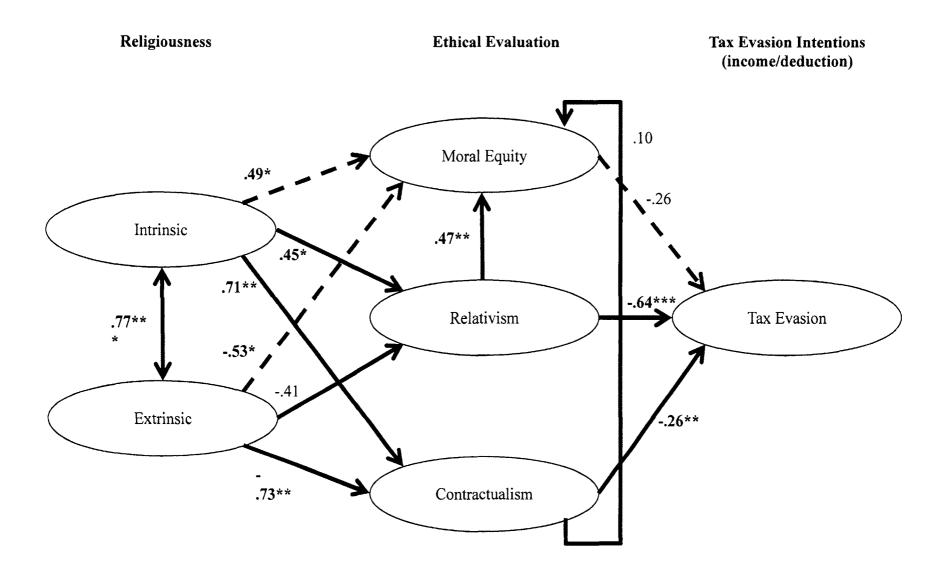


Figure 22 SEM Estimates of the Effect of the ROS on the Ethical Evaluation of Tax Evasion Intentions (Model 9a)

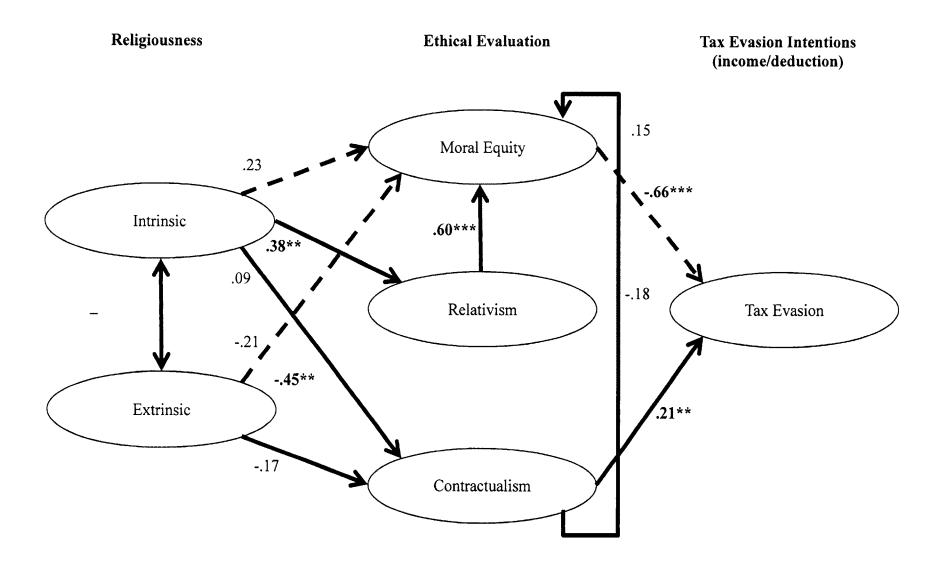


Figure 23 SEM Estimates of the Effect of the ROS on the Ethical Evaluation of Tax Evasion Intentions (Model 9b)

Based on prior research, ethical evaluation may either mediate or moderate both the moral capacity- and religiousness-tax evasion intention relationships (Grasmick et al. 1991; Kaplan et al. 1997; Henderson and Kaplan 2005). Bonner (2008) defines a mediator as a necessary underlying factor in a person's decision-making process; whereas a moderator simply determines the strength of the process-outcome relationship. These statistical methods are incorporated to assess the significance of the study's posited hypotheses and to improve the generalization of the study's findings.

CHAPTER FOUR

DATA ANALYSIS AND RESULTS

Overview

This chapter presents the analyses and results of the study. Instrument administration, demographic, and descriptive statistics are presented first. These are followed by summary statistics and tests of the hypotheses using Structural Equation Modeling (SEM).

Instrument Administration

A single administrator distributed 243 assessment packages to potential participants, and each of these packages consisted of the following: (1) a human subjects' consent form, (2) two tax evasion scenarios assessed via the Multidimensional Ethics Scale (MES), (3) the Religious Orientation Scale (ROS), and (4) the updated Defining Issues Test (DIT 2). The subjects were undergraduate and graduate students from a medium-sized southern university. Because average package completion time was expected to be about one hour, respondents were allowed to complete the instruments on their own and return them to the administrator or to their course instructor (if applicable) who, in turn, forwarded the packages to the survey administrator. Of the packages distributed, 53 were not returned leaving 190 surveys collected. Of the instruments collected, nine were incomplete concerning either the MES or the ROS, and 53 failed validity checks for the

DIT 2. Therefore, the final pairwise sample size was 181 for Models 1-3 and 128 for Models 4-9 (see Tables 9-11).

Table 9

Moral Capacity Descriptive Statistics for Models 4-9 (All Subjects)

	N	Minimum	Maximum	Mean	Std. Deviation
P_SCORE	128	0	64	28.80	11.596
N2_SCORE	128	-4.58	64.59	27.2369	12.62661
PN2	128	-4.58	128.59	56.0385	23.26762
Valid N (listwise)	128				

Table 10

Moral Capacity Descriptive Statistics for Models 4-9 (High Moral Capacity)

	N	Minimum	Maximum	Mean	Std. Deviation
P_SCORE	64	28	64	37.70	7.216
N2_SCORE	64	18.67	64.59	36.4725	8.04959
PN2	64	57.86	128.59	74.1695	13.79225
Valid N (listwise)	64				

Table 11

Moral Capacity Descriptive Statistics for Models 4-9 (Low Moral Capacity)

	N	Minimum	Maximum	Mean	Std. Deviation
P_SCORE	64	0	38	19.91	7.630
N2_SCORE	64	-4.58	30.97	18.0013	9.12666
PN2	64	-4.58	57.32	37.9075	15.27181
Valid N (listwise)	64				

The recommended sample size is ten respondents per estimated parameter (Hair et al. 2006; Byrne 2010). Models 1-3 each have 20 estimated items which yields a recommended sample size of 200 subjects rather than the 181 collected; however, Field (2009) maintains that a sample size from five to ten subjects per measured parameter is

acceptable with appropriate model fit. Model fit is assessed in the next section of this chapter. The actual sample size for Models 4-6 appears to be adequate in that the models only have twelve estimated items each resulting in a recommended sample size of 120 participants compared to the 128 collected. Models 7-9 compare higher moral capacity respondents with lower ones by splitting the DIT 2 sample (i.e., 128 subjects) at the mean, resulting in two samples of 64 participants each. Like Models 1-3, Models 7-9 have 20 items to be estimated yielding a suggested sample size from the low- to the high-end of 100 and 200, respectively. However, Hair et al. (2006) indicate that with good model fit, even sample sizes of those observed in Models 7-9 may be adequate. Again, model fit is examined in the next section of this chapter.

Measurement Model Results

Overall measurement quality for all models (i.e., Models 1 – 12) was simultaneously assessed using Confirmatory Factor Analysis (CFA) for a complete test of convergent and discriminant validity. A comparative analysis of relevant fit statistics for the each measurement model is presented in Table 12. First, preliminary tests of Models 1 – 3 suggested three items (i.e., two items of reverse intrinsicness and one item of social extrinsicness) with low factor loadings (i.e., below .40) be dropped from the models. Although these measures were eliminated, other items remained in the models which were similar to those purged (i.e., items measuring reverse intrinsicness and social extrinsicness). Additionally, two factors (i.e., Tax Evasion Intentions and the MES Contractualism dimension) which consisted of only two items each required factor loadings to be set at .7 because at least one error variance was negative.

Table 12

Comparison of Measurement Model Fit Statistics

Statistic	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	Model (⁵ High)	7 Model (⁶ Low)	7 Model (High)	8 Model (Low)	8 Model (High)	9 Model 9 (Low)
1χ2	280.8	275.6	304.0	114.8	138.0	87.2	243.3	218.2	242.0	242.0	227.3	222.7
² df	157	157	157	46	46	46	158	158	158	158	158	158
χ^2/df	1.789	1.755	1.936	2.495	3.000	1.897	1.542	1.381	1.532	1.532	1.439	1.410
³ CFI	.94	.94	.93	.93	.91	.96	.90	.93	.90	.90	.91	.92
⁴ RMSE	.06	.06	.07	.10	.12	.08	.09	.08	.09	.09	08	.08
Sample Size	181	181	181	128	128	128	64	64	64	64	64	64

All factor loadings exceeded .5 except for the socially extrinsic item that read, "I go to church because it helps me make friends." Perhaps respondents viewed this extrinsically categorized item as intrinsically oriented Christian fellowship. Regardless, consistent with the scale's theory, the item was left in the model. Additionally, each indicator t-value is significant (p < .001). The overall fit supports the measurement analysis for Models 1-3. The χ^2 fit statistic is 280.8, 275.6, and 304.0 for Models 1-3, respectively, with 157 degrees of freedom (df) for each model (p < .001). The χ^2/df is less than 1.94 for each model which is less than 2.00 as suggested (Hair et al. 2006; Byrnes 2010). The comparative fit index (CFI) is at least .93 for each model for which Hair et al. (2006) and Byrnes (2010) agree that acceptable levels are above .9. Furthermore, the root mean squared error (RMSE) which measures badness of fit is below .07 for each model (Models 1 - 3). Statisticians suggest that the RMSE should be below .08 (Hair et al. 2006; Byrnes 2010); therefore, Models 1 – 3 fulfill this requirement. Given the indicated good model fit, the sample size for Models 1-3 appear to be acceptable; therefore, the measures are adequate for further analysis.

Second, initial tests of Models 4-6 did not indicate any necessary model changes due to low factor loadings; however the Relativism dimension (i.e., a two-measure construct) of the MES had at least one negative error variance. Therefore, factor loadings for the Relativism construct were set at .7 for each of its two items. All factor loadings exceeded .7 except for the peer assessment item that read, "The probability that my friends would undertake the same action is..." This item was added to the scale to minimize the bias often evident in self-reports of deviant actions such as tax evasion. Based on a seven-point scale, respondents rated the likelihood that their friends would

cheat (i.e., mean = 4.57) higher than that of themselves (i.e., mean = 3.32) as indicated in Table 2. Concerning factor loadings, Models 4-6 were superior to those of Models 1-3. Additionally, each indicator t-value is significant (p < .001). The overall fit supports the measurement analysis for Models 4-6. The χ^2 fit statistic is 114.8, 138.0, and 87.2 for Models 4-6, respectively, with 46 degrees of freedom (df) for each model (p < .001). The χ^2 /df is only less than 2.00 for Model 6 (i.e., income scenario); whereas, the χ^2 /df for Model 4 and Model 5 are 2.50 and 3.00, respectively which exceeds the rule of thumb (Hair et al. 2006; Byrnes 2010). The CFI is at least .91 for each model for which Hair et al. (2006) and Byrnes (2010) agree that acceptable levels are above .9. Furthermore, the RMSE is below .08 for Model 6 (i.e., income scenario), but is .11 and .13 for Model 4 and Model 5, respectively. Statisticians suggest that the RMSE should be below .08 (Hair et al. 2006; Byrnes 2010). Given the moderate model fit, the measures appear adequate for further analysis; however, concerns about model fit for Models 4-6 are discussed as limitations of this study in Chapter Five.

Third, Models 7 - 12 compared higher moral capacity respondents with lower ones splitting the DIT sample size in half for each group (i.e., 64 subjects in each sample). Preliminary tests of Models 7 - 9 exhibited similar factor loading concerns as did Models 1 - 3; therefore, the model changes made for Models 1 - 3 were also made for Models 7 - 9. Considering Models 7 - 9, all factor loadings exceeded .5 except for the socially extrinsic item that was previously discussed in the assessment of Models 1 - 3. With respect to factor loadings, Models 7 - 9 for both higher and lower moral capacity subjects were similar or better than those of Models 1 - 6. As in the case of Models 1 - 6, each indicator t-value was significant (p < .001) for Models 7 - 9, and the overall fit

supports the measurement analysis for the models. The χ^2 fit statistic is less than 243.3 for Models 7 – 9 for both higher and lower moral capacity respondents, with 158 degrees of freedom (df) for each model (p < .001). The χ^2 /df is less than 1.60 for all models which is less than 2.00 as suggesting good fit (Hair et al. 2006; Byrnes 2010). The CFI is at least .9 for each model for which Hair et al. (2006) and Byrnes (2010) agree that acceptable levels are above .9. Furthermore, the RMSE is below .08 for Model 7 (i.e., combined scenario) and Model 9 (i.e., income scenario) and merely .09 for Model 8 (i.e., deduction scenario). RMSEs below .08 suggest good fit (Hair et al. 2006; Byrnes 2010). Models 7 – 9 have the best overall fit of any of the models tested in this study. Given this model fit, the measures appear adequate for further analysis even though the sample size (i.e., 64 respondents) for these models appeared at first glance to be somewhat small. Precautions about small sample size are discussed as a limitation of this study.

Hypotheses Testing

To test the study's hypotheses, nine structural models are evaluated. The nine models consist of three models (i.e., income case, deduction case, and a combination of the previous cases) of the effect of each of the following on the ethical evaluation of tax evasion intentions: religiousness, moral capacity, and a mixture of religiousness and moral capacity considering high and low moral capacity. Summary results for the study's hypotheses are presented in Table 13.

Table 13 Summary Results for Research Hypotheses

		Predicted	Actual	¹ Significance	
Hypotheses	Relationship	Direction	Direction		
Hla	Intrinsic Religiousness → Moral Equity Dimension of MES	Positive	Positive	**	
H1b	Intrinsic Religiousness → Contractualism Dimension of MES	Positive	Positive	NS	
H1c	Intrinsic Religiousness → Relativism Dimension of MES	Negative	Positive	NS	
H1d	Intrinsic Religiousness → Tax Evasion Intentions (larger than extrinsic)	Negative	Negative	*	
H2a	Extrinsic Religiousness → Moral Equity Dimension of MES	Negative	Negative	**	
H2b	Extrinsic Religiousness → Contractualism Dimension of MES	Negative	Negative	**	
H2c	Extrinsic Religiousness → Relativism Dimension of MES	Positive	Negative	*	
H2d	Extrinsic Religiousness → Tax Evasion Intentions (smaller than	Negative	Positive	NS	
	intrinsic)				
Н3а	Postconventional Moral Capacity → Moral Equity Dimension of MES	Positive	Positive	**	
H3b	Postconventional Moral Capacity → Contractualism Dimension of MES	Not Related	Positive	NS	
Н3с	Postconventional Moral Capacity → Relativism Dimension of MES	Not Related	Positive	*	
H3d	Postconventional Moral Capacity → Tax Evasion Intentions	Not Related	Mixed	NS	
H4a	All MES Dimensions → Tax Evasion Intentions (simultaneous)	Negative	Negative	***	
H4b	All MES Dimensions → Tax Evasion Intentions (deduction)	Negative	Negative	**	
H4c	Moral Equity MES Dimension → Tax Evasion Intentions (income)	Negative	Negative	***	

¹p-value significance *, **, *** at the .10, .05, and .01 levels, respectively ²Not Significant

Religious Orientation Hypotheses

The hypotheses related to intrinsic and extrinsic religiousness are assessed via structural Model 1 (i.e., combined case), Model 2 (i.e., deduction case), and Model 3 (income case) as indicated in Figures 8-10. Before evaluating the models' results, model fit statistics are examined and presented in Table 14. The χ^2 fit statistics are 287.9, 278.9, and 321.6 for Models 1-3, respectively. The accompanying degrees of freedom (df) for each model are 160 resulting in a significant p-value for each model (p < .001). The γ^2/df for Models 1-3 are 1.82, 1.77, and 2.04, respectively. These are all less than 2.00 except for Model 3 (i.e., income case) which is slightly over the suggested limit representing good model fit (Hair et al. 2006; Byrnes 2010). The comparative fit indexes (CFI) are .94, .94, and .92 for Models 1-3, respectively. Hair et al. (2006) and Byrnes (2010) agree that acceptable levels of CFI are above .9. Furthermore, the root mean squared errors (RMSEs) which measures badness of fit are .06, .06, and .07, respectively. These measures are all below the recommended .08 suggesting good model fit (Hair et al. 2006; Byrnes 2010). Additionally, each estimated indicator t-value is significant for each model's constructs (p < .001). The overall fit supports the structural analysis for Models 1-3. Given the indicated good model fit and acceptable sample sizes, Models 1-3 are adequate for further analysis.

Table 14 Comparison of Structural Model Fit Statistics

			T				Model 7	Model 7	Model 8	Model 8	Model 9	Model 9
Statistic	Model 1	Model 2	Model 3	Model 4	Model 5	Model 6	(Free)	(Constrain)	(Free)	(Constrain)	(Free)	(Constrain)
χ^2	287.9	278.9	321.6	115.9	138.2	93.3	460.4	480.0	485.1	506.5	446.9	469.5
² df	158	158	158	47	47	47	320	332	320	332	320	332
χ^2/df	1.822	1.765	2.036	2.467	2.941	1.987	1.439	1.446	1.516	1.526	1.397	1.414
³ CFI	.94	.94	.92	.94	.91	.95	.92	.91	.90	.90	.92	.91
⁴ RMSE	.06	.06	.07	.10	.12	.08	.11	.09	.06	.06	.05	.05
\mathbb{R}^2	.33	.27	.34	.43	.47	.39	.14	.37	.35	.40	.17	.38
Sample Size	181	181	181	128	128	128	64	64	64	64	64	64

¹Chi Square ²Degrees of Freedom ³Comparitive Fit Index ⁴Root Mean Squared Error

⁵Higher Moral Capacity as measured by the DIT 2 P-score and N2-score ⁶Lower Moral Capacity as measured by the DIT 2 P-score and N2-score

Intrinsic Religiousness Hypotheses

Hypotheses H1a through H1d regarding intrinsic religiousness and hypotheses H2a through H2d with respect to extrinsic religiousness are evaluated via Models 1-3 as shown in Figures 8-10. First, H1a posits that intrinsic religiousness is positively related to the moral equity dimension of the multidimensional ethics scale (MES). Models 1-3 each support this hypothesis in that their standardized regression weights are all positive (i.e., .23, .20, and .21, respectively) and significant (p < .05).

Second, H1b predicts a direct relationship between intrinsic religiousness and the contractualism dimension of the MES. This prediction is not supported by Models 1-3. The standardized regression weights for Models 1-3 are in the predicted direction (i.e., .15, .14, and .14, respectively); however, their suggested paths are not significant.

Third, H1c asserts that intrinsic religiousness is negatively associated with the relativism dimension of the MES. Models 1-3 also do not support this conjecture in that the standardized regression weights for Model 1 (i.e., combined cases) and Model 3 (i.e., income case) are not in the predicted direction (i.e., .04 and .17, respectively) compared with that of Model 2 (i.e., deduction case) -.12. However, none of the indicated paths have a significant p-value with respect to any of the models.

Last, H1d hypothesizes that intrinsic religiousness is negatively related to tax evasion intention as assessed by the MES and has a larger negative effect than extrinsic religiousness. Models 1-3 all have standardized regression weights in the predicted direction (i.e., -.19, -.27, and -.09, respectively) with Model 2 (i.e., deduction scenario) indicating the strongest association. Although the standardized regression weights are all in the anticipated direction, only Model 1 and Model 2 are statistically significant at the

.10 level while Model 3 is not significant at any relevant level. Therefore, Models 1-3 partially support the first part of H1d. The second portion of the hypothesis is evaluated in the next section.

Extrinsic Religiousness Hypotheses

Hypotheses H2a through H2d with respect to extrinsic religiousness are evaluated via Models 1-3 as shown in Figures 8-10. First, H2a posits that extrinsic religiousness is negatively associated with the moral equity dimension of the MES. Models 1-3 moderately support this prediction. Models 1-3 have standardized regression weights in the anticipated direction (i.e., -.26, -.15, and -.26, respectively); however, Model 2 (i.e., deduction case) is not significant whereas Model 1 (i.e., combined cases) and Model 3 (i.e., income scenario) are statistically significant at the .05 level

Second, H2b predicts an indirect relationship between extrinsic religiousness and the contractualism dimension of the MES. This prediction is moderately supported by Models 1-3. The standardized regression weights for Models 1-3 are in the predicted direction (i.e., -.23, -.14, and -.26, respectively); however, the statistical significance of these paths vary. The extrinsic-contractualism path for Model 1 (i.e., combined scenarios) is significant at the .10 level and that for Model 3 (i.e., income case) is significant at the .05 level; however, the respective path for Model 2 is not significant at any reasonable level.

Third, H2c asserts that extrinsic religiousness is directly associated with the relativism dimension of the MES. Models 1-3 do not support this conjecture in that the standardized regression weights for Model 1 (i.e., combined cases) and Model 3 (i.e., income case) are not in the predicted direction (i.e., -.13 and -.25, respectively) compared

with that of Model 2 (i.e., deduction case) .02. Furthermore, only the indicated extrinsic-relativism path for Model 3 has a significant p-value at the .05 level; however, the standardized regression weight is not in the anticipated direction.

Last, H2d hypothesizes that extrinsic religiousness is negatively related to tax evasion intention as assessed by the MES and has a smaller negative effect than intrinsic religiousness. Neither of the standardized regression weights for Models 1-3 are in the predicted direction (i.e., .11, .16, and .11, respectively) nor are they statistically significant at any of the normal alpha levels. Therefore, the first part of this hypothesis is not supported via Models 1-3 and the last part of this hypothesis is not relevant for this prediction. However, the fact that H2d is rejected strengthens the support for H1d which predicts that intrinsic religiousness is indirectly associated with tax evasion intentions and has a larger effect than extrinsic religiousness.

The following summarizes the results of H1a-H1d and H2a-H2d concerning intrinsic and extrinsic religiousness. First, higher intrinsic religious assessments are associated with higher evaluations that tax evasion is unjust, unfair, immoral, and unacceptable to the respondents family as measured by the moral equity dimension of the MES, regardless of the type of hypothetical tax scenario (i.e., income case, deduction case, or a combination of the cases). Second, higher extrinsic religious measures are related to lower assessments of moral equity and implied contracts as represented by the MES for the hypothetical income tax case and the combined scenarios, but not for the deduction case. Last, increases in intrinsicness are significantly associated with decreases in tax evasion intentions considering the effects of the MES dimensions (i.e., moral

equity, relativism, and contractualism). However, extrinsic religiousness is not related to tax evasion intentions when accounting for MES dimensions.

Moral Capacity Hypotheses

The hypotheses related to moral capacity are assessed via structural Model 4 (i.e., combined case), Model 5 (i.e., deduction case), and Model 6 (income case) as indicated in Figures 14-16. Before evaluating the models' results, model fit statistics are examined and presented in Table 14. The χ^2 fit statistics are 115.9, 138.2, and 93.3 for Models 4-6, respectively. The accompanying degrees of freedom for each model are 47 resulting in a significance p-value for each model (p < .001). The χ^2/df for Models 4-6 are 2.47, 2.94, and 1.99, respectively. Chi square/df for Model 3 (i.e., income case) is the only one which is less than the suggested limit of 2.00 representing good model fit (Hair et al. 2006; Byrnes 2010). The CFIs are .94, .91, and .95 for Models 4-6, respectively. Hair et al. (2006) and Byrnes (2010) agree that acceptable CFIs are above .9. Furthermore, the RMSEs which measure badness of fit are .10, .12, .08, respectively. Again, only Model 3 (i.e., income case) is below the recommended .08 suggesting good model fit (Hair et al. 2006; Byrnes 2010). Additionally, each estimated indicator t-value is significant for each model's constructs (p < .001). The overall fit supports the structural analysis for Model 6 and perhaps Model 4 and Model 5, since their CFIs indicate good model fit. The moderate fit of structural Models 4 and 5 is a potential limitation to this study. Given the indicated good to moderate model fit and acceptable sample sizes, Models 4-6 are adequate for further analysis.

Hypotheses H3a through H3d regarding postconventional moral capacity are evaluated via Models 4-6 as shown in Figures 14-16. First, H3a posits that

postconventional moral capacity is positively related to the moral equity dimension of the multidimensional ethics scale (MES). Models 4-6 each support this hypothesis in that their standardized regression weights are all positive (i.e., .14, .05, and .16, respectively) and statistically significant (p < .10, p < .05, and p < .05, respectively).

Second, H3b predicts no relationship between postconventional moral capacity and the contractualism dimension of the MES. This prediction is partially supported by Models 4-6. The standardized regression weights for Models 4-6 are all positive (i.e., .16, .08, and .16, respectively); however, two of their suggested paths are significant. The Model 4 (i.e., combined scenarios) and the Model 6 (i.e., income case) postconventional moral capacity-contractualism paths are statistically significant at the .10 level; whereas, Model 5 (i.e., deduction scenario) is not significant at normal alpha levels.

Third, H3c asserts that postconventional moral capacity is not associated with the relativism dimension of the MES. Models 4-6 support this conjecture. Although, the standardized regression weights for Models 4-6 are all positive (i.e., .09, .01, and .15, respectively), none of the indicated paths have a significant p-value with respect to any of the fore mentioned models.

Last, H3d hypothesizes that postconventional moral capacity is not related to tax evasion intention as assessed by the MES. Models 4-6 all have standardized regression weights in differing directions (i.e., .01, -.03, and -.01, respectively). In addition to the standardized regression weights being in conflicting directions, no model is statistically significant at any relevant level. Therefore, Models 4-6 support the hypothesis that postconventional moral capacity is not associated with tax evasion intentions.

The following summarizes the results of H3a-H3d concerning postconventional moral reasoning. First, like measures of intrinsic religiousness, higher levels of postconventional reasoning are associated with higher evaluations that tax evasion is unjust, unfair, immoral, and unacceptable to the respondents family as measured by the moral equity dimension of the MES, regardless of the type of hypothetical tax scenario (i.e., income case, deduction case, or a combination of the cases). Second, assessments of postconventional moral reasoning are not related to assessments of relativism as measured by the MES. The insignificance in the postconventional reasoning-relativism path holds for all hypothetical tax cases (i.e., income, deduction, and the combined scenarios). Third, increases in postconventional moral thinking are significantly associated with increases in implied contractualism as measured by the MES for Model 4 (i.e., combined case) and Model 6 (i.e., income case), but not for Model 5 (i.e., deduction case). Last, postconventional moral reasoning is not related to tax evasion intentions when accounting for MES dimensions, regardless of the type of hypothetical tax scenario.

Ethical Evaluation Hypotheses

The hypotheses related to ethical evaluation are assessed via structural Models 1-6 as indicated in Figures 8-10 for Models 1-3 and in Figures 14-16 for Models 4-6. Fit statistics in Table 14 have been examined for all these models, and all models indicated relatively good fit conducive for further analysis. First, H4a posits that when income and deduction scenarios are simultaneously evaluated, all three MES dimensions (i.e., moral equity, relativism, and contractualism) will be negatively related with tax evasion intentions. Model 1 and Model 4 are assessed to evaluate H4a. The regression weights for all paths from the moral equity and relativism dimensions of the MES to tax evasion

intentions are in the predicted direction (i.e., negative) and are statistically significant (p < .001). However, although regression estimates are in the predicted direction for the contractualism dimension of the MES, the estimates are either only moderately significant (p < .10) as for Model 4 (i.e., moral capacity effects) or insignificant as in the case of Model 1 (i.e., religiousness effects). Therefore, H4a is supported with respect to the moral equity and relativism dimensions of the MES, but not for the contractualism dimension of the construct.

Second, H4b asserts that when deduction cases are independently evaluated, all three MES dimensions will be inversely associated with tax evasion intentions. Model 2 and Model 5 are assessed to evaluate H4b. The regression weights for all paths from all MES dimensions (i.e., moral equity, relativism, and contractualism) to tax evasion intentions are in the predicted direction (i.e., negative) and are statistically significant (p < .05) for Model 5 (i.e., moral capacity effects). However, although regression estimates are in the predicted direction for Model 2 (i.e., religious effects), the estimate is only significant (p < .001) as for the relativism dimension of the MES. Consequently, the results indicate that H4b is supported when ethical evaluation is related to postconventional moral reasoning, but not necessarily when associated with religious orientation.

Last, H4c predicts that only the moral equity dimension of the MES will be indirectly linked with tax evasion intentions when income scenarios are independently evaluated. Model 3 and Model 6 are assessed to evaluate H4c. Like the results for H4a, the regression weights for all paths from the moral equity and relativism dimensions of the MES to tax evasion intentions are in the predicted direction (i.e., negative) and are

statistically significant (p < .001). Also, similar to the findings for H4a, the regression estimates are in the predicted direction for the contractualism dimension of the MES; however, the estimates are insignificant for both Model 3 (i.e., religiousness effects) and Model 6 (i.e., moral capacity effects). Therefore, H4c is supported with respect to the moral equity and relativism dimensions of the MES, but not for the contractualism dimension of the construct.

To summarize the findings for the ethical evaluation hypotheses, all postconventional moral capacity models (i.e., Models 4-6) generally support a negative association between each of the MES dimensions (i.e., moral equity, relativism, and contractualism) and tax evasion intentions. However, only the moral equity and relativism dimensions of the MES are significantly inversely related to probable tax evasive practices for religious orientation models (i.e., Models 1-3).

Religiousness Across Moral Capacity Levels Research Question

The research question related to religiousness across high and low levels of postconventional moral capacity is assessed via structural Model 7 (i.e., combined case), Model 8 (i.e., deduction case), and Model 9 (income case) as indicated in Figures 18-23. Specifically, the research question addresses whether the model of the ideological factors of tax compliance improves when religiousness is evaluated across levels of moral capacity. This research question requires testing the aforementioned structural models on the overall sample and on a dichotomously divided sample of high and low moral reasoning. Before evaluating the models' results, model fit statistics are examined. The χ^2 /df for each model is less than 1.53 which is less than the suggested limit of 2.00

representing good model fit (Hair et al. 2006; Byrnes 2010). Furthermore, the CFIs are greater than .90 for which Hair et al. (2006) and Byrnes (2010) agree are acceptable for good fit. Moreover, the RMSEs are less than the recommended .08 except for Model 7 (i.e., combined cases) which is .11 and .09 for the totally free and constrained models, respectively (Hair et al. 2006; Byrnes 2010). Additionally, each estimated indicator t-value is significant for each model's constructs (p < .001). The overall fit supports the structural analysis for Model 8 and Model 9 and perhaps Model 7. Given the indicated good model fit and acceptable sample sizes, Models 7-9 appear adequate for further analysis.

Factor structure invariance across postconventional moral capacity levels is examined by comparing the totally free model with the model of constrained measurement weights. As indicated in Table 14, the χ^2 fit statistics for Model 7 (i.e., combination of the income and deduction scenarios) are 460.4 and 480.0 for the unconstrained and constrained models, respectively. Furthermore, the related degrees of freedom are 332 and 320 for the unconstrained and constrained models, correspondingly. The difference between the χ^2 and degrees of freedom is 19.7 and 12, respectively which is marginally significant (p > .10). This finding provides moderate evidence that the factor weights hold across high and low postconventional levels for Model 7. Next, for Model 8 (i.e., deduction case), the χ^2 fit statistics are 485.1 and 506.5 for the unconstrained and constrained models, respectively. Furthermore, the related degrees of freedom are 332 and 320 for the unconstrained and constrained models. The difference between the χ^2 and degrees of freedom is 21.4 and 12, respectively which is significant (p < .05). This finding provides evidence that the factor weights are not constant across high

and low postconventional levels for Model 8. Last, for Model 9 (i.e., income case), the χ^2 fit statistics are 446.9 and 469.5 for the unconstrained and constrained models, respectively. Furthermore, the related degrees of freedom are 332 and 320 for the unconstrained and constrained models. The difference between the χ^2 and degrees of freedom is 22.6 and 12, respectively which is significant (p < .05). Like that of Model 8, this finding provides evidence that the factor weights are not constant across high and low postconventional levels for Model 9.

In addition to factor structure invariance which measures the stability of factor loadings across postconventional levels, model R^{2's} may be compared to assess the quality of the each models (Models 1-9) predictions. As indicated in Table 14, the R^{2's} for Models 1-3 (i.e., religious orientation models) are slightly lower than those of Models 4-6 (i.e., moral capacity models). Furthermore, R^{2's} for Models 7-9 (i.e., models combining religiousness and morality) for higher postconventional reasoning are generally lower than all other models. Moreover, R^{2's} for lower postconventional moral capacity are nearly as high as Models 4-6. Therefore, the moral capacity models (i.e., Models 4-6) seem to not only be more predictive than the combined religiousness-morality models (i.e., Models 7-9), but also the stand-alone religiousness models (i.e., Models 1-3). Therefore, both the lack structural invariance across levels of moral capacity for two of the three models (i.e., Models 8 and 9) and lower R^{2's} for most models (i.e., Models 7-9) indicate that the models of the ideological factors of tax compliance (i.e., Models 7-9) do not seem to improve when religiousness is evaluated across levels of moral capacity.

CHAPTER FIVE

SUMMARY AND CONCLUSIONS

Overview

The purpose of this chapter is to summarize the findings of this study and their implications to tax compliance research. Furthermore, limitations of the study are evaluated and suggestions for future research are discussed along with concluding remarks.

Summary of Previous Chapters

Chapter One highlights the continuing concern with respect to the widening of the tax gap. The chapter outlines the various economic and behavioral theories used to explain and predict income tax compliance. Furthermore, ideological factors such as religiousness and morality are suggested as antecedents of ethical evaluations to predict tax evasion intentions. The study analyzes the question whether religion, morality, or some combination of the two matter relating to the ethical evaluation of tax evasion intentions. Chapter One culminates by briefly identifying the study's results and outlining the research process.

Selected tax compliance literature is reviewed in Chapter Two. First, this study's research design includes low Internal Revenue Service visibility (i.e., low opportunity of getting caught evading taxes) based on the assertions of General Deterrence Theory

(GDT) and subadditivity of decision weights from Prospect Theory. Next, the chapter assesses behavioral theories of fairness (i.e., Fiscal Psychology), social contracts (i.e., Social Norms), and behavioral intentions (i.e., Theory of Planned Behavior). Following these behavioral conceptualizations, ideological postulations are described including: Multidimensional Religious Orientation, Ethics. and Moral Reasoning. The Multidimensional Ethics Scale (MES) combines the concepts of fairness, social contracts, and greater good while evaluating an ethical dilemma (i.e., tax evasion intentions). Moreover, the Religious Orientation Scale (ROS) measures the extent to which one's religiousness is either intrinsically or extrinsically motivated. Furthermore, the Defining Issues Test (DIT 2) assesses the level of postconventional moral capacity. Postconventional thinkers desire to create a society that appeals to a sharable social ideal which is fair to all societal members and open to scrutiny. The research design includes both the ROS and the DIT 2 as antecedents to the MES in that they are posited to influence the ethical evaluation of tax evasion intentions. Last, Chapter Two develops the study's research hypotheses.

Chapter Three describes the research methodology by describing the study's participants, three-part questionnaire (i.e., MES, ROS, and DIT 2), and statistical analyses. Following the research design, Chapter Four analyzes the data and presents the results of the research.

Summary of Research Findings

Cruz et al. (2000, p. 239) states, "...future research could investigate whether the effects of personal characteristics such as cognitive moral development or personal values influence their deontological and teleological evaluations of ethical dilemmas, and

whether those evaluations in turn influence ethical judgments and intentions." Based on the previous statement, this study examines three complementary research questions. First, do personal religious beliefs matter with respect to the ethical evaluation of tax evasion intentions? Similarly, the second question is whether moral capacity matters regarding the ethical evaluation of tax evasion intentions? The last inquiry considers interactive effects and questions whether cognitive moral development interacts with personal religious beliefs when considering the ethical evaluation of tax evasive practices?

The Importance of Religiousness

Concerning the first question, Figures 5-7 indicate that religiousness is posited to directly influence the ethical evaluation of one's tax reporting decisions. Tax and non-tax studies generally find that intrinsic religiousness or a deontological perspective is directly related to both the moral equity dimension of the MES (Collins and Daniel 1996; Knotts et al. 2000; Henderson and Kaplan 2005) and the contractualism dimension of the MES (R&R 1988; Henderson and Kaplan 2005), but inversely related to the relativism dimension of the MES and tax evasion intentions (Grasmick et al. 1991; Barnett et al. 1996; Clark and Dawson 1996). However, insignificant correlations are also found between intrinsic religiousness or a deontological perspective and the relativism dimension of the MES (Henderson and Kaplan 2005), the contractualism dimension of the MES (Barnett et al. 1996), and tax evasion intentions (Donahue 1985; Henderson and Kaplan 2005). Thus, when considering the relationship between intrinsic religiousness and the dimensions of the MES, only the moral equity dimension is expected to be consistently significant.

Moreover, tax and non-tax studies have found inverse correlations between extrinsic religiousness or a teleological perspective and both the moral equity and the contractualism dimensions of the MES (R&R 1988; Clark and Dawson 1996; Henderson and Kaplan 2005), and a direct association with the relativism dimension of the MES (Henderson and Kaplan 2005). However, Donahue (1985) and Henderson and Kaplan (2005) find an insignificant correlation between extrinsic religiousness or a teleological perspective and tax evasion intentions. Therefore, extrinsic religiousness has been significantly related to the MES dimensions, but not directly associated with tax evasion intentions.

Considering the previous research with respect to intrinsic and extrinsic religiousness, the following hypotheses are offered:

H1a: Intrinsic religiousness is positively related to the moral equity dimension of the MES.

H1b: Intrinsic religiousness is positively related to the contractualism dimension of the MES.

H1c: Intrinsic religiousness is negatively related to the relativism dimension of the MES.

H1d: Intrinsic religiousness is negatively related to tax evasion intentions as assessed by the MES and has a larger negative effect than extrinsic religiousness.

H2a: Extrinsic religiousness is negatively related to the moral equity dimension of the MES.

H2b: Extrinsic religiousness is negatively related to the contractualism dimension of the MES.

H2c: Extrinsic religiousness is positively related to the relativism dimension of the MES.

H2d: Extrinsic religiousness is not related to tax evasion intentions as assessed by the MES and has a smaller negative effect than intrinsic religiousness.

Table 13 summarizes the results of H1a-H1d and H2a-H2d concerning intrinsic and extrinsic religiousness. First, higher intrinsic religious assessments are associated with higher evaluations that tax evasion is unjust, unfair, immoral, and unacceptable to the respondents family as measured by the moral equity dimension of the MES, regardless of the type of hypothetical tax scenario (i.e., income case, deduction case, or a combination of the cases). This finding provides support for H1a. Second, higher extrinsic religious measures are related to lower assessments of moral equity and implied contracts as represented by the MES for the hypothetical income tax case and the combined scenarios, but not for the deduction case. This finding provides partial support for both H2a and H2b. Last, increases in intrinsicness are significantly associated with decreases in tax evasion intentions considering the effects of the MES dimensions (i.e., moral equity, relativism, and contractualism). However, extrinsic religiousness is not related to tax evasion intentions when accounting for MES dimension effects. These last findings confirm the results indicated by previous research.

The Importance of Moral Judgment

Concerning the second question about moral judgment, Figures 11-13 indicate that postconventional moral reasoning is an antecedent to the ethical evaluation of one's tax reporting decisions. The highest level of development, the postconventional schema (i.e., Kohlberg's stages five and six), emphasizes society-creating with a justice

orientation. Postconventional thinkers view rules, roles, laws, and institution as serving some sharable concept of cooperation (Rest et al. 1999). In particular, postconventional reasoners are concerned about maintaining an ideal societal structure for all members of society which must be open to scrutiny. Studies have found that the MES outperforms the DIT in predicting behavioral intent (Cohen et al. 1996; Shawver and Sennetti 2009). However, Weber (1996) indicates that the DIT is neither equal to the MES, nor is it intended to be. Moreover, Weber resolves that the MES may be a compliment (e.g., justice orientation), not a replacement, to the DIT and Kohlbergian Theory. Concerning the DIT P-score and the prediction of behavioral intent, previous research has not only found that higher P-scores are related to lower tax evasion intentions (Kaplan et al. 1997; Fisher 1999; Trivedi et al. 2003), but also found no relation between P-scores and tax evasion intentions (Troutman et al. 1995; Shawver and Sennetti 2009).

Considering the previous research with respect to moral capacity, the following hypotheses are offered:

H3a: Postconventional moral capacity is positively related to the moral equity dimension of the MES.

H3b: Postconventional moral capacity is not related to the contractualism dimension of the MES.

H3c: Postconventional moral capacity is not related to the relativism dimension of the MES.

H3d: Postconventional moral capacity is not related to tax evasion intentions as assessed by the MES.

The finding related to the preceding postconventional moral reasoning hypotheses may be summarized as follows. First, like measures of intrinsic religiousness, higher levels of postconventional moral thinking are associated with higher evaluations that tax evasion is unjust, unfair, immoral, and unacceptable to the respondents family as measured by the moral equity dimension of the MES, regardless of the type of hypothetical tax scenario (i.e., income case, deduction case, or a combination of the cases). This finding substantially provides support for H3a. Second, increases in postconventional moral thinking are significantly associated with increases in implied contractualism as measured by the MES for Model 4 and Model 6, but not for Model 5 (i.e., deduction case). This finding offers partial support for H3b particularly for the understatement of income case. Third, assessments of postconventional moral reasoning are not related to values of relativism as measured by the MES. The insignificance in the postconventional reasoning-relativism path holds for all hypothetical tax cases (i.e., income, deduction, and the combined scenarios). Therefore, the study's findings do not support H3c. Last, postconventional moral reasoning is not related to tax evasion intentions when accounting for MES dimensions, regardless of the type of hypothetical tax scenario. This finding provides support for H3d which is consistent with the assertion that morality is a philosophical rather than a behavioral concept and may not accurately measure behavioral intent or action (Kohlberg 1981).

Ethical Evaluation

Regarding the MES and ethical evaluation, individuals tend to rely on a broad sense of moral equity dominated by concerns for fairness and justice, tempered by relativistic and implied social contract deontological dimensions. Prior research generally finds that all three MES dimensions (i.e., moral equity, relativism, and contractualism) are indirectly related to the evaluation of unethical behavior, such as tax evasion intentions (R&R 1988, 1990; Cohen et al. 1996; Henderson and Kaplan 2005). However, Henderson and Kaplan (2005) assess both the underreporting of taxable income and the overreporting of tax deductions and find that the latter is rated more unethical than the former for actual taxpayers. Furthermore, the income scenarios are not significant for the relativism and contractualism dimensions of the MES; however, when both income and deduction cases are simultaneously evaluated, all MES dimensions are significant. Their result concerning the disparity between income and deductions is similar to that of Groves (1958) which finds that farmers and landlords are reluctant to overreport deductions as compared with underreporting income.

Considering the previous research with respect to ethical evaluation, the following hypotheses are offered:

H4a: When income and deduction scenarios are simultaneously evaluated, all three MES dimensions (i.e., moral equity, relativism, and contractualism) will be negatively related with tax evasion intentions.

H4b: When deduction scenarios are independently evaluated, all three MES dimensions (i.e., moral equity, relativism, and contractualism) will be negatively related with tax evasion intentions.

H4c: When income scenarios are independently evaluated, only the moral equity dimension of the MES will be negatively related with tax evasion intentions.

To summarize the findings for the ethical evaluation hypotheses (i.e., Figures 5-7) for religiousness and Figures 11-13 concerning morality), all postconventional moral capacity structural models (i.e., Models 14-16 representing the combined case, the deduction case, and the income case, respectively) generally support a negative association between each of the MES dimensions (i.e., moral equity, relativism, and contractualism) and tax evasion intentions. However, only the moral equity and relativism dimensions of the MES are significantly inversely related to probable tax evasive practices for religious orientation models (i.e., Models 1-3). Therefore, the study provides support for H4a when moral capacity is an antecedent to the ethical evaluation as measured by the MES, but not when religion precedes the ethical evaluation as indicated by the MES. Like Henderson and Kaplan (2005), this study finds that subjects respond differently when considering the income case and the deduction scenario. However, unlike Henderson and Kaplan (2005), the income case seems to be significant rather than the deduction case. Perhaps this finding results from differing participant characteristics. This study assesses student subjects (i.e., mean age = 24.2); whereas, Henderson and Kaplan (2005)'s participants are more mature (i.e., mean age = 37.2).

The Importance of Religiousness Across Moral Capacity Levels

Previous research indicates that the ROS and the DIT are distinct measures of religiousness and moral capacity, respectively. Perhaps these unique measures may combine to better predict behavioral intent (e.g., tax evasion intentions) than either single measure alone. Based on the preceding statements, the following research question is offered:

RQ: The model of the ideological factors of tax compliance will improve when considering the ROS (i.e., intrinsic and extrinsic religiousness) in addition to the DIT (i.e., P-score, N2-score, etc.) above that of the single construct alone (i.e., ROS or DIT).

Model improvement is evaluated via a two-fold assessment. First, factor structure invariance across postconventional moral capacity levels is examined by comparing the totally free model with the model of constrained measurement weights. The difference between the χ^2 and degrees of freedom is insignificant (p > .05) for Model 7, but not for Model 8 or Model 9. These results provide partial support for factor structure invariance which indicates that the combination of the income and deduction scenarios has consistent factor weights across measures of high and low postconventional reasoning.

Second, in addition to factor structure invariance, model R^{2's} may be compared to assess the quality of the each models (Models 1-9) predictions. As indicated in Table 14, the R^{2's} for Models 1-3 (i.e., religious orientation models) are slightly lower than those of Models 4-6 (i.e., moral capacity models). Furthermore, R^{2's} for Models 7-9 (i.e., models combining religiousness and morality) for higher postconventional reasoning are lower than all other models, and R^{2's} for lower postconventional moral capacity are nearly as high as Models 4-6. Therefore, the moral capacity models (i.e., Models 4-6) seem to be more predictive not only considering the combined models (i.e., Models 7-9), but also the religiousness models (i.e., Models 1-3).

Implications

This study potentially contributes to the tax compliance literature in that it sets out to disentangle the underlying motivations for tax evasion intentions of intrinsic and extrinsic religious types with respect to the ethical evaluation dimensions (i.e., moral equity, relativism, contractualism, and utilitarianism). Based on the author's research, this study is the first to simultaneously assess the interaction among religiousness operationalized by the ROS and the ethical evaluation of tax evasion intentions using the MES.

The study's findings make two significant contributions to the tax compliance literature. First, intrinsic religiousness appears to be not only an important predictor of tax evasion intentions, but also an antecedent to the moral equity and deontological contractualism dimensions of the MES. However, similar results are not found for extrinsic religiousness. Second, the models of postconventional moral reasoning explain the ethical evaluation of tax evasion intentions better than either the religious orientation models or the models combining religiousness and morality. However, as predicted, the models of postconventional morality do not predict tax evasion intentions directly.

Limitations

The primary limitations of this study are the use of students as proxies for U.S. taxpayers, a small sample size and poor model fit with respect to a few of the study's assessed models. First, this study evaluates religious, ethical, moral, and tax compliance intentions of undergraduate and graduate students. The average age of the respondents who participated in this study is 24.2 years old, while the approximate mean age of the U.S. taxpayer in 2010 was 44.9 years old (Hodge and McBride 2012). This may explain the inconsistent findings between this study and Henderson and Kaplan (2005). Both studies used the same measure to assess tax evasion intentions for an underreporting of income scenario and an overreporting of deduction case. Additionally, both studies'

findings are statistically significant when the scenarios are combined. However, Henderson and Kaplan (2005) find significant results primarily for the deduction case; whereas, this study indicates compelling findings for the income scenario.

Second, the recommended sample size is ten respondents per estimated parameter (Hair et al. 2006; Byrne 2010). Models 1-3 each have 20 estimated items which yields a recommended sample size of 200 subjects rather than the 181 collected; however, Field 2009 maintains that a sample size from five to ten subjects per measured parameter is acceptable with appropriate model fit. The fit of Models 1-3 meets the suggested requirements for good fit; therefore, sample size does not appear to be an issue for these models. The actual sample size for Models 4-6 appears to be adequate in that the models only have twelve estimated items each resulting in a recommended sample size of 120 participants compared to the 128 collected. Models 7-9 compare higher moral capacity respondents with lower ones by splitting the DIT 2 sample (i.e., 128 subjects) at the mean resulting in two samples of 64 participants each. Like Models 1-3, Models 7-9 have 20 items to be estimated yielding from the low- to the high-end 100 and 200, respectively. However, Hair et al. (2006) indicate that with good model fit, even sample sizes of those observed in Models 7-9 may be adequate. Fit statistics seem to be adequate for Models 7-9.

Last, the overall fit partially supports the measurement analysis for Models 4-6. The χ^2 /df is only less than 2.00 for Model 6 (i.e., income scenario); whereas, the χ^2 /df for Model 4 and Model 5 are 2.50 and 3.00, respectively which exceeds the rule of thumb (Hair et al. 2006; Byrnes 2010). The comparative fit index (CFI) is at least .91 for each model for which Hair et al. (2006) and Byrnes (2010) agree that acceptable levels are

above .9. Furthermore, the RMSE is below .08 for Model 6 (i.e., income scenario), but is .11 and .13 for Model 4 and Model 5, respectively. Statisticians suggest that the RMSE should be below .08 (Hair et al. 2006; Byrnes 2010). Given the moderate model fit, especially for Model 4 and Model 5, concerns about model fit may limit the interpretation of the models' results.

Future Research

Since the widening of the tax gap continues to be a concern for governments, continued research in the area of tax compliance is necessary; however, because of the aforementioned limitations future research should include the following. To address the generalization of the research findings, a national sample of taxpayers should be assessed. If a split sample of higher and lower postconventional reasoning is to be evaluated, a sample size of at least 400 respondents should be administered. Perhaps the combination of taking a national sample of taxpayers and increasing the sample may resolve issues pertaining to inadequate model fit.

Moreover, this study's findings related to religiousness and postconventional morality seem promising. Future research should examine how general deterrence theory factors and/or fairness phenomenon interact with the ideological constructs of religiousness, morality and ethicality in predicting tax evasion intentions.

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APPENDIX A

MULTIDIMENSIONAL ETHICS SCALE (MES) SCENARIOS

Computer Sale Scenario 1:

The Smiths purchased a new computer system for use in their business. The old system was sold to a friend as a home computer for \$2,300 in cash. The Smiths fully depreciated the old computer system on prior tax returns, and they are aware that the \$2,300 represents taxable income.

Action: Since the computer was sold to a friend for cash and the Internal Revenue Service (IRS) would not be aware of the sale, the Smiths did not report the \$2,300 cash received from the sale on their federal income tax return.

Please give your beliefs concerning the Smiths' action described in the scenario above by filling in the circle corresponding to your assessment.

Just	0	0	0	0	0	0	0	Unjus	st		
Fair	0	0	0	0	0	0	0	Unfai	r		
Morally Right	0	0	0	0	0	0	0	Not N	10rally	Right	
Acceptable to my Family	0	0	0	0	0	0	0		Unacceptable to my Family		
Traditionally Acceptable	0	0	0	0	0	0	0		Traditionally Unacceptable		
Culturally Acceptable	0	0	0	0	0	0	0		Culturally unacceptable		
Violates an Unwritten Contract	0	0	0	0	0	0	0		Does not Violate an Unwritten Contract		
Violates an Unwritten Prom	O nise	0	0	0	0	0	0		Does not Violate an Unwritten Promise		
The action described above	e is	Ethical	0	0	0	0	0	0	0	Unethica	
The probability getting caught cheating in this tax situation is	of	High	0	0	0	0	0	0	0	Low	
The probability my friends wou undertake the			•					•			
same action is		High	0	0	0	0	0	0	0	Low	
The probability I would underta	ke	High	0	0	0	0	0	0	0	Low	

Business Meal Scenario 2:

The Browns started a business where they frequently incur expenses for business-related meals and entertainment. Because of the nature of their business, the Browns routinely save all of their receipts for meals and entertainment. While preparing their tax return, the Browns find that, in addition to their business receipts, they have accumulated enough personal meals and entertainment receipts to falsely support an additional \$2,300 deduction.

Action: Since falsely reporting the personal meals and entertainment receipts for business would probably not be detected by the Internal Revenue Service (IRS), the Browns took the additional false \$2,300 deduction on their federal income tax return.

Please give your beliefs concerning the action of the dealer described in the scenario by filling in the circle corresponding to your assessment.

Just	0	0	0	0	0	0	0	Unjust
Fair	0	0	0	0	0	0	0	Unfair
Morally Right Right	0	0	0	0	0	0	0	Not Morally
Acceptable to my Family	0	0	0	0	0	0	0	Unacceptable to my family
Traditionally Acceptable	0	0	0	0	0	0	0	Traditionally Unacceptable
Culturally Acceptable	0	0	0	0	0	0	0	Culturally Unacceptable
Violates an an Unwritten Contract Contract	0	0	0	0	0	0	0	Does not Violate Unwritten
Violates an an Unwritten Promise Promise	0	0	0	0	0	0	0	Does not Violate Unwritten
The action described above is Ethical	0	0	0	0	0	0	0	Unethical
Probability of getting caught cheating in this tax situation is High	0	0	0	0	0	0	0	Low
Probability that my friends would undertake the same action is High	0	0	0	0	0	0	0	Low
Probability that I would undertake	0	0	0	0	0	0	0	Low

APPENDIX B

DEMOGRAPHIC INFORMATION AND RELIGIOUS ASSESSMENT

Thank you for participating in this survey. Your participation is vital to the success of this research. This study is concerned with how people view the social problems and issues of taxation. YOUR RESPONSES ARE COMPLETELY ANONYMOUS.

Please provide the following information about yourself:

What is your undergraduate major? O Accounting O Yes O No O Computer Information Systems O Economics Have you ever filed a federal income tax return O Yes O No O Management O Marketing O Other Please respond to the following statements based on the scale below: Never Seldom Somewhat Always Not Agree Rarely Agree Neutral Agree Usually Agree Applicable	What	is your gra	de point	average (GPA)? _	•					
O Economics O Finance O Yes O No O Management O Marketing O Other Please respond to the following statements based on the scale below: Never Seldom Never	O Ac	O Accounting									
Never Seldom Somewhat Always Not	O Ed O Fin O M	conomics nance anagement arketing	ormation				-		led a federal income tax return?		
•	Pleas	-	o the foll	-							
			Rarely					•			
1. I enjoy reading about my religion. 1 2 3 4 5 6 7 8	1.					(5)	6	7	8		
2. I go to a place of worship because it helps me make friends.	2.	I go to a p	olace of w	orship be	cause it l	nelps me	make frie	ends.			
(1) (2) (3) (4) (5) (6) (7) (8)		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
3. It doesn't matter what I believe so long as I am good. 1 2 3 4 5 6 7 8	3.		$\overline{}$	\sim				7	8		
4. It is important to me to spend time in private thought and prayer.	4.	It is impo	rtant to m		d time in	- ~	hought ar	nd prayer			
(1) (2) (3) (4) (5) (6) (7) (8)		_	_	_		_	\sim	(7)	(8)		
5. I have often had a strong sense of God's presence. 1 2 3 4 5 6 7 8	5.						\sim	7	8		
6. I pray mainly to gain relief and protection. (1) (2) (3) (4) (5) (6) (7) (8)	6.		inly to ga				(A)	$\widehat{(2)}$	(9)		
	7		to live al			$\overline{}$	_	_	•		
7. I try hard to live all my life according to my religious beliefs. (1) (2) (3) (4) (5) (6) (7) (8)	7.				\sim	_			(8)		
8. What religion offers me most is comfort in times of trouble and sorrow.	8.	What relie	oion offer		-		es of tro	uble and			
1 2 3 4 5 6 7 8	•										
9. Prayer is for peace and happiness. (1) (2) (3) (4) (5) (6) (7) (8)	9.		<u>~</u>	_ ··	\sim	(5)	(6)	7)	(8)		
10. Although I am religious, I don't let it affect my daily life.	10.	Although	I am reli	gious. I de	on't let it	affect m	v daily lit	fe.	•		
1 2 3 4 5 6 7 8		_							8		
11. I go to a place of worship mostly to spend time with my friends.	11.	I go to a p	lace of w	orship m	ostly to s	pend time	e with my	friends.			
		(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)		
12. My whole approach to life is based on my religion.	12.						_				
(1) (2) (3) (4) (5) (6) (7) (8)				_	_		_	-			
13. Although I believe in my religion, many other things are more important in life. (1) (2) (3) (4) (5) (6) (7) (8)	13.										

APPENDIX C

FIVE DILEMMA DIT-2 INSTRUMENT

This portion of the survey is divided into five stories about specific social problems. After each story, there will be a list of questions. The questions that follow each story represent different issues that might be raised by the problem. You will be asked to rate and rank the questions in terms of how important each one seems to you when making your decision.

Example of the task:

Imagine you are about to vote for a candidate for the Presidency of the United States. Before you vote, you are asked to rate the importance of five issues you could consider in deciding who to vote for. Rate the importance of each item (issue) by checking the appropriate box.

Rate the following issues in terms of importance	Rate	the f	following	issues	in terms	of importance
--	------	-------	-----------	--------	----------	---------------

	Great	Much	Some	Little	None
1. Financially are you personally better off now than you were four years ago?					
2. Does one candidate have a superior moral character?					
3. Which candidate stands the tallest?					
4. Which candidate would make the best world leader?					
5. Which candidate has the best ideas for our country's internal problems, like crime and health care?					

Note. Some items may seem irrelevant or do not make sense (as possibly in item #3). In that case, rate the item as "None". After you rate all of the items you will be asked to RANK the TOP FOUR ITEMS in terms of importance. Note that it makes sense that the items you rate as most important should be RANKED high as well. So if you only rated Item 1 as having great importance, you should rank it as most important.

Consider the five issues above and rank the FOUR ISSUES that are most important:

Most important issue?	1. 🗆	2. 🗆	3. □	4. 🗆	5. □
Second most important?	1. 🗆	2. 🗆	3. 🗆	4. 🛘	5. □
Third most important?	1. 🗆	2. 🗆	3. □	4. □	5. □
Fourth most important?	ΙП	2 □	3 П	4 П	5 П

Again, remember to consider all of the items before you rank the four most important items and be sure that you only rank items that you found important.

Note also that before you begin to rate and rank items you will be asked to state your preference for what action to take in the story.

Thank you and you may begin the questionnaire!

Story 1 Famine

The small village in Northern India has experienced shortages of food before, but this year's famine is worse than ever. Some families are even trying to feed themselves by making soup from tree bark. Mustaq Singh's family is near starvation. He has heard that a rich man in his village has supplies of food stored away and is hoarding food while its price goes higher so that he can sell the food later at a huge profit. Mustaq is desperate and thinks about stealing some food from the rich man's warehouse. The small amount of food that he needs for his family probably would not even be missed.

Do	Do you favor the action of taking food? ☐ Should take the food ☐ Cannot decide ☐ Should not take the food							
Rat	Rate the following issues in terms of importance:							
1.	Is Mustaq Singh courageous enough to risk	Great	Much	Some	Little	None		
2.	getting caught for stealing? Is it not only natural for a loving father to care							
	nuch for his family that he would steal?		_	_	_	,		
3.	Should not the community's laws be upheld?							
4.	Does Mustaq Singh know a good recipe for preparing soup from tree bark?							
5.	Does the rich man have any legal rights to store when other people are starving?							
6.	Is the motive of Mustaq Singh to steal for himself or to steal for his family?							
7.	What values are going to be the basis for social cooperation?							
8.	Is the epitome of eating reconcilable with the guilt of stealing?							
9.	Does the rich man deserve to be robbed for being so greedy?							
10.	Is not private property an institution to enable to enable the rich to steal from the poor?							
11.	Would stealing bring about more total good for everybody concerned or wouldn't it?							
12.	Are laws getting in the way of the most basic claim of any member of a society?							
Con	Consider the 12 issues above and rank the FOUR ISSUES that are most important:							
Sec Thi	st important issue? 1. \square 2. \square 3. \square 4. \square 5. \square 6 ond most important? 1. \square 2. \square 3. \square 4. \square 5. \square 6 ord most important? 1. \square 2. \square 3. \square 4. \square 5. \square 6 orth most important? 1. \square 2. \square 3. \square 4. \square 5. \square 6 orth most important? 1. \square 2. \square 3. \square 4. \square 5. \square 6	5. 🗆 7. 5. 🗆 7.	□ 8. □ □ 8. □	9. □ 9. □	10.	12. \square 12. \square 12. \square 12. \square		

Story 2 Reporter

Molly Dayton has been a news reporter for the Gazette newspaper for over a decade. Almost by accident she learned that one of the candidates for Lieutenant Governor for her state, Grover Thompson, had been arrested for shop-lifting 20 years earlier. Reporter Dayton found out that early in his life, Candidate Thompson has undergone a confused period and done things he later regretted, actions which would be very out of character

now. His shoplifting had been a minor offense and charges had been dropped by the department store. Thompson has not only straightened himself out since then, but built a distinguished record in helping many people and in leading constructive community projects. Now, Reporter Dayton regards Thompson as the best candidate in the field and likely to go on to important leadership positions in the state. Reporter Dayton wonders whether or not she should write the story about Thompson's earlier troubles because in the upcoming close and heated election, she fears that such a news story could wreck Thompson's chance to win.

Do	you favor the action of re	eporting the story	?					
	Should report the story	☐ Cannot decide		☐ Should not report the story				
Rat	e the following issues in terms	of importance:	.	. 4 3 4 1	6	F *441	8. 7	
1.	Doesn't the public have a right facts about all the candidates		Grea	at Much	Some	Little □	None	
2.	Would publishing the story he Dayton's reputation for invest	elp Reporter						
3.	If Dayton does not publish the another reporter get the story the credit for investigative rep	e story, wouldn't? anyway and get						
4.	Since voting is such a joke an							
5.	make any difference what rep Hasn't Thompson shown in the that he is a better person than	ne past 20 years						
6. 7.	a shoplifter? What would best service socie If the story is true, how can it	•				0		
8.	report it? How could reporter Dayton be heartless as to report the dama							
9.	candidate Thompson? Does the right of "habeas corp this case?	ous" apply in						
10.	Would the election process be or without reporting the story							
11.	Should reporter Dayton treat a office in the same way by rep	all candidates for orting everything						
12.	she learns about them good or Isn't it a reporter's duty to rep claim of any member of a soc regardless of the circumstance	ort all the news iety?						
Cor	sider the 12 issues above and i	ank the FOUR ISSU	JES that	t are most	importa	ant:		
Sec Thi	ond most important? 1. \square 2. rd most important? 1. \square 2.	□ 3. □ 4. □ 5. □ □ 3. □ 4. □ 5. □ □ 3. □ 4. □ 5. □	6. □ 7 6. □ 7	7. 🗆 8. 🗆 7. 🗆 8. 🗆	9. □ 9. □	10. \(\Bigcap \) 11. \(\Bigcap \) \(\Bigcap \) 12. \(\Bigcap \) 11. \(\Bigcap \) 12. \(\Bigcap \) 11. \(\Bigcap \) 12. \(\Bigcap \) 12. \(\Bigcap \) 13. \(\Bigc	12. \square	

Story 3 School Board

Mr. Grant has been elected to the School Board District 190 and was chosen to be chairman. The district is bitterly divided over the closing of one of the high schools. One of the high schools has to be closed for financial reasons, but there is no agreement over which school to close. During his election to the School Board, Mr. Grant had proposed a series of "Open Meetings" in which members of the community could voice their opinions. He hoped that dialogue would make the community realize the necessity of closing one high school. Also, he hoped that through open discussions, the difficulty of the decision would be appreciated, and that the community would ultimately support the school board decision. The first "Open Meeting" was a disaster. Passionate speeches dominated the microphones and threatened violence. The meeting barely closed without fist-fights. Later in the week, school board members received threatening phone calls. Mr. Grant wonders if he ought to call off the next "Open Meeting."

Do you favor the action of calling off the next "Open Meeting"? Rate the following issues in terms of importance: Is Mr. Grant required by law to have "Open Meetings "on major school board decisions? Would Mr. Grant be breaking his election campaign promises to the community by discontinuing the "Open Meetings"? Would the community be even angrier with Mr. Grant if he stopped the "Open Meetings"? Would the change in plans prevent scientific assessment? 5. If the school board is threatened, does the chairman have the legal authority to protect the Board by making decisions in closed meetings? Would the community regard Mr. Grant as a coward if he stopped the open meetings? Does Mr. Grant have another procedure in mind for ensuring that divergent views are heard? Does Mr. Grant have the authority to expel troublemakers from the meetings or prevent them from making long speeches? 9. Are some people deliberately undermining the school board process by playing some sort of power game? 10. What effect would stopping the discussion have on the community's ability to handle controversial issues in the future? 11. Is the trouble coming from only a few hotheads and is the community in general really fair-minded and democratic? 12. What is the likelihood that a good decision could be made without open discussion from the community?

Co	Consider the 12 issues above and rank the FOUR ISSUES that are most important:								
Sec Thi	ist important issue? 1. \square 2. \square 3. \square 4. \square 5. \square 6. \square 6. \square 6. \square 7. \square 7. \square 8. \square 9. \square 9	7. 🗆 8 7. 🗆 8	8. 🗆 9. 🗆 8. 🗆 9. 🗆	│ 10. □ │ 10. □	. . .	12. □ 12. □			
Mr and ma pro rea	Story 4 Cancer Mrs. Bennett is 62 years old, and in the last phases of colon cancer. She is in terrible pain and asks the doctor to give her more pain-killer medicine. The doctor has given her the maximum safe dose already and is reluctant to increase the dosage because it would probably hasten her death. In a clear and rational mental state, Mrs. Bennett says that she realizes this; but she wants to end her suffering even if it means ending her life. Should the doctor give her an increased dosage?								
Do	Do you favor the action of giving more medicine? ☐ Should give Mrs. Bennett increased dosage ☐ Cannot decide ☐ Should not give Mrs. Bennett increased dosage								
Rat	e the following issues in terms of importance:								
1.	Isn't the doctor obligated by the same laws as everyone else if giving an overdose would be the same as killing her?	Great	Much □	Some	Little	None □			
2.	Wouldn't society be better off without so many laws about what doctors can and cannot do?								
3.	If Mrs. Bennett dies, would the doctor be legally responsible for malpractice?								
4.	Does the family of Mrs. Bennett agree that she should get more painkiller medicine?								
5. 6.	Is the painkiller medicine an active heliotropic drug? Does the state have the right to force continued existence of those who do not want to live?								
7.	Is helping end another's life ever a responsible act of cooperation?								
8.	Would the doctor show more sympathy for Mrs. Bennett								
9.	by giving the medicine or not? Would not the doctor feel guilty from giving Mrs. Bennett	t 🗆							
11.	so much drug that she died? Should only God decide when a person's life should end? Shouldn't society protect everyone against being killed? Where should society draw the line between protecting life and allowing someone to die if the person wants to?				_ _ _				
Cor	nsider the 12 issues above and rank the FOUR ISSUES that	are m	ost impor	tant:					
Sec Thi	Most important issue?								

Story 5 Demonstration

Political and economic instability in a South American country prompted the President of the United States to send troops to "police" the area. Students at many campuses in the U.S.A have protested that the United States is using its military might for economic advantage. There is widespread suspicion that big oil multinational companies are pressuring the President to safeguard a cheap oil supply even if it means loss of life. Students at one campus took to the streets in demonstrations, tying up traffic and stopping regular business in town. The president of the university demanded that the students stop their illegal demonstrations. Students then took over the college's administration building, completely paralyzing the college. Are the student's right to demonstrate in these ways?

Do □	Do you favor the action of demonstrating in this way? ☐ Should demonstrate this way ☐ Cannot decide ☐ Should not demonstrate this way							
Rat	e the following issues in terms of importance:	Great	Much	Some	Little	None		
1.	Do the students have any right to take over							
_	property that does not belong to them?			_	_	_		
2.	Do the students realize that they might be arrested and fined, and even expelled from school?							
3.	Are the students serious about their cause or are							
	they just doing it just for fun?			_		_		
4.	If the university president is soft on students this time, will it lead to more disorder?							
5.	Will the public blame all students for the							
	actions of a few student demonstrators?							
6.	Are the authorities to blame by giving in to the							
_	greed of the multinational oil companies?	_	_	_				
7.	Why should a few people like Presidents and							
	business leaders have more power than ordinary people?							
8.	Does this student demonstration bring about							
υ.	more or less good in the long run to all people?			LJ				
9.	Can the students justify their civil disobedience?							
	Shouldn't the authorities be respected by		ā	ā				
	students?							
11.	Is taking over the building consistent with							
12	principles of justice? Isn't it everyone's duty to obey the law whether							
12.	one likes it or not?	_	_	_	_			
Con	sider the 12 issues above and rank the FOUR ISSU	ES that ar	e most im	oortant:				
Sec.	Most important issue? 1. □ 2. □ 3. □ 4. □ 5. □ 6. □ 7. □ 8. □ 9. □ 10. □ 11. □ 12. □ Second most important? 1. □ 2. □ 3. □ 4. □ 5. □ 6. □ 7. □ 8. □ 9. □ 10. □ 11. □ 12. □ Third most important? 1. □ 2. □ 3. □ 4. □ 5. □ 6. □ 7. □ 8. □ 9. □ 10. □ 11. □ 12. □ Fourth most important? 1. □ 2. □ 3. □ 4. □ 5. □ 6. □ 7. □ 8. □ 9. □ 10. □ 11. □ 12. □							

APPENDIX D

HUMAN USE APPROVAL LETTERS



OFFICE OF UNIVERSITY RESEARCH

TO: Mr. Fred Coleman and Dr. Thomas Phillips

FROM: Barbara Talbot, University Research

SUBJECT: HUMAN USE COMMITTEE REVIEW

DATE: June 23, 2011

In order to facilitate your project, an EXPEDITED REVIEW has been done for your proposed study entitled:

"General Deterrence Theory and the Defining Issues Test:..."

HUC 878

The proposed study's revised procedures were found to provide reasonable and adequate safeguards against possible risks involving human subjects. The information to be collected may be personal in nature or implication. Therefore, diligent care needs to be taken to protect the privacy of the participants and to assure that the data are kept confidential. Informed consent is a critical part of the research process. The subjects must be informed that their participation is voluntary. It is important that consent materials be presented in a language understandable to every participant. If you have participants in your study whose first language is not English, be sure that informed consent materials are adequately explained or translated. Since your reviewed project appears to do no damage to the participants, the Human Use Committee grants approval of the involvement of human subjects as outlined.

Projects should be renewed annually. This approval was finalized on June 23, 2011 and this project will need to receive a continuation review by the IRB if the project, including data analysis, continues beyond June 23, 2012. Any discrepancies in procedure or changes that have been made including approved changes should be noted in the review application. Projects involving NIH funds require annual education training to be documented. For more information regarding this, contact the Office of University Research.

You are requested to maintain written records of your procedures, data collected, and subjects involved. These records will need to be available upon request during the conduct of the study and retained by the university for three years after the conclusion of the study. If changes occur in recruiting of subjects, informed consent process or in your research protocol, or if unanticipated problems should arise it is the Researchers responsibility to notify the Office of Research or IRB in writing. The project should be discontinued until modifications can be reviewed and approved.

If you have any questions, please contact Dr. Mary Livingston at 257-4315.



MEMORANDUM

OFFICE OF UNIVERSITY RESEARCH

TO:

Mr. Fred Coleman and Dr. Thomas Phillips

FROM:

Barbara Talbot, University Research

SUBJECT:

HUMAN USE COMMITTEE REVIEW

DATE:

June 20, 2012

In order to facilitate your project, an EXPEDITED REVIEW has been done for your proposed study entitled:

"The Effects of Ideology on the Likelihood of Income Tax Compliance"

HUC 982

The proposed study's revised procedures were found to provide reasonable and adequate safeguards against possible risks involving human subjects. The information to be collected may be personal in nature or implication. Therefore, diligent care needs to be taken to protect the privacy of the participants and to assure that the data are kept confidential. Informed consent is a critical part of the research process. The subjects must be informed that their participation is voluntary. It is important that consent materials be presented in a language understandable to every participant. If you have participants in your study whose first language is not English, be sure that informed consent materials are adequately explained or translated. Since your reviewed project appears to do no damage to the participants, the Human Use Committee grants approval of the involvement of human subjects as outlined.

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If you have any questions, please contact Dr. Mary Livingston at 257-4315.

A MEMBER OF THE UNIVERSITY OF LOUISIANA SYSTEM