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The Relationship Between Theory of Planned Behavior Constructs and Small Business Owners' Tax Evasion and Avoidance Behaviors

Kenyatta Patton
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Walden University

College of Management and Human Potential

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Kenyatta Patton

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Walden University
2025

Abstract

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by

Kenyatta Patton

MPhil, Walden University 2024

MA, Keller Graduate School of Business, 2009

BS, Mercer University, 2007

Dissertation Submitted in Partial Fulfillment

of the Requirements for the Degree of

Doctor of Philosophy

Management

Walden University

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Abstract

The U.S. Department of the Treasury incurs substantial costs due to a tax gap, and the U.S. Internal Revenue Service has limited capacity to implement non-enforcement strategies without a deeper understanding of the behavioral drivers of tax non-compliance. Grounded in the theory of planned behavior, the purpose of this quantitative, correlational study was to explore the relationships between small business owners' attitudes toward taxation, social norms, perceived behavioral control, and tax compliance behaviors. The participants comprised 121 small business owners in the Atlanta, Georgia, metropolitan area. They completed a combined survey consisting of the ethics of tax evasion survey instrument and the tax compliance inventory. Multiple linear regression and model-building techniques were employed to determine the relationships between nine independent variables and two dependent variables, and to develop predictive models for tax compliance behavior. The findings indicated that the predictive models for tax evasion and tax avoidance culture were statistically significant. The tax evasion model showed $F(9, 121) = 39.94, p < .001$, and the tax avoidance culture model showed $F(9, 121) = 4.18, p < .001$. The moral norms, penalty magnitude, and perceptions of government authority were significant predictors of tax evasion culture. The primary recommendation is for policymakers and managers to understand this relationship to ensure equitable treatment across taxpayers and to demonstrate, in tangible ways, how tax revenues get used to benefit the community. The implications for positive social change include the potential for government managers to increase voluntary tax compliance, reduce tax evasion and tax avoidance, and enhance public trust in the tax system.

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Dedication

This dissertation is dedicated to my beautiful daughter, Julianna Crawford-Patton. Thank you for being a wonderful blessing and providing me with the motivation it took to stay on task to completion. I look forward to this terminal degree providing me with opportunities that will enhance your life immeasurably. I love you very much, and I'm so thankful to have you in my life.

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Table of Contents

List of Tables	v
List of Figures	vi
Chapter 1: Introduction to the Study.....	1
Background of the Study	2
Problem Statement.....	6
Purpose of the Study	8
Research Questions and Hypotheses	8
Theoretical Foundation.....	9
Nature of the Study.....	11
Definitions.....	12
Assumptions.....	13
Scope and Delimitations	14
Limitations	14
Significance of the Study	15
Significance to Theory.....	15
Significance to Practice.....	16
Significance to Social Change	17
Summary and Transition.....	17
Chapter 2: Literature Review.....	19
Literature Search Strategy.....	20
Theoretical Foundation.....	23

Literature Review.....	25
History of Tax Evasion and Tax Avoidance.....	25
Tax Avoidance Based on Performance Measurement.....	38
Research Gap.....	52
Institutions, Norms, and Algorithms: A 5-Year Synthesis on Tax Evasion and Avoidance.....	55
Summary and Conclusions.....	74
Chapter 3: Research Method.....	78
Research Design and Rationale.....	78
Methodology.....	78
Population.....	78
Sampling and Sampling Procedures.....	80
Procedures for Recruitment, Participation, and Data Collection (Primary Data).....	81
Instrumentation and Operationalization of Constructs.....	83
Data Analysis Plan.....	89
Multiple Linear Regression.....	90
Regression Model-Building Techniques.....	96
Research Questions and Hypotheses.....	100
Threats to Validity.....	101
External Validity.....	101
Internal Validity.....	102

Construct Validity.....	103
Ethical Procedures	104
Summary.....	105
Chapter 4: Results.....	107
Hypothesis 1.....	107
Hypothesis 2.....	107
Hypothesis 3.....	108
Hypothesis 4.....	108
Data Collection	108
Study Results	112
Research Question 1: DV = Tax Evasion Culture (TAXE).....	114
Research Question 2: DV = Tax Avoidance Culture (TAXA).....	124
Research Question 3: DV = Tax Evasion Culture (TAXE), IVs = Demographics	134
Research Question 4: DV = Tax Avoidance Culture (TAXA), IVs = Demographics	139
Summary.....	144
Chapter 5: Discussion, Conclusions, and Recommendations.....	147
Interpretation of the Findings.....	150
Tax Evasion Culture Findings	151
Tax Avoidance Culture Findings.....	152
Non-Significant Predictors.....	153

Findings in the Context of Prior Research.....	154
Limitations of the Study.....	162
Recommendations.....	163
Implications.....	164
Methodological Implications	166
Theoretical Implications	167
Empirical Implications.....	167
Conclusion	169
References.....	172
Appendix A: Dr. Kirchler’s Permission to Use Survey Instrument.....	198
Appendix B: Demographic Questions	200
Appendix C: Invitation Email.....	202
Appendix D: Maximum, Range, Mean, and Standard Deviation for Independent and Dependent Variables	203

List of Tables

Table 1. Synthesis of Authors and Works	21
Table 2. Categories, Number of Articles, and Percent of Total Representing Tax Evasion, Tax Avoidance, Social Norms, Attitude, and Perceived Behavior Control.....	23
Table 3. Income by Gender.....	111
Table 4. Age of Participants.....	112
Table 5. Household Income of Participants	113
Table 6. Ethnicity of Participants.....	113
Table 7. Study Constructs, Independent Variables, Sub-Constructs, and Item Associations	117
Table 8. SPSS Coefficients Table: Final Predictive Model for TAXE.....	118
Table 9. SPSS Coefficients Table: Final Predictive Model for TAXA	128
Table 10. SPSS Coefficients Table: Final Predictive Model for TAXE with Demographic IVs.....	136
Table 11. SPSS Coefficients Table: Final Predictive Model for TAXA with Demographic IVs.....	141

List of Figures

Figure 1. Theory of Planned Behavior Model	24
Figure 2. Outcome of a Priori Power Analysis	80
Figure 3. Post Hoc Power Analysis	111
Figure 4. Scatterplot of TAXE versus TAXC.....	115
Figure 5. Scatterplot of Unstandardized Residuals for TAXE Versus TAXC	116
Figure 6. Normal Probability Plot of Unstandardized Residuals for TAXE	116
Figure 7. 2FI Between MORA and GOVT (View 1)	120
Figure 8. 2FI Between MORA and GOVT (View 2)	121
Figure 9. 2FI Between TAXC and PENA	122
Figure 10. 2FI Between HORI and SOCI.....	123
Figure 11. Scatterplot of TAXA Versus TAXC	125
Figure 12. Scatterplot of Unstandardized Residuals for TAXA Versus TAXC	126
Figure 13. Normal Probability Plot of Unstandardized Residuals for TAXA	126
Figure 14. 2FI Between EXCH and GOVT (View 1)	130
Figure 15. 2FI Between EXCH and GOVT (View 2)	131
Figure 16. 2FI Between EXCH and MORA.....	132
Figure 17. 2FI Between HORI and TAXC	133
Figure 18. Normal Probability Plot of Unstandardized Residuals for TAXA	135
Figure 19. Normal Probability Plot of Unstandardized Residuals for TAXA.....	140

Chapter 1: Introduction to the Study

For many years, the U.S. Internal Revenue Service (IRS) has been challenged with reducing the tax gap, the difference between what taxpayers owe and the amount received by the IRS. The IRS reports significant gaps in revenue collected and owed each year. According to Raczkowski and Mróz (2018), the IRS experienced a revenue shortage, or tax gap, of approximately \$653.7 billion in 2015. Estimating the tax gap is challenging for managers responsible for managing the IRS tax gap due to the time-consuming process of compiling tax gap data (IRS, 2022). The most recent tax gap projection by the IRS for the years 2017 to 2019 is \$540 billion (IRS, 2022). In part, the tax gap is caused by taxpayers who fail to pay the correct tax amount. According to Sarin and Summers (2019), the U. S. Treasury Department lost approximately \$630 billion in 2020, with loss projections over the next decade equivalent to \$7.5 trillion, primarily due to tax evasion and tax avoidance. While tax evasion is illegal, tax avoidance is generally considered legal. Yet, both forms of uncollected funds from business entities account for billions in lost revenue each year.

I investigated tax evasion and tax avoidance as instigating behaviors associated with the reported tax gap challenge that the IRS consistently reports and projects. Many taxpayers, including small business owners, argue that filing a tax return is voluntary and not a requirement (IRS, 2022). As recently as 2015, the IRS partnered with researchers and policymakers to discover methods in addition to enforcement action to manage the significant loss of revenue (Slemrod, 2015). Within Chapter 1, I will discuss the background of the study, problem statement, purpose of the study, research questions,

theoretical foundation, nature of the study, definition of terms, assumptions, scope and delimitations, limitations, and significance of the study to provide context for this research. The topics offer insight into research design and the contribution that the findings will make to the management field.

Background of the Study

Various research has been conducted on tax evasion and tax avoidance from the perspective of general deterrence, economic measures, and fiscal psychology (see, for example, Altaf, 2019; Auerbach et al., 2019; IRS, 2019; Kasper et al., 2015; Kirchler & Wahl, 2010). Tax evasion and tax avoidance have had, and continue to have, a significant impact on tax revenue lost every year (IRS, 2019). This loss of revenue is referred to as a tax gap, which is the difference between taxes owed and taxes collected. The net tax gap is defined as the amount derived after revenue is collected from enforcement activity, as well as late payments that have been added back into the amount of revenue generated (Johnson & Rose, 2019).

In 2019, the IRS reported on the methodology used to determine the tax gap, as well as the concepts employed to define and analyze tax compliance and noncompliance. Tax is defined as both tax and refundable and nonrefundable tax credits (IRS, 2019). Relating the definition of taxes to the tax gap, the IRS suggested there is more than one way to estimate all the components of a tax gap, so multiple methods are used. Tax gap methods include contemporaneous estimation, detection-controlled estimation, the voluntary compliance rate, and the net compliance rate. The IRS (2019) posited that a significant limitation is that

each method is subject to non-sampling error; the component estimates that are based on samples are further subject to sampling error. The uncertainty of the estimates is therefore not readily captured by standard errors that typically accompany population estimates based on sample data. For that reason, standard errors, confidence intervals, and significance tests for statistical comparisons across years are not reported. (p. 5)

The primary contributors to the tax gap are non-filers, underreporters, and underpayments. Taxpayers fail to file a tax return for various reasons. Under-reporting and under-payments are associated with each other in that a return may be filed, yet the income is inaccurately reported. Thus, both under-reporting and under-payments result in payment of less than what is owed to the IRS. Owing to this fact, the focus of the current U.S. administration has been on increasing the enforcement of underreporters and underpayment initiatives (Bunn et al., 2021).

The American Jobs Plan (AJP) focuses on increasing taxes on business entities, which include small business owners, to improve enforcement efficiency. In addition, the American Families Plan (AFP) set aside \$80 billion for increased audits of high-dollar taxpayers. Though this initiative may be effective in producing desired results, further research examining the relationship, if any, between taxpayer attitudes toward taxation, social norms, and perceived behavior control could result in initiatives to address the tax gap in ways other than enforcement (*Details and Analysis of President Biden's American Jobs Plan*, 2024).

Slemrod (2015) stated that the IRS partnered with researchers and policy makers to discover methods, in addition to enforcement actions, to manage the significant loss of revenue, causing the tax gap problem. Similarly, Altaf (2019) studied major determinants that influence tax evasion by examining economic, institutional, and demographic variables with their relationship to tax evasion. Altaf concluded that economic and institutional factors are the strongest determinants of tax evasion, compared to other demographic factors. Furthermore, Auerbach et al. (2019) suggested that tax evasion and avoidance account for a significant amount of uncollected taxes. Auerbach et al. examined the significance of the U.S. tax evasion problem and found that the amount of missed tax revenue is equivalent to 75% of the annual federal budget deficit. The authors also suggested that the rate of income misreporting is higher for income from sole proprietorships and farms than for business entities and is greater for high-income households than for lower-income households.

Kasper et al. (2015) investigated how the traits of trust and power exhibited by tax authorities, as portrayed in the media, influence intended tax compliance. The authors found that the issue of tax evasion can be summed up as an economic decision under uncertainty. The authors found a significant relationship between perceived authoritative trust, power, and the intent to comply with tax law. Further, socioeconomic factors, when viewed together with institutional and demographic factors, produce a complex phenomenon of tax evasion behavior.

Hoffman et al. (2008) claimed that small business owners fail to manage their taxes and report their income due to their attitude toward taxation, with a belief that they

can avoid paying taxes and a false understanding that they can control tax outcomes for failure to comply with tax law (Hofman et al., 2008). Lin and Braithwaite (2018) identified that small business owners can take multiple postures toward paying taxes. The authors found that the correct response by authorities to address taxpayer issues depends on specific tax situations; however, the effectiveness of the authoritative response depends on taxpayer attitudes toward the tax system (Lin & Braithwaite, 2018).

Wei and McGee (2015) studied the ethical aspect of tax evasion to inquire whether men are more compliant toward tax laws or whether women are more defiant. The authors found that women were significantly more opposed to tax evasion. Onu et al. (2019) investigated the psychological underpinnings of tax avoidance and tax evasion of 330 owners of small businesses. They found that tax avoidance and tax evasion were perceived as qualitatively distinct by respondents and that they were predicted by different factors. While both tax avoidance and tax evasion were associated with weak personal norms regarding contributions to the tax system, tax avoidance was linked to a perception that the tax system is unfair and that tax law has loopholes that can be exploited. In contrast, tax evasion was predicted by the perception that evasion is a trivial crime.

Most research conducted on the topic of tax evasion and tax avoidance has been primarily from the perspective of general deterrence, economic measures, and fiscal psychology. Research analyzing the relationship among attitudes toward taxation, social norms, perceived behavior control, tax evasion, and tax avoidance has been limited to countries other than the United States (Benk, 2011; Kirchler et al., 2010). In addition,

much of the research has been focused on individual taxpayers, as opposed to small business owners. Consequently, there is a lack of research specifically focused on the issue of tax evasion and avoidance among small business owners in the United States.

Problem Statement

The general management problem was that a tax gap costs the U.S. Treasury billions of dollars every year (IRS, 2022). In part, the tax gap is attributed to tax evasion and tax avoidance behaviors by taxpayers. As a result, the IRS fails to meet tax income goals, which consequently limits the government's revenue used to enact laws and initiatives that ensure effective government operations and reduce budget deficits (Gleeson, 2022).

Despite the magnitude and severity of the tax gap, there is limited research that provides an understanding of the attitudes, social factors, social norms, behavior control, and behaviors that lead small business owners in the United States to evade or avoid paying taxes. These attitudinal and behavioral factors are captured in the theory of planned behavior (TPB; Ajzen, 1991). Altaf (2009) indicated a lack of studies examining taxpayer behaviors in the United States while noting that the focus of the current literature was only the investigation of some variation of economic, institutional, or demographic factors. Benk (2011) used TPB in Turkey and found a significant correlation between taxpayer attitudes, social norms, and perceived behavior control with tax evasion and tax avoidance. Kirchler (2010) found similar results in Austria, which support the aims of this research within the United States.

The research problem was that there is a lack of knowledge and understanding of the relationship between small business owners' attitudes toward taxation, social norms, and perceived behavior control, and tax evasion and tax avoidance behaviors. Consequently, effective methods (other than enforcement) to counter the behavior and correct the tax gap have yet to be thoroughly explored in the United States. The IRS has limited authority to implement policies and programs other than enforcement to effectively address tax evasion and avoidance behavior and manage tax collection within a voluntary tax reporting system. The IRS has a limited capacity to implement effective solutions to the tax gap without an understanding of the behavioral drivers of tax evasion and avoidance. Therefore, research is needed to examine whether small business owners "may be driven to commit acts of tax evasion and tax avoidance by social norms, attitudes, and perceived behavior control" (Onu et al., 2019, p. 13). Onu et al.'s (2019) research was limited and did not include U.S. taxpayers, including business owners. A better understanding of how attitudes, perceived behavioral control (PBC), and social norms influence tax evasion and tax avoidance behavior could assist IRS management in addressing the small business culture and internal processes that promote tax evasion and avoidance behavior. Additionally, a better understanding could lead to increased IRS revenue collection through procedures other than enforcement actions. This study could also assist small business owners with saving thousands of dollars in tax penalties and interest.

Purpose of the Study

The purpose of this quantitative correlational, non-experimental study was to explore the relationship between various measures of the TPB regarding attitudes, social factors, social norms, behavior control, and behaviors of U.S. small business owners pertaining to taxation and measures of tax avoidance and tax evasion culture. The nine independent variables (IVs) were vertical equity, horizontal equity, exchange equity, social and moral norms, detection risk, penalty magnitude, tax compliance intentions, and perceptions of government authority. The two dependent variables (DVs) were measures of tax evasion and tax avoidance. In addition, I explored the relationships between five demographic IVs and the DVs.

Research Question and Hypotheses

RQ1: Is there a relationship among the constructs of attitudes, social norms, perceived behavior control, and perception of government authority and tax evasion?

H₀: There are no significant predictors of tax evasion among the variables associated with attitudes, social norms, perceived behavior control, and perception of government authority.

H_a: There is at least one significant predictor of tax evasion among the variables associated with attitudes, social norms, perceived behavior control, and perception of government authority.

RQ2: Is there a relationship among the constructs of attitudes, social norms, perceived behavior control, and perception of government authority and tax avoidance?

H2_o: There are no significant predictors of tax avoidance among the variables associated with attitudes, social norms, perceived behavior control, and perception of government authority.

H2_a: There is at least one significant predictor of tax avoidance among the variables associated with attitudes, social norms, perceived behavior control, and perception of government authority.

RQ3: Is there a relationship between gender, age, ethnicity, business annual income, and household income and tax evasion?

H3_o: There are no significant predictors of tax evasion among gender, age, ethnicity, business annual income, and household income.

H3_a: There is at least one significant predictor of tax evasion among gender, age, ethnicity, business annual income, and household income.

RQ4: Is there a relationship between gender, age, ethnicity, business annual income, and household income and tax avoidance?

H4_o: There are no significant predictors of tax avoidance among gender, age, ethnicity, business annual income, and household income.

H4_a: There is at least one significant predictor of tax avoidance among gender, age, ethnicity, business annual income, and household income.

Theoretical Foundation

The TPB has been used extensively in research examining behavior modeling (Alessa, 2019; Cera & Furxhiu, 2017; Christina, 2017). The model assumes that behavior is planned; hence, it predicts deliberate behavior (Ajzen, 1991). Furthermore, TPB is an

improvement to the initial model known as the theory of reasoned action (Ajzen & Fishbein, 1975). The theoretical enhancement was a result of Ajzen's (1991) research, which revealed that behavior is not always a self-controlled act; thus, the addition of perceived behavior control as a predictor to the model. The underlying premise of TPB is that any action a person takes is directed by three kinds of considerations: behavioral beliefs (beliefs about the probable consequences of the practiced behavior), normative beliefs (beliefs about the normative expectations of other people), and control beliefs (beliefs about the presence of factors that may enable or obstruct the performance of the behavior (Ajzen, 1991).

This study aligns with TPB by examining whether small business owners' attitudes, subject norms, and PBC together shape their behavioral intentions and behaviors relative to tax evasion and avoidance. Ajzen (1991) posited that what a person believes results in a favorable or unfavorable attitude toward a certain behavior; normative beliefs result in perceived social pressure or subjective norms, and control beliefs trigger PBC. TPB was able to explain approximately 25% and 50% of the variance in intention and adherence behavior, respectively, in Ajzen's (1991) study. While other demographics and variables that are related to adherence could enhance TPB (Ajzen, 1991), Sniehotta et al. (2014) suggested that adding additional variables would limit any progress in the development of TPB.

The IRS continues to seek new ways of managing optimum tax collection in a voluntary tax reporting system (Slemrod, 2015). Examining the potential relationship between attitudes, social norms, and perceived behavior control (TPB-related factors) and

tax evasion and tax avoidance among small business owners could inform the development of effective regulatory processes, promote a more equitable tax system, and identify cultural practices that negatively impact small businesses and the community at large.

Nature of the Study

The nature of the study was premised on a quantitative correlational research design employing a multiple linear regression (MLR) analysis and statistical model-building. MLR models the relationship between two or more IVs and a DV by fitting a linear equation to observed data (Warner, 2013). MLR is a statistical technique by which a researcher can analyze the relationship between IVs to DVs to accomplish three objectives:

- Find the best predictive model of a DV
- Control for confounding factors to highlight the influence or predictability of specific IVs or a set of IVs
- Identify the relationships (if any) between IVs and a DV (Ho, 2014)

I examined the relationship between the multiple variables reflecting attitudes toward the U.S. tax system, social norms, and PBC (the IVs) and tax evasion and avoidance (the DVs). Small business owner participants were selected from a third-party vendor that compiles and sells specific information on small business demographics. The data were analyzed for each DV using MLR and regression model-building. MLR was the most suitable statistic technique for identifying, testing, and calculating the relationship among multiple IVs and DVs.

Definitions

Definitions are provided to assist the reader in understanding terms specific to the study topic. Though some terms may be understood by the reader, they may have different meanings relative to this study topic. All definitions are derived from peer-reviewed sources that are referenced in this study.

Attitude: The aggregate of a human being's beliefs about perceived control over behavior, what is considered socially normal behavior, and beliefs about the consequences of such behavior (Ajzen, 1991).

Exchange equity: The adequacy of the provision of public goods and services to citizens in the long run (Getachew, 2019).

Horizontal equity: Taxpayers, including small business owners, who earn like amounts and carry similar tax burdens (Elkins, 2006).

Moral norms: Belief that individuals or groups of people important to a taxpayer approve of their moral standing (Efebera et al., 2004).

Perceived behavior control: Beliefs about variables that may impede or facilitate carrying out certain behaviors (Ajzen, 1991).

Small business owner intention (entrepreneurial intention): A state of mind that directs a person's attention and action toward some form of self-employment (Linan, 2004).

Social norms: Beliefs that individuals or groups of people important to a taxpayer approve of their behaviors (Ajzen, 1991).

Tax avoidance: A taxpayer's intentional action to reduce their taxes through legal means by taking advantage of loopholes in the law (Webley, 2004).

Tax evasion: When taxpayers, including small business owners, break the law deliberately by understating income or by exaggerating deductions (Webley, 2004).

Tax gap: The difference between what taxpayers owe and what they actually pay the IRS for taxes (Webley, 2004).

Vertical equity: An increase in taxes paid from an increase in taxpayers' income (Rosenzweig, 2021).

Assumptions

MLR analysis requires that seven assumptions be met; otherwise, outcomes will not be considered valid or reliable (Roberson, 2022). Accordingly, the first assumption dictates at least one numerical DV and two numerical IVs. Respectively, I analyzed two DVs, tax evasion and tax avoidance, and nine IVs: attitude toward taxation, social norms, perceived behavior control, gender, age, perception of government/authorities as powerful or not, and perception of government/authorities as trustworthy or not. The IVs (attitude toward taxation, perceived behavior control, and social norms) were aggregate variables that included one to three subconstructs. Each IV was measured with a Likert scale. Likert scales provide a way for participants to answer a question from a range of response options (i.e., a level of approval, disapproval, or some combination of agreement to disagreement). Data from Likert scales are considered to be an ordinal scale level of measurement; however, according to Sullivan and Artino (2013), a Likert scale with five or more categories can often be used as ratio numerical data without harming

the analysis planned in the study. The survey instrument in this study included Likert scales with five or more levels, and the variables were considered as ratio scale numerical data. The other six assumptions of MLR are independence of observation, a linear relationship between each DV and each of the IVs, homoscedasticity of residuals, lack of multicollinearity, no significant outliers, and normally distributed residuals.

Scope and Delimitations

Delimitations signify a study's limitations and scope (Smith et al., 2016). This study focused on relationships between two DVs (tax evasion and tax avoidance) and nine IVs (attitude toward taxation, social norms, perceived behavior control, and demographics). The study used an internet questionnaire. Participants were small business owners who have businesses located in Atlanta, Georgia and were between the ages of 18 and 65. This study was a quantitative correlational design that used an MLR model employing a questionnaire which was adapted from previous research (Benk, 2011; Kirchler, 2010). Owners of franchises were eliminated from the pool of potential participants because the study only focused on one geographical area, and most franchises tend to have multiple locations in multiple cities or states.

Limitations

This study had several limitations. The first limitation was associated with utilizing MLR to analyze data. Since the study focused on a very specific set of nine IVs, I did not consider any other factors that may have influenced the outcomes of the two DVs, such as education and income level, that were outside the scope of this study.

Therefore, the survey instrument did not collect any data outside of the scope of this research.

Other limitations of the study included a time constraint that limited the ability to perform a more complete analysis of other potentially significant IVs that might have influenced the DVs. Likewise, the participants of this study were limited to the Atlanta metropolitan area. The data associated with the IVs were specific to the TPB, along with a limited set of demographic factors.

Significance of the Study

This research examined the relationship between tax evasion and tax avoidance and small business owners' attitudes toward taxation, social norms, perceived behavior control, tax evasion, and tax avoidance. Helping to reduce the tax gap could increase available resources used by the U.S. federal government for federally funded programs. In addition, study outcomes could assist with the development of processes that could be applied to IRS management of tax gap initiatives, as well as private sector management of tax reporting procedure.

Significance to Theory

According to Corley and Gioia (2011), originality and utility are the major themes in identifying contributions to theory. Most research concerning tax evasion and tax avoidance using the TPB as a theoretical foundation has been conducted outside of the United States. An examination of the TPB relative to tax evasion and tax avoidance in the United States could help to expand the context by which the theory is used in examining small business owner behavior relative to tax evasion and tax avoidance.

Significance to Practice

This study could prompt management and policy makers to incorporate TPB into communication and educational platforms. Engle et al. (2010) stated that since small business owners are the driving force of growth and development in an economy, the variables that determine why a person chooses to become a small business owner is a growing topic of interest among researchers. Molaei et al. (2014) suggested that forming and fostering autonomy, initiative, and growth of business are some key elements of a small business owner's intention, whereas the intention to own a small business is one of the biggest predictors of small business owner's behavior. Likewise, Malecki (1997) and Reynolds et al. (1994) argued that the formation of new businesses is important for any country's economy, and small business activity is related to regional and local development. Small business owner intention, also referred to as entrepreneurial intention, is defined as a state of mind that directs a person's attention and action toward a form of self-employment (Esfandiar et al., 2019). Linan (2004) found that the decision to start a business is based on three variables. The first is individual preference or attraction toward small business ownership. The second element is social norms, and the third is perceived feasibility. Although these researchers were interested in what influences the decision-making process of small business owners, their studies were limited to investigating the elements that may lead a person to choose small business ownership over employment. My research examined the relationships between attitude toward taxation, social norms, and PBC relative to propensity to commit tax avoidance or tax evasion. Adding to the literature relative to tax evasion and avoidance behavior could

promote positive social change in the areas of tax planning by reducing the potential for unwanted tax problems for small business owners; this could occur by adding to research relative to the principles of management, which instruct how managers should conduct themselves in various situations, and by adding to research relative to theories of small business ownership, which include entrepreneurship, that seeks to understand why small business owners act the way they do.

Significance to Social Change

Over 14 million Americans failed to pay approximately \$402 billion in taxes per year between 2014 and 2016 due to tax evasion or tax avoidance. Research indicates the trend continues. According to the IRS (2019), “the underreporting tax gap was \$352 billion, and the underpayment tax gap was \$50 billion” (p. 8) for the years 2011 to 2013. Underreporting and underpayment of tax are significant management problems for small business owners, policymakers, and IRS management. The goal of this study was to identify potential motivations behind tax evasion and avoidance behavior, with the aim of assisting the IRS in addressing the tax gap. A deeper understanding of tax fundamentals, coupled with the reduction of the tax gap, could make small businesses healthier going concerns and lead to additional tax revenue-funded social projects by saving small businesses thousands of dollars in unwanted tax debt and increasing IRS tax revenue.

Summary and Transition

The tax gap has been, and continues to be, a significant problem for the IRS. Recently, U.S. government policymakers and IRS management have teamed up with researchers to examine alternative ways of closing the tax gap. Most research in the

United States examining tax evasion and tax avoidance has primarily focused on general deterrence, economic measures, and fiscal psychology (Atlaf, 2019). Prior studies examining tax-compliant behavior lack generalizability, theoretical foundation, and empirical validation (Kirchler & Wahl, 2010).

Onu et al. (2019) posited that many small businesses may be driven by attitude, social norms, and perceived behavior control. The purpose of this quantitative correlational, non-experimental study was to explore the relationship between TPB attitudes, social factors, social norms, behavior control, and behaviors (IVs) and measures of tax avoidance and tax evasion culture (DVs). TPB is the theoretical foundation of this study (Ajzen, 1991). TPB has been used in several studies examining behavior modeling (Atlaf, 2019; Benk, 2011; Kirchler, 2010; Onu, 2019).

In this study, I used a quantitative correlational research design and MLR analysis for model-building. MLR models the relationship between two or more independent numerical variables and a DV by fitting a linear equation to observed data (Warner, 2013). Most of the studies in the literature review in Chapter 2 were quantitative and used MLR analysis. The chapter will show how research related to my topic has progressed over the last 65 years.

Chapter 2: Literature Review

The general management problem was that a tax gap costs the U.S. Treasury billions of dollars every year (IRS, 2022). The tax gap is partly caused by poor tax planning, tax evasion, and tax avoidance. As a result, the Internal Revenue Service (IRS) fails to reach tax revenue goals. Tax evasion limits government revenue used to enact laws and initiatives, ensure effective government, and reduce budget deficits (Gleeson, 2022). Despite the magnitude and severity of the tax gap, there is a lack of research that provides an understanding of the attitudes, social factors, social norms, behavior control, and behaviors that lead small business owners to evade or avoid paying taxes in the United States. These attitudinal and behavioral factors are captured in the TPB (Ajzen, 1991). Currently, there are no studies examining taxpayer behavior in the United States that do not use some variation of the economic, institutional, and demographic factors suggested by Altaf (2009).

The research problem was a lack of knowledge and understanding of the relationship among business owners' attitudes toward taxation, social norms, PBC, tax evasion, and tax avoidance. Consequently, effective methods (other than enforcement) to counter the behavior and correct the tax gap have not been thoroughly explored in the United States. The purpose of this quantitative correlational, non-experimental study was to explore the relationship between various measures of the TPB regarding attitudes, social factors, social norms, behavior control, and behaviors of U.S. small business owners pertaining to taxation (the IVs) and measures of tax avoidance and tax evasion culture (the DVs).

Tax evasion limits the government's ability to enforce laws and initiatives, decreases government efficiency, and proliferates budget deficits (Gleeson, 2022). A better understanding of how attitudes, PBC, and social norms influence tax evasion and tax avoidance behavior could assist management in addressing the small business culture and internal processes that promote such behavior. This could result in management saving thousands of dollars in penalties and interest, as well as increased IRS tax revenue goals. management strategy designed to reduce the tax gap. Many small business owners "may be driven by social norms, attitudes, and perceived behavior control" (Onu et al., 2019, p. 13). Some small business owners fail to manage their taxes and report their income due to their attitude toward taxation, belief that they can avoid paying taxes, and belief that they can control tax outcomes for failure to comply with tax law (Hofman et al., 2008). This chapter covers the literature search strategy, theoretical foundation, and literature review.

Literature Search Strategy

I searched for literature related to my topic using databases such as Thoreau, Business Source Complete, Google Scholar, ABI/INFORM Collection, Academic Search Complete, ResearchGate, and EBSCO. I searched for peer-reviewed journal articles and expanded the search, as necessary. The keywords searched were *tax evasion* (10,723+), *tax avoidance* (8,182+), *planned behavior theory* (39,200+), *social norms* (96K+), *perceived behavior control* (16K+), and *attitude toward taxation* (225). The search was then narrowed to the TPB, adding the following as search terms: *tax evasion* and *tax avoidance* (8), and *tax evasion and avoidance in the United States* (3,439). I used a

synthesis matrix to identify relationships, as well as to compare and contrast research relative to my study. My strategy was to analyze existing literature that was related to my study's DVs, which are tax evasion and tax avoidance, and my study's IVs, which are perceived behavior control, attitude toward taxation, and social norms. I used a synthesis matrix to examine and reveal relationships among the various articles reviewed. The columns were evaluated for relationships among the findings in the articles by description of constructs, research design, methodology, sample size and population, subject matter, and articles' relationship to the IVs or DVs. Articles that were similar were compared, contrasted, and synthesized to complete my literary review.

The categories that emerged from this analysis include the following: the history of how tax evasion and tax avoidance have been examined, tax evasion and tax avoidance by multinational corporations (MNCs), tax evasion and tax avoidance by mid-sized enterprises, and tax evasion and tax avoidance by small business enterprises. Table 1 organizes the five categories, the number of articles in each, and the percentage of the total. A total of 77 articles were reviewed and annotated.

Table 1

Synthesis of Authors and Works

Author (Year) Title	Methodology	Research design	Sample	Variables or constructs (major concepts that emerged)	Tax evasion and avoidance relative to behavior	Tax evasion and avoidance relative to attitude	Tax evasion and avoidance relative to social norms
van Rooij, B. (2016). Weak enforcement, strong deterrence: Dialogues	Qualitative	Grounded Theory	Lawyers, enforcement officials, and legal experts	Subjective plural deterrence. Methodological ly, it uses data gathered	Interview		Deterrence is based on fear of state authorities, client

Author (Year) Title	Methodology	Research design	Sample	Variables or constructs (major concepts that emerged)	Tax evasion and avoidance relative to behavior	Tax evasion and avoidance relative to attitude	Tax evasion and avoidance relative to social norms
with Chinese lawyers about tax evasion and compliance. Law & Social Inquiry, 41(2), 288–310. https://doi.org/ 10.1111/lsi.12 136				through in- depth qualitative interview dialogues.			perceptio n, and personal morals
Blaufus, K., Hundsdoerfer, J., Jacob, M., & Sünwoldt, M. (2016). Does legality matter? The case of tax avoidance and evasion. Journal of Economic Behavior & Organization, 127, 182–206. https://doi.org/ 10.1016/j.jebo. 2016.04.002	Quantitative	Experime ntal - Between Subjects	The 64 participants were graduate students (27%) and undergradua te students (73%) from different departments of the Leibniz University Hanover; 59% of the participants were male and the average age was 25.36 years (SD 9.12). All participants were recruited by e-mail.	Wording (legal tax loophole and illegal tax evasion)	Legality might be an important determina nt of behavior only if we consider activities with little or no risk of negative financial consequ nces or if subjects are morally primed		

Table 2

Categories, Number of Articles, and Percent of Total Representing Tax Evasion, Tax Avoidance, Social Norms, Attitude, and Perceived Behavior Control

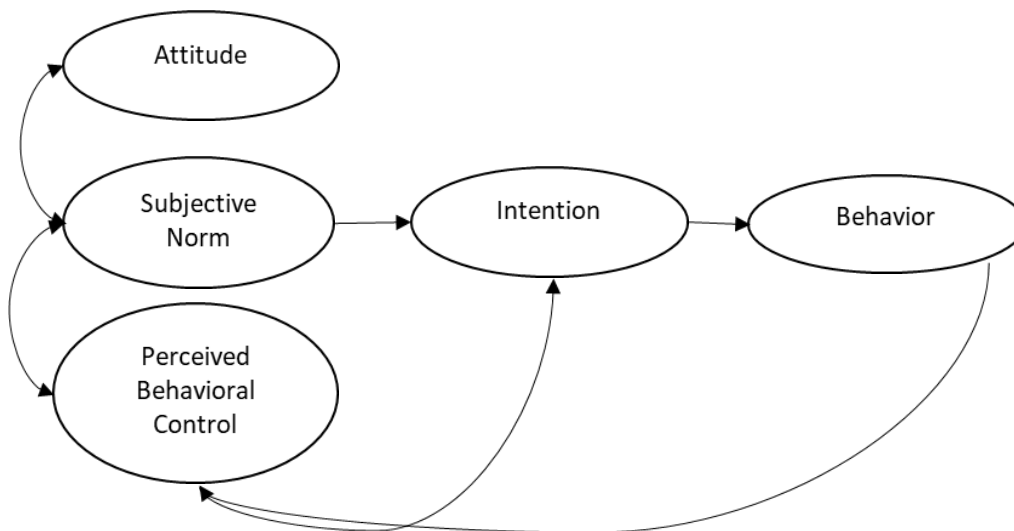
Category	No. of articles	% of total
The history of how tax evasion and tax avoidance has been examined	25	36
Multinational corporation tax evasion and tax avoidance	20	21
Midsized business enterprise tax evasion and tax avoidance	17	17
Small business enterprises tax evasion and tax avoidance	14	20
Total	76	100

Note. Percent totals were rounded to the nearest whole number and added to represent 100%.

Having explored the table of articles on tax evasion and tax avoidance, the following section examines the theoretical foundation used in my study to provide a more structured analysis of tax evasion and tax avoidance behavior in relation to the TPB. Integrating these perspectives yields a more comprehensive understanding of how TPB offers a coherent approach to addressing the complexities of tax evasion and tax avoidance in small business environments.

Theoretical Foundation

The framework for my study was TPB. The model assumes that behavior is planned; hence, it predicts deliberate behavior (Ajzen, 1991). Figure 1 shows the factors of the TPB. These factors include attitude, subjective norms, PBC, and behavioral intentions. The variables identified by Ajzen (1991) are attitude, social norms, PBC, and intention. My study did not measure the mediating variable of intention. My study examined tax evasion and tax avoidance as the DVs.

Figure 1*Theory of Planned Behavior Model*

Several studies have used TPB as a theoretical foundation (Cechovsky, 2021; Kaulu, 2021; Taing & Chang, 2020). Cechovsky (2021) tested the TPB as it relates to tax evasion and tax avoidance among 688 vocational business students aged 16–22. Cechovsky administered a survey focused on voluntary compliance, tax avoidance, and tax evasion, as well as factors influencing participants' behavioral intentions. A regression analysis was conducted to test TPB. The analysis showed that attitudes and subjective norms had a significant ability to explain tax compliance intentions in all three subject areas. PBC was only relevant for variable tax avoidance. Cechovsky found that TPB could explain behavioral intentions in the field of tax compliance among vocational business students. Similar findings were reported in another study conducted in Cambodia. Taing and Chang (2020) used TPB to investigate the tax compliance intentions of citizens in Phnom Penh, Cambodia. Based on the TPB variables attitude, social norms, and perceived behavior control, the authors developed seven additional

variables to study taxpayer compliance intentions: tax morale, tax fairness, trust in government, perceived power of authority, tax complexity, tax information, and tax awareness. They found that tax morale, tax fairness, and tax complexity had a statistically significant influence on the tax compliance intention of small business owners; the power of authority, trust in government, tax information, and tax awareness did not show a statistically significant relation to tax compliance intention (Taing & Chang, 2020).

Kaulu (2021) posited that egoism is a determining factor of tax evasion and avoidance.

Using TPB as a theoretical foundation for determining tax evasion intention, the author used the same seven variables used by Taing and Chang (2020). The data provide statistical support for egoism's mediation of the effects of four determinants on tax evasion intention. The results further confirm that many of the old preconditions for mediation are unnecessary given modern-day bootstrapping analysis" (Kaulu, 2021, p. 67). Bootstrapping is a method in which a researcher uses a computer program to empirically estimate a sampling distribution by utilizing the variability within a sample (Lavrakas, 2008). My study aligns with TPB because the study seeks to examine whether small business owners' attitudes, subjective norms, and PBC together shape their behavioral intentions and behaviors relative to tax evasion and avoidance.

Literature Review

History of Tax Evasion and Tax Avoidance

Historically, due to the illegality of tax evasion, measuring the extent of taxpayer involvement or actual tax revenue lost resulting from tax evasion was difficult. Tax avoidance was not identified as avoidance until academic focus on the matter drew a

distinction between acceptable and unacceptable tax management (Frecknall-Hughes, 2015). Over the past 61 years, the literature has shown changes in scholarly interest in the topics of tax evasion and tax avoidance (Allingham & Sandmo, 1972; Cagan, 1958; Mossin, 1968b).

Tax Evasion and Avoidance, 1958–1978

Tax and avoidance research began to emerge in 1958. Cagan (1958) suggested the currency demand approach, which compared currency demand and tax pressure for the United States between 1919 and 1955 as a measure of tax evasion. Cagan described currency demand as the amount of currency that banks purchase from the Federal Reserve to meet consumer demand. According to Allingham and Sandmo (1972), the theoretical origins of examining tax evasion and avoidance were derived through the lens of correlating taxation and risk-taking, and limited to analyzing the effect of tax rates on financial accounts and investment decisions. Mossin (1968b) illustrated the power of expected utility as it relates to risk-taking. Between 1958 and 1972, researchers focused on risk-taking as a factor influencing tax evasion and avoidance. Stiglitz (1969) examined the effects of income, wealth, and capital gains taxation on risk-taking. Allingham and Sandmo (1972) sought to limit the scope of tax evasion investigation to individual taxpayer choice to avoid and evade paying taxes. Though the study's scope was limited and represented a change in research approach relative to tax evasion, Allingham and Sando's findings were unclear and seemed to indicate that further research was needed that was similar to that of Cagen (1958, p. 337), such as measuring the impact of labor supply on tax evasion. However, due to the redistribution of the tax burden in Sweden,

tax compliance became a major concern for policy makers and others charged with administering tax policy (Vogel, 1974). In 1974, the Swedish government investigated the legal and behavioral framework of tax compliance, evasion, and related criminal penalties (Vogel, 1974, p. 499). Unlike Allingham and Sandmo (1972), Vogel found that the primary type of tax evasion is motivated by aspirations and the awareness of an illegal opportunity. The other secondary tax evasion was found to be grounded in the need for compensation for the additional tax burden due to the large amount of primary type tax evasion (Vogel, 1974). Relative to social psychology balance theory, Vogel (1974) posited that individuals would realign their thoughts about a particular tax consequence to justify noncompliance. Subsequent studies have referenced similar approaches.

Tax Evasion and Avoidance 1978–1998

Tax avoidance research continued to emerge between 1978 and 1998. Tajfel (1979) posited that the people with whom one associates is an important source of self-esteem and that acceptable behavior norms are influenced by group affiliation. Tanzi (1980, 1983) further established Cagan's method by relating economics to currency demand in the United States between 1929 and 1980. Tanzi (1980) suggested that, because shadow transactions are often conducted in cash, an increase in demand for cash indicates an increase in shadow economy activity (Tanzi, 1980). Feige (1979, 1989, 1996) developed the transaction approach. Feige posited that there is a constant relationship between the number of transactions and gross national product (GNP). Feige used the Fisher's quantity equation, $MV = pT$ with M = money, V = velocity, p = prices,

and t = total transactions. According to Feige (1979), assumptions are made about the velocity of money and the relationship between the value of total transactions and nominal GNP. A measure of the shadow economy is derived by subtracting official GNP from nominal GNP (Feige, 1979). Pissarides and Weber (1989) measured the approximate size of Britain's shadow economy by analyzing income and expenditure data taken from the 1982 Family Expenditure Survey. The researchers assumed that all small business owners correctly reported expenditures for food, that employees (P60) correctly reported income, and that the self-employed underreport income.

Tax Evasion and Tax Avoidance, 1998–2018

Research on tax evasion and avoidance between 1998 and 2018 focused on the shadow economy, discrepancies between gross domestic product (GDP) and gross national product (GNP), and personal risk-taking. Schneider et al. (2000) examined the shadow economy, defined as individuals who saw taxation as a burden and chose to exit the government system instead of advocating for change (Hirschman, 1970, as cited in Schneider et al., 2000); also defined by Phillip (1994) as “market-based production of goods and services whether legal or illegal that escapes detection in the official estimates of Gross Domestic Product (GDP)” (p. 18). Schneider et al. (2000) measured indicators of tax evasion and avoidance, including discrepancies between national expenditure and income statistics, which indicate a problem because, in accounting, the income measure of GNP should equal expenditures of GNP. The difference between the income measure and the expenditure measure was used as a measure of the shadow economy. The physical input (electricity consumption) method, also referred to as the Kaufman–

Kaliberda method, assumes that electricity consumption is the best indicator of economic activity. “The difference between the growth of official GDP and the growth of electricity consumption is attributed to the growth of the shadow economy” (Dominik et al., 2000, p. 96). Dominik’s approach to tax evasion and avoidance considered multiple variables in measuring the shadow economy. Blumenthal et al. (2001) explained an experiment that took place in 1995. In that experiment, 1,724 taxpayers were selected at random and sent a letter stating that tax returns filed that year would be closely examined. Compared to the control group who did not receive the letter, tax payments increased significantly. Additionally, high-income earners who received the letter reported a significant reduction in tax liability compared to the control group. The outcomes were interpreted by Blumenthal et al. (2001) to indicate noncompliance or the presence of tax evasion. Similarly, Iyer et al. (2010) conducted an experiment to analyze whether enhanced taxpayer understanding of detection risk and raised penalty awareness relative to use tax and business and occupation tax would improve compliance. The idea was that improvement in compliance would serve as a measure for the presence of tax evasion. Iyer et al. (2010) found same-period improvement for use tax; however, no significant change was analyzed in relation to business and occupation tax.

Wenzel (2002) examined whether taxpayers would be more concerned about justice for the whole and minimize concern for personal outcomes when they believed they were part of the group to which the procedures and distributions applied; Wenzel applied the theories of procedural and distributive justice based on the categorization approach and the group-value model. The author sought to address the inconsistency in

previous research findings relative to the impact of justice perceptions on tax compliance. Wenzel conducted a regression analysis using data from a survey of 2,040 Australian citizens and found that two forms of tax compliance behavior, pay income reporting and tax minimization, were impacted by self-interest variables. In addition, the author found that two other forms of tax compliance, non-pay income and deductions, were significantly impacted by inclusive identification and moderated the effects of self-interest and justice variables, as posited. The above studies addressed social identity as a social norm and its relationship to taxpayer behavior. However, each study used variables that are not generalizable in that they include certain assumptions that may or may not exist in other populations. Hanlon and Slemrod (2009) studied how stock prices reacted to news about corporate tax aggressiveness. For this study tax aggressiveness referred to the use of tax shelters. The authors found inadequate support for the reaction serving as a good proxy for idiosyncratic risk. Some market segments were more negatively impacted than others. The authors understood this to indicate that the market reacted positively to signs that a firm was attempting to avoid taxes when their financials showed no proof of the firm being tax aggressive. Again, a positive response to tax avoidance behavior reinforced avoidance as a cultural norm. However, ways of measuring IVs were found to be ad hoc and without validity and reliability (Kirchler, 2010).

Kirchler and Wahl (2010) achieved a scientifically methodical way to measure IVs: attitudes toward tax system, social norms, and PBC. The second project developed the inventory due to a lack of standardization, theoretical background, and empirical validation (Kirchler & Wahl, 2010). The factors included voluntary compliance,

noncompliance, tax evasion, and tax avoidance. During Kirchler and Wahl's project, several barriers had to be overcome to develop an instrument that could be used to assess taxpayer behavior intention. Kirchler and Wahl examined previous research as a basis for inquiry into the development of an inventory from which four valid scales could be developed and used in multiple research studies. Though informative, outcomes were not generalizable and varied such that intention to comply could hardly be differentiated from intent for noncompliance. Therefore, Kirchler and Wahl formulated items representing concrete intentions of intent to evade or avoid paying taxes. The data set was obtained from a survey of 369 taxpayers. Both the developed inventory and the survey instrument tested high for both reliability and validity. Kirchler and Wahl tested construct validity by analyzing the correlations between scales and found that voluntary compliance and enforced tax compliance were not related.

Tax Evasion and Avoidance, 2018–Present

Chan (2018) analyzed whether people's national identity reduced tax evasion in the United States, Australia, and Britain. "The idea was that people would sacrifice their self-interests for one's country" (Chan, 2018, p. 300). Chan conducted three experiments. The first was to test whether national identity reduced taxpayers' propensity to commit tax evasion. In the second test, Chan recruited a group of Australian graduate students and tested to see whether the flag would encourage participants to help the country. The third test was a repeat of the first, only Chan used a British flag. Steps were taken to ensure findings were generalizable and reliable. The author found that exposure to the flags positively affected taxpayer behavior regarding tax evasion. Further, Chan was able

to alleviate social norms and trust in authorities as alternative explanations. Chan suggested that national symbols (e.g., flags) could enhance tax compliance and improve the social welfare of a country.

Cebula (2019) examined the impact of individual taxpayer aggregate tax evasion on the real interest rate yield on 10-year U.S. Treasury notes, 20-year U.S. Treasury bonds, and 30-year U.S. Treasury bonds using an open economy loanable funds model that was modified to estimate tax evasion as a ratio of unreported adjusted gross income (AGI) to actual AGI. A loanable funds model illustrates the interaction between borrowers and savers in the economy. The market is balanced when the real interest rate has adjusted so that the amount of borrowing is equal to the amount of saving. If government borrowing absorbs all the available lending capacity in the economy, interest rates rise. The tax evasion variable is an IV, where the yield on long-term bonds is the DV, and tax evasion is shown to influence the yield on those long-term bonds. The study outcomes suggested that income tax evasion raises the possibility of a tax evasion-induced form of crowding out. Crowding out addresses the economic consequence of expansionary fiscal actions. For example, if there is an increase in government demand, financed by either taxes or debt issuance to the public, and it fails to stimulate total economic activity, the private sector is said to have been crowded out by government action. As a result, private business and individuals borrow less, which can have a negative impact on the economy and cause a significant reduction in tax revenue. Tax evasion causes the government to lose tax revenue. As a result, the government must borrow funds to meet its fiscal obligations. This causes the demand for the supply of

funds to increase and increases interest rates as well. Cebula (2013) posited that tax evasion could create the need for the government to seek loans, thus starting the process that leads to the *crowding out effect* (p. 726).

Atria (2019) analyzed the subjectivities of economic elites relative to tax compliance decisions in Chile. This qualitative study was derived from the idea of how different wealthy taxpayers' tax behaviors are self-quantified. Subjectivities vary among taxpayers and, after interviewing 32 wealthy elites, Atria found that tax laws are not always advantageous to tax compliance and may even provide for the antithesis of desired tax revenue collection outcomes. Atria further suggested that it is tax law itself that provides for tax avoidance and, although the results are the same as with tax evasion, tax avoidance is legal.

Aside from subjectivities, De Cristofaro (2021) sought to inform interested parties about how persuasive pathways of mindfulness interact with tax evasion intentions and support for progressive tax policy. Mindfulness was defined as "moment-by-moment awareness," tax evasion intentions were characterized as an act of "inequality-enhancing behavior," and progressive taxation was characterized as "inequality-reducing behavior" (De Cristofaro, 2021, p. 1). De Cristofaro's assumption was that mindfulness promotes healthy mental attributes such as empathy, the desire to help neighbors, and making good ethical decisions. Brizi (2015) studied the impact of social value orientation on tax morale and intention to avoid or evade taxes and found a relationship between social value orientation and measures of tax compliance. De Cristofaro (2021) found, in two studies, that mindfulness was negatively associated with tax evasion intentions through

lower social dominance orientation: “a dispositional tendency to accept and even prefer circumstances that sustain social inequalities, combined with a general preference for hierarchical social structures” (APA Dictionary of Psychology, 2015, p. 994). The second study indicated that the relation between mindfulness and support for progressive taxation is channeled by competitive jungle beliefs, defined as “a relatively stable belief that the social world is a competitive jungle in which the advantaged win and the disadvantaged lose” (De Cristofaro, 2021, p. 3), or a perilous world view, such as right-wing authoritarianism (RWA). RWA was defined as “people espousing elevated right-wing authoritarianism support coercive social control, obedience, and respect for authorities. Therefore, RWA is related with hierarchy and inequality, but from an intragroup perspective, rather than an intergroup perspective” (De Cristofaro, 2021, p. 3).

Benk et al. (2020) examined the impact of religiosity on the effect of ethics on tax evasion using some of the same language as De Cristofaro (2021). Benk et al. surveyed 369 taxpayers of Turkey’s population about the ethics of tax evasion. The questionnaire consisted of 18 of the most common statements cited in prior study questionnaire responses to justify tax evasion. Similar to De Cristofaro’s findings, the most prominent reasons given as justification were instances of government mediated human rights abuse, government corruption or waste of tax funds, or the lack of benefit to the taxpayer from the tax expenditures. This was similar to DeCristofaro’s findings of “a relatively stable belief that the social world is a competitive jungle in which the advantaged win and the disadvantaged lose” (p. 3). The weakest reasons cited were in instances were equality and fairness were major parts of surveyed responses. Benk et al. further posited that

religiosity is significantly related to both outward social culture and personal religiosity when considering the ethics of tax evasion. Benk et al. used an MLR model to analyze the impact of dimensions of religiosity from both interpersonal and intrapersonal perspectives. They found that surveyed taxpayers with high scores on interpersonal religiosity reported lower scores for the ethics of tax evasion. In addition, intrapersonal religiosity seemed to be the key factor that influenced taxpayers' positive attitude toward evading taxes.

Tax avoidance has been an extremely important topic since the 1900s and is currently considered the most important economic topic of our time (Chaffee, 2019; International Monetary Fund, 2018; Shams et al., 2022). The Tax Cut and Jobs Act of 2017, signed into law on December 22, 2017 by U.S. President Donald Trump, reduced the corporate tax rate from 35% to 21%; it also reduced or eliminated other business-related deductions and credits. It was estimated that the act would save corporations and cost taxpayers approximately \$1 trillion (Chaffee, 2019). Corporate executives and managers cite high tax rates as the reason for moving operations to tax friendly countries, which also motivated politicians to vote in favor of legislation designed to reduce the tax burden (Chaffee, 2019). The acceptability of tax avoidance has become a major legal issue. The magnitude of tax avoidance has led 26 countries and jurisdictions to sign or commit to signing a multilateral agreement that is designed to reduce corporate tax avoidance practices by multinational businesses by closing gaps in existing international tax law.

According to the International Monetary Fund (2018), major channels of international tax avoidance by MNCs include transfer mispricing, which is when related parties set prices meant to manipulate markets or to deceive tax authorities; international debt shifting, which is when the tax cost of equity or debt financing depends on tax law in applicable countries shifting debt to jurisdictions that are more favorable, thereby facilitating avoidance of taxes otherwise due and payable (Huizinga et al., 2006); treaty shopping, which is the use of bilateral income tax treaties to avoid paying tax on U.S.-sourced income (Grady, 2008); and tax deferral, which is the delay of paying taxes to some point in the future. Some taxes can be deferred indefinitely. Another form of tax avoidance is corporate inversion (e.g., a U.S. company begins to show an increase in foreign income and decides to sell the U.S. corporation to a foreign entity). While daily operations stay the same, the U.S. corporation is dissolved. The goal is to reduce taxes through geographic inversion of the U.S. company's home of record.

The International Monetary Fund (2018) performed a meta-analysis of existing literature that estimated the overall size of profit shifting. The literature suggested that, for the most recent year, a 1 percentage-point lower corporate tax rate compared to other countries will expand before-tax income by 1.5%—an effect that is larger than has been reported as the consensus estimate in previous surveys and has a tendency to increase over time (International Monetary Fund, 2018). “The literature on tax avoidance still has several unresolved puzzles and blind spots that require further research” (International Monetary Fund, 2018, p. 28).

Shams et al. (2021) examined the interaction between empire building and tax avoidance. The authors analyzed 35,060 U.S. firms over a 24-year period (1991–2015). The authors built a composite empire-building measure by conducting a factor analysis on four popular empire-building proxies used in the literature. To measure tax avoidance, the four proxies were “the 5-year effective tax rate (ETR); 5-year cash effective tax rate (CETR); 3-year adjusted effective tax rate (ETR); and 3-year adjusted cash effective tax rate (CETR)” (Shams et al., 2022, p. 2). In addition, the authors measured empire building as a composite score obtained from the principal component analysis of four proxies of empire building. The four proxies were “the acquisition ratio; level of capital expenditure; total assets growth; and growth in property, plant and equipment” (Shams et al., 2022, p. 2). Shams et al. found a strong indication that managerial empire-building exercises are positively and significantly affected by tax avoidance strategies by business entities.

Mikler et al. (2019) examined the Australian Senate’s 2015–2017 inquiry into corporate tax avoidance to highlight tax strategies used by MNCs most targeted by tax authorities, versus those of particular relevance in an Australian context: mining companies. Using document analysis, the authors analyzed the discursive ambiguity of defense tactics employed by corporations. MNCs use complex tax avoidance strategies, provided to them by accounting and legal professionals, for the purpose of legitimizing a reduced tax burden in high tax geographical areas like Australia. The Senate inquiry found that most complex tax strategy plans employ at least one of the following exercises: profit shifting, thin capitalization, and intercompany loans. “Taken together,

these mechanisms allow firms to transfer profits around the globe to ‘friendlier’ tax jurisdictions, where the tax rate may be lower or special reduced rates have been negotiated” (Mikler et al., 2019, p. 245).

Tax Avoidance Based on Performance Measurement

Other studies investigated how corporations measured the performance of their tax departments and how that measurement informed executive incentives to avoid taxes. Robertson et al. (2010) researched why firms evaluate tax departments as profit centers and not cost centers. Using data taken from a survey of chief financial officers, the researchers developed a theory to test how departments were being evaluated. They found that evaluating tax departments as profit centers was more prevalent than evaluating tax departments as cost centers. The authors also found that measuring a tax department’s performance as a cost center provided adequate motivation to contribute to net income via lower effective tax rates. Reduced effective tax rates are derived from lower tax liability and aggressive management of accruals. Lowering tax liability through tax planning and managing accruals is a form of tax avoidance. Though legal, effective tax planning and accruals management produce the same negative outcomes for tax authorities—a reduced amount of tax revenue. Feldman and Slemrod (2007) analyzed the degree of tax noncompliance by examining unaudited tax returns. They measured charitable giving relative to wages and salary as compared to alternative reported income sources such as self-employment and farm and other small business income. Two assumptions were made: that income source was not related to the taxpayer’s desire to donate to charity, and that the ratio of true income to taxable income did not vary by

income source. Feldman and Slemrod posited that the difference relative to charitable giving and income source is due to underreporting by the taxpayers who receive nonwage and salary income. The authors found that the amount of tax noncompliance was significant when viewed from the relationship of charitable contributions to income source.

Another modern measure of tax evasion or tax avoidance is the survey method. De Paula and Scheinkman (2010) suggested an equilibrium model of tax avoidance and investigated the model's implications by surveying small businesses in Brazil. They found that informality, which for the purpose of this study is defined as tax avoidance, was more prevalent in small businesses run by taxpayers with limited management experience. In addition, the authors posited that informality (tax avoidance) is carried out through vertical relationships when value added tax (VAT) is levied through the credit method. In the credit method, sales transactions are taxed, the customer is made aware of the VAT on the transaction, and the business may receive credit for the VAT paid on materials and service. Informality and fraud occur in VAT transactions and cause revenues to be lost. An example of informality is referred to as carousel fraud. Carousel fraud is the act of a seller of a good or service charging VAT and failing to remit VAT to the proper authorities (Keen & Smith, 2006). None of the traditional or modern measures of tax evasion or avoidance studies examined taxpayer behavior relative to attitudes toward taxation, perceived behavior control, or social norms.

Goh et al. (2016) measured the effects of corporate tax avoidance on the cost of equity in terms of cost of cash flow. Goh et al. (2016) highlighted how investors value tax

avoidance behavior. Using three measures of tax avoidance, (book-tax differences, permanent book-tax differences, and long-run cash ETRs), the author attempted to uncover tax avoidance at a more ambiguous level. Book-tax difference was removed by the IRS from the list of reported transactions per §6011 of the Internal Revenue Code (Lisowsky, 2010). Permanent book-tax differences tend to reduce a firm's tax liability while increasing financial income (Shevlin & Rajgopal, 2002). The effective tax rate measure stays constant over a 5-year horizon. This avoids annual volatility in effective tax rates and mitigates concerns about earnings management through accruals because accruals are likely to reverse over time (Goh et al., 2016, p. 7). Lambert et al.'s (2007) origin of the cost of equity capital was used to develop a testable hypothesis that related tax avoidance to a firm's cost of equity capital. Overall, Goh et al. (2016) found that the cost of equity is lower for tax-avoiding firms, even after controlling for the business fundamentals underlying these tax savings transactions. Hanlon and Slemrod (2009) studied how stock prices reacted to news about corporate tax aggressiveness. For this study, tax aggressiveness referred to the use of tax shelters. The authors found inadequate support for the reaction serving as a good proxy for idiosyncratic risk. Some market segments were more negatively impacted than others. The authors understood this to indicate the market reacts positively to signs that a firm is attempting to avoid taxes when their financials show no proof of the firm being tax aggressive. Again, a positive response to tax avoidance behavior reinforces avoidance as a cultural norm.

Multinational Corporations' Tax Evasion or Avoidance

The problem of creative compliance or tax avoidance and tax evasion at the multinational corporate level has deferred more than \$300 billion per year in tax revenue (U.S. Treasury, 2007). The effects of this significant tax gap originating from tax avoidance produce the same effects as tax evasion. The difference is that tax avoidance is legal.

Many studies have been conducted looking at tax havens for major corporations (Clark, 2015; Coe et al., 2014; Palan et al., 2010; Wojcik, 2013). Tax havens, defined as a state with no or relatively low taxes, have been a point of interest since the 1920s. Offshore financing, defined by the International Monetary Fund as “a country or jurisdiction that provides financial services to non-residents on a scale that is incommensurate with the size and the financing of its domestic economy” (Zorome, 2007, p. 7), can be dated back to the Bretton Woods system where all states set out to control all cash inflows and outflows (Bliss & Strange, 1987). Kudrle (2013) defined offshore as any jurisdiction through which financial claims pass to avoid policy constraints elsewhere. During the 1960s, U.S. banks started the trend of establishing deposit accounts in currency other than the U.S. dollar. American banks started using U.S. dollar accounts in London that were not subject to U.S. regulation. The definitions, as it relates to large MNCs, could be argued to be the theoretical foundation of creative compliance, also called tax avoidance by some and tax evasion by others. Coe et al. (2014) examined the international structure of offshore jurisdictions in the global economy and found that “financial vehicles have a distinctive geography, as their

promoters, corporate and individual, tend to register them in offshore jurisdictions, outside of their own home countries, for reasons related to taxation, regulation, secrecy, and other types of institutional arbitrage” (p. 234). Offshore dominion can be a country like Switzerland, places like the Cayman Islands, or states within the United States such as Delaware (Palan et al., 2010). Interestingly, offshore jurisdictions have been named in every major corporate scandal in the last 20 years. This includes companies such as Enron, Northern Rock, Bear Stearns, and Madoff’s Ponzi scheme (Palan et al., 2010). Also congruent with offshore jurisdictions and corporate scandals is the significant amount of tax avoidance and tax evasion. The structure of offshore financing or tax havens could be best described from a geographical perspective. Switzerland, places such as the Cayman Islands, and states within the United States such as Delaware operate globally. These networks, referred to as global financial networks (Coe et al., 2014), are well known by professionals who serve major corporations and extremely wealthy taxpayers. It is not that corporations and wealthy taxpayers travel to Caribbean locations in search of tax havens. Major corporations and wealthy taxpayers seek the advice of these professionals who present predetermined offshore financing opportunities. The opportunity to practice tax avoidance and tax evasion has become inherent in the global finance network (Wainwright, 2011).

The inherent nature of tax avoidance and evasion in the global finance network has been examined by researchers using deontological, utilitarian, and moral concepts like fairness. Deontology is an ethical theory that uses rules to determine right from wrong. In the case of tax avoidance, a deontological approach to examining why MNCs

behave the way they do could produce both good and bad results. Under deontological ethics, a person or entity has a duty to follow rules such as “Don’t cheat, lie, or steal.” If these rules are followed, then the common good should be the social outcome of operations for both stakeholders and non-stakeholders. However, if an accountant knows that numbers in an accounting report have been manipulated, but company policy is to report issues to his boss, who is responsible for the incorrect numbers? For the accountant, circumventing his boss would be breaking the rules. In this case following the rules would inadvertently support tax avoidance or evasion, depending on the circumstances, which could be considered an adverse outcome for all applicable parties, yet still within the philosophical view of deontology.

A utilitarian perspective argues that an agent should do what is good, “where such good is variously described as happiness, pleasure, preference satisfaction or individual welfare” (West, 2018, p. 1145). A utilitarian view is that actions are morally correct only if they produce as much net happiness as any other option, any other action is morally wrong. Utilitarianism supports the argument that “giving corporations free will to manage their operations in a way that maximizes their profits and or shareholder wealth provides opportunity for those corporations to generate considerable benefits for the economy, with concomitant positive social impact” (West, 2018, p. 1145). Utilitarianism is composed of two elements, value theory and theory of right action. The problem with utilitarianism is that agents, managers, and accountants could accept upholding the value theory without upholding the theory of right action and vice versa. The capitalist perspective on business and industry is that private industry generates the greatest

common good for all applicable stakeholders (West, 2018, p. 1145). According to Friedman (1970), any problems should be handled by regulators in government. At the same time, accountants are charged with maximizing shareholder value. West (2018) argued that there could be a problem with the above-mentioned *Friedmanesque* approach. There is no quantifiable data that proves that the greater good is being accomplished, and economic benefits are being posited without consideration for nonquantifiable costs and benefits (West, 2018).

Though deontology and utilitarianism are considered the more prominent approaches to moral philosophy, West (2018) also examined MNC tax avoidance through the lens of other moral concepts like fairness. West (2018) examined how fairness should be viewed as it relates to MNCs:

Applying this to MNC [multinational corporation] tax avoidance, one could argue that given the unfairness of persistent societal inequalities that are associated with social group, race or gender steps ought to be taken to rectify this situation whenever possible. As MNC tax avoidance tends to benefit the shareholders of MNCs more directly than any other group, and as shareholders are more likely to number amongst the more (financially) advantaged members of society, the transfer pricing and thin capitalization arrangements of MNCs could be considered unfair. (p. 1147)

West (2018) found that congruent with the deontological perspective, all MNCs avoid taxes as much as possible, and accountants employed by the MNC adopt any process they can to minimize tax exposure. Though the government will lose revenue,

there is nothing immoral about avoiding taxes (West, 2018). Government regulations are charged with keeping laws in place that keep MNCs from practicing tax avoidance to the extreme or tax evasion. However, rules like transfer pricing and thin capitalization are established that provide legal ways to avoid and evade paying taxes. Transfer pricing is a taxation and accounting practice that represents the price that one division in a company charges another division for goods and services provided. Thin capitalization is when an entity whose assets are funded by a high level of debt has relatively little equity.

Transfer pricing and thin capitalization are vital processes used by MNCs and their accountants to avoid payment of taxes (West, 2018). The IRS implemented IRC Section 482 to serve as a deterrent for MNCs who seek tax avoidance and evasion using transfer pricing. IRC Section 482

authorizes the IRS to adjust the income, deductions, credits, or allowances of commonly controlled taxpayers to prevent evasion of taxes or to clearly reflect their income. The regulations under section 482 generally provide that price charged by one affiliate to another, in an intercompany transaction involving the transfer of goods, services, or intangibles, yield results that are consistent with the results that would have been realized if uncontrolled taxpayers had engaged in the same transaction under the same circumstances (Transfer Pricing | IRS, 2021).

Sixty-one countries have employed thin capitalization rules that stop MNCs from shifting their tax base to countries with lower tax rates (Merlo et al., 2019). Thin capitalization rules result from policy makers' concerns, globally, about public disdain relative to the amount of taxes paid by MNCs like Apple, Facebook, and Google (Merlo

et al., 2019). The Organization for Economic Co-operation and Development (OECD; 2019) reported that intragroup financial transaction is one of the main ways MNCs avoid taxes. Legal tax evasion is a mechanism by which complex tax law and jurisdictional secrecy culminate in a significant loss of tax revenue. According to Stoica (2017), the amount of tax revenue loss due to MNC tax avoidance or evasion is trillions of dollars (Stoica, 2017). The problem of MNC tax avoidance or evasion has existed for a long time. Slemrod (1990) argued that, in the global economy, it is difficult to collect taxes outside of the country to which the taxes are due. In most developing countries, the ability to levy tax on foreign source income is practically nonexistent. Combining this fact with the move of developed countries to abolish their own withholding taxes on income paid to foreigners implies that funds flowing from south to north may be completely untaxed.

Midsized Business Enterprises' Tax Evasion and Avoidance

Medium-sized corporations could take their tax process cues from large corporations (LaRae, 2019). However, when midsized firms start to address similar tax issues that plague large corporations, they run into bottlenecks because they lack the budget to address complex tax issues the same way as large operations. This could be one of the reasons tax avoidance and tax evasion occur in midsized corporations. The United Kingdom government (2017) commissioned Quadrangle, a London-based research firm, to qualitatively examine characteristics and attitudes of medium-sized businesses that engage in tax evasion and to evaluate possible outcomes of various approaches to deter evasion behavior, encourage compliance, or respond to acts of evasion within their firms.

The goal was to attempt to find the most effective ways to deter tax evasion behavior. Quadrangle found five core attitudinal variables that affected tax evasion behavior. The first was sense of citizenship, which instructs an individual's values and beliefs. The second variable was whether owners maintained separate accounts for business and personal affairs and assets. The third variable was perceived risk; in other words, whether the business could mitigate risk if evasion was discovered. The fourth variable was the risk versus the reward, and the fifth was the willingness to commit evasion. Interestingly, Quadrangle posited four core types of evaders: unthinking evaders, invested evaders, lifestyle evaders, and systematic evaders. Unthinking evaders are tax evaders who have developed a habit of low-level evasion. Invested evaders evade paying tax out of necessity. For example, they have cashflow issues and evade making ends meet. Lifestyle evaders evade paying taxes to keep up a lifestyle that otherwise could not be afforded, and systematic evaders make evading taxes an integral part of their business model. Salehi et al. (2019) examined the relationship between tax avoidance and firm risk in Iran. They found that uncertainty about future tax rates was influenced by aggressive strategies of tax avoidance. In Iran, tax avoidance is not identified as an activity that reduces government revenue. Tax avoidance is considered a value add; capital activists view avoidance as a positive act that is socially acceptable (Akbari et al., 2019).

According to Quadrangle (2017), social norms could instruct the definition of tax evasion. "Some businesses interviewed suggested that social norms had increased perceived acceptability of evasion in particular circumstances by creating the belief that fully compliant businesses are a minority" (Quadrangle, 2017, p. 11). Tax evasion is

thought of not only as normal but also as a smart business practice. Some reported normalities as underreporting cash transactions and over-claiming business expenses (Quadrangle, 2017, p. 11). In addition, Quadrangle found that global media coverage seemed to encourage tax evasion behavior. Tax avoidance and evasion is a popular topic in mainstream media, as well as in social media. Medium-sized firms pay close attention to large corporations who appear to strike deals with taxing authorities. Quadrangle posited that the mindset that larger corporations get unfair tax advantages encourages tax avoidance and evasion behavior. Another finding was the personal importance of a social contract company leaders have with society at large. Though Quadrangle found that most medium-sized business owners surveyed agreed that there should be a certain amount of tax paid, the amount paid was considered contingent relative to their level of engagement with the social contract and personal code.

Some researchers have argued that evasion and avoidance behavior is inherent in the tax system.

No government can announce a tax system and then rely on taxpayers' sense of duty to remit what is owed. Some dutiful people will undoubtedly pay what they owe, but many others will not. Over time the ranks of the dutiful will shrink, as they see how they are being taken advantage of by the others. Thus, paying taxes must be made a legal responsibility of citizens, with penalties attendant on noncompliance. But even in the face of those penalties, substantial tax evasion exists—and always has. The history of taxation is replete with episodes of evasion, often notable for their inventiveness. During the third century, many

wealthy Romans buried their jewelry or stocks of gold coin to evade the luxury tax, and homeowners in eighteenth-century England temporarily bricked up their fireplaces to escape notice of the hearth tax collector. (Webber & Wildavsky, 1986, p. 141)

The IRS (2021) reported that \$110 billion of the \$314 billion individual tax gap is attributed to pass-through entities. Pass-through entities are sole proprietorships, partnerships, limited liability companies, and S-corporations (What are pass-through businesses, 2021). Most mid-sized corporations consist of one of the above structures. Small and mid-sized companies account for approximately 50% of all business tax revenue, making the issue of understanding tax avoidance and tax evasion behavior significant to reduction efforts taken on behalf of policymakers, academia, and stakeholders (What are pass-through businesses, 2021).

Chen et al. (2021) examined how tax departments are associated with tax planning and compliance outcomes. They found that the correlation between companies with larger tax departments and lower cash effective tax rates was significant. In addition, companies that hire accountants that specialize in tax planning or compliance experience increased tax avoidance and tax risk (Chen et al., 2021). Li (2020) examined whether four specific tax avoidance incentives (financial constraints, equity risk incentives, hedge fund interventions, and analyst cash flow forecasts) induce managers to make investments in the firm's tax department. The author found "that managers invest resources in the tax function when incentivized to avoid taxes. My study also provides

assurance that the association between incentives and effective tax rates documented in prior studies is reflective of intentional tax avoidance behavior” (Li, 2020, pp. 32–33).

Small Business Tax Evasion and Avoidance

Small businesses number about 31.7 million in the United States (Small Business Administration, 2020). In addition, the IRS has reported that between 2011 and 2013 approximately \$125 billion of the tax gap can be attributed to unreported revenue from small business owners (IRS, 2022). Many studies have been conducted to examine the causes of tax evasion among small business owners (Fikade, 2019; Heese, 2019; Olsen et al., 2018; Zhang et al., 2021).

Olsen et al. (2018) postulated that emotion is significantly related to the mediation of the relationship between the perception of tax authorities and tax compliance. The authors tested the response of 411 Turkish small business owners as it related to reaction to emphasizing tax authorities’ power to enforce tax compliance. Olsen et al. found that emphasizing tax authorities’ ability to enforce tax compliance induced negative emotions and the readiness to evade. Scenarios that exhibited trust between tax authorities and small business owners reduced negative emotion and raised positive feelings, which were associated with intentions to comply voluntarily. The researchers further postulated that a combination of powerful enforcement ability and a show of trust in taxpayer behavior also induced a positive attitude toward voluntary tax compliance.

Other researchers have suggested ways the IRS could possibly affect taxpayer emotion. According to Hesse (2019), the Tax Cuts and Jobs Act, P.L. 115–97, contained certain provisions that would simplify recordkeeping for small businesses. Businesses

with receipts of \$25 million or less are permitted to use the cash method of accounting and are spared from complying with burdensome requirements. This provision helps small businesses because using the cash method opposed to the accrual method allows revenue to be reported on the income statement only when cash is received. Expenses are only recorded when cash is paid out. The accrual method requires revenue to be recorded when earned. Recording revenue when earned could mean that taxes are owed on funds that have not been received. This could create an extra financial burden on small businesses, inducing negative emotion relative to underreporting income. Though the above-mentioned provision was designed to assist small business owners, the rule does not apply to syndicated businesses. This could be devastating to small businesses that allocate 35% or more of losses to limited partners. The rule was meant to block tax shelters from benefiting; however, syndicated businesses, though not used for tax avoidance, get caught up in the broad sweeping definition that indicates a business is syndicated (Hesse, 2019). As a result, some small businesses lose the ability to use the cash method of accounting. These small businesses are considered tax shelters and must adhere to cumbersome accounting requirements (Hesse, 2019). The goal was to help tax revenue collection by simplifying the rules. However, according to Gale et al. (2018), the Tax Cut and Jobs Act could significantly reduce tax collections, make the distribution of after-tax income more unequal, raise federal debt, and impose burdens on future generations. Missed tax revenue from small business represents a significant share of the overall tax gap.

Zang et al. (2021) examined the impact of sugar-sweetened beverage taxes in Seattle, Washington; Boulder, Colorado; Cook County, Illinois (Chicago); Philadelphia, Pennsylvania; and two cities in the San Francisco Bay Area in California (Berkeley and Oakland). The researchers used grocery scanner data, relying on a series of difference-in-difference designs. Results showed that each cent per ounce increase in taxes caused the price of the taxed beverages to increase from 0.47 to 0.98 cents per ounce, and the sales of taxed beverages to decrease by 5.1%–14.4%. But the efficacy of the sugar-sweetened-beverage tax was undermined by two avoidance behaviors: (a) cross-border shopping avoidance, where people shopped outside of the taxed area; and (b) substitution avoidance, in which people switched from taxed to tax-exempt beverages that are just as high in sugar. The results from this study provide evidence that sugar-sweetened-beverage taxes can be effective. However, to enhance the effectiveness of the taxes, policy makers should consider tax avoidance when developing future policies.

Research Gap

Examining the relationships between tax evasion and tax avoidance and social norms, attitude toward taxation, and PBC could result in positive social change by assisting small business owners achieve revenue goals, increase tax planning efficiency, and address cultural issues that instruct tax evasion or tax avoidance behavior. According to the IRS (2019), outstanding tax revenue, referred to as the tax gap, which is the difference between taxes remitted and taxes owed but not remitted, for small businesses total \$83–\$99 billion annually. The IRS suggested that the tax gap for small or large corporations drives IRS enforcement activities and motivates changes to the tax laws. In

addition, small business owners suffer by incurring large tax debts and experiencing increased reporting, record-keeping, and audit activity, which takes away from predetermined revenue goals due to the allocation of resources to address tax issues (IRS, 2019).

Small business owners have developed an aggressive culture of tax-planning strategies that interestingly produce the same negative impact on tax revenue as tax evasion. Though small business owners are within the parameters set by tax law, Onu et al. (2019) examined the moral implications and found that

tax avoidance is usually defined as a business arrangement set up with the principal purpose of avoiding tax, tax arrangements that are considered by some people in some historical periods to be legitimate business practices constitute in other historical periods deeply immoral avoidance of contributing to the public good. (p. 3)

Due in large part to the issues that are derived from tax evasion or tax avoidance, researchers have examined causes of evasion and avoidance behavior. Oladele and Okpala (2013) examined primary data from 120 selected small- and medium-scale businesses in Lagos to determine factors that impact tax evasion and avoidance behavior in Nigeria's business community and found that low quality of service provided by the government, along with a lack of transparency, significantly influenced taxpayer behavior toward tax evasion and avoidance. Oladele and Okpala (2013) suggested that other factors that could impact taxpayer behavior toward tax evasion and tax avoidance should be researched.

The research gap is due, in large part, to the ambiguity surrounding how evasion and avoidance are defined. Often, taxpayers are not clear on the differences between tax compliance or evasion. Some of the complexity is due to non-lawyers or tax professionals trying to comprehend court rulings or authoritative interpretations without a fundamental understanding of the origin of tax issues (Onu et al., 2019). Interestingly, Onu et al. (2019) suggested that though outcomes of similarly conducted research show positive correlation between tax evasion and tax avoidance and social norms, attitude toward taxation, and PBC, participant responses to surveys may be post hoc and without properly established validity. More research is needed for greater depth of analysis of decision making surrounding taxation that is unfounded and irrational (Onu et al., 2019). Kirchler and Wahl (2010) suggested that “surveys on tax compliance and noncompliance often rely on ad hoc formulated items which lack standardization, theoretical background, and empirical validation” (p. 1). Though studies have been conducted analyzing compliance and noncompliance behavior, the research could lack generalizability due to the potential use of nonvalidated scales without a clear factorial structure (Kirchler & Wahl, 2010).

The specific problem is a lack of understanding of the relationship in the United States between attitudes toward taxation and social norms, and PBC, which are the IVs and the DVs of tax evasion and tax avoidance relative to small business owners (Onu et al., 2019). In addition, all studies reviewed relevant to my study topic were conducted outside the United States (Kirchler & Wahl, 2010; Oladele & Okpala, 2013; Onu et al., 2019; Wei & McGee, 2015). A review of the literature revealed that the relationship among tax evasion and tax avoidance and social norms, attitudes towards taxation, and

perceived behavior control requires further examination (Kirchler & Wahl, 2010; Oladele & Okpala, 2013; Onu et al., 2019; Wei & McGee, 2015).

Institutions, Norms, and Algorithms: A 5-Year Synthesis on Tax Evasion and Avoidance

Over the past 5 years, scholarship on tax evasion and avoidance has expanded dramatically, driven by new data sources, technological innovations, and global policy debates over fairness and fiscal capacity. The distinction between evasion and avoidance remains formally important, but recent research demonstrates how often the two behaviors overlap in practice. This review synthesizes literature from 2019 to 2025, highlighting conceptual refinements, methodological advances in detecting evasion, evolving strategies of avoidance, macro-level influences, and distributional consequences. Together, these studies illustrate how compliance behavior is both adaptive and socially embedded, shaped by institutions, norms, and technology.

Conceptual Refinements to Tax Evasion and Tax Avoidance 2019–Present

Recent studies stress that evasion and avoidance are best understood as points along a continuum rather than strictly distinct categories. Islam and Hashim (2020) demonstrated that aggressive tax planning often resembles evasion in its intent to reduce liability, even if it technically remains within the law. They argued that the legitimacy of such strategies depends less on legality than on perceptions of fairness and social responsibility. Hossain et al. (2024) similarly emphasized that concepts such as tax risk, tax aggressiveness, and uncertainty have become central to understanding avoidance.

Political and economic instability further complicates conceptual distinctions. A 2025 study shows that under high uncertainty, taxpayers in stronger institutional environments adopt aggressive avoidance as a hedge, while those in weaker environments often resort to outright evasion (Negkakis et al., 2025). These findings suggested that evasion and avoidance are not static legal categories, but dynamic behaviors shaped by context and perception. This conceptual evolution underscores the limitations of treating compliance simply as a legal question. Instead, it requires a broader framework that considers legitimacy, uncertainty, and institutional design .

Advances in Detecting Tax Evasion

Innovations in detection methods represent one of the most striking developments in recent years. Zumaya et al. (2021) employed network science and machine learning to analyze Mexican invoice data, detecting suspicious clusters of transactions indicative of hidden evasion. Their approach not only improves identification rates but also highlights how evaders exploit structural weaknesses in reporting systems. Lazebnik and Shami (2025) advance detection by modeling taxpayer decision-making using reinforcement learning agents. Their simulations show that evasion emerges endogenously from interactions among taxpayers, enforcement agencies, and public goods provision. This work suggests that compliance dynamics evolve over time and cannot be reduced to simple deterrence models.

Behavioral approaches further enrich this literature. Holz et al. (2025) demonstrated through field experiments that exposure to elite avoidance behaviors reduces tax morale among ordinary citizens. This finding illustrates that detection is not

only a technical problem but also a social one, since perceptions of fairness and legitimacy affect willingness to comply. Collectively, these studies demonstrate that evasion is both detectable through computational tools and influenced by social and psychological mechanisms that extend beyond traditional enforcement frameworks.

Corporate Tax Avoidance 2019–2025

Corporate avoidance has been the subject of extensive research, reflecting its impact on public revenues and perceptions of fairness. A systematic review identifies firm size, profitability, and governance structures as key determinants (Sritharan et al., 2023). Wang et al. (2024) found that stronger board independence reduces avoidance in Chinese listed firms, while concentrated ownership increases propensity for aggressive planning. Chen et al. (2024) showed that avoidance distorts investment by worsening inefficiency, particularly in contexts with weak investor protection.

The role of digitalization has become increasingly prominent. Zhang and She (2024) find that firms undergoing digital transformation engage in less avoidance, as technology enhances transparency and improves internal controls. Yet this trend is not uniform. A study of FTSE All-Share companies (Sastroredjo et al., 2025) found that high-performing environmental firms sometimes adopt aggressive avoidance when financially constrained. This suggests that ESG commitments and tax behavior do not always align. Multinational enterprises remain central actors in avoidance research. Despite OECD reforms under the Base Erosion and Profit Shifting (BEPS) framework and the introduction of a global minimum tax, studies find that firms continue to exploit

mismatches in international tax rules. This resilience demonstrates the adaptability of corporate strategies in the face of policy reform.

Macro-Level Forces Impact on Tax Compliance

Macro-level forces such as transparency reforms and economic uncertainty exert strong influences on compliance. An experimental study found that mandatory disclosure requirements reduce avoidance while simultaneously affecting consumer perceptions of firms (Razen & Kupfer, 2023). Transparency thus operates both as a compliance mechanism and as a reputational tool. Political and economic uncertainty also plays a decisive role. Negkakis et al. (2025) showed that uncertainty increases both avoidance and evasion, though the exact form depends on institutional strength. In contexts with strong governance, taxpayers shift toward avoidance, while in weaker systems, evasion becomes more common. These results suggest that stability and trust are prerequisites for effective compliance. Taken together, these findings highlight that macro-level conditions shape taxpayer incentives as much as firm-level or individual characteristics do.

Distributional Dimensions in Tax Evasion and Avoidance

Distributional concerns are central to the modern literature on evasion and avoidance. Alstadsæter et al. (2019) demonstrated that offshore evasion is overwhelmingly concentrated among the wealthiest households, with the top 0.01% evading a substantial portion of their liabilities. Meanwhile, wage earners whose income is heavily third-party reported show high compliance, reflecting structural inequalities in opportunity. Recent studies showed that large multinationals exploit avoidance strategies

more effectively than smaller firms. This shifts the effective burden onto ordinary taxpayers and SMEs, undermining fairness and weakening fiscal capacity. These findings suggest that evasion and avoidance exacerbate inequality not only by reducing revenues but by redistributing tax responsibilities regressively. Literature thus frames compliance not only as a legal or administrative issue but as a distributive one with profound implications for social equity.

Synthesis of Research 2019–Present

Synthesizing across these studies, the literature from 2019 to 2025 emphasized that evasion and avoidance remain distinct in law but operate along a behavioral continuum. Advances in detection illustrate how evasion can be identified through machine learning, simulations, and experiments. Avoidance, meanwhile, is shaped by governance, digitalization, and multinational behavior, but also by macro-level forces like transparency and uncertainty. Distributional analyses reveal that both behaviors disproportionately benefit elites and large corporations, raising concerns about fairness and state capacity. The literature therefore points toward a holistic understanding of compliance as adaptive, context-dependent, and embedded within social and institutional frameworks. Evasion and avoidance are not simply matters of legality, but phenomena shaped by legitimacy, trust, and structural inequality.

Tax Evasion and Tax Avoidance through the Theory of Planned Behavior (2019–2025)

The TPB remains a central framework for understanding taxpayer decisions related to evasion and avoidance. TPB posits that attitudes, subjective norms, and PBC jointly predict intentions, which in turn influence actual behavior. Recent literature

highlights the robustness of this model while extending it with constructs such as tax knowledge, fairness perceptions, trust in government, and perceived complexity to reflect contemporary compliance environments. Evidence across multiple contexts suggests that favorable attitudes toward tax compliance, supportive norms, and higher perceived control reduce the likelihood of evasion and avoidance, while complexity and negative perceptions of government performance undermine compliance (Islam & Hashim, 2020; Khristy et al., 2022; Zafar et al., 2024).

Attitudes toward compliance continue to emerge as critical predictors of taxpayer intentions. Studies among self-employed taxpayers and SMEs indicate that when taxpayers perceive compliance as fair and beneficial, they are less likely to engage in evasion or aggressive avoidance (Bani-Khalid et al., 2022; Khristy et al., 2022). Recent research in Indonesia demonstrates that attitudes, together with perceived simplicity of tax procedures, significantly increase compliance intentions (Alfaro et al., 2024). Similarly, Nurani et al. (2024) in a study of student taxpayers showed that positive compliance attitudes, particularly when tax rules are perceived as manageable, foster intentions to comply. These findings reinforce TPB's claim that positive evaluations of compliance behaviors are integral to shaping taxpayer intentions.

The role of subjective norms has also been confirmed in contemporary research. Taxpayers are influenced not only by family and peers but also by broader societal norms regarding compliance. Evidence from multiple countries suggests that when taxpayers perceive others in their networks as compliant, they are more likely to conform to these norms (Raghunathan et al., 2024; Sajeewani et al., 2021). However, norms can be

undermined by exposure to elite avoidance or evasion, which signals that such practices are acceptable or widespread. Studies show that observing high-profile tax scandals can lower tax morale, thereby weakening compliance norms (Raghunathan et al., 2024). These findings highlight the social embeddedness of taxpayer decision-making, a feature well captured by TPB's norms construct.

PBC has been increasingly linked to taxpayers' experiences with digitalization and administrative complexity. Research finds that when taxpayers perceive tax filing systems as simple, efficient, and transparent, their sense of control increases, which strengthens compliance intentions (for example, Alfaro et al., 2024; Nurani et al., 2024). Conversely, perceptions of complexity reduce PBC and increase the likelihood of avoidance or evasion behaviors (Khristy et al., 2022). The expansion of e-filing systems has been identified as a key mechanism that enhances PBC by reducing procedural uncertainty and compliance costs (Raghunathan et al., 2024). These results confirm that improving taxpayers' perceptions of control over compliance tasks is essential in reducing non-compliant behavior.

Recent studies extend TPB to include additional constructs that improve explanatory power. Bani-Khalid et al. (2022) and Khristy et al. (2022) demonstrated that tax knowledge and perceived complexity directly influence taxpayer intentions and indirectly affect attitudes and PBC. Trust in government and perceived fairness have also been incorporated into TPB-based models, with findings showing that taxpayers who view authorities as fair and efficient develop more positive compliance attitudes and are less inclined to evade (Khristy et al., 2022; Sajeewani et al., 2021). Nawafleh (2023)

added that perceived power of tax authorities as a moderator, finding that authority power strengthens the links between TPB's constructs and compliance intentions. These extensions illustrate how TPB remains adaptable to contemporary challenges in tax administration.

Current research also demonstrates the versatility of TPB across different populations and contexts. Among SMEs, compliance is strongly shaped by knowledge and perceptions of administrative burden (Bani-Khalid et al., 2022). Among pre-service taxpayers, such as students preparing to file taxes for the first time, perceived ease and clarity of tax obligations are particularly influential (Nurani et al., 2024). For entrepreneurs, perceived authority power significantly moderates the influence of attitudes and norms on compliance intentions (Nawafleh, 2023). These variations suggest that while TPB's core remains valid, the weight of each construct may shift depending on population characteristics and institutional context.

In addition, meta-analytic and review studies confirm the enduring value of TPB in tax compliance research. Zafar et al. (2024) found that attitudes and norms consistently predict compliance intentions across diverse settings, while trust and fairness perceptions strengthen TPB pathways. Narrative reviews also emphasize the importance of integrating new constructs such as digitalization, complexity, and morale into TPB to fully capture taxpayer behavior in modern contexts (Raghunathan et al., 2024). These findings collectively suggest that TPB, especially in extended forms, continues to provide a robust framework for explaining tax evasion and avoidance behaviors.

Research on tax compliance has consistently highlighted psychological, institutional, and contextual factors shaping taxpayer behavior, yet the relative weight of these determinants differs across settings. Studies grounded in the TPB (Alleyne & Harris, 2017; Nurwanah et al., 2018; Owusu et al., 2019; Taing & Chang, 2021) confirmed that attitudes, subjective norms, and PBC are strong predictors of compliance or evasion intentions. For example, in Cambodia, TPB factors explained taxpayer intentions to comply (Taing & Chang, 2021), while in Barbados, similar constructs predicted intentions to evade, particularly when moral obligation was weak (Alleyne & Harris, 2017). These findings align with Owusu et al. (2019), who found that Ghanaian students' intentions to evade were shaped not only by TPB factors but also by morality, suggesting that moral obligation strengthens TPB's predictive power. Nurwanah et al. (2018) extended the model with stakeholder theory, showing that legitimacy and fairness considerations influence corporate taxpayers in Indonesia, underscoring that compliance is not just an individual but also a relational and institutional phenomenon.

In contrast, studies focusing on trust and enforcement highlight the *slippery slope* framework, which posits that trust fosters voluntary compliance while power enforces compliance. Olsen et al. (2018) experimentally demonstrated how trust and power shape emotions that, in turn, influence compliance intentions. Inasius (2019), however, found only partial support for this distinction among Indonesian SMEs, with trust and power interacting in less predictable ways. Similarly, Kiconco (2019) found that Ugandan SMEs' compliance behavior was explained by attitudinal and normative drivers rather

than enforcement alone, reinforcing the idea that coercive power without legitimacy may be insufficient.

Institutional quality emerges as a cross-cutting concern. Rosid et al. (2018) highlighted how perceptions of corruption undermine compliance in developing countries, linking compliance not just to individual psychology but also to systemic governance. Kassa (2021) similarly found in Ethiopia that weak enforcement, lack of knowledge, and perceived unfairness increased tax evasion, pointing to administrative inefficiencies as a barrier to compliance. Complementing this, Owusu, Bekoe, and Mintah (2021) showed that perceived tax complexity reduced compliance among Ghana's self-employed, while trust and targeted interventions (e.g., reminders, education) increased compliance intentions. These findings emphasize that compliance is sensitive not only to attitudes and norms but also to how taxpayers perceive the complexity, fairness, and integrity of tax systems.

Taken together, these studies suggest that compliance is best explained through a multi-level lens: individual-level attitudes and morality (Alleyne & Harris, 2017; Owusu et al., 2019; Taing & Chang, 2021), relational trust and power dynamics (Inasius, 2019; Olsen et al., 2018), and institutional quality, complexity, and governance (Kassa, 2021; Owusu et al., 2021; Rosid et al., 2018). Importantly, divergences such as the mixed results on the trust–power balance (Inasius, 2019) highlighted that cultural and institutional contexts mediate theoretical predictions. While TPB remains a robust baseline framework, integrating it with trust-based, institutional, and stakeholder

perspectives provides a more comprehensive account of taxpayer behavior across diverse settings.

Tax Compliance in Context: A Comparative Review of Six Studies Published in 2025

Tax compliance and evasion remain central challenges for governments because persistent noncompliance erodes fiscal capacity, undermines horizontal equity among taxpayers, and weakens public trust in institutions. Classical deterrence models treat taxpayers as rational calculators who compare the expected value of sanctions with the benefits of evasion. Yet the last two decades of research show that purely economic accounts cannot explain the observable variance in compliance: ethical norms, socialization, institutional credibility, and even the design of digital governance all shape whether individuals and organizations choose to comply. The six works reviewed here by Amelio et al. (2025), Kumar et al. (2025), Alarcón-García et al. (2025), Permana and Sanjaya (2025), Machfuzhoh and Puspanita (2025), and Younus et al. (2025) jointly illuminate this multidimensional terrain.

Although all six address the same broad problem, they do so at different levels of analysis and with distinct conceptual lenses. Amelio et al. (2025) ask how nonfinancial, social, and ethical pressures interact with corporate social responsibility (CSR) to shape tax fraud in Romania. Kumar et al. (2025) focused on individual taxpayers in India's National Capital Region, combining variance-based (PLS-SEM) modeling with configurational analysis (fsQCA) to identify the drivers of income tax evasion behavior. Alarcón-García et al. (2025) examined young people's fiscal awareness through the lens of dense social trust and conditional cooperation, testing a structural model with a very

large student sample. Permana and Sanjaya (2025) used a laboratory experiment to explore how corruption risk, pre-filled forms, and audit schemes affect real-effort earnings reporting in Indonesia. Machfuzhoh and Puspanita (2025) applied the TPB to *ethical* tax evasion, linking attitudes, subjective norms, and perceived control to evasion intentions. Finally, Younus et al. (2025) synthesized evidence on how e-government systems and behavioral profiling can detect and deter noncompliance.

A comparative reading shows both complementarity and tension. The CSR framing highlights organization-level ethics and reputation; the TPB framing emphasizes intention formation and perceived control; the trust and conditional cooperation framing centers socialization and peer influence; the corruption experiment probes institutional credibility and the fragility of tax morale; and the e-government chapter foregrounds data, analytics, and detection capacity. Together these perspectives suggest that *compliance* is an emergent property of systems rather than a single lever: organizational commitments, individual intentions, social networks, and institutional designs interact in ways that can reinforce-or undermine-one another (Alarcón-García et al., 2025; Amelio et al., 2025; Kumar et al., 2025; Machfuzhoh & Puspanita, 2025; Permana & Sanjaya, 2025; Younus et al., 2025).

Across the six works, theoretical lenses vary from organizational ethics to microlevel behavioral intention, social capital, institutional credibility, and digital governance. Amelio et al. (2025) explicitly positioned CSR as a moderator in the link between social/ethical pressures and tax fraud. In their view, CSR-related behaviors institutionalize ethical considerations in corporate decision-making; firms with stronger

CSR commitments should, all else equal, translate external ethical pressures into lower fraud propensities. This situates tax fraud as a governance and values problem: non-financial drivers matter, but they matter through the standards organizations adopt and are held to. By contrast, Machfuzhoh and Puspanita (2025) adopted Ajzen's TPB to model *ethical tax evasion* as the product of attitudes (moral evaluations of evasion), subjective norms (perceived expectations of reference groups), and PBC (beliefs about one's capacity to evade). Here, the mechanism is intention formation rather than corporate governance.

Alarcón-García et al. (2025) brought in social capital and conditional cooperation, distinguishing dense social trust-trust in close networks such as family-from generalized social trust. Their argument is that family tolerance of fraud and the underground economy shape young people's fiscal awareness and willingness to comply. In this account, tax behavior is socially embedded: compliance norms originate and are reinforced in primary groups long before people file returns. Permana and Sanjaya (2025) approached tax behavior through institutional economics and behavioral public finance. They conceptualize tax morale as inherently fragile and contingent on credible, noncorrupt administration. Even compliance-facilitating design choices (e.g., pre-filled returns) can backfire if citizens infer that the system is corrupt or manipulable, undermining the moral obligation to comply. Younus et al. (2025) contributed a governance-and-technology lens, arguing that e-government platforms enable better risk segmentation and targeted enforcement through behavioral profiling, analytics, and

information sharing; technology, in their account, augments administrative capacity but still depends on legal and institutional safeguards.

Comparatively, CSR and TPB offer different causal stories about how ethics *enters* tax behavior—CSR through formalized organizational commitments that mediate external pressures, TPB through internal intentions shaped by beliefs and perceived control. Dense trust foregrounds social learning and intergenerational transmission of norms, potentially preceding both corporate codification and individual intention formation. The corruption-tax morale framework emphasizes that even well-designed deterrence or simplification tools can be neutralized by low institutional credibility. The e-government chapter argues that detection, segmentation, and service design can shift both perceived probabilities of detection and the salience of norms. These framings need not conflict—their units of analysis differ—but they sometimes imply different leverage points: embed ethics in governance (CSR), shape intentions and norms (TPB and dense trust), restore credibility (anti-corruption), and enhance monitoring and service delivery (e-government).

Methodologically, the corpus spans confirmatory modeling, configurational analysis, experiments, and integrative review. Amelio et al. (2025) employed partial least squares–based structural equation modeling (PLS-SEM) on Romanian respondents (N = 290) to estimate both measurement and structural paths linking social and ethical factors, CSR-related behaviors, and tax fraud. PLS-SEM is well suited to models with formative and reflective constructs and to samples of a few hundred cases, but it can be sensitive to common-method variance and self-report biases when data come from single surveys.

Kumar et al. (2025) paired PLS-SEM with fuzzy-set qualitative comparative analysis (fsQCA) on a substantially larger sample of individual taxpayers in India's National Capital Region ($N = 548$). The hybrid design captures both net effects (via SEM) and conjunctural causation (via fsQCA), allowing the authors to identify multiple sufficient configurations (e.g., high perceived tax burden + corruption + complexity) that lead to evasion intentions, thereby addressing causal asymmetry and equifinality that regression-based models often miss.

Alarcón-García et al. (2025) also deployed SEM but on a much larger student sample ($N = 2,059$), modeling latent constructs such as dense social trust and fiscal awareness. Large- N SEM offers precise estimates and power to test mediation, but student samples can limit external validity; the advantage is that the study isolates early socialization effects before work and filing experiences complicate the picture. Permana and Sanjaya (2025) conducted a laboratory experiment with real-effort tasks, random audits, penalties, and treatments including pre-filled forms, varying rates of return to taxes, and an explicit corruption condition. Experimental control strengthens causal inference relative to surveys by manipulating key institutional features; the trade-off is ecological validity, as the stakes and context differ from real tax environments.

Machfuzhoh and Puspanita's (2025) research appeared to be survey-based within a TPB framework; absent detailed public metadata, it likely estimates regression or SEM models linking attitudes, norms, perceived control, intentions, and (self-reported) ethical evasion. Finally, Younus et al. (2025) provided a conceptual synthesis rather than original data, integrating prior empirical evidence on e-government, analytics, and behavioral profiling.

Such integrative chapters are valuable for mapping literature and highlighting design implications but cannot on their own adjudicate competing hypotheses.

Comparing across designs clarifies their complementary strengths. SEM-based studies (Alarcón-García et al., 2025; Amelio et al., 2025) offer theory-driven measurement and causal modeling under cross-sectional assumptions; fsQCA (Kumar et al., 2025) added configurational nuance and allows for multiple pathways; experiments (Permana & Sanjaya, 2025) isolated institutional mechanisms under controlled conditions; conceptual syntheses (Younus et al., 2025) translated accumulated findings into administrative strategies. Each approach embodies trade-offs in internal versus external validity, causal identification versus generalizability, and breadth versus depth. As a set, they triangulate the phenomenon from different angles, increasing confidence where findings converge.

Despite conceptual and methodological diversity, several patterns emerge—alongside a few notable tensions. At the organizational level, Amelio et al. (2025) reported that CSR-related behaviors moderate the relationship between nonfinancial social/ethical pressures and tax fraud; in their Romanian sample, stronger CSR is associated with lower reported fraud, consistent with the idea that values codified in governance frameworks can translate diffuse ethical pressures into concrete practice. At the individual level, Kumar et al. (2025) explained roughly half of the variance in both behavioral intention ($\approx 53\%$) and self-reported evasion behavior ($\approx 51\%$). Their SEM results indicate that perceived tax burden, corruption, and system complexity significantly increase intentions to engage in income tax evasion, whereas digitalization

and tax morale do not significantly predict intentions; intentions, in turn, strongly predict behavior. This configuration points to structural and institutional stressors as proximate drivers of evasion in the context studied, with moral and technological factors playing surprisingly limited roles.

Alarcón-García et al. (2025) showed that dense social trust—operationalized through family tolerance for fraud and the underground economy—positively predicts fiscal awareness among young people; family attitudes toward tax fraud and the economy appear to transmit compliance norms, supporting a conditional cooperation account in which individuals are more willing to comply when they believe peers do so. This socialization channel offers a micro foundation for cross-sectional correlations often observed between generalized trust and compliance. In sharp contrast, the laboratory evidence from Permana and Sanjaya (2025) demonstrated that corruption risk can erode tax morale so deeply that even compliance-facilitating designs, such as pre-filled forms, fail to sustain reporting accuracy. In their experiment, both pre-filled returns and the possibility of bribe-seeking behavior were associated with greater underreporting of real-effort earnings, and high *rates of return* to taxes—intended to signal competent public finance—could not reliably offset the corruption signal. This finding suggests that while design improvements may be helpful, they alone may not fully address challenges in low-credibility environments.

Machfuzhoh and Puspanita (2025) situated *ethical tax evasion* squarely within TPB, reinforcing the importance of attitudes and perceived social norms in shaping intentions to evade. Although full statistical details are limited in the public record, the

framework dovetails with both Alarcón-García et al. (2025)—by emphasizing socialization and norms—and with Kumar et al. (2025)—by focusing on intentions as the immediate antecedent of behavior. Finally, Younus et al. (2025) argued that e-government platforms can increase compliance by enabling behavioral profiling to identify noncompliant segments and tailor enforcement and services accordingly. Conceptually, this stance contrasts with Kumar et al.'s (2025) insignificance of *digitalization* as a direct driver of intentions; the difference can be reconciled by distinguishing back-office analytics (which alter detection risk and service design) from taxpayers' own perceptions of digital tools (which may not, on their own, change intentions absent institutional credibility and reduced complexity).

Points of convergence include the central role of institutional conditions, particularly corruption and perceived complexity—in shaping evasion, the salience of social norms and dense trust in forming compliance orientations, and the value of organizational ethics frameworks in constraining corporate misconduct. Points of divergence include the role of digitalization (insignificant in Kumar et al.'s model versus central in the e-government synthesis) and the robustness of tax morale (fragile under corruption in the experiment, insignificant in the Indian SEM, yet implicitly important in TPB accounts). These tensions likely reflect contextual heterogeneity across Romania, India, Spain/Mexico, and Indonesia, differences in units of analysis (organizations vs. individuals), and the distinction between perceived versus actual administrative capabilities (Alarcón-García et al., 2025; Amelio et al., 2025; Kumar et al., 2025; Machfuzhoh & Puspanita, 2025; Permana & Sanjaya, 2025; Younus et al., 2025).

Synthesizing across the six works suggests an integrated account in which organizational ethics, intention formation, social learning, institutional credibility, and administrative technology combine to produce observed compliance. At the organizational level, CSR appears to function as a commitment device: by embedding ethical standards in governance, firms reduce discretion for opportunistic tax practices in response to social and ethical pressures (Amelio et al., 2025). At the individual level, intentions are shaped by a triad of factors: (a) structural burdens and institutional dysfunction (Kumar et al., 2025), (b) socialization within dense trust networks (Alarcón-García et al., 2025), and (c) beliefs about one's ability to evade and the acceptability of doing so (Machfuzhoh & Puspanita, 2025). Institutional credibility, particularly the absence of corruption, conditions how design features are interpreted; in the Indonesian experiment, the same tools meant to ease compliance (pre-filled returns) were associated with more underreporting when juxtaposed with corruption risk (Permana & Sanjaya, 2025). Finally, administrative technology, such as e-government and behavioral profiling, improves monitoring, segmentation, and service delivery (Younus et al., 2025).

These elements are mutually reinforcing or undermining. Strong CSR may cultivate internal cultures that align with social expectations, lowering the marginal impact of external pressure to engage in aggressive tax practices. Dense trust can cultivate pro-compliance norms before individuals become taxpayers, amplifying TPB's normative pathway and reducing the perceived payoff to evasion. Effective e-government can reduce complexity and raise perceived detection probability, which in Kumar et al.'s

(2025) model would directly act on two significant determinants (complexity, corruption). Conversely, corruption can sever these linkages: it converts simplification into suspicion and nullifies the reputational premium of CSR, while also weakening the social norm that *most people comply*. In this sense, the studies jointly imply a layered model in which organizational commitments and digital capacity are necessary but insufficient without credible, noncorrupt administration and supportive social norms.

Where the studies appear to disagree—such as on the importance of *digitalization* or the strength of tax morale—differences in operationalization and locus help explain the divergence. Kumar et al. (2025) measured taxpayers’ perceptions of digital tools and moral motivation as direct predictors of intention; Younus et al. (2025) discussed agency-side information systems and analytics that alter the enforcement production function; and Permana and Sanjaya (2025) manipulated a corruption signal that can overwhelm moral suasion. Meanwhile, TPB-consistent models can coexist with CSR moderation: organizations are, after all, collections of individuals whose intentions are formed in social contexts. The six studies thus do not yield a single *best* theory but, read together, supply a composite model in which compliance hinges on the alignment of values (CSR, norms), beliefs and intentions (TPB), credible institutions (anti-corruption), and administrative capability (e-government).

Summary and Conclusions

Across more than six decades of scholarship, research on tax evasion and avoidance has evolved from early risk-based and macro-proxy models (e.g., currency demand, transactions, and electricity consumption) to multi-method programs that

integrate behavioral science, institutional analysis, and computational detection.

Foundational work in 1958–1978 linked noncompliance to risk-taking and individual choice, while later studies (1978–1998) refined macro indicators of the shadow economy and used household surveys to infer underreporting. From 1998–2018, experiments and field studies showed that perceived detection, penalties, and social identity influence compliance, and that corporate aggressiveness can shape market responses. Since 2019, the literature reframes evasion and avoidance as a behavioral continuum shaped by legitimacy and context; advances in machine learning, network analysis, and simulations improve detection, while field experiments demonstrate that elite avoidance can erode tax morale. Corporate work identifies governance, profitability, and digitalization as levers of avoidance, with multinational strategies adapting despite Base Erosion and Profit Sharing (BEPS) style reforms; distributional analyses show that offshore evasion and profit shifting are concentrated among the wealthiest households and largest firms, shifting burdens onto wage earners and SMEs. Macro-level forces—transparency mandates, political-economic uncertainty, and institutional credibility—systematically condition compliance. The TPB continues to provide a robust micro-foundation: attitudes, subjective norms, and PBC consistently predict intentions, strengthened by extensions that incorporate trust, fairness, knowledge, and perceived complexity. Comparative evidence across settings reveals that compliance is an emergent, system-level outcome: organizational ethics (e.g., CSR), socialization within dense trust networks, institutional quality (especially corruption control), and administrative technology (e-government,

analytics) interact to encourage or undermine compliant behavior among multinationals, mid-sized firms, and small businesses alike.

Taken together, the literature demonstrates that tax compliance cannot be reduced to legality or deterrence alone; it is adaptive, socially embedded, and mediated by governance quality and technological capacity. Effective policy therefore requires complementary interventions: (a) strengthen institutional credibility and anti-corruption safeguards so that simplification tools and transparency mandates raise perceived fairness rather than cynicism; (b) embed ethical commitments in organizational governance (e.g., CSR) to constrain aggressive planning; (c) enhance taxpayer perceived control by reducing complexity and investing in user-centric digital services; (d) deploy data-driven detection and targeted enforcement to raise the salience of audit risk for the highest-impact actors; and (e) address distributional imbalances by closing international gaps that enable profit shifting and offshore evasion. Measurement standardization also remains a priority: validated behavioral scales, harmonized shadow-economy proxies, and triangulation across experiments, administrative data, and computational models would improve comparability and external validity. Notably, the review identifies a U.S.-specific gap on the links among social norms, attitudes toward taxation, PBC, and small-business compliance—an area suited to mixed-methods designs that integrate TPB with institutional and trust-based frameworks. Future research should examine how shocks (e.g., uncertainty, fiscal crises) shift taxpayers along the evasion-avoidance continuum; when and why digitalization curbs (versus enables) aggressive planning; and how visibility of elite behavior shapes norms over time. A holistic approach that aligns ethical

culture, credible administration, and modern analytics offers the most promising path to durable improvements in compliance and equity.

Chapter 3: Research Method

The purpose of this quantitative correlational, non-experimental study was to explore the relationship between various measures of the TPB regarding attitudes, social factors, social norms, behavior control, and behaviors of U.S. small business owners pertaining to taxation (the IVs) and measures of tax avoidance and tax evasion culture (the DVs). This chapter will cover research design, methodology, sampling, procedures for participation, instrumentation, data analysis plan, threats to validity, and ethical procedures.

Research Design and Rationale

My research design was quantitative, correlational, and non-experimental. Benk et al. (2011) demonstrated that a non-experimental design is the most appropriate design for predicting relationships among variables. The nine IVs included those related to attitude toward taxation (vertical equity, horizontal equity, and exchange equity), social norms (social and moral norms), PBC (detection risk, penalty magnitude, and tax compliance intentions), and perceptions of government authority. The DVs included measures of tax evasion and tax avoidance. Additionally, I examined the relationship between five demographic variables and the DVs.

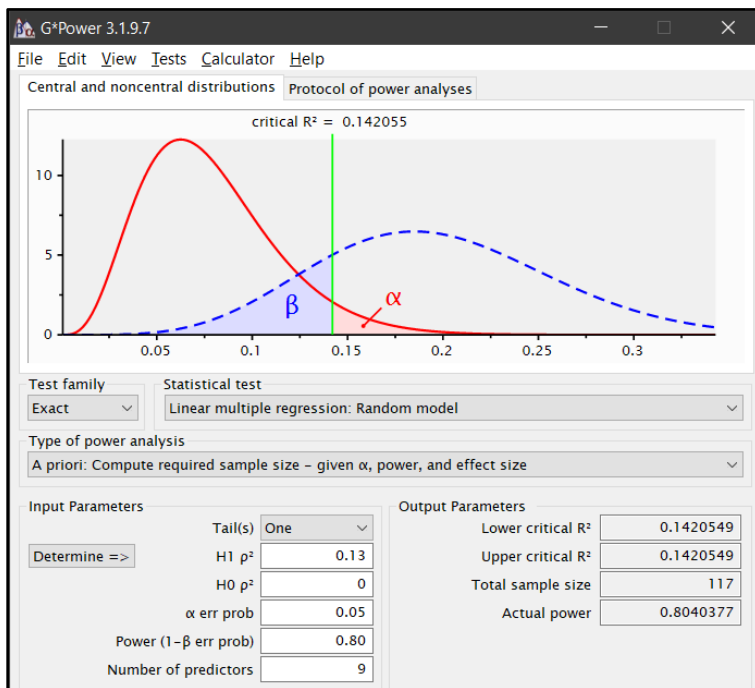
Methodology

Population

The Small Business Administration defined small business based on the number of employees and annual receipts (“Table of size standards,” 2019). Most U.S. small businesses have fewer than five employees (Hait, 2021). As such, the population of the

study consisted of small business owners with between 5 and 1500 employees, and annual revenue between \$100,000 and \$500,000. Small business owners ranged from 18 to 90 years of age, and they operated their businesses within the Atlanta, Georgia, metro area. My plan was to access the target population using DataAxle. DataAxle maintains a database of all small business owners of record in the geographical area under analysis. My goal was to ensure that both seasoned small business owners and start-ups were represented in the sample.

To attain an appropriate sample for this study, I used G Power 3.1.9.4 (Figure 2). I conducted an a priori power analysis given $\alpha = .05$, power = $1 - \beta = .80$, one-tail test, nine IVs, and effect size $f^2 = 0.15$ or $\rho^2 = 0.13$ (Faul et al., 2009). The minimum sample size was $n = 117$ complete and valid surveys.

Figure 2*Outcome of a Priori Power Analysis***Sampling and Sampling Procedures**

The plan was to select participants from a list purchased from DataAxle, a marketing research firm that compiles lists according to desired characteristics for the purpose of administering surveys and conducting research. DataAxle maintains a database of current small businesses in the United States. Potential participant lists can be purchased based on specific criteria, including age, gender, geographic location, company size, industry code, and annual revenue. DataAxle's list is derived from county-level public sources, secretaries of state, annual reports, securities, Securities Exchange Commission filings, articles, press releases, internet research, utility connects and disconnects, and industry and tourism directories.

I planned to use a systematic random sampling approach. Systematic random sampling requires that prospective participants be selected based on a system of intervals from a numbered population (Warner, 2013). Stratified sampling was used to ensure equal representation of groups within the sample frame. I stratified by creating groups for age and gender, and sampled until an adequate number of each group and gender was represented according to the required sample size. Systematic random sampling ensures the sample is random because the researcher cannot control who is on the list or in what order prospective participants will appear. Stratified random sampling provides a systematic method for obtaining a population sample that controls for the demographic makeup of the population, leading to stronger research results (Warner, 2013).

I included two strata: gender (two levels: male, female) and annual revenue (three levels: \$0 to 100,000, \$101,000 to \$500,000, and \$500,000+). This resulted in six distinct groups. The minimum sample size was $n = 117$. With six groups, there was a minimum of $117 \div 6 = 19.5$ participants per group, rounded to 20. Assuming a 10% rate of corrupted surveys, an additional two records were needed per group, bringing the sample size per group to 22 participants. The total required sample size was then $n = 22 \times 6 = 132$. My goal was to obtain 20 complete and valid questionnaires from participants for each of the six groups, totaling at least 120.

Procedures for Recruitment, Participation, and Data Collection (Primary Data)

Recruitment of potential study participants began with purchasing a list of small business owners and entrepreneurs from DataAxle. To ensure that potential participants were qualified, I planned to use a predetermined search criterion that DataAxle would

apply when searching their database for potential participants. The search criteria consisted of small business owners who met the small business criteria as defined by the Small Business Administration. The Small Business Administration defines small businesses according to North American Industry Classification System (NAICS) codes, annual revenue, or employee number, depending on the industry. For this study, potential participants were qualified based on annual revenue only. SurveyMonkey ensured that all potential participants were considered small businesses, as defined by the U.S. Small Business Administration's Table of Small Business Size Standards. SurveyMonkey was used to run queries matching NAICS codes with annual revenue. All NAICS codes with annual revenues that exceeded amounts provided in the prerequisite criteria were discarded.

For this study, potential participants were qualified based on annual revenue only. DataAxle was used to ensure all potential participants were considered small businesses pursuant to the definition set forth in the U.S. Small Business Administration Table of Small Business Size Standards. DataAxle was used to choose a random sample using the zip codes of potential participants. The list of qualified potential participants had associated email addresses and NAICS codes. After securing permission from the Walden University IRB and all other required permissions, I sent emails to the potential participants provided by Data Axle, providing a link to information regarding the study's purpose, consent form, demographics questionnaire, and a response due date.

Hiebl and Richter (2018) found the average survey response rate in management accounting research was historically 38%, with a significant decline to 27% in 2016. A

20% survey response rate would require $120 \div 0.20 = 660$ invitations. DataAxle required a minimum order of 2,300. The entire 2,300 received the initial invitation email. The email requested that potential participants agree to complete the entire survey. All responses received from potential participants who had not agreed to complete the entire survey were discarded. All potential participants were given 30 days to respond.

Respondents were divided into two strata, with three groups each, based on demographic factors they shared. The data collection process was complete when all respondents were assigned to a group and the minimum number of participants (20) was obtained for every group. Additional invitations were sent if needed to increase the sample size of complete, valid questionnaires in any group. Once groups were populated, those with more than the minimum sample size were reduced to a random sample of 20 participants through a random selection process using a random number generator in Excel. Finally, research participants were sent a link to the SurveyMonkey questionnaires via email.

Instrumentation and Operationalization of Constructs

Data were obtained from questionnaires used in two previous research projects: Kirchler's survey on tax avoidance and tax evasion (Kirchler & Wahl, 2010) and Benk's survey of planned behavior (Benk, 2011). Benk (2011) and Kirchler and Wahl (2010) used the TPB as the theoretical foundation for their studies. Permission to use the instruments was obtained via email from both Dr. Benk and Dr. Kirchler (Appendix A). In addition, I added a self-designed questionnaire for the collection of demographic data (Appendix B).

Kirchler's Survey of Tax Evasion and Tax Avoidance

Kirchler and Wahl (2010) developed four validated scales with a clear factorial structure to provide a standardized measure that could be generalizable and comparable across research focusing on self-reports. Forty-two studies examining various aspects of tax evasion and tax avoidance research conducted over a 94-year period were reviewed. Kirchler and Wahl (2010) posited that most questionnaires used to assess tax behaviors ask respondents to indicate their commitment to compliance, how they filed taxes, or their willingness to evade taxes without considering previous items on tax behavior and theoretical or statistical foundations. Furthermore, Kirchler and Wahl suggested that questionnaires on compliance with tax law and noncompliance often rely on informally formulated items that lack consistency, theoretical foundation, and empirical validation. Kirchler and Wahl (2010) examined previous research as a basis for developing an inventory from which four valid scales could be identified and used in multiple research studies.

Although informative, the outcomes were not generalizable and varied such that the intention to comply could hardly be differentiated from the intent for noncompliance. Therefore, Kirchler and Wahl formulated items representing concrete intentions of intent to evade or avoid paying taxes. The first project used a scientific and methodical approach to measure IVs: attitudes toward the tax system, social norms, and PBC. In the second project, they developed other factors due to a lack of standardization, theoretical background, and empirical validation. The factors included voluntary compliance,

noncompliance, tax evasion, and tax avoidance that could be used to measure taxpayer behavior intention.

The data set was obtained from a survey of 310 taxpayers, randomly divided into two groups of $n = 155$. One group was tested during factor analysis, and the other group was tested with the survey instrument. Both the factors and the survey instrument tested high for both reliability and validity. Factors included voluntary compliance, enforced compliance, avoidance, and evasion. Survey instruments are the primary source of survey responses from a research participant. First, descriptive statistics were used, and normal distribution was assessed. Next, all IVs were analyzed by conducting a principal component factor analysis (CFA), a technique that reduces the number of variables in a data set (Warner, 2013); the component factor analysis included varimax rotation, which is used to clarify relationships between factors to examine the factor structure (Warner, 2013).

Third, for each concept, the five items with the highest factor loadings were selected and CFAs were run to check for the best fitting factor structure of the inventory. A CFA is conducted to test the hypothesis by determining whether a relationship between observed variables and underlying constructs exist. Fourth, construct validity of the four scales was assessed (Kirchler & Wahl, 2010). Kirchler and Wahl (2010) tested construct validity by analyzing the correlations between scales and found that voluntary compliance and enforced tax compliance are not related.

Cronbach's alpha for the items on voluntary tax compliance, enforced tax compliance, tax avoidance, and tax evasion ranged between .69 and .90 as it related to

reliability and validity (Kirchler, 2010). The inter-item reliability estimates were above .60, indicating acceptable convergent validity; to test for divergent validity, DVs were factor analyzed. The factor analysis accounted for 73.7% of the overall variance among DVs.

Benk's Survey of Planned Tax Behavior

Benk et al. (2011) used the TPB as a theoretical foundation to examine the compliance intentions of individual taxpayers. Benk et al.'s survey examined the extent to which PBC, social norms, and attitude toward taxation affected tax compliance intention. Benk et al.'s survey outcomes revealed Cronbach's alpha values ranging from .70 to 1.00. Benk et al. conducted a factor analysis that showed a 73.7% overall variance among response items. Only factors with eigenvalues greater than or equal to 1 were retained. Factor scores were used in the multiple regression analysis rather than construct indices composed of the sum or average of item responses within each construct. The IVs included attitude toward taxation (i.e., beliefs about the probable consequences of the practiced behavior), normative beliefs (i.e., beliefs about the normative expectations of others), and control beliefs (i.e., beliefs about the presence of factors that may enable or obstruct the performance of the behavior).

The independent data points were defined by subconstructs. Cronbach's alpha values for subconstructs ranged from .70 to 1.00 (Benk, 2011). Benk (2011) examined the compliance intentions of individual taxpayers in the city of Zonguldak in Turkey. The population size was 369 individual taxpayers. Social norms (IV) included the subconstruct scales of moral and social norms; attitude toward taxation included the

subconstruct scales related to vertical, horizontal, and exchange equity (IV); and PBC included the subconstructs related to detection risk and penalty magnitude (IV). Each variable was assessed using a 5-point Likert scale, informed by a questionnaire. The DVs were also informed by a questionnaire and assessed using a 5-point Likert scale. The DVs were discrete and ordinal due to all possible responses being between 1 (very fair) and 5 (very unfair). Benk (2011) referenced 23 studies examining various aspects of tax compliance over a 36-year period to develop the factors for the instrument. Benk's (2011) survey design was obtained from Efebera et al.'s (2004) study.

Each variable was assessed using questions designed to measure taxpayer attitude, social norms, and perceived behavior control. The answering format consisted of responses such as complete agreement, complete disagreement, very likely, and very unlikely. Benk's survey questions were derived from Efebera et al.'s (2004) study. Efebera et al.'s study was used to determine understandability levels of potential participants. A pilot test was conducted via a survey of 30 participants with various educational backgrounds. The study's findings showed the questions in Benk's survey instrument were understandable. Variable testing consisted of analyzing responses to subconstructs. The responses were averaged to arrive at descriptive statistics and reliability estimates for the main variable constructs.

Combined Survey

The demographic questions, Benk's survey instrument, and Kirchler's survey instrument were combined into one survey. A link to the survey was sent via email to the participants. The instruments were not modified in any way except for revision to reflect

applicable monetary systems and denominations. Turkish Liras (TL) were converted to U.S. Dollars (USD).

The instruments were appropriate to answer my research questions because they were derived from the synthesis of multiple sources and research conducted over several years in an area of investigation related to my study topic. In addition, the instruments measured the variables of the TPB. The instruments were also aligned with the research questions and objective of my study, which was to examine whether the IVs (attitude, social norms, and perceived behavior control) explain small business owners' behavior toward the DVs (tax evasion and tax avoidance).

Variables

Demographic variables were informed using the demographic questionnaire. They included gender, age, ethnicity, business annual income, and household income.

Data for the IVs (attitude towards taxation, social norms, perceived behavior control, and perceptions of government authority) were obtained using Benk et al.'s survey of planned tax behavior to assess intentions of compliance and noncompliance relative to tax evasion and tax avoidance. Questions measuring attitude toward taxation were coded as vertical equity (VE), horizontal equity (HE), and exchange equity (EE). Social norms were informed by questions coded as social norm 1 (SN1), social norm 2 (SN2), moral norm 1 (MN1), and moral norm 2 (MN2). Perceived behavior control was informed by survey questions coded as detection risk 1 and 2, penalty magnitude 1 and 2, and tax compliance intentions 1 and 2. The values for the IVs were calculated as mean scores. Participant perceptions of government authority and power were assessed via

questions. The goal was to examine participant understanding relative to the government's power and authority.

Data for the DVs (tax evasion and tax avoidance) were obtained using Kirchler et al.'s survey of tax evasion and tax avoidance. The DVs were measured using a 5-point Likert scale. The values for the DVs were calculated as mean scores for questions TE1 to TE9 (tax evasion) and questions TA1 to TA6 (tax avoidance).

Data Analysis Plan

The raw data were exported from SurveyMonkey and then imported into Excel for initial analysis. Participants also received follow-up emails discussing study outcomes. In the initial analysis, I checked for missing or corrupt data for each participant. Data cleaning and screening were conducted as follows. First, accuracy of data entry was confirmed. Data were also checked for completeness. I looked for missing data and any patterns of missing data among responses, and extreme scores that could indicate corruption or inaccurate entry of data that could affect outcomes. The data were then exported to SPSS for analysis. Analysis to address the research questions and test the hypotheses was performed using MLR and regression model-building.

I used MLR and model-building to model the relationship between my study's IVs and DVs. The analysis process was iterative in that the analysis was based on a series of processes to ensure the best possible predictive equation was developed. MLR is a method used to ascertain the influence of two or more IVs on a DV. Predictive model-building is methodology used to determine the model that best predicts the DV(s). The predictive model is comprised of variables that minimize bias and best fit the data. In the

first step in my model building, I used the IVs from the TPB. Next, I analyzed the IVs and their two-factor interactions (2FIs) using multiple regression techniques. Finally, the results from the various regression techniques employed previously were combined and analyzed to determine the best predictive model.

Multiple Linear Regression

MLR is used to determine the relationship between IVs (Xs) and the DV (DV, or Y) and to construct a predictive model of the DV. This description of MLR and regression modeling is synthesized and adapted from multiple sources (Levine et al., 2011; Warner, 2013), and generally considered common statistical knowledge (McAllister, 2023).

Because the statistical and practical significance of each predictor is highly dependent on the presence of other explanatory variables, predictive model-building using MLR is used to select the IVs that comprise the model that best predicts the DV. The predictive model is also used to assess the sensitivity of the DV to changes in the IVs. The computations are complex and generally performed using a statistical tool such as IBM's SPSS (IBM, 2023).

Sample Size Calculations for Multiple Linear Regression

For quantitative analysis that relies on sampling to make inferences about a population, a critical step is calculating the minimum a priori sample size that will enable the analyst to detect an effect, while minimizing the probability of Type I (false positive) and Type II (false negative) statistical errors. Sample size calculations for MLR are commonly performed using a software application such as G*Power (Faul et al., 2009).

For MLR, G*Power inputs are α , β , number of predictors or groups, and effect size. The statistical test used in MLR to assess the significance of the regression model is an F test. The proper statistical test is the Exact test, found in the Test family menu; then, in the adjacent Statistical test menu, the Linear multiple regression: Random model test. The same test is also available by selecting the Tests menu at the top of the app, choosing Correlation and regression, and then Linear multiple regression: Random model.

Once the proper test is selected, then the analyst must select values for tails, effect size (considering a null and alternate hypothesis), level of significance (α), power ($1 - \beta$), and number of predictors in the postulated model. The choice of α and β is fairly straightforward and represents choices that are associated with the probability of Type I and Type II errors.

The number of tails is chosen logically. The presumption is that there is no effect. The analyst wishes to detect an effect with a probability equal to power ($1 - \beta$), of at least the size of the effect. Therefore, this would be a one-tail test.

Effect size is expressed in G*Power as a hypothesis. The intent is to determine whether an effect exists, meaning that there is a specified influence (predictability) on the DV by a regression model. The null hypothesis is that there is no effect—the coefficients for all predictors are zero, which means that none of the variance in the response is due to variance in the predictors. Therefore, in G*Power, H_0 is $\rho^2 = 0$. The effect size, then, is expressed as the alternate hypothesis, H_1 .

For random model MLR, G*Power uses the exact sampling distribution of the squared multiple correlation coefficient (ρ^2) as the effect size, under the alternative

hypothesis (H1). Without prior knowledge of the population, the analyst chooses an effect size based on scholarly rationale (e.g., previous research), or from Cohen (1988) as follows:

Small effect size: $f^2 = 0.02$, translated to $\rho^2 = 0.02$

Medium effect size: $f^2 = 0.15$, translated to $\rho^2 = 0.13$

Large effect size: $f^2 = 0.35$, translated to $\rho^2 = 0.26$

The a priori sample size can then be computed, as shown in Figure 2, employing a medium effect size. Two considerations are necessary regarding sample size. The first is to ensure that the number of observations, or surveys collected, are sufficient to guarantee that the minimum sample size is obtained, even in the presence of corrupted or missing data. The second consideration relates to surveys, and is to ensure that a sufficient number of surveys are sent out, or a sufficient number of participants are identified, to allow for a realistic rate of submission of valid responses.

Two-Factor Interactions

When properly performed, MLR assesses the impact of 2FIs between predictors. Two-way interactions are calculated as the cross-product of the IVs. For example, one 2FI is $X_1 \times X_2$. 2FIs are tested in the MLR analysis and included in predictive model-building.

The Regression Model

The regression model of a real-world phenomenon is the following:

$$Y = \beta_0 + \beta_1 X_1 + \dots + \beta_k X_k + \varepsilon$$

where

Y = the response variable

the IVs (X_1 to X_k) predict Y (including 2FIs)

β_0 = the Y intercept, or the value of Y if the value of all X s = 0

β_j = the coefficient for the IV X_j ; the slope of the regression line; or the amount that Y will change per one unit change of X_j

X_j = the j th IV (which may be a 2FI)

ε = random error in Y .

Multiple Regression Hypotheses

Null Hypothesis. The null hypothesis for the overall multiple regression model (the hypothesis regarding the influence of the X s on Y) is that there is no relationship between any of the IVs and the DV, depicted mathematically as follows:

$$H_0: \beta_1 = \beta_2 = \dots = \beta_k = 0, \text{ where } \beta_j \text{ is the regression coefficient for } X_j.$$

Alternative Hypothesis. There is a relationship between the DV and at least one IV, depicted mathematically as follows:

$$H_A: \text{at least one } \beta_j \neq 0.$$

Hypotheses are tested regarding the overall model (testing the relationship between the DV and the entire set of IVs) using the F test (and its associated p value). The F test assesses whether the entire set of IVs (the regression model) predicts the DV.

Adjusted R^2 , the coefficient of determination, is a measure of the goodness-of-fit of the model. Adjusted R^2 indicates the extent to which the predictors contribute to the variance in the DV—the percentage of variation in the DV attributed to variation in the entire model composed of IVs and 2FIs.

Hypotheses related to the significance of individual IVs (the extent to which each X_j predicts Y) are tested with a t test and its associated p value. The t test is employed as part of, and throughout, the regression modeling process to evaluate the influence of each prospective IV and 2FI, and its contribution to the predictability of the regression model.

Statistical tools such as SPSS are employed to calculate the F statistic, t statistics, and adjusted R^2 as part of the MLR analysis.

Assumptions

MLR operates under several assumptions that are assessed as part of the analysis (Aczel & Sounderpandian, 2006; Warner, 2013; Williams et al., 2013). First, the IVs and DVs must be numerical in nature. The model also assumes linearity, meaning there is a straight-line relationship between the IVs and the DV. Another key assumption is independence, which requires that the values of the residuals (error terms) are independent from one another, indicating no autocorrelation. Homoscedasticity is also necessary, meaning the variance of the residuals remains constant across all values of the IVs. Additionally, the absence of multicollinearity is assumed, ensuring that the IVs are not strongly correlated with each other. The residuals should be normally distributed. Finally, the model assumes there are no influential cases, such as significant outliers, that could unduly affect the results.

Because the IVs and DVs must be numerical, categorical IVs must be converted to numerical values using dummy variables. A scatterplot assesses linearity, independence, and homoscedasticity. A Durbin-Watson test is also used to test independence. A value of 2.0 is generally considered evidence of no autocorrelation.

Variance inflation factors (VIFs) are used to assess the absence of multicollinearity. The absence of multicollinearity indicates no relationship among IVs. VIF values greater than 5 suggest the presence of multicollinearity. When

multicollinearity is present, IVs are eliminated, sequentially, starting with the variable with the highest VIF, until all VIFs are acceptable.

A normal probability plot of residuals is used to assess their normality. Outliers are checked for all variables, defined as a value ± 3 standard deviations from the mean.

Predictive Model-Building

Predictive model-building is a strategy and technique for finding the mathematical model that *best* predicts the DV—that is, the set of predictors (IVs, factors, and 2FIs) that minimizes bias and best fits the data.

The result of MLR model-building is a predictive regression equation:

$$\hat{Y} = b_0 + b_1X_1 + \dots + b_kX_k$$

where

$\hat{Y} = Y\text{-hat}$ is the predicted value of the DV

b_0 = the Y intercept for the sample

X_j = the j th predictor, including interaction terms

b_j = the slope (coefficient) for the predictor, X_j , for the sample

Note that the predictive model shown here is different from the regression model of the real-world phenomenon in that there is no error term (ε), and the DV is \hat{Y} or $Y\text{-hat}$ —the predicted value of Y based on values for the predictors, X_j . The difference between \hat{Y} and the actual value for Y for any set of values for the X s is called the *residual*.

Model-Building in Stages

Regression model-building is a systematic process that involves selecting IVs and 2FIs to construct the model that best predicts the DV. Model-building is performed in four stages. Stage 1 relies on theory, prior research, empirical findings, and subject matter expertise to identify potential IVs. Stage 2 serves as a screening stage, where regression

techniques are applied to eliminate IVs that are unlikely to be significant predictors of the DV or that fail to contribute meaningfully to the model's goodness-of-fit. In Stage 3, the remaining candidate IVs and their 2FIs are further analyzed using multiple regression techniques. Finally, in Stage 4, the results from the various regression techniques employed in Stage 3 are compared and considered as a collaborative body of evidence on which to base selection of the final predictive model.

Regression Model-Building Techniques

In Stages 2 and 3, model-building involves combined use of several techniques to select the IVs that comprise the final and best predictive model of the DV. These include *best-subsets regression* and two forms of *stepwise regression: purposeful sequential regression* and *statistical regression*. All regression techniques are employed collaboratively to generate statistical evidence to select the best predictive model, while overcoming some of the deficiencies of any one technique. The final predictive model is used to determine which among the predictors is a significant predictor of the DV; and, in sensitivity analysis, to explain how much the DV is predicted to change with a change in the value of a predictor.

Best-Subsets Regression

This technique assesses all the IVs in the data set remaining after the initial check of assumptions, and evaluates *all* possible regression models (i.e., all combinations of IVs). Best-subsets regression is accomplished using commercial software (e.g., SPSS), because of the potential need for assessment of a large number of models. The computations provide a list of all possible models along with their adjusted R^2 and

Mallows' C_p . This enables the analyst to identify the best model based on a combination of criteria, including parsimony (the simplest model—fewest terms—meeting the evaluation criteria). Best-subsets regression model-building is often used as a screening device, to reduce the large number of possible regression models to consider and evaluate (PSU, 2018). In addition, it is used in conjunction with stepwise regression to produce evidence for selecting a final predictive model.

Stepwise Regression

Stepwise regression is a model-building approach that examines a series of regression models, adding or eliminating candidate predictors one-by-one after each regression run, to consider the influence of individual IVs and their contribution to the strength of the overall regression model (based on significance [p value] and adjusted R^2). The intent is to find a model that best predicts the DV, according to a set of criteria including adjusted R^2 .

Because the stepwise approach begins with either no predictors and then adds them individually or begins with all candidate predictors and eliminates them individually, it may not evaluate every possible model (every combination of candidate predictors). In addition, models developed using a stepwise approach may consist of combinations of predictors heavily dependent on the order in which they are added or eliminated. For that reason, it is imperative not to rely on any one stepwise regression technique; instead, it is better to use the evidence obtained from best-subsets regression, multiple stepwise approaches, and sequential regression to develop and select a final predictive regression model.

Statistical Regression (Automated Stepwise)

Commercial software programs, such as SPSS, provide automated routines for executing stepwise regression (IBM, 2023), often referred to as statistical regression or data-driven regression (Warner, 2013). In SPSS, these routines include stepwise, backward elimination, and forward selection.

In stepwise regression at each step, the IV not in the equation that has the smallest p value is entered, if that probability is sufficiently small. Variables already in the regression equation are removed if their p value becomes sufficiently large. The method terminates when no more variables are eligible for inclusion or removal.

In backward elimination, all IVs are entered into the equation and then sequentially removed. The IV with the smallest partial correlation with the DV is considered first for removal. If it meets the criterion for elimination, it is removed. After the first IV is removed, the IV remaining in the equation with the smallest partial correlation is considered next. The procedure stops when there are no IVs in the equation that satisfy the removal criteria.

In forward selection, IVs are sequentially entered into the model. The first IV considered for entry into the equation is the one with the largest positive or negative partial correlation with the DV. This IV is entered into the equation only if it satisfies the criterion for entry. If the first IV is entered, the IV not in the equation that has the largest partial correlation is considered next. The procedure stops when there are no IVs that meet the entry criterion..

Purposeful Sequential Regression (Manual Stepwise)

A second stepwise regression approach is called purposeful sequential regression, variously called hierarchical, simultaneous, standard, or user-determined regression (Warner, 2013). This technique employs a series of manual, individual regression analyses using the SPSS Enter method—essentially stepwise regression without using the automated multi-run routines in SPSS.

Purposeful sequential regression begins with a candidate model—all candidate IVs are entered as a block. Then, using the Enter method, SPSS performs the MLR calculations to generate a regression model of the selected IVs, and provides the statistical outcomes needed to evaluate the first model, and each subsequent model assessed. Considering the significance of each predictor (p value) and measures of goodness-of-fit (e.g., adjusted R^2), the analyst decides which IVs to add or eliminate after each run. The process progresses incrementally, run to run, until the analyst believes the best model has been found.

The process is also iterative, in the sense that the analyst may remove and then add back various predictors based on the effect on adjusted R^2 and based on knowledge obtained from best-subsets regression and statistical regression. In other words, an IV entered into the model at an early stage may be removed after other IVs are considered (Levine et al., 2011). The converse is also possible—IVs removed early may be considered for re-entry at a later stage.

Research Questions and Hypotheses

RQ1: Is there a relationship among the constructs attitudes, social norms, perceived behavior control, and perception of government authority and tax evasion?

H1_o: There are no significant predictors of tax evasion among attitudes, social norms, perceived behavior control, and perception of government authority.

H1_a: There is at least one significant predictor of tax evasion among attitudes, social norms, perceived behavior control, and perception of government authority.

RQ2: Is there a relationship among the constructs attitudes, social norms, perceived behavior control, and perception of government authority and tax avoidance?

H2_o: There are no significant predictors of tax avoidance among attitudes, social norms, perceived behavior control, and perception of government authority.

H2_a: There is at least one significant predictor of tax avoidance among attitudes, social norms, perceived behavior control, and perception of government authority.

RQ3: Is there a relationship between gender, age, ethnicity, business annual income, and household income and tax evasion?

H3_o: There are no significant predictors of tax evasion among gender, age, ethnicity, business annual income, and household income.

H3_a: There is at least one significant predictor of tax evasion among gender, age, ethnicity, business annual income, and household income.

RQ4: Is there a relationship between gender, age, ethnicity, business annual income, and household income and tax avoidance?

H₀: There are no significant predictors of tax avoidance among gender, age, ethnicity, business annual income, and household income.

H_a: There is at least one significant predictor of tax avoidance among gender, age, ethnicity, business annual income, and household income.

Threats to Validity

External validity addresses problems with sampling, while construct and internal validity address problems of operational definition and relationships between variables (Balnaves & Caputi, 2010). There is a fourth validity, referred to as statistical validity, which addresses the appropriate use of statistical methods to assess the relationships among study variables. Researchers must control for measuring what is intended to be measured, ensure measurements are done appropriately, and employ sampling techniques that maximize external validity. The sections below will examine threats to internal, external, and construct validity.

External Validity

The external threats to validity are sampling bias, history bias, and hypothesis guessing (Bhandari, 2020). Sampling bias is countered by ensuring that every prospect in the sampling frame meets the requirements of being a small business owner with annual revenue between \$0 and \$500K+ who conducts business only in the Dekalb County, Atlanta, Georgia area. According to Bhandari (2020), probability sampling reduces sampling bias by making sure everyone in a population has an equal chance of being selected for a study sample. In my study, the systematic random sampling technique was used. History bias could have threatened external validity because a participant may have

heard or become exposed to an unexpected tax event that had nothing to do with the study, but had an influence on how survey questions were answered. Replication assisted in countering this effect. Though not in the same geographical area, like studies have been conducted that help increase generalizability and counter history bias. Hypothesis guessing occurs when participants anticipate the desired outcome of the study and attempt to align responses to the believed outcome rather than answering the questions truthfully. My cover letter and informed consent form served to mitigate this threat by clearly disclosing the intentions of the study. Two other threats to external validity exist. They are aptitude treatment and situation effect. Aptitude treatment is when interactions between characteristics of a group and individual variables together influence the DV. In other words, a participant's tax aptitude coupled with each IV may skew potential relationships with DVs. To counter this effect, the survey instrument questions only required minimal knowledge of taxation. The *situation effect* is related to factors such as time of day or night, location, measurement error, and recruitment techniques and may also limit generalizability of the findings. Therefore, I have analyzed surveys with like characteristics, such as time of survey completion and other characteristics that allowed survey grouping, to assess differences. According to researchers must specifically delineate the extent to which the findings are relevant to individuals, treatments, outcomes, and settings beyond the ones studied (Matthay & Glymour, 2020).

Internal Validity

Internal validity measures the viability of research, which helps researchers determine the accuracy and reliability of outcome data and research conclusions. Urban

and van-Eden (2014) suggested that the ability to demonstrate cause and effect between at least two variables defines internal validity. The threats to internal validity in my study are attrition and testing. Attrition bias is a cognitive bias relative to errors made when evaluating behavior patterns. Attrition can lead to inaccurate results, which may then threaten internal validity. Attrition occurs when 20% of participants drop out or provide unsuitable data. I countered attrition by offering a cup of Starbucks coffee as an incentive and emphasizing the importance of the study to participants. Testing must be accurately performed. Multiple regression studies have seven assumptions that must be met before outcomes are considered valid and reliable. In my study, I tested for these assumptions to ensure all assumptions were met. My study included survey questions relevant to the IVs and DVs that provided the data necessary to address the research questions. I also used surveys that had been tested for internal, external, and construct validity and were found to be valid and reliable. As a result of the extensive testing and steps taken by Benk et al. (2011) and Kirchler (2010), the creators of survey instruments I used, to confirm reliability and validity of the measures, related threats have been mitigated.

Construct Validity

The variables in this study were specifically defined by the research instruments used to conduct the survey (Benk et al., 2011; Kirchler, 2010). Construct validity is the extent to which surveys developed from theory measure what is intended to be measured based on the theory. The surveys used in this study were established via previous research through which construct validity was confirmed.

Ethical Procedures

I used ethical considerations to safeguard the sanctity of this work (Loeb, 1971). All required permissions were secured from the Walden University Institutional Review Board (IRB). Targeted respondents were voluntarily recruited before surveys were administered. The three principles of the Belmont report, which are respect of persons, beneficence, and justice, were followed and confidentiality of participant identity and data were ensured by strict adherence to Walden's policies regarding ethical compliance in social research ("Read the Belmont Report," 1979; "Academic Guides: Research Ethics: Walden Research Ethics and Compliance Policies," n.d.). Survey results were aggregated and reported as grouped data. All survey respondent information was properly secured and will be stored for at least 5 years. Participants were able to withdraw from the study at any time.

There are five additional guiding principles for ethical research (Emmanuel et al., 2000); these principles include social and clinical value, (i.e., every study is conducted to answer a specific question); scientific validity, (i.e., a study should be conducted using proper scientific methodology); fair subject selection, (i.e., the basis for recruiting for a study are the scientific goals of that study); favorable risk-benefit ratio, (i.e., lack of clarity regarding study outcomes is inherent); independent review, (i.e., peer reviews should be performed); and informed consent, (i.e., public participation is strictly voluntary). All the ethical considerations were in accordance with the Walden University code of ethics and the IRB.

Summary

In this chapter, I outlined the research methodology employed in this quantitative correlational, nonexperimental study, which was designed to explore the relationships between constructs of the TPB—attitudes, social norms, and PBC—and tax evasion and tax avoidance behaviors of U.S. small business owners. The IVs included TPB attitudes, social norms, and perceived behavior control, while the DVs were measures of tax avoidance and tax evasion culture.

I provided a detailed discussion of the research design, justifying the use of a correlational approach to examine these relationships without manipulating variables. In the methodology section, I specified the target population, sampling strategy, and criteria for participant selection, which ensured that the sample represented Atlanta, Georgia small business owners. I also explained procedures for participation, including recruitment strategies and informed consent protocols.

In the instrumentation section, I detailed the validated tools used to measure TPB constructs and tax-related behaviors, addressing their reliability and validity. I described the data analysis plan, including the statistical techniques used to evaluate correlations and interpret findings relative to the research questions. I also discussed potential threats to validity, including internal, external, and statistical validity risks, as well as measures to mitigate these threats. Finally, via discussion of ethical procedures, I emphasized compliance with ethical research standards, highlighting participant confidentiality, data security, and adherence to the Walden University IRB requirements. Through these elements, I have provided a comprehensive framework for investigating the relationship

between attitude, social norms, and perceived behavior control, and tax evasion and tax avoidance behaviors among small business owners.

Chapter 4: Results

The purpose of this quantitative, correlational, non-experimental study was to explore the relationship between various measures of the TPB attitudes, social factors, social norms, behavior control, and behaviors of U.S. entrepreneurs and small business owners pertaining to taxation (the IVs); and measures of tax avoidance and tax evasion culture (the DVs). The following hypotheses and research questions were examined.

RQ1: Is there a relationship among the constructs attitudes, social norms, perceived behavior control, and perception of government authority and tax evasion?

Hypothesis 1

H_{1o}: There are no significant predictors of tax evasion among attitudes, social norms, perceived behavior control, and perception of government authority.

H_{1a}: There is at least one significant predictor of tax evasion among attitudes, social norms, perceived behavior control, and perception of government authority.

RQ2: Is there a relationship among the constructs attitudes, social norms, perceived behavior control, and perception of government authority and tax avoidance?

Hypothesis 2

H_{2o}: There are no significant predictors of tax avoidance among attitudes, social norms, perceived behavior control, and perception of government authority.

H_{2a}: There is at least one significant predictor of tax avoidance among attitudes, social norms, perceived behavior control, and perception of government authority.

RQ3: Is there a relationship between gender, age, ethnicity, business annual income, and household income and tax evasion?

Hypothesis 3

H3_o: There are no significant predictors of tax evasion among gender, age, ethnicity, business annual income, and household income.

H3_a: There is at least one significant predictor of tax evasion among gender, age, ethnicity, business annual income, and household income.

RQ4: Is there a relationship between gender, age, ethnicity, business annual income, and household income and tax avoidance?

Hypothesis 4

H4_o: There are no significant predictors of tax avoidance among gender, age, ethnicity, business annual income, and household income.

H4_a: There is at least one significant predictor of tax avoidance among gender, age, ethnicity, business annual income, and household income.

What follows is a description of the data collection process, including the collection of demographic information for use in the calculation of frequencies and percentages for categorical analysis. A description of the testing of assumptions and the outcome of statistical testing is also provided. The chapter ends with a synopsis of the study's results.

Data Collection

Based on cost and sample size requirements, I used SurveyMonkey.com to obtain participants for this study. The SurveyMonkey platform was used to send questionnaires to a predetermined number of potential participants. For example, if there is a need for 150 completed questionnaires, 75 men and 75 women, SurveyMonkey would send survey

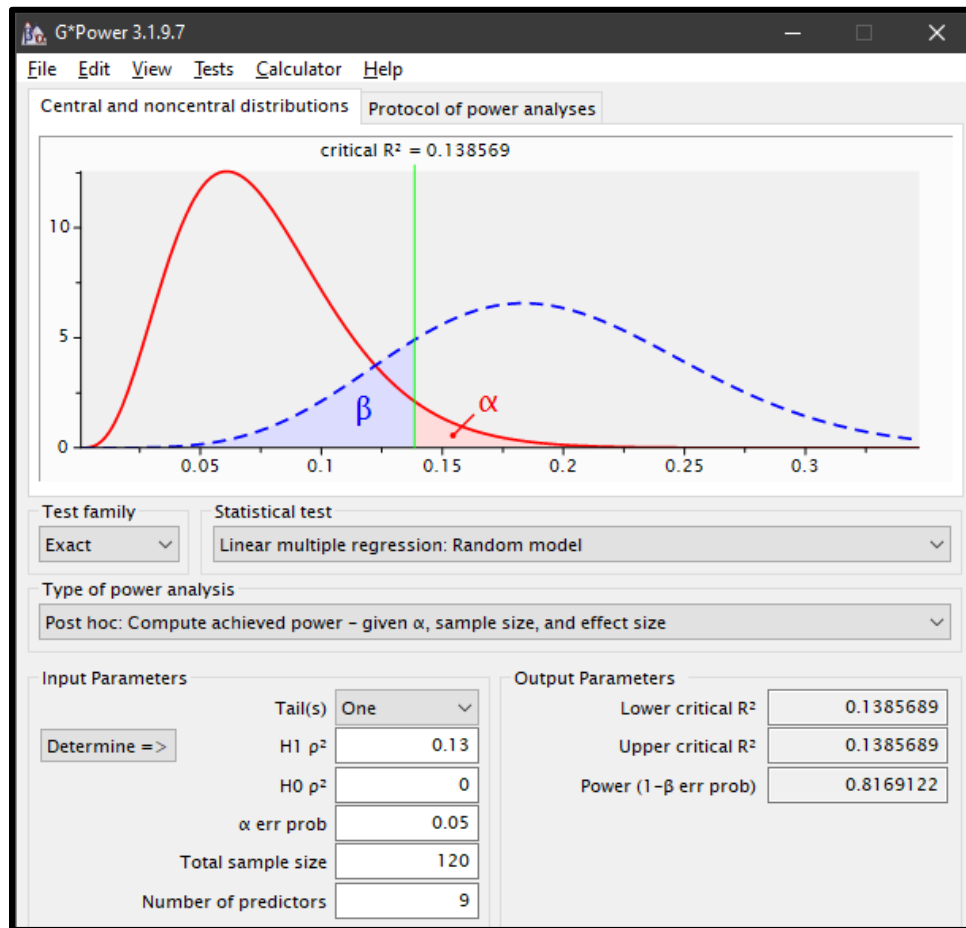
completion requests to that exact number of potential participants. SurveyMonkey does not guarantee responses. I collected survey data from a sample of $n = 121$ participants using SurveyMonkey. One questionnaire was incomplete. The incomplete questionnaire was discarded, resulting in a sample of $n = 120$.

Six categorical demographic variables were originally intended to qualify the candidates for stratified sampling, characterize the sample, and address research questions 3 and 4. These variables were transformed into an appropriate number of dummy variables: gender: two values, ethnicity: eight values, age: four values, business annual income: three values, household income: nine values, exact statistics and associated probability values, confidence intervals around the statistics, as appropriate, and effect sizes, as appropriate.

My original intention was to divide respondents into two strata, with one stratum having two values and the other having three values, each based on demographic factors. I did not obtain the minimum number of completed surveys required for each of the six groups, although additional opportunities for acquiring more respondents by broadening the representative geographical area were available through the SurveyMonkey platform. My study was limited to the metro Atlanta, Georgia area, which resulted in low response rates for some of the groups I intended to include in my study. After weighing the cost and logistics of additional data collection, no further invitations were sent to increase the sample size.

Given the actual sample size, I conducted a post hoc power analysis using the same parameters I used in the a priori sample size calculation (Figure 3) using G*Power

(Faul et al., 2009). The overall statistical power ($1 - \beta$) was 81.7%, which was adequate to guard against a Type II statistical error (false negative—failing to detect a medium-sized effect in the analysis). However, the consequence of not achieving the full minimum sample size of $n = 120$, with 20 participants per group, was that some combinations of variable values in the demographic analysis were too low to be included in the analysis. Additionally, statistical power and confidence were diminished by unequal and low sample sizes per group. Finally, the skewed distribution of participants across the strata may have led to over- or under-sampling bias in the results of the demographic analysis. However, in the analyses related to RQs 1 and 2, the sample size was adequate to detect effects at a probability of 81.7% (See Figure 3).

Figure 3*Post Hoc Power Analysis***Table 3***Income by Gender*

	Gender		Total
	Male	Female	
Revenue \$0–100k	26	8	34
\$101–500k	23	13	36
\$501k+	30	20	50
Total	79	41	120

Study Results

There were 79 (65.8%) males and 41 (34.1%) females included in the sample. The age range for participants was 18 to 80 years, with 67 (59.9%) of participants between 30 and 44 years of age. The household income ranged between \$10,000 and \$200,000, with 28 (23%) of participants earning between \$100,000 and \$124,000 annually. The ethnicity of participants included African American, White/Caucasian, Eastern/Indian, Eastern/Asian, Native American, Hispanic, and Mixed Race; 88 (73%) of participants were White/Caucasian. Tables 4 through 7 describe this information in greater detail.

Table 4

Age of Participants

Age	Frequency	Percent
18–29	12	10
30–44	67	55.9
45–60	29	24.1
> 60	12	10
Total	120	100

Table 5*Household Income of Participants*

Household income	Frequency	Percent
10k–24k	6	0.05
25k–49k	8	0.07
50k–74k	7	0.06
75k–99k	11	0.09
100k–124k	28	0.23
125k–149k	18	0.15
150k–174k	12	0.10
175k–199k	17	0.14
> 200k	13	0.11
Total	120	100.00

Table 6*Ethnicity of Participants*

Ethnicity	Frequency	Percent
African American	12	0.05
White-Caucasian	88	0.73
Hispanic	8	0.07
Asian-Indian	7	0.06
Asian-Eastern	2	0.02
Native American	1	0.01
Mixed Race	2	0.02
Total	120	100.00

Research Question 1: DV = Tax Evasion Culture (TAXE)***Testing of Assumptions***

I ran an initial standard regression analysis with the full set of the IVs, using the SPSS *enter* method. I then tested the assumptions of linear regression (Aczel & Sounderpandian, 2006; Warner, 2013; Williams et al., 013). All IVs were numerical variables. There was a continuous, numerical DV (TAXE) . Scatterplots showed no obvious nonlinear relationships or patterns between the IVs and the DV. An example of a typical depiction of the relationship, TAXE versus TAXC, is shown in Figure 4. The Durbin-Watson statistic for the initial analysis with nine IVs was 1.926, indicating no autocorrelation. I checked for multicollinearity; all VIFs were less than 4.33, indicating no multicollinearity. Scatterplots of unstandardized residuals versus IV values were used to check for homoscedasticity, and no issues were discovered. A representative scatterplot is depicted in Figure 5. The normal probability plot of post hoc residuals for TAXE in Figure 6 shows no significant departure from normality.

Influential cases (outliers) were considered for all variables, defined as a value ± 3 standard deviations from the mean. However, the values of all variables were limited in range by Likert scales. Also, the values represented accurate, true values, and not anomalies, and were considered relevant to the analysis. In actuality, no values in the data set for the numerical variables were outliers. No violations of the assumptions of linear regression were found, and no transformations of the data were required to address violations of the assumptions.

Figure 4

Scatterplot of TAXE versus TAXC

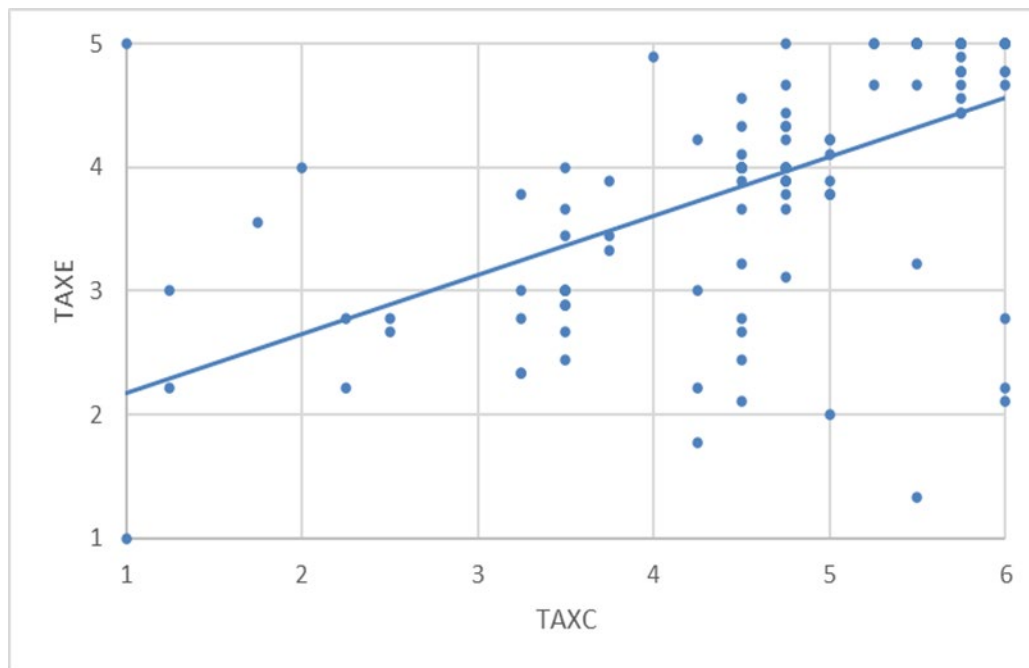
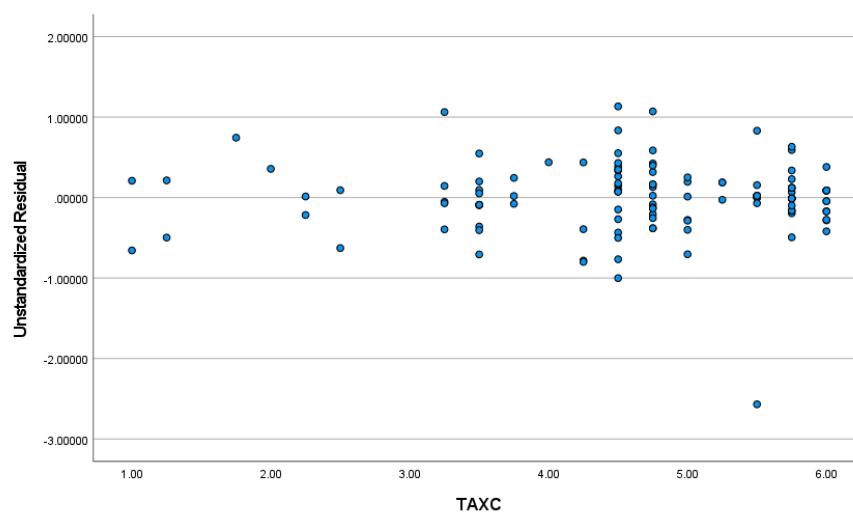


Figure 5

Scatterplot of Unstandardized Residuals for TAXE Versus TAXC

**Figure 6**

Normal Probability Plot of Unstandardized Residuals for TAXE

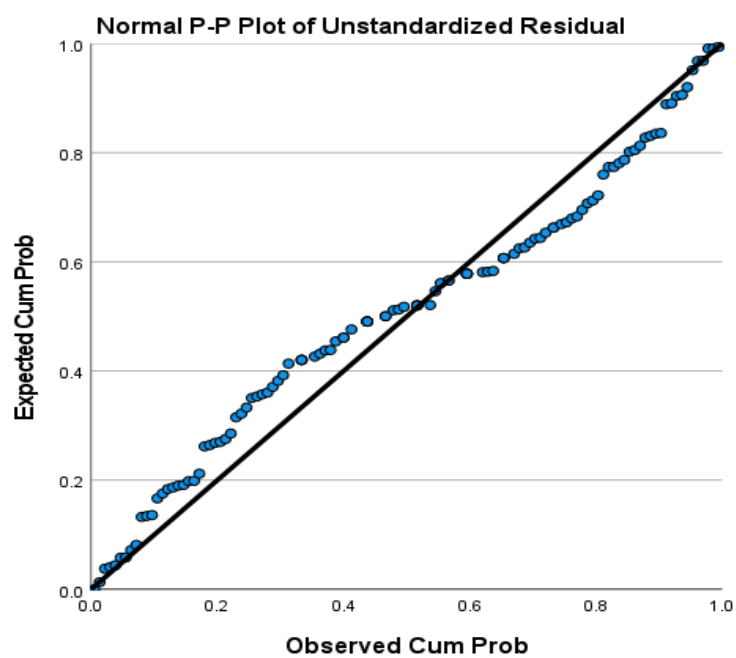


Table 7*Study Constructs, Independent Variables, Sub-Constructs, and Item Associations*

Construct	Variable	Item
Attitude (ATT)	Vertical equity (VERT) Horizontal equity (HORI) Exchange equity (EXCH)	Question 2
Social norms (SN)	Social norms (SOCl) Moral norms (MORA)	
Perceived behavior control (PBC)	Detection risk (DETE) Penalty magnitude (PENA) Tax compliance intentions (TAXC)	Two questions Sum of two questions
Perception of Government/Authorities (GOVT)	Perception of Government/Authorities (GOVT)	Two questions

Data Analysis

The analysis was performed using MLR to assess the relationship of TAXE to the nine IVs. In Stage 3, I conducted five SPSS runs using best-subsets regression, statistical regression, and purposeful sequential regression to screen for IVs that were clearly not significant influences on TAXE. In Stage 4, I added the 2FIs for the remaining IVs with the objective of developing the best and final predictive model of TAXE. In this stage, I executed 19 SPSS runs with an iterative mix of best-subsets regression, statistical regression, and purposeful sequential regression. I then compared the candidate IVs, 2FIs, and models using the cumulative evidence from the four stages and their segments in the model-building process, and selected a final model based on the variable inclusion criteria (adjusted R^2 , p value [Sig.], and part correlation).

The final predictive model for TAXE is depicted in Table 8. The F statistic was 37.957 with a p value $< .001$. I rejected the null hypothesis and concluded that at least one coefficient $\neq 0$. The model was a statistically significant predictor of TAXE.

Regarding the IVs in the final model, I used individual *t* tests (*p* values, or Sig.); IV contribution to goodness-of-fit (adjusted R^2) was also a criterion for inclusion in the model. Three IVs (MORA, PENA, and GOVT) and nine 2FIs contributed positively to model goodness-of-fit (adjusted R^2).

The final predictive model is expressed in terms of a regression equation with the computed unstandardized coefficients for IVs and 2FIs from the SPSS coefficients table (Table 8):

$$\hat{Y} = b_o + b_1 X_1 + \dots + b_k X_k$$

where

\hat{Y} = predicted value for TAXE,

k = the number of predictors in the model (IVs or 2FIs),

b_o = the intercept or constant of the model,

b_i = the unstandardized coefficient for X_i , and

X_i = the *i*th IV.

Table 8

SPSS Coefficients Table: Final Predictive Model for TAXE

Model	Unstandardized coeff		Stdzd coeff	t	Sig.	Correlations		
	B	Std. Error	Beta			Zero- order	Partial	Part
1 (Constant)	-0.028	0.472		-0.060	0.953			
MORA	-0.526	0.140	-0.510	-3.751	<.001	0.700	-0.340	-0.164
PENA	1.305	0.203	1.221	6.432	<.001	0.707	0.526	0.281
GOVT	1.113	0.447	0.538	2.490	0.014	-0.022	0.233	0.109
HOR*EXCH	-0.138	0.048	-1.099	-2.897	0.005	0.738	-0.269	-0.126
HOR*SOCI	0.153	0.031	1.091	4.995	<.001	0.795	0.433	0.218
HOR*TAXC	0.153	0.035	1.273	4.381	<.001	0.743	0.388	0.191
HOR*GOVT	-0.566	0.126	-1.196	-4.508	<.001	0.236	-0.398	-0.197
EXC*TAXC	0.139	0.041	1.228	3.404	<.001	0.706	0.311	0.149
SOC*GOVT	-0.611	0.150	-1.253	-4.060	<.001	0.225	-0.364	-0.177
MOR*GOVT	0.928	0.177	1.895	5.239	<.001	0.220	0.450	0.229
PEN*TAXC	-0.265	0.045	-2.078	-5.943	<.001	0.683	-0.496	-0.259

The adjusted R^2 of the final predictive model indicates, approximately, the percentage of the variation in the DV that can be attributed to the model. It also indicates that $(1 - \text{adjusted } R^2)$ % of the variation in the DV is explained by other causes, influences, and predictors. The TAXE model adjusted $R^2 = .774$. The model was a strong predictor of TAXE.

Each of the coefficients (B) in the final predictive model indicates the sensitivity of the DV to changes in the respective IV. A one-unit change in an IV would predict a change in the DV equal to the value of the coefficient for that IV. For example, a one-unit change in PENA would predict a change in TAXE equal to 1.305.

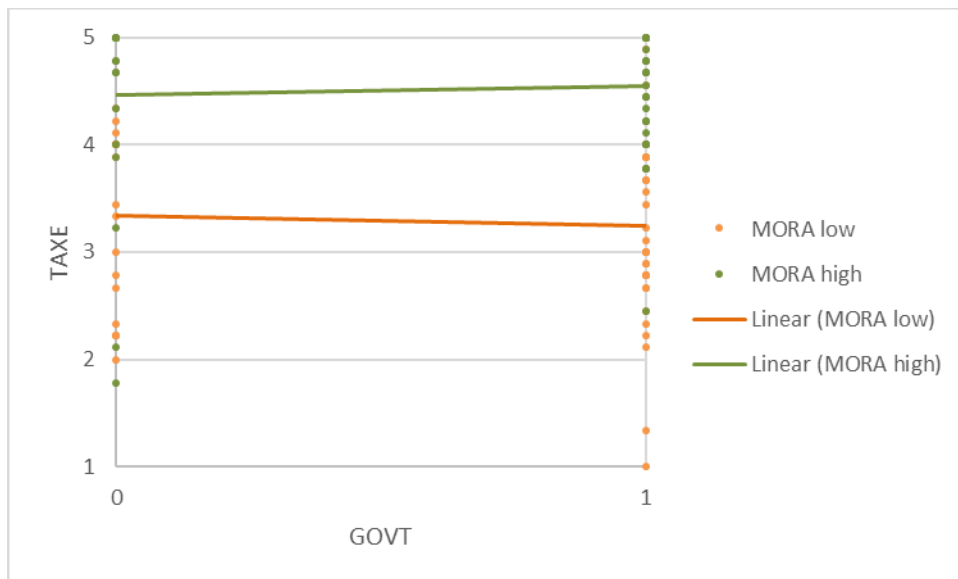
The standardized coefficients from the coefficients table (β) indicate the relative influence of each IV on the DV. These are coefficients normalized by each variable's standard deviation. The higher the standardized coefficient, the more the IV influences the DV relative to other IVs. It is a way to identify which IVs appear to be the most influential. Using the coefficients table, a value for TAXE can be predicted for any combination of values for the predictors. The graphical analysis shown in Figure 4 (TAXE versus TAXC) depicts the influence of each IV on TAXE.

Generally, 2FIs indicate that the influence of one IV on the DV depends on (is moderated by) the value of a second IV. The claim that one IV influences the DV must be clarified by the moderation of the second IV. There were eight 2FIs in the final model. Among these were three kinds of 2FI. The first was an interaction between two significant IV predictors. In the final model, there was a significant 2FI between the two individually significant IVs, MORA and GOVT. Figure 7 shows that when MORA is

low, TAXE decreases as GOVT changes in value from 0 to 1. When MORA is high, TAXE increases as GOVT varies from 0 to 1.

Figure 7

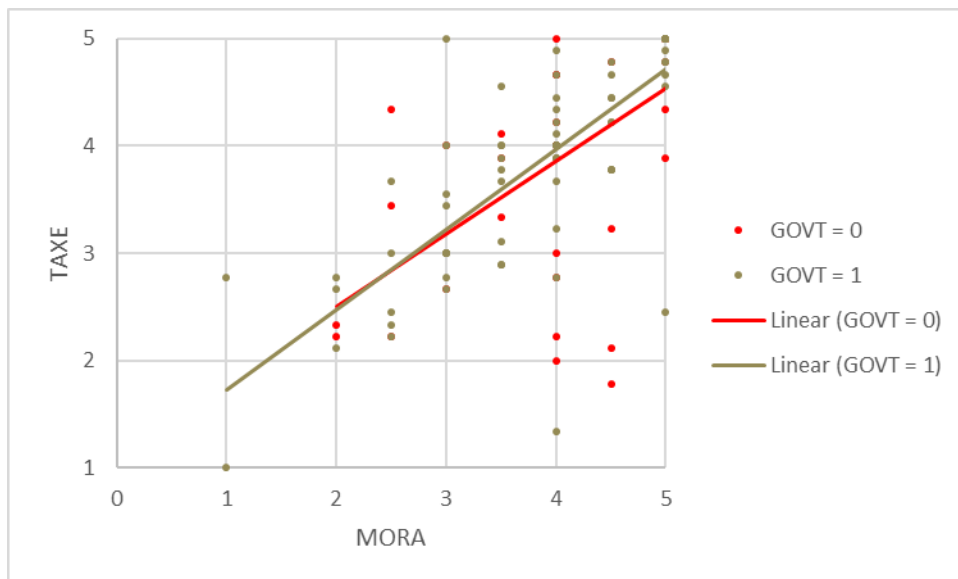
2FI Between MORA and GOVT (View 1)



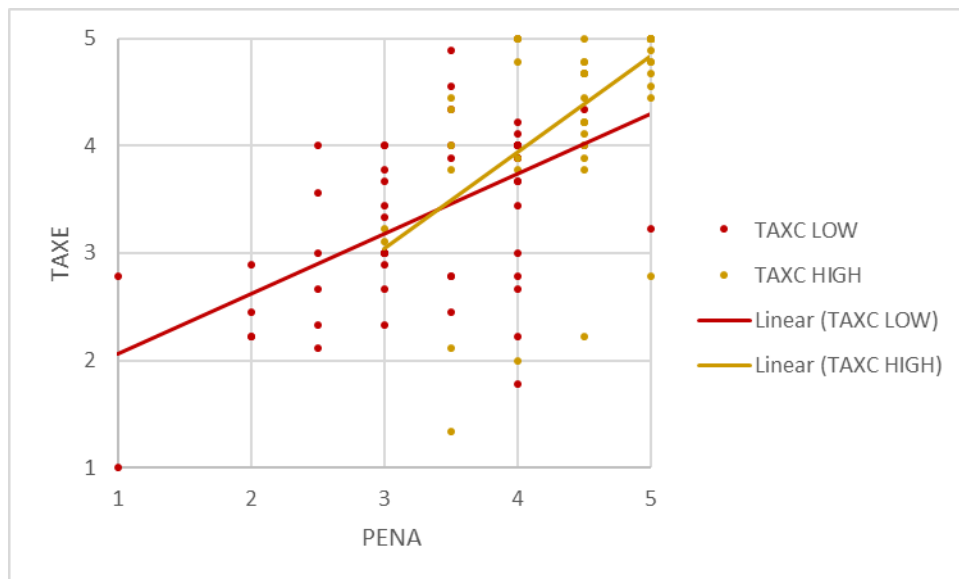
A second view of the 2FI between MORA and GOVT is depicted in Figure 10, which shows that TAXE increases with increases in MORA for both values of GOVT (0 and 1). However, the increase in TAXE (slope) is slightly greater when GOVT = 1 compared to when GOVT = 0. In both views, the claim that TAXE is influenced by either MORA or GOVT must be qualified by the additional statement that that relationship changes depending on the value of the other IV.

Figure 8

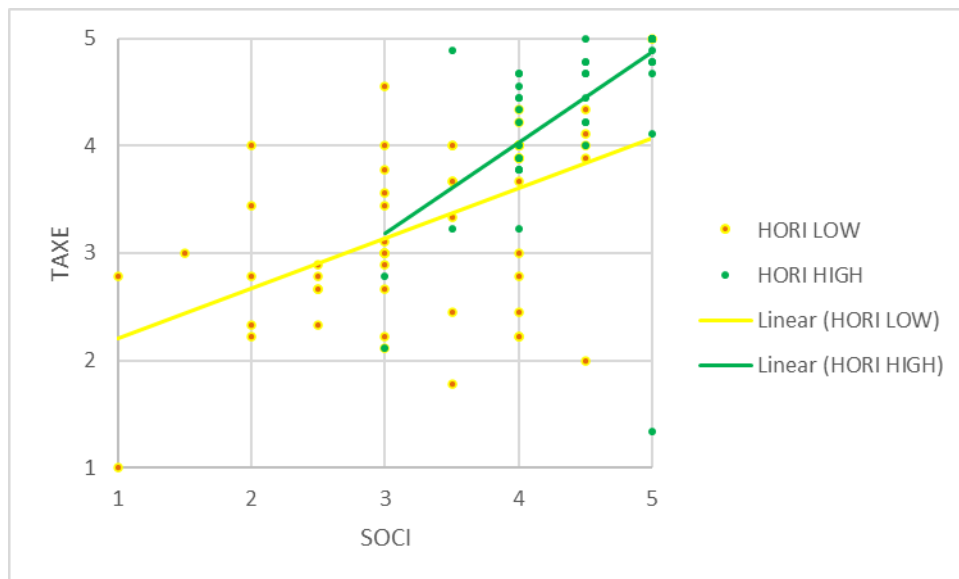
2FI Between MORA and GOVT (View 2)



The second type of 2FI is between one significant IV and a second IV that does not have a significant influence on the DV by itself. There were three 2FIs of this type: HORI*GOVT, SOCI*GOVT, and PENA*TAXC. These 2FIs indicated that the influence on TAXE of one of the significant IVs was moderated by the presence of another IV. For example, Figure 11 shows that the relationship between PENA and TAXE was moderated by TAXC. When TAXC is high, the influence by PENA on TAXE (slope) is greater than when TAXC is low.

Figure 9*2FI Between TAXC and PENA*

The third type of 2FI is between two IVs, neither of which is a significant predictor of the DV by itself. Instead, it is the combination of two individually insignificant IVs which exerts a significant influence on the DV when combined. There were four 2FIs of this kind: HORI*EXCH, HORI*SOCI, HORI*TAXC, and EXCH*TAXC. For example, as depicted in Figure 12, the combination of values of HORI and SOCI influence the value of TAXE. TAXE is highest when both HORI and SOCI are high. TAXE is lowest with both SOCI and HORI are low.

Figure 10*2FI Between HORI and SOCI****Findings for Research Question 1***

RQ1 was focused on the relationship between the primary IVs and the DV TAXE. The hypotheses for RQ1 were tested and the RQ was answered using a single analysis using MLR and predictive model-building. The MLR null hypothesis was that none of the IVs was a significant predictor of TAXE (all had coefficients = 0). The alternate hypothesis was that at least one IV had a coefficient $\neq 0$ and, therefore, was a significant predictor of TAXE. The null hypothesis was tested and rejected using an F test. There was evidence that the alternate hypothesis was true: at least one of the IVs was a significant predictor of the DV.

Among the IVs analyzed, three were found to be significant predictors of TAXE: MORA, PENA, and GOVT. None of the other IVs was found to be a significant predictor of TAXE by itself. In addition, there were eight significant 2FIs. These indicated that

SOCI and HORI moderated the influence of GOVT and PENA. TAXC moderated the influence of PENA, even though none of these moderator variables was a significant predictor by itself. Also, four 2FIs indicated that there were combinations of predictors that significantly influenced TAXE: HORI and EXCH, HORI and SOCI, HORI and TAXC, and EXCH and TAXC.

Research Question 2: DV = Tax Avoidance Culture (TAXA)

Initial Data Analysis

In Excel, I computed descriptive statistics for each variable (minimum, maximum, range, mean, and standard deviation). These computations are shown in Appendix D.

Testing of Assumptions

I ran an initial standard regression analysis with the full set of the IVs, using the SPSS *enter* method. I then tested the assumptions of linear regression (Aczel & Sounderpandian, 2006; Warner, 2013; Williams et al., 013). All IVs were numerical variables. There was a continuous, numerical DV (TAXA). Scatterplots showed no obvious nonlinear relationships or patterns between the IVs and the DV. Example of a typical depiction of the relationship, TAXA versus TAXC, is shown in Figure 11. The Durbin-Watson statistic for the initial analysis with nine IVs was 1.987 indicating no autocorrelation. I checked for multicollinearity—all VIFs were less than 4.33 indicating no multicollinearity. Scatterplots of unstandardized residuals versus IV values were used to check for homoscedasticity, and no issues discovered. A representative scatterplot is depicted in Figure 12. The normal probability plot of post hoc residuals for TAXE in Figure 13 shows no significant departure from normality.

Influential cases (outliers) were considered for all variables, defined as a value ± 3 standard deviations from the mean. However, the values of all variables were limited in range by Likert scales. Also, the values represented accurate, true values, and not anomalies; and considered relevant to the analysis. In actuality, no values in the data set for the numerical variables were outliers. No violations of the assumptions of linear regression were found, and no transformations of the data were required to address violations of the assumptions.

Figure 11

Scatterplot of TAXA Versus TAXC

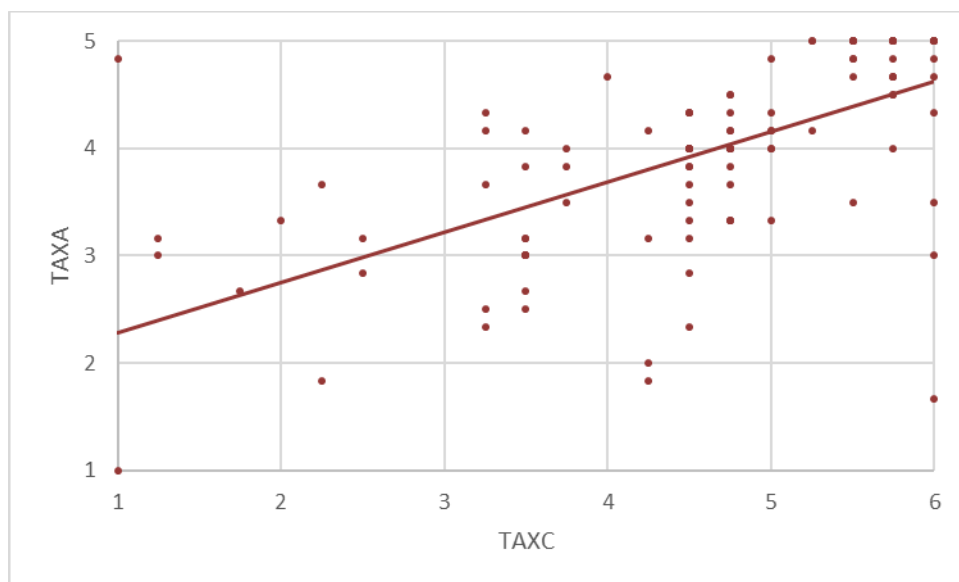
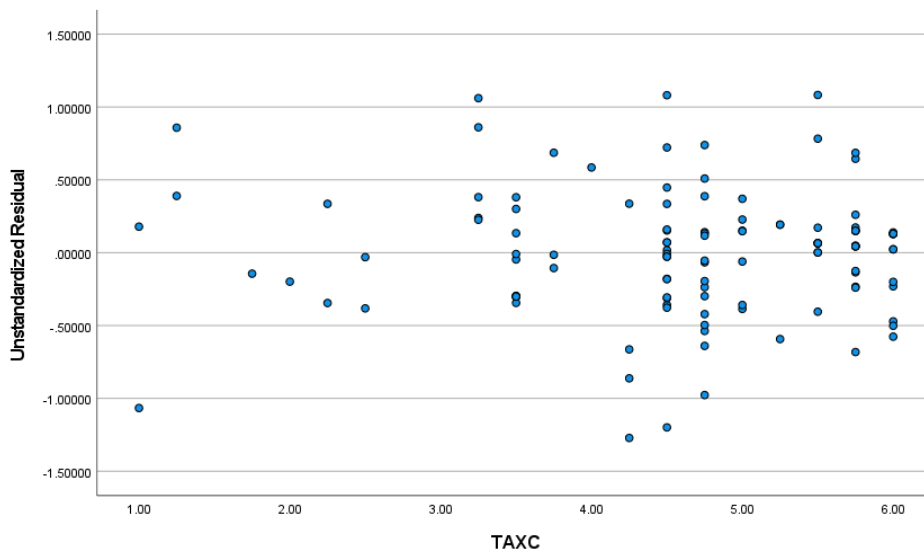
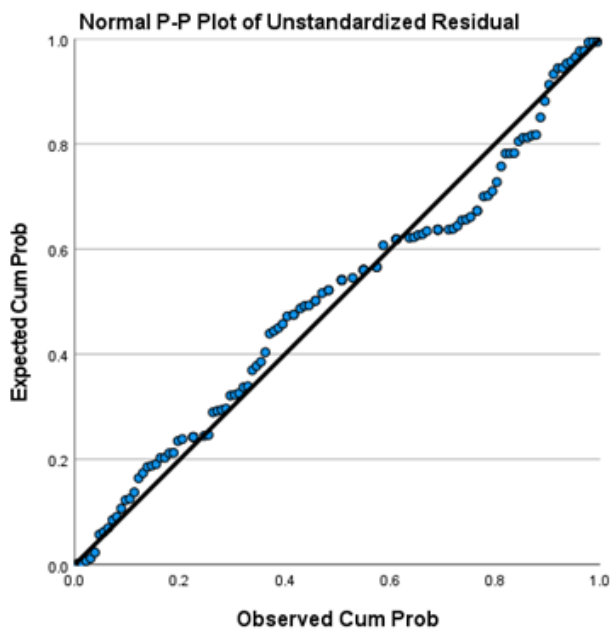


Figure 12

Scatterplot of Unstandardized Residuals for TAXA Versus TAXC

**Figure 13**

Normal Probability Plot of Unstandardized Residuals for TAXA



Analysis

The analysis was performed using MLR to assess the relationship of TAXA to the nine IVs. In Stage 2, I made 10 SPSS runs using best-subsets regression, statistical regression, and purposeful sequential regression to screen for IVs that did not have a significant influence on TAXA. In Stage 3, I added the 2FIs for the remaining IVs with the objective of developing the best and final predictive model of TAXA. In this stage, I executed 19 SPSS runs with an iterative mix of best-subsets regression, statistical regression, and purposeful sequential regression. I then compared the candidate IVs, 2FIs, and models using the cumulative evidence from the four stages and their segments in the model-building process, and selected a final model based on the variable inclusion criteria (adjusted R^2 , p value, and part correlation).

The final predictive model for TAXA is depicted in Table 9. The F statistic was 39.938 with a p value $< .001$. I rejected the null hypothesis and concluded that at least one coefficient $\neq 0$. The model was a statistically significant predictor of TAXA. Regarding the IVs in the final model, I used the individual t tests (p values), but emphasized that their contribution to goodness-of-fit (adjusted R^2) was also a criterion for inclusion in the model.

Two IVs (EXCH and GOVT) and seven 2FIs contributed positively to model goodness-of-fit (adjusted R^2). During Stages 3 and 4, using the variable inclusion criterion of .20, I retained marginal terms if their elimination decreased model goodness-of-fit. I fine-tuned the model in Stage 4, using a variable inclusion criterion of .05.

The final predictive model can be expressed in terms of a regression equation with the computed unstandardized coefficients for IVs and 2FIs from the SPSS coefficients table:

$$\hat{Y} = b_o + b_1 X_1 + \dots + b_k X_k$$

where

\hat{Y} = predicted value for TAXE,
 k = the number of predictors in the model (IVs or 2FIs),
 b_o = the intercept or constant of the model,
 b_i = the unstandardized coefficient for X_i , and
 X_i = the i th IV.

The adjusted R^2 of the final predictive model indicates the approximate percentage of the variation in the DV that can be attributed to the model. It also indicates that $(1 - \text{adjusted } R^2)$ % of the variation in the DV is explained by other causes, influences, and predictors. The TAXA model adjusted $R^2 = .747$. Therefore, the model is a strong predictor of TAXA.

Table 9

SPSS Coefficients Table: Final Predictive Model for TAXA

Model	Unstandardized coeff		Stdzd coeff			Correlations		
	B	Std. error	Beta	t	Sig.	Zero-order	Partial	Part
1 (Constant)	0.263	0.412		0.639	0.524			
EXCH	0.738	0.151	1.072	4.902	<.001	0.635	0.423	0.226
GOVT	1.310	0.437	0.705	2.998	0.003	-0.044	0.275	0.138
HOR*TAXC	0.109	0.024	1.008	4.572	<.001	0.776	0.400	0.211
HOR*GOVT	-0.211	0.105	-0.496	-2.005	0.047	0.239	-0.188	-0.093
EXC*MORA	-0.204	0.041	-1.691	-4.955	<.001	0.741	-0.427	-0.229
EXC*GOVT	0.294	0.098	0.654	2.997	0.003	0.246	0.275	0.138
SOC*MORA	0.225	0.033	1.679	6.721	<.001	0.8	0.540	0.310
SOC*TAXC	-0.092	0.023	-0.819	-3.961	<.001	0.745	-0.353	-0.183
SOC*GOVT	-0.367	0.144	-0.836	-2.554	0.012	0.226	-0.237	-0.118

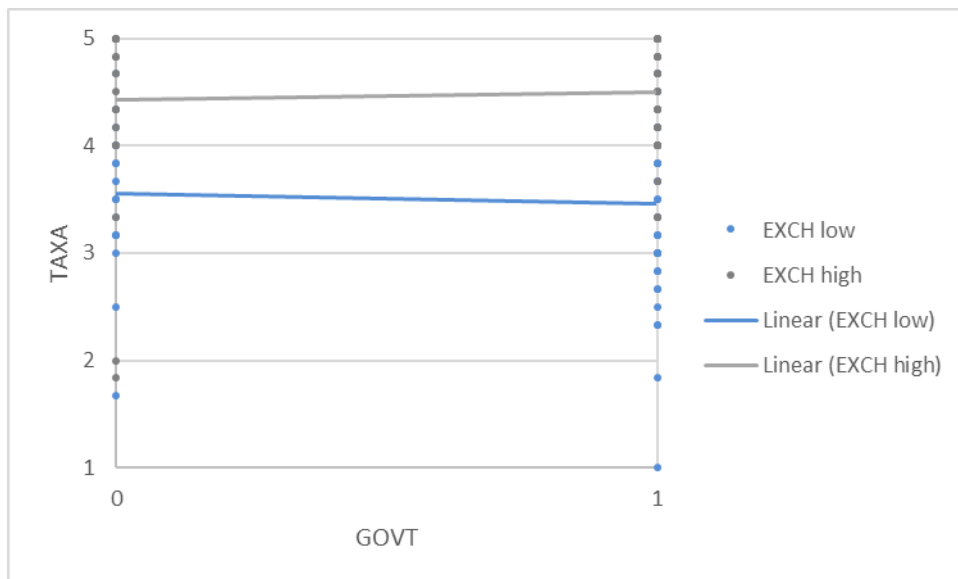
Each of the coefficients (B) in the final predictive model indicated the sensitivity of the DV to changes in the respective IV. A one-unit change in an IV would predict a change in the DV equal to the value of the coefficient for that IV. For example, a one-unit change in EXCH would predict a change in TAXA equal to 0.738.

The standardized coefficients from the coefficients table (β) indicate the relative influence of each IV on the DV. These are coefficients normalized by the variable's standard deviations. The higher the standardized coefficient, the more the IV influences the DV relative to other IVs; it is a way to identify which IVs appear to be the most influential.

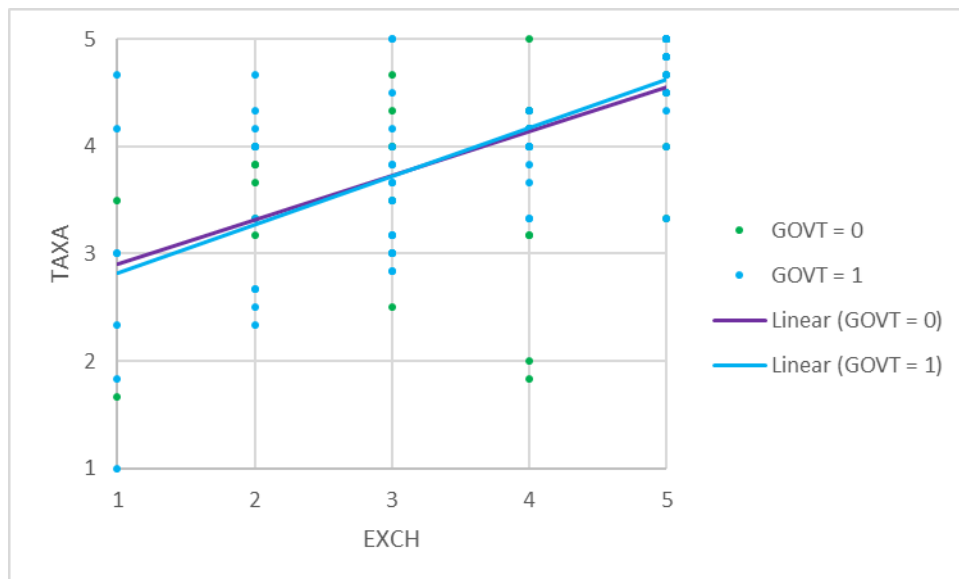
Using the coefficients table (Table 9), a value for TAXA can be predicted for any combination of values for the predictors. The graphical analysis shown in Figure 13 (TAXA versus TAXC) depicts the influence of each IV on TAXA.

Generally, 2FIs indicate that the influence of one IV on the DV depends on (is moderated by) the value of a second IV. The claim that one IV influences the DV must be clarified by the moderation of the second IV. There were seven 2FIs in the final model. Among these were three kinds of 2FI.

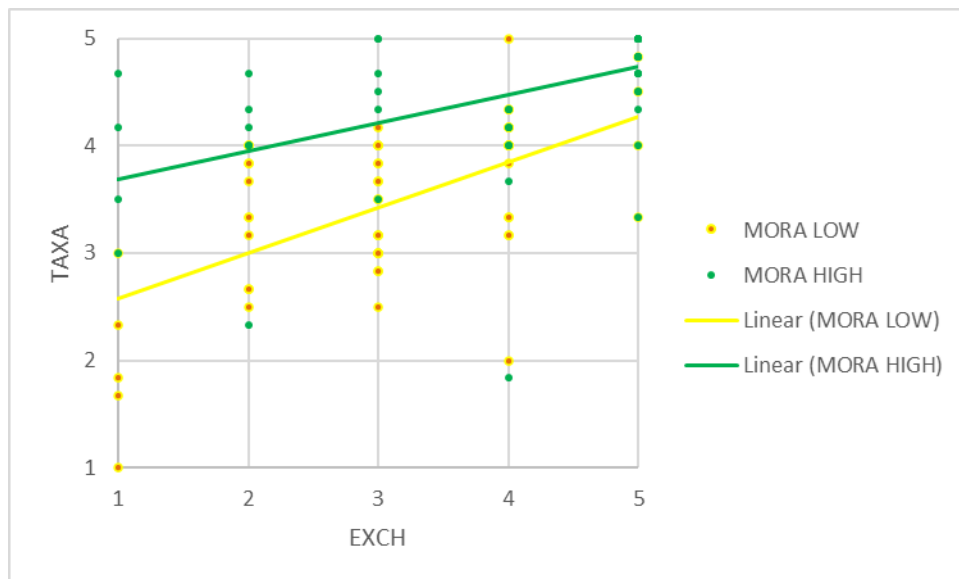
The first was an interaction between two significant IV predictors. In the final model, there was a significant 2FI between the two individually significant IVs, EXCH and GOVT. Figure 16 shows that when EXCH is low, TAXA decreases as GOVT changes in value from 0 to 1. When EXCH is high, TAXA increases as GOVT varies from 0 to 1.

Figure 14*2FI Between EXCH and GOVT (View 1)*

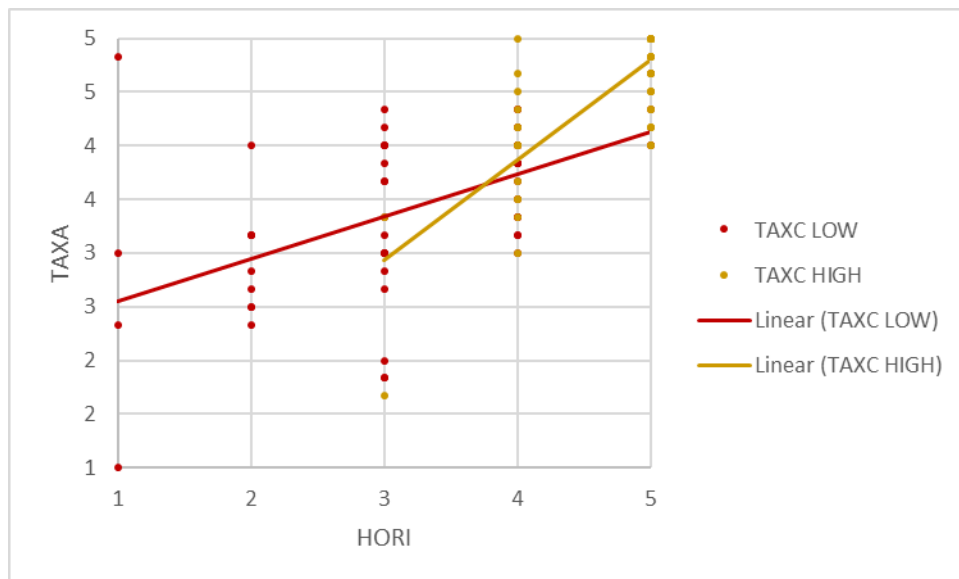
A second view of the 2FI between EXCH and GOVT is depicted in Figure 17, which shows that TAXA increases with increases in EXCH for both values of GOVT (0 and 1). However, the increase in TAXA (slope) is slightly greater when GOVT = 1 compared to when GOVT = 0. In both views, the claim that TAXA is influenced by either EXCH or GOVT must be qualified by the additional statement that that relationship changes depending on the value of the other IV.

Figure 15*2FI Between EXCH and GOVT (View 2)*

The second type of 2FI is between one IV with significant influence and a second IV that is not a significant influence on the DV by itself. There were three 2FIs of this type: $HORI*GOVT$, $SOCI*GOVT$, and $EXCH*MORA$. These 2FIs indicated that the influence on of one of the significant IVs on TAXA was moderated by the presence of another IV. For example, Figure 18 shows that the relationship between EXCH and TAXA was moderated by MORA. When MORA is high, the influence of EXCH on TAXA (slope) is greater than when MORA is low.

Figure 16*2FI Between EXCH and MORA*

The third type of 2FI is between two IVs, neither of which is a significant predictor of the DV by itself. Instead, it is the combination of two individually insignificant IVs which exerts a significant influence on the DV. There were three 2FIs of this kind: HORI*TAXC, SOCI*MORA, and SOCI*TAXC. For example, as depicted in Figure 19, the combination of values of HORI and TAXC determines the value of TAXA. TAXA is highest when both TAXC and HORI are high. TAXA is lowest with both TAXC and HORI are low.

Figure 17*2FI Between HORI and TAXA****Findings for Research Question 2***

RQ2 was focused on the relationship between the primary IVs and the DV TAXA. The hypotheses for RQ2 were tested, and the RQ was answered with a single analysis using MLR and predictive model-building. The MLR null hypothesis was that none of the IVs was a significant predictor of TAXA (all had coefficients = 0). The alternate hypothesis was that at least one IV had a coefficient $\neq 0$ and, therefore, was a significant predictor of TAXA. The null hypothesis was tested and rejected using an F test. There was evidence that the alternate hypothesis was true: at least one of the IVs was a significant predictor of the DV.

Among the IVs analyzed, two were found to be significant predictors of TAXA: EXCH and GOVT. None of the other IVs was found to be a significant predictor of TAXA. In addition, there were seven significant 2FIs. These indicated that EXCH and

GOVT moderate the influence of each other. HORI and SOCI moderated the influence of GOVT, even though neither was a significant predictor by itself. Also, three 2FIS indicated that there were combinations of predictors that significantly influenced TAXA: HORI and TAXC, SOCI and MORA, and SOCI and TAXC.

Research Question 3: DV = Tax Evasion Culture (TAXE), IVs = Demographics

Initial Data Analysis

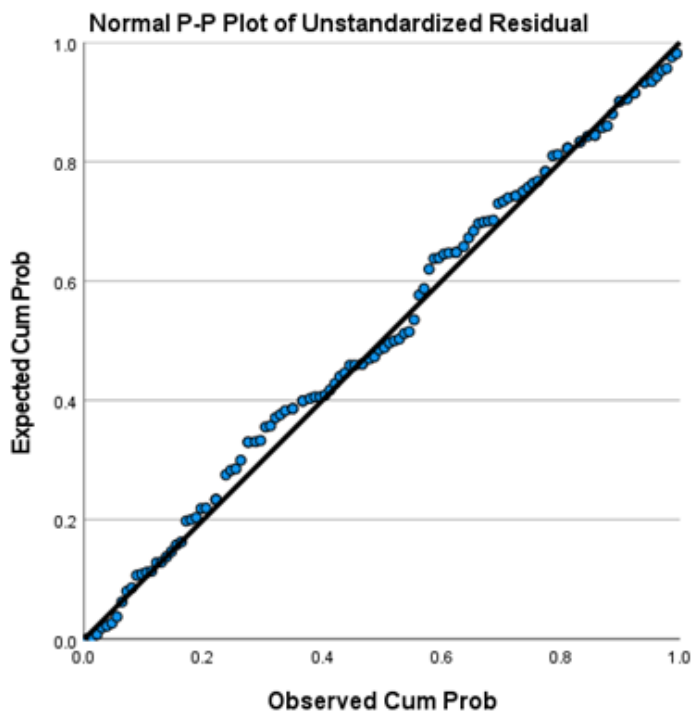
In Excel, I computed additional descriptive statistics for each demographic variable (counts). These computations are available (see Appendix D).

Testing of Assumptions

I ran an initial standard regression analysis with the full set of the IVs, using the SPSS *enter* method. I then tested the assumptions of linear regression (Aczel & Sounderpandian, 2006; Warner, 2013; Williams et al., 2013). All IVs were numerical variables. There was a continuous, numerical DV (TAXE). Scatterplots showed no obvious nonlinear relationships or patterns between the IVs and the DV. The Durbin-Watson statistic for the initial analysis with nine IVs was 1.665 indicating no autocorrelation. The normal probability plot of post hoc residuals for TAXE in Figure 18 shows no significant departure from normality. No values in the data set for the numerical variables were outliers. No violations of the assumptions of linear regression were found, and no transformations of the data were required to address violations of the assumptions.

Figure 18

Normal Probability Plot of Unstandardized Residuals for TAXA



Analysis

The analysis was performed using MLR to assess the relationship of TAXE to the five demographic IVs, which were converted to a total of 21 dummy variables. I made 15 SPSS runs with an iterative mix of statistical regression and purposeful sequential regression to screen for IVs that did not significantly influence TAXE. I then compared the candidate IVs and models using the cumulative evidence from the model-building process, and selected a final model based on the variable inclusion criteria (adjusted R^2 , p value, and part correlation).

The final predictive model for TAXE is depicted in Table 10. The F statistic was 4.175 with a p value $< .001$. I rejected the null hypothesis and concluded that at least one coefficient $\neq 0$. Therefore, the model is a statistically significant predictor of TAXE.

Regarding the IVs in the final model, I used the individual t tests (p values) but emphasized that their contribution to goodness-of-fit (adjusted R^2) was also a criterion for inclusion in the model.

Table 10

SPSS Coefficients Table: Final Predictive Model for TAXE with Demographic IVs

Model	Unstandardized Coeff		Stdzd Coeff			Correlations		
	B	Std. Error	Beta	t	Sig.	Zero-order	Partial	Part
1 (Constant)	2.743	0.243		11.278	<.001		2.743	0.243
GEN	0.297	0.17	0.144	1.747	0.084	0.139	0.297	0.17
E7	2.048	0.956	0.189	2.141	0.035	0.171	2.048	0.956
A2	0.281	0.202	0.122	1.394	0.166	0.111	0.281	0.202
A3	0.837	0.274	0.264	3.057	0.003	0.244	0.837	0.274
B1	-0.352	0.181	-0.165	-1.952	0.054	-0.156	-0.352	0.181
H1	0.562	0.41	0.134	1.371	0.173	0.109	0.562	0.41
H4	1.203	0.247	0.516	4.878	<.001	0.389	1.203	0.247
H5	1.319	0.284	0.488	4.648	<.001	0.371	1.319	0.284
H6	1.154	0.312	0.351	3.704	<.001	0.296	1.154	0.312
H7	0.888	0.284	0.314	3.124	0.002	0.249	0.888	0.284
H8	1.086	0.315	0.342	3.448	<.001	0.275	1.086	0.315
E5	0.827	0.652	0.107	1.269	0.207	0.101	0.827	0.652

The 12 IVs (dummy variables) depicted in Table 10 contributed positively to model goodness-of-fit (adjusted R^2). I used a variable inclusion criterion of .20 and retained marginal terms if their elimination decreased model goodness-of-fit. Eliminating the marginally significant IV (E5), and those with a p value greater than .05 (GEN, A2,

B1, and H1) resulted in decreases in goodness-of-fit. Therefore, in the interest of avoiding missing variable bias, and to select the model with terms that best predict TAXE, the final model shown in Table 10 was chosen.

The final predictive model can be expressed in terms of a regression equation with the computed unstandardized coefficients for IVs and 2FIs from the SPSS coefficients table:

$$\hat{Y} = b_o + b_1 X_1 + \dots + b_k X_k$$

where

\hat{Y} = predicted value for TAXE,

k = the number of predictors in the model (IVs or 2FIs),

b_o = the intercept or constant of the model,

b_i = the unstandardized coefficient for X_i , and

X_i = the i th IV.

The adjusted R^2 of the final predictive model indicates the approximate percentage of the variation in the DV that can be attributed to the model. It also indicates that $(1 - \text{adjusted } R^2)$ % of the variation in the DV is explained by other causes, influences, and predictors. The TAXE model adjusted $R^2 = .242$. Therefore, the model is a significant predictor of TAXE.

Each of the coefficients (B) in the final predictive model indicates the sensitivity of the DV to changes in the respective IV. A one-unit change in an IV would predict a change in the DV equal to the value of the coefficient for that IV. For example, a one-unit change in GEN (from 0 to 1) would predict a change in TAXE equal to 0.297. Using the coefficients table, a value for TAXE can be predicted for any combination of values for the predictors.

The standardized coefficients from the coefficients table (β) indicate the relative influence of each IV on the DV. These are coefficients normalized by the variable's standard deviations. The higher the standardized coefficient, the more the IV influences the DV relative to other IVs; it is a way to identify which IVs appear to be the most influential.

Findings for Research Question 3

RQ3 was focused on the relationship between the demographic IVs and the DV TAXE. The hypotheses for RQ3 were tested and the RQ was answered with a single analysis using MLR and predictive model-building. The MLR null hypothesis was that none of the IVs was a significant predictor of TAXE (all had coefficients = 0). The alternate hypothesis was that at least one IV had a coefficient $\neq 0$ and, therefore, was a significant predictor of TAXE. The null hypothesis was tested and rejected using an F test. There was evidence that the alternate hypothesis was true: at least one of the demographic IVs was a significant predictor of TAXE.

Among the 21 IVs analyzed as dummy variables, 12 were found to be significant predictors of TAXE. These variables reflected individual values for each of the demographic variables, and their influence on TAXE can be found in Table 10. I ran an excursion with all variables included in the model-building analysis (primary and demographic). With 30 IVs, the sample size was insufficient to ensure reliable, specific conclusions regarding the influence of the primary IVs while controlling for demographics. However, the excursion did provide evidence that the demographic variables of gender, age, ethnicity, business income, and household income were at the

very least moderators of the primary variables when analyzed together to determine the influence of the predictors of TAXE.

From these results, I conclude that the demographic variables gender, ethnicity, age, business income, and household income influence tax evasion culture. Some groups within these demographic categories were more influential than others, but those results must be interpreted with caution due to the insufficient sample size, which prevented precise examination.

Research Question 4: DV = Tax Avoidance Culture (TAXA), IVs = Demographics

Initial Data Analysis

In Excel, I computed additional descriptive statistics for each demographic variable (counts). These computations are available in Appendix D.

Testing of Assumptions

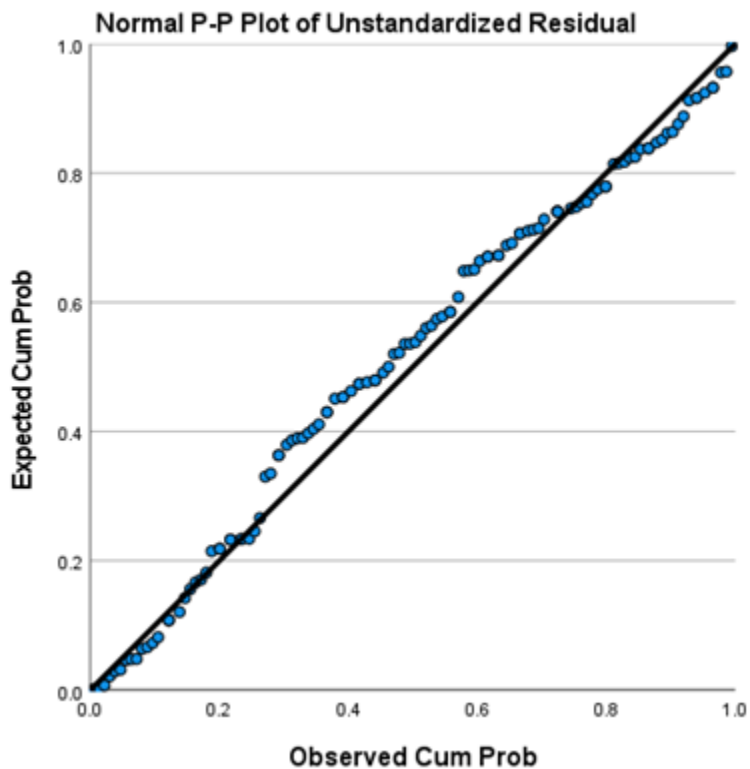
I ran an initial standard regression analysis with the full set of the IVs, using the SPSS *enter* method. I then tested the assumptions of linear regression (Aczel & Sounderpandian, 2006; Warner, 2013; Williams et al., 2013).

All IVs were numerical variables. There was a continuous, numerical DV (TAXE). Scatterplots showed no obvious nonlinear relationships or patterns between the IVs and the DV. The Durbin-Watson statistic for the initial analysis with nine IVs was 1.749 indicating no autocorrelation. The normal probability plot of post hoc residuals for TAXE in Figure 17 shows no significant departure from normality. No values in the data set for the numerical variables were outliers. No violations of the assumptions of linear

regression were found, and no transformations of the data were required to address violations of the assumptions.

Figure 19

Normal Probability Plot of Unstandardized Residuals for TAXA



Analysis

The analysis was performed using MLR to assess the relationship of TAXA to the five demographic IVs, which were converted to a total of 21 dummy variables. I made 16 SPSS runs with an iterative mix of statistical regression and purposeful sequential regression to screen for IVs clearly not significant influences on TAXA. I then compared the candidate IVs and models using the cumulative evidence from the model-building

process, and selected a final model based on the variable inclusion criteria (adjusted R^2 , p value [Sig.], and part correlation).

The final predictive model for TAXA is depicted in Table 11. The F statistic = 3.639 with a p value < .001. I rejected the null hypothesis and concluded that at least one coefficient $\neq 0$. The model is a statistically significant predictor of TAXA. Regarding the IVs in the final model, I used the individual t tests (p values, or Sig.); but, emphasize that their contribution to goodness-of-fit (adjusted R^2) was also a criterion for inclusion in the model.

Table 11

SPSS Coefficients Table: Final Predictive Model for TAXA with Demographic IVs

Model	Unstandardized coeff		Stdzsd coeff			Correlations		
	B	Std. error	Beta	t	Sig.	Zero-order	Partial	Part
1 (Constant)	2.556	0.347		7.365	<.001			
GEN	0.334	0.156	0.180	2.141	0.035	0.180	0.203	0.174
A3	0.522	0.251	0.183	2.085	0.039	0.129	0.198	0.170
B2	0.254	0.150	0.141	1.687	0.094	0.169	0.161	0.137
H1	1.154	0.444	0.305	2.602	0.011	0.020	0.244	0.212
H4	1.372	0.359	0.654	3.819	<.001	0.187	0.346	0.311
H5	1.278	0.378	0.526	3.382	0.001	0.091	0.311	0.276
H6	1.439	0.397	0.487	3.622	<.001	0.123	0.330	0.295
H7	1.072	0.379	0.421	2.825	0.006	0.041	0.263	0.230
H8	0.989	0.398	0.347	2.486	0.014	-0.032	0.234	0.203
H3	0.510	0.406	0.166	1.255	0.212	-0.171	0.120	0.102
E4	-0.371	0.307	-0.104	-1.208	0.230	-0.195	-0.116	-0.098
H2	0.487	0.446	0.129	1.092	0.277	-0.189	0.105	0.089

The 12 IVs (dummy variables) depicted in Table 4 contributed positively to model goodness-of-fit (adjusted R^2). I used a variable inclusion criterion of .20, and kept

marginal terms if their elimination decreased model goodness-of-fit. Eliminating the marginally significant IVs (H3, E4, and H2), and those whose p value was greater than .05 (B2) resulted in decreases in goodness-of-fit. Therefore, in the interest of avoiding missing variable bias, and to select the model whose terms best predict TAXA, the final model shown in Table 4 was chosen.

The final predictive model can be expressed in terms of a regression equation with the computed unstandardized coefficients for IVs and 2FIs from the SPSS

Coefficients table:

$$\hat{Y} = b_0 + b_1X_1 + \dots + b_kX_k$$

where,

\hat{Y} = predicted value for TAXA

k = the number of predictors in the model,

b_0 = the intercept or constant of the model,

b_i = the unstandardized coefficient for X_i ,

and, X_i = the i^{th} IV.

The adjusted R^2 of the final predictive model indicates approximately what percentage of the variation in the DV that can be attributed to the model. It also means that $(1 - \text{adjusted } R^2)$ % of the variation in the DV is explained by other causes, influences, and predictors. The TAXA model adjusted $R^2 = .210$. The model is a significant predictor of TAXA.

Each of the coefficients (B) in the final predictive model indicates the sensitivity of the DV to changes in the respective IV. A one unit change in an IV would predict a change in the DV equal to the value of the coefficient for that IV. For example, a one unit change in GEN (from 0 to 1) would predict a change in TAXA equal to 0.334. Using the

coefficients table, a value for TAXA can be predicted for any combination of values for the predictors.

The standardized coefficients from the coefficients table (Beta) indicate the relative influence of each IV on the DV. These are coefficients normalized by the variable standard deviations. The higher the standardized coefficient, the more the IV influences the DV relative to other IVs. It is a way to identify which IVs appear to be the most influential.

Findings for Research Question 4

RQ4 was focused on the relationship between the demographic IVs and the DV, TAXA. The hypotheses for RQ4 were tested and the RQ was answered with a single analysis using MLR and predictive model-building. The MLR null hypothesis was that none of the IVs was a significant predictor of TAXA (all had coefficients = 0). The alternate hypothesis was that at least one IV had a coefficient $\neq 0$, that at least one was a significant predictor of TAXA. The null hypothesis was tested and rejected using an F test. There was evidence that the alternate hypothesis was true: at least one of the demographic IVs was a significant predictor of TAXA.

Among the 21 IVs analyzed as dummy variables, 12 were found to be significant predictors of TAXA. These variables reflect individual values for each of the demographic variables, and their influence on TAXA can be found in Table 4. I ran an excursion with all variables included in the model-building analysis (primary and demographic). With 30 IVs the sample size was insufficient for completely reliable, specific conclusions regarding the influence of the primary IVs while controlling for

demographics. However, the excursion did provide evidence that the demographic variables gender, age, ethnicity, business income, and household income were at the very least moderators of the primary variables when analyzed together to determine the influence of the predictors of TAXA.

From these results, I conclude that gender, ethnicity, age, business income, and household income as demographic variables are influential on TAXA—a self-reported measure of tax avoidance. Some individual groups within these demographic categories were more influential than others, but again those conclusions need to be considered in light of the insufficient sample size available for performing a precise examination.

Summary

This study examined the relationships between among predictors, demographic variables, and the cultures of tax evasion and tax avoidance. For tax evasion culture, three variables emerged as significant predictors: (a) moral norms, (b) penalty magnitude, and (c) perception of government authority. Higher moral norms reduce tax evasion, while stronger perceptions of penalty magnitude and government authority were associated with higher reported tax evasion. This suggests that moral commitment acts as a deterrent, but perceptions of penalties and authority may be interpreted differently, potentially as signs of excessive control that provoke resistance. Importantly, moral norms and government authority moderated each other, meaning their influence on evasion culture depended on how strongly the other was perceived.

In addition, horizontal equity and social norms moderated the effect of government authority, and tax compliance intentions moderated the effect of penalty

magnitude. These moderating effects show that the impact of authority and penalties changes depending on the broader cultural and social environment. While some constructs were not significant predictors on their own, several combinations—such as horizontal equity with exchange equity, horizontal equity with social norms, horizontal equity with compliance intentions, and exchange equity with compliance intentions—did significantly influence evasion. These combinations effectively function as new cultural variables, suggesting that fairness, norms, and compliance reinforce one another in shaping behavior.

For tax avoidance culture, two predictors were significant: exchange equity and perception of government authority. Higher values of either were linked to greater tax avoidance, indicating that when taxpayers perceived inequity in exchange or viewed government authority as burdensome, they were more likely to pursue avoidance strategies. Exchange equity and government authority also moderated each other, meaning that the influence of these two factors should be considered as a combination of the two, instead of their influence being considered separately.

Horizontal equity and social norms moderated the impact of government authority, while moral norms moderated exchange equity. Once again, some individual predictors were not significant alone but were influential in combination. Specifically, horizontal equity with compliance intentions, moral norms with social norms, and social norms with compliance intentions jointly influenced avoidance culture. These compound effects reflect emergent dynamics where fairness, morality, and collective expectations together shape avoidance behaviors.

Regarding the influence that demographics have on tax evasion culture and tax avoidance culture, there is evidence that every one of the demographic categories evaluated exerted some influence on tax evasion and tax avoidance. There were five demographic categories (gender, age, ethnicity, business income, and household income), comprising 22 subgroups in total. All five demographic categories showed an influence on either tax evasion or tax avoidance. Out of 22 subgroups tested, eight were significant predictors of tax evasion and tax avoidance. Eight were predictors of either tax evasion or tax avoidance. This shows that demographics should be considered when assessing the influence of this study's primary predictors on tax evasion and tax avoidance; different groups interpret and respond to authority, fairness, penalties, and norms in distinct ways.

Finally, several combinations of variables examined, not significant predictors by themselves, were significant influences when considered in combination with other nonsignificant predictors. These could be combined mathematically into new variables that could be assessed as influences on tax evasion and tax avoidance. For example, neither horizontal equity nor tax compliance were found to be significant predictors of tax evasion or tax avoidance, individually. However, in combination, they influenced both tax evasion and tax avoidance.

Chapter 5: Discussion, Conclusions, and Recommendations

The purpose of this quantitative, correlational, non-experimental study was to explore the relationship between various measures of the TPB regarding attitudes, social factors, social norms, behavior control, and behaviors of U.S. small business owners pertaining to taxation, including measures of tax avoidance and tax evasion culture. The nature of the study was premised on a quantitative correlational research design employing an MLR analysis and statistical model-building.

I examined the relationship between the multiple variables reflecting attitudes toward the U.S. tax system, social norms, and PBC (the IVs) and tax evasion and avoidance (the DVs). Small business owner participants were selected from a third-party vendor that compiles and sells specific information on small business demographics. Understanding the factors that lead small business owners in the United States to evade or avoid paying taxes could assist in the development of tax policy that addresses not only enforcement strategies but also increased transparency in tax authority. These policy changes could lead to positive social change.

The analysis produced the following findings. Moral norms, penalty magnitude, and perception of government/authorities were found to be significant predictors of tax evasion culture. However, their influence was moderated by horizontal equity, exchange equity, and tax compliance intentions. Also, horizontal equity and exchange equity, horizontal equity and social norms, and horizontal equity and tax compliance intentions were variables that were found to be influential in combination, even though the variables

were not significant predictors by themselves. In essence, the combination of these predictors was a significant variable itself.

For tax avoidance culture, exchange equity and perception of government/authorities were found to be significant predictors. Their influence was moderated by horizontal equity, moral norms, and social norms. In addition, combinations of primary variables (social norms and tax compliance intentions, moral norms and social norms, and horizontal equity and tax compliance intentions) were influential, even though these variables were not significant predictors individually.

Vertical equity, horizontal equity, and detection risk were not found to be individual predictors of either tax evasion culture or tax avoidance culture. Regarding the influence that demographics have on tax evasion culture and tax avoidance culture, there is evidence that every one of the demographic variables evaluated exerted some influence on tax evasion and tax avoidance.

The second type of 2FI involves a significant predictor interacting with a non-significant predictor. Examples include Penalty Avoidance \times Tax Compliance Burden, Horizontal Inequity \times Government Perceptions, and Social Inequity \times Government Perceptions. For instance, the effect of Penalty Avoidance on tax evasion is stronger when Tax Compliance Burden is high, demonstrating that even predictors not significant on their own can modify the effect of significant predictors. The third type occurs when two non-significant predictors interact to exert a significant influence on tax evasion. Examples include Horizontal Inequity \times Social Inequity, Horizontal Inequity \times Fairness in Exchange, Horizontal Inequity \times Fairness in Compliance, and Fairness in Exchange \times

Fairness in Compliance. Individually, these variables do not significantly affect tax evasion; however, their combination does. For example, tax evasion is highest when both Horizontal Inequity and Social Inequity are high, and lowest when both are low. Overall, these 2FIs illustrate that the relationships between predictors and tax evasion are complex and conditional. Some variables influence tax evasion only in combination with others, highlighting the importance of examining interactions rather than focusing solely on individual predictors. By including these 2FIs, the model captures nuanced behavioral dynamics and provides a deeper understanding of what drives tax evasion.

The final model for tax avoidance highlighted several significant 2FIs, indicating that the effect of one predictor often depends on the level of another. The first type of 2FI occurs between two individually significant predictors, Fairness in Exchange and Government Perceptions. When Fairness in Exchange is low, tax avoidance decreases as Government Perceptions change from 0 to 1. Conversely, when Fairness in Exchange is high, tax avoidance increases as Government Perceptions vary from 0 to 1. A second perspective shows that tax avoidance increases with higher Fairness in Exchange for both low and high levels of Government Perceptions, but the increase is slightly steeper when Government Perceptions = 1. These findings indicate that the influence of Fairness in Exchange on tax avoidance is conditional on perceptions of government fairness, and the effect of Government Perceptions is likewise dependent on the level of Fairness in Exchange.

The second type of 2FI involves two predictors that are not individually significant, but whose combination significantly affects tax avoidance. Three interactions

of this type were identified: Horizontal Inequity \times Tax Compliance Burden, Social Inequity \times Moral Norms, and Social Inequity \times Tax Compliance Burden. For example, the combination of Horizontal Inequity and Tax Compliance Burden determines tax avoidance, which is highest when both Tax Compliance Burden and Horizontal Inequity are high, and lowest when both are low.

Overall, these 2FIs demonstrate that tax avoidance is influenced not only by individual predictors such as Moral Norms, Penalty Avoidance, Government Perceptions, Fairness in Exchange, Social Inequity, Fairness in Compliance, Government Fairness, Tax Compliance Burden, Social Norms about Government, Moral Judgment of Government, and Penalties in Tax Compliance, but also by specific combinations of these predictors. Some variables exert influence on tax avoidance only when paired with others, highlighting the importance of examining interactions to fully understand taxpayer behavior.

The study concluded that gender, ethnicity, age, business income, and household income, as demographic variables, are influential in determining tax evasion and tax avoidance, as measured by self-reported measures of tax evasion and tax avoidance culture. Some individual groups within these demographic categories were more influential than others, but again, those conclusions need to be considered due to the insufficient sample size available for performing a precise examination.

Interpretation of the Findings

Overall, the results demonstrate that tax evasion and avoidance are not the result of a single factor, but rather the product of an intricate web of predictors, moderators, and

demographic contexts. Individual beliefs about morality, penalties, fairness, and government legitimacy matter, but their effects are amplified, or sometimes reversed, depending on how they interact with cultural norms and social expectations. In practice, this means that effective policy interventions must go beyond deterrence and instead combine enforcement with fairness, legitimacy, and demographic-sensitive strategies to foster durable tax compliance cultures.

The study showed that tax evasion and avoidance behaviors are not driven by a single factor alone. Instead, they result from a mix of beliefs, social pressures, fairness concerns, and views about the government. These factors often work together in complex ways. Moral norms, fairness in exchange, and trust in government emerged as the most significant influences, but their impact was amplified when combined with other factors, such as social norms and tax compliance intentions. This means that to encourage better tax compliance, policies and strategies should address not just individual motivations, but also the social and fairness-based contexts that shape taxpayer behavior.

Tax Evasion Culture Findings

The study revealed that three factors influence business owners' attitudes toward tax evasion: individuals' moral beliefs, the severity of penalties for tax evasion, and their perception of the government or authorities; however, these factors did not operate independently. Their impact was influenced by how they combined with other things. For example, when fairness between taxpayers (horizontal equity) was paired with exchange equity, social norms, or tax compliance intentions, those combinations strongly influenced tax evasion culture—even though fairness by itself was not a strong predictor.

This means that tax evasion is shaped not only by single factors, but also by the way different beliefs and perceptions interact with one another.

In practical terms, this means that interventions aimed at reducing tax evasion cannot rely solely on emphasizing moral obligations, increasing penalties, or improving perceptions of government fairness. Instead, strategies are more likely to be effective if they address multiple factors simultaneously and consider how these factors interact. For instance, enhancing perceptions of fairness in exchange while simultaneously reinforcing social norms about compliance and strengthening moral norms may produce a larger reduction in tax evasion behavior than targeting any single factor alone. Overall, the results highlight the nuanced and interconnected nature of tax behavior, showing that both individual beliefs and the broader context in which they operate must be considered to understand and influence tax compliance effectively.

Tax Avoidance Culture Findings

Two main factors were significant predictors of tax avoidance culture: exchange equity (how fair people think the exchange between paying taxes and receiving public goods is) and how people view the government or authorities. Again, these factors did not work alone. Their influence was moderated by factors like horizontal equity, moral norms, and social norms. The results identified combinations of factors that by themselves were not significant predictors. The combinations included social norms with tax compliance intentions, moral norms with social norms, and horizontal equity with tax compliance intentions. These combinations offer unique insight into the culture and mentality of business owners, contemplating paying their taxes.

Thus, like tax evasion, tax avoidance is shaped by both individual predictors and the way different beliefs and fairness concerns combine. In other words, Tax avoidance emerges as a product of both individual predictors and the ways in which those predictors combine and interact with one another. On their own, factors such as attitudes toward taxation, moral norms, trust in government, and perceptions of fairness exert clear influence on whether a person chooses to avoid taxes. Each variable independently helps explain behavior: some individuals are guided primarily by their sense of moral obligation, others by their views on whether the tax system is fair, and still others by how much they trust the authorities who administer the system. These standalone effects are important, but they do not tell the full story. The findings of this study demonstrate that the more powerful explanation comes from the combinations of beliefs and fairness concerns that shape taxpayers' decisions in context. For example, perceptions of unfairness in the system become far more consequential when coupled with strong social norms that suggest others are also avoiding taxes. Similarly, weak moral norms may not inevitably lead to avoidance if they are balanced by a credible threat of penalties, while strong moral norms can override even weak enforcement.

Non-Significant Predictors

The study also found that vertical equity (fairness across income groups), horizontal equity (fairness between similar taxpayers), and detection risk (the chance of getting caught) were not strong predictors by themselves for either tax evasion or avoidance. However, horizontal equity became important when paired with other variables, which shows it may still play a role indirectly through interactions. For

example, when perceptions of horizontal equity are paired with concerns about exchange equity (the fairness of what taxpayers receive in return for taxes), the sense of unfairness multiplies.

Findings in the Context of Prior Research

The results of this study support the findings of prior research on tax compliance, which have shown a similar emphasis on the significance of trust in government, perceived fairness of the tax system, and social norms in influencing tax-related behaviors. Studies grounded in the TPB and the slippery slope framework have suggested that attitudes toward government authority and perceptions of equitable tax distribution play a crucial role in shaping compliance intentions. Additionally, empirical studies have demonstrated that cultural factors and demographic variables can significantly impact tax compliance decisions, aligning with the current study's findings. For instance, Olsen et al. (2018) postulated that emotion is significantly related to the mediation of the relationship between the perception of tax authorities and tax compliance. Olsen et al. found that emphasizing tax authorities' ability to enforce tax compliance induced negative emotions and the readiness to evade. Scenarios that exhibited trust between tax authorities and small business owners reduced negative emotion and increased positive affect, which are associated with intentions to comply voluntarily. Similarly, the results from my study demonstrated that the combination of moral norms, potential penalties, and taxpayer perception of government authority and trustworthiness was a significant predictor of tax evasion behavior.

Onu et al. (2019) suggested that many small business owners “may be driven by social norms, attitudes, and perceived behavior control” (p.13). While Onu et al. conducted their study outside the United States, my study revealed that tax evasion and tax avoidance behavior was significantly predicted by taxpayer moral and social norms, the magnitude of penalty, and taxpayer perception of the government as being trustworthy or not, and powerful or not; these results align with Onu et al.’s (2019) findings. All findings indicate that TPB represents a theoretical foundation for small business owner’s propensity to commit tax evasion and tax avoidance. Although outcomes may be interpreted as self-interest for one’s country as in Chan (2018), Atria (2019) analyzed the subjectivities of economic elites relative to tax compliance decisions in Chile. This qualitative study assessed how different wealthy taxpayers’ tax behaviors were self-quantified. Subjectivities varied among taxpayers and, after interviewing 32 wealthy elites, Atria found that tax laws were not always advantageous to tax compliance and may even support the antithesis of desired tax revenue collection outcomes. Another example of how TPB is prevalent due to compliance and how it can be negatively impacted by taxpayer perception of government authority.

Additionally, Vogel (1974) provided differing yet complementary perspectives on tax evasion and avoidance behaviors, reflecting both contemporary and historical understandings of taxpayer motivations. Vogel employed predictive modeling to demonstrate that tax evasion and avoidance cultures are significantly influenced by attitudes, social norms, PBC, and perceptions of government and authorities. His findings highlighted the complex interplay of multiple predictors, such as moral norms, penalty

magnitude, and perceptions of government trustworthiness, in shaping tax evasion culture. Additionally, he emphasized the role of interaction effects, where factors like horizontal and exchange equity moderated these relationships. Similarly, for tax avoidance culture, he identified exchange equity and perception of government/authorities as key predictors, which were further moderated by social norms and moral considerations. My research, therefore, suggested that tax compliance behavior is not only driven by direct individual motivations but also by broader institutional and social factors.

In contrast, Vogel (1974) also offered a more straightforward economic perspective, arguing that tax evasion is primarily driven by illegal opportunity and the perceived additional financial burden of paying taxes. His findings aligned with deterrence-based theories, which posit that individuals weigh the costs and benefits of evasion based on enforcement risks and financial constraints. Unlike my research, Vogel did not emphasize the moderating effects of social and institutional trust, suggesting a more economically rational, rather than socially constructed, view of tax compliance.

While Vogel's (1974) study provided a foundational understanding of tax evasion rooted in financial self-interest and opportunity, the findings of the current study reflect a more nuanced, modern approach that incorporates behavioral and psychological factors. This study extends beyond economic deterrence models to include attitudes, social norms, perceived behavior control, trust in government, and fairness perceptions, aligning with contemporary theories like the slippery slope framework and social exchange theory. Both studies have contributed valuable insights, with Vogel (1974) emphasizing

the financial drivers of tax evasion and the current study highlighting the multifaceted and interactive nature of tax compliance culture.

Tang and Chang (2020) used TPB to investigate the tax compliance intentions of citizens in Phnom Penh, Cambodia. The authors found that attitudes, social norms, and perceived behavior control had a significant effect on small business owners' tax evasion and tax avoidance behavior. In addition, the authors found that trust in government and perception of government authority did not always have a positive or direct impact on tax evasion and avoidance behavior. These findings are congruent with the findings of this study, however there were some differences. The focus of Tang and Chang was tax compliance intentions of small business owners whereas the focus of my study was tax evasion and tax avoidance culture among small business owners. Tang and Chang did not examine the same variables. Variables not examined by Tang and Chang include horizontal equity, exchange equity, moral norms, penalty magnitude, and detection risk. Interestingly, tax morale, tax fairness, and tax complexity were significant for tax compliance intentions, while moral norms, penalty magnitude, and perception of government/authorities were significant for tax evasion, and exchange equity and perception of government/authorities were significant for tax avoidance. Trust in government, power of authority, tax information, and tax awareness were not significant predictors of tax compliance intention, and vertical equity, horizontal equity, and detection risk were not direct predictors of tax evasion or tax avoidance; however, my research found significant combinations of variables that were not significant when

assessed individually: horizontal equity and exchange equity, horizontal equity and social norms, social norms and tax compliance intentions.

Similar to my study, Wenzel (2002) analyzed variables influencing tax evasion and tax avoidance behavior, although Wenzel used a different theoretical model. Wenzel analyzed the role of procedural and distributive justice and group identity in tax evasion and tax avoidance behavior. In my study, I employed predictive models for tax evasion and tax avoidance culture, identifying key structural, psychological, and social predictors. Wenzel suggested that compliance was enhanced when taxpayers felt a collective responsibility, whereas my findings highlight the complex interplay of individual attitudes, social norms, and perceptions of fairness in shaping tax behavior.

Chan (2018) examined whether national identity reduced tax evasion in the United States, Australia, and Britain. The goal of the author's study was to use national identity theory, which is when taxpayers prioritize national welfare over self-interest to determine impact on tax evasion and tax avoidance. While Chan focused on national identity as a motivator for tax compliance, this study examined a broader range of psychological and structural factors influencing tax evasion and avoidance culture. Chan's experimental approach provided direct evidence that national symbols influence tax compliance, whereas this study's predictive models highlight the interplay of moral norms, social norms, and fairness perceptions in shaping tax behavior.

Similar to Hanlon and Slemrod (2009), I examined tax behavior, specifically tax avoidance and tax evasion, although Hanlon and Slemrod focused on different subjects—their focus was corporations whereas mine was small businesses. Both studies employed

quantitative methods; Hanlon and Slemrod analyzed stock market reactions whereas I used predictive modeling. Additionally, both studies highlighted the role of cultural norms in tax behavior. Hanlon and Slemrod found that markets sometimes react positively to firms engaging in tax avoidance, reinforcing avoidance as a norm. Similarly, in my study, I identified moral norms, government perception, and social norms as key predictors of tax compliance behavior. In both studies, there were challenges in measurement, with Hanlon and Slemrod critiquing ad hoc measures of tax aggressiveness, while the results of the current study suggest that stratified sampling and a larger sample size would enhance future research.

Despite these similarities, our studies differed in scope and focus. Hanlon and Slemrod (2009) investigated corporate tax aggressiveness and market reactions, whereas I examined factors influencing tax compliance behaviors among small business owners. Key variables also differed; Hanlon and Slemrod focused on stock price reactions and tax shelters as indicators of tax aggressiveness, while I analyzed multiple IVs, including attitudes, social norms, and PBC to predict tax evasion and avoidance culture. In terms of findings, Hanlon and Slemrod observed that market reactions were dependent on a firms' financials, with some benefiting from perceived tax avoidance. In contrast, I identified specific variables—such as moral norms, penalty magnitude, and government perception—as significant predictors of tax culture. Methodologically, Hanlon and Slemrod critiqued the reliability of tax aggressiveness measures, while my results support a call for a larger, more stratified sample to improve future research.

Ultimately, while both studies were designed to explore tax-related behaviors, Hanlon and Slemrod (2009) focused on corporate market reactions to tax aggressiveness, whereas this study provides a more detailed examination of behavioral factors influencing tax compliance among small business owners. This study offers deeper insights into individual attitudes and social influences on tax behavior, whereas Hanlon and Slemrod highlighted the role of financial perception and the limitations of existing measurement approaches.

Atria (2019) also examined tax compliance behaviors, but their research differed from my study in scope, methodology, and focus. Atria's qualitative study explored the subjectivities of economic elites in Chile and how their perceptions shaped tax compliance decisions. Through interviews with 32 wealthy taxpayers, Atria found that tax laws may inadvertently encourage tax avoidance, emphasizing that, while tax evasion is illegal, tax avoidance remains legal but leads to similar government revenue loss. In contrast, I employed a quantitative approach, using predictive models to analyze how attitudes, social norms, PBC, and perceptions of government influence tax evasion and avoidance culture. I identified specific predictors of tax compliance, such as moral norms, penalty magnitude, and government perception, that showed interactions between factors, such as horizontal equity, social norms, and tax compliance intentions that further influenced tax behavior.

Despite methodological differences, both the study by Atria (2019) and my study demonstrated that tax behavior is shaped by individual perceptions and systemic factors. Atria highlighted how legal frameworks themselves facilitate tax avoidance, while I

demonstrated how social and psychological factors predict tax evasion and avoidance culture. While Atria focused on the subjective experiences of economic elites, I took a broader, data-driven approach to identify patterns in tax compliance among small business owners. Additionally, Atria critiqued tax law for enabling avoidance, whereas my data suggest that perceptions of fairness and government authority play a crucial role in tax compliance. Limitations in measurement were noted for both studies; Atria addressed the complexities of self-quantified tax behavior and based my results, there is a need for stratified sampling and a larger sample size to enhance research validity. Together, these studies provide complementary perspectives on tax compliance, underscoring both structural and behavioral influences on tax-related decision-making.

Most of the studies I reviewed used traditional economic theories (e.g., Allingham and Sandmo's deterrence model) and focused on penalties and enforcement or procedural and distributive justice theory, which uses a categorization approach and the group-value model to explain how individuals prioritize collective justice over self-interest. Study findings have shown that all theories examined have an impact on tax evasion and avoidance behavior. However, my research highlights the importance of perceived fairness and trust, aligning with psychological and sociological theories of compliance (e.g., TPB). My novel contribution through this research is the development of predictive models for tax evasion and tax avoidance culture, which allow examination of interaction effects among predictors.

Within the limits of my study's purpose, the findings indicate that attitudes, social norms, and perceptions of control are certainly linked to tax evasion and tax avoidance.

However, their effects are often exacerbated or diminished by interactions with fairness perceptions and compliance intentions. For example, if a business owner has a negative attitude toward taxes (attitude component of TPB) and also perceives the system as unfair or that peers are not paying their fair share, their intention to evade may be stronger than predicted by TPB alone. The unfairness reinforces and magnifies the effect of their negative attitude. Conversely, if a business owner has a mild intention to evade but perceives that taxes are fair and that compliance is socially expected, these fairness perceptions can reduce the likelihood that they will act on their initial intentions. Social norms and fairness perceptions can act as buffers, weakening the direct influence of attitudes or perceived control on behavior. This posits that tax behavior cannot be understood through isolated factors alone; rather, it reflects a network of interrelated beliefs, norms, and perceptions of government. Consequently, the study advances the purpose by showing that predictive models of tax culture should incorporate not only individual predictors but also their combined effects. These insights provide a foundation for future research to refine behavioral models of tax compliance and for policymakers to design interventions that address both individual attitudes and the broader social and fairness contexts that shape compliance decisions.

Limitations of the Study

The first limitation was associated with utilizing MLR for data analysis. As the study was focused on a very specific set of nine IVs, I did not consider any other factors that may have influenced the outcomes of the two DVs, such as education and income levels, as being outside the scope of this study. Time constraints limited my ability to

perform a more complete analysis of other potentially significant IVs that might have influenced the DVs. Likewise, the participants of this study were limited to the Atlanta metropolitan area. The data associated with the IVs was specific to the TPB, along with a limited set of demographic factors.

Other limitations were prevalent in this study that affect the credibility and generalizability of the findings. First, the nature of the data created challenges, as some variables were limited in variability or frequency, reducing their explanatory power and making it difficult to detect consistent patterns. Second, the sample size constrained the reliability of results, particularly when analyzing interaction effects or running models with a large number of predictors. Related to this, the population of subgroups was unevenly represented, with some demographic groups appearing infrequently in the data. This limited the ability to draw precise or confident conclusions about the influence of those subgroups on tax evasion or avoidance culture. Finally, the combination of limited sample size, sparse variable distributions, and subgroup imbalance means that while significant predictors and interactions were identified, they must be interpreted with caution and viewed as exploratory rather than definitive.

Recommendations

In further study, a wider geographical area could be examined to analyze potential differences in different parts of the United States. Additional IVs could be analyzed, such as religion, political affiliation, higher annual revenue variables, and education level. Future studies could focus on refining tax compliance measurement by developing more comprehensive scales to measure perceptions of exchange equity and government trust,

ensuring cross-cultural validity. In addition, future research could integrate group identity theories with predictive models to develop a more comprehensive understanding of tax compliance, evasion, and avoidance behavior.

The study's implications highlight the need for multidimensional tax policies that go beyond deterrence and enforcement. By improving exchange equity and government credibility, societies can foster a culture of voluntary compliance, leading to more sustainable and effective tax systems. Tax avoidance is not just an economic decision—it is deeply influenced by how fair people perceive the tax system to be and how much trust they have in their government. When taxpayers see a clear link between their contributions and public benefits (exchange equity) and believe that authorities are transparent, accountable, and fair, they are more likely to comply voluntarily. To reduce tax avoidance and tax evasion, as well as promote a culture of compliance, governments must go beyond strict enforcement and focus on building trust, ensuring fairness, and improving transparency. A tax system perceived as just and equitable is not only more effective but also fosters positive social change and economic stability.

Implications

Promoting positive social change through tax compliance involves strengthening moral norms, enhancing public trust in government, and optimizing penalty structures. First, fostering a culture of tax compliance begins with education and awareness. Targeted educational campaigns could help individuals recognize tax compliance as a social duty, while integrating ethics and civic responsibility into school curricula could instill responsible financial behavior among children from an early age. Media campaigns

could further reinforce these values by showcasing the tangible benefits of tax compliance, such as improved infrastructure, healthcare, and education. Additionally, community role models, including business leaders and influencers, can play a crucial role in advocating for responsible tax practices.

Enhancement of public perception of government and authorities is another essential factor. Increasing transparency in tax collection and expenditure could build public trust, while citizen engagement initiatives, such as participatory budgeting and public forums, may promote accountability. Addressing corruption and bureaucratic inefficiencies would help ensure that tax revenues are used for public good, reinforcing confidence in the system. Furthermore, improving government responsiveness to taxpayer issues could foster a sense of fairness and encourage compliance.

Optimizing penalty structures is also key to reducing tax evasion. Ensuring that penalties are fair, consistent, and effectively enforced would serve as a deterrent to non-compliance. However, strict enforcement should be balanced with incentives, such as tax discounts for timely payments and amnesty programs for voluntary disclosure. Additionally, behavioral nudges, including reminders and simplified tax procedures, could help reduce non-compliance caused by complexity or misunderstanding. By addressing these three factors—education and awareness, public trust, and effective enforcement—societies can cultivate a culture of voluntary tax compliance, reduce evasion and avoidance, and enhance public services, ultimately driving positive social and economic development.

The findings of this study carry significant methodological, theoretical, and empirical implications. These insights contribute to a deeper understanding of tax compliance behavior, highlighting the complex interplay between perceptions of fairness, trust in government, and social influences. Methodologically, the study underscores the need for refined measurement tools, longitudinal analyses, and experimental approaches to better capture taxpayer decision-making. Theoretically, the results expand traditional economic models by integrating psychological and sociological perspectives, reinforcing the importance of voluntary compliance driven by social norms and institutional trust. Empirically, the findings suggest practical policy recommendations that emphasize transparency, fairness, and behavioral interventions to enhance tax compliance. The following sections elaborate on these implications in greater detail.

Methodological Implications

Future research should focus on refining tax compliance measurement by developing more comprehensive scales to assess perceptions of exchange equity and government trust, ensuring cross-cultural validity. The methodology was sound for addressing the research questions. However, future research into these relationships would be strengthened if a rigorous application of stratified sampling was used to ensure an adequate and equal number of participants were found for each unique group (defined by combinations of demographic factors). Future quantitative research would also be strengthened with a sample size adequate to account for all 30 IVs (primary and demographic).

Additionally, employing longitudinal studies could establish causal relationships between fairness perceptions, trust in government, and tax avoidance behavior over time. A mixed-methods approach that combines quantitative surveys with qualitative interviews may offer deeper insight into taxpayers' motivations and decision-making processes. Furthermore, behavioral experiments, such as implementing interventions or policy simulations, could provide empirical evidence on how government transparency and tax incentives influence tax avoidance and tax evasion behaviors.

Theoretical Implications

The results of this study contribute to the expansion of tax compliance theories by demonstrating that perceived fairness and trust play a critical role in taxpayer behavior, beyond traditional economic deterrence models such as Allingham and Sandmo's framework. This finding aligns with psychological and sociological theories such as social exchange theory and the slippery slope framework, which emphasize the importance of voluntary compliance driven by social norms and institutional trust. Additionally, the findings integrate with governance and public administration theories, particularly good governance theory, which suggests that transparency, accountability, and fairness in government institutions foster greater compliance. These insights indicate that policies aimed at increasing perceived fairness may be just as effective as enforcement measures in promoting tax compliance.

Empirical Implications

From a policy perspective, governments should prioritize transparency, fairness, and efficiency in tax administration rather than relying solely on punitive measures.

Comparative studies across different governance systems, such as developed versus developing countries, could provide further insights into how exchange equity and trust influence tax compliance in varying political and economic contexts. Moreover, tax authorities can apply behavioral economics principles—such as default settings, simplification, and social proof—to encourage compliance by enhancing perceptions of fairness and institutional trust. These empirical insights highlight the need for tax policies that not only deter tax evasion and tax avoidance but also cultivate voluntary compliance through trust-building measures.

The findings of this study carry important implications for professional and managerial practice. First, while penalties and enforcement remain important tools for deterring noncompliance, they cannot stand alone. Their effectiveness depends on whether taxpayers perceive government authority as legitimate and the system itself as fair. Thus, professionals in tax administration must balance enforcement with efforts to strengthen legitimacy and transparency. Equally important is embedding fairness into policy and practice. Both horizontal equity, or fairness among peers, and exchange equity, or fairness between taxpayers and government, emerged as powerful influences on compliance. This underscores the need for managers to ensure equitable treatment across taxpayers and to demonstrate, in tangible and visible ways, how tax revenues are used to benefit the community.

The results also show that compliance is deeply shaped by cultural and social norms. For professionals, this means moving beyond rules and penalties to cultivate a culture of compliance. Leveraging community networks, professional associations, and

peer groups can reinforce tax compliance as a shared value, not just a legal requirement. Educational campaigns that highlight the civic responsibility of paying taxes can further support this cultural shift. Another key implication lies in the role of demographics. Different groups defined by factors such as age, income, and ethnicity respond differently to fairness, penalties, and trust in government. This finding suggests that targeted interventions are necessary. Tax authorities and managers should tailor outreach, education, and even enforcement to the needs and expectations of specific subgroups rather than assuming a one-size-fits-all approach will be effective.

Finally, professionals and managers can strengthen compliance by embracing technology and internal culture. Digital tools that provide transparency—such as platforms that show taxpayers how their contributions are allocated—can reinforce perceptions of fairness and exchange equity. Likewise, within organizations, managers can foster cultures that value compliance by promoting ethical leadership, offering training, and ensuring that business practices align with both legal and social expectations. Taken together, these recommendations highlight that compliance is not enforced through penalties alone but is nurtured through legitimacy, fairness, and culture. Professionals and managers are therefore not only enforcers of rules but also stewards of trust, responsible for creating the conditions in which voluntary compliance becomes the norm.

Conclusion

This study demonstrates that tax evasion and tax avoidance are not isolated behaviors explained by single variables but are instead cultural phenomena shaped by the

interplay of morality, fairness, trust, authority, and demographics. The findings reveal that moral norms, perceptions of government authority, penalties, and fairness in exchange are central drivers of tax behavior, but their power lies not in isolation but rather, in how they combine, moderate, and reinforce one another within broader social and cultural contexts. Just as important, demographic subgroups interpret and respond to these influences differently, underscoring that compliance is never uniform across a population. From a practical standpoint, these results highlight that efforts to curb tax evasion and avoidance cannot rely solely on deterrence or enforcement. Lasting compliance requires an integrated approach that couples fair and transparent enforcement with the cultivation of legitimacy, trust, and shared cultural norms. Policymakers and practitioners must therefore design strategies that are sensitive to fairness, responsive to demographics, and anchored in both deterrence and legitimacy.

The broader takeaway is clear: tax compliance is a cultural contract. It is negotiated daily between individuals and institutions, shaped by perceptions of fairness, trust, and community norms. When that contract is honored—when taxpayers perceive fairness among peers, equity in exchange with government, and legitimacy in authority—compliance flourishes. When it is broken, no level of penalty or enforcement can fully restore trust.

This research contributes to the literature by identifying the multidimensional, interactive, and culturally embedded nature of tax behavior. It offers not only a model for understanding tax evasion and avoidance but also a roadmap for fostering a stronger tax compliance culture. While limitations of data, sample size, and subgroup representation

temper the precision of the findings, the direction is unmistakable: to build a sustainable and equitable tax system, authorities must move beyond punishment and toward cultivating legitimacy, fairness, and trust across diverse populations. In the end, the study affirms that compliance is not enforced; it is earned. The future of tax policy and administration will depend on how well institutions embrace this reality, shifting from a narrow focus on enforcement to a broader strategy of building cultural legitimacy. This is the enduring contribution of the present work—and its challenge to both scholarship and practice moving forward.

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Appendix A: Permissions to Use Survey Instruments

AW: Permission to use instrument Erich Kirchler Tue 8/16/2022 2:27 PM

To: Kenyatta Patton

Dear Kenyatta Patton, I already answered you that you can use it. All the best,
 Erich Kirchler Prof Dr Erich Kirchler Faculty of Psychology, University of Vienna
 Department of Occupational, Economic and Social Psychology Universitaetsstrasse 7, A-
 1010 Vienna Austria T +43 1 4277 473 33 - F +43 1 4277 473 39

Homepage: [https://ucris.univie.ac.at/portal/de/persons/erico-kirchler\(055f5cb8-04af-4400-be12-0cfa475f6278\)/cv.html?id=60521725\)](https://ucris.univie.ac.at/portal/de/persons/erico-kirchler(055f5cb8-04af-4400-be12-0cfa475f6278)/cv.html?id=60521725)

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[perspective101628fa-2020-0014?no_cache=1](https://www.mohrsiebeck.com/artikel/tax-policy-measures-to-combat-the-sars-cov-2-pandemic-and-considerations-to-improve-tax-compliance-a-behavioral-perspective101628fa-2020-0014?no_cache=1) TAX CHAT WITH NINA OLSON: THE
 ECONOMIC PSYCHOLOGY OF TAX BEHAVIOR:

<https://www.youtube.com/watch?v=DR01e0vWRmY&t=4s> VIDEO TAX

PSYCHOLOGY: https://www.youtube.com/watch?v=BMevq_vHswU&feature=youtu.be

Dr. Benk's Permission to use survey instrument

Kenyatta Patton (email redacted)

Tue 2/15/2022 10:33 PM

To: serkan benk (email redacted)

Hello Dr. Benk,

I hope all is well. Thank you for your prompt response and permission to use your instrument. If you could, please send instructions on how to score your instrument.

Thank you in advance for your time and consideration.

Best,

Kenyatta Patton

From: serkan benk (email redacted)

Sent: Wednesday, February 9, 2022 4:41 PM

To: Kenyatta Patton (email redacted)

Subject: Yan: Permission to use instrument and request for instrument instructions

Hi Kenyatta,

Of course you can use the survey instrument.

9/13/22, 7:07 PM Mail - Kenyatta Patton - Outlook

Permission to use instrument Erich Kirchler Tue 8/16/2022 2:27 PM To: Kenyatta

Patton Dear Kenyatta Patton, I already answered you that you can use it.

All the best, Erich Kirchler Prof Dr Erich Kirchler Faculty of Psychology,

University of Vienna Department of Occupational, Economic and Social Psychology

Universitaetsstrasse 7, A-1010 Vienna, Austria

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Appendix B: Demographic Questions

This is the second instrument that will be used to obtain demographic information on potential study participants.

Demographics

How would you describe your gender?

- Male
- Female
- Other (with a blank entry field for the participant to self-identify)

What is your age?

- Under 15
- 16–24
- 25–34
- 35–44
- Over 50

What is your ethnic background?

- White / Caucasian
- Asian - Eastern
- Asian - Indian
- Hispanic
- African-American
- Native-American
- Mixed race

Please circle your answer

- What is your perception of the federal government/authorities?
- Power or Not Powerful

- Trustworthy or Not Trustworthy

Appendix C: Invitation Email

Subject line:

20 Minute survey on tax evasion and tax avoidance behavior (\$5 Starbucks thank you gift).

Email message:

There is a new study about tax avoidance and tax evasion behavior that could help small business owners better understand taxation issues and avoid business culture habits that result in significant tax bills. this study, you are invited to share your thoughts relative to tax behavior scenarios.

About the study:

- One 20-minute survey.
- You would receive a \$5 Starbucks gift card as a thank you.
- To protect your privacy, you would not be asked for personal information.

Volunteers must meet these requirements:

- 18 years old or older
- Female or Male
- History of being a small business owner

This survey is part of the doctoral study for Kenyatta Patton, a Ph.D. student at Walden University. Interviews will take place during March 2024. For additional information please click the link below.

<https://subdomain.example.com/make-content...2021>

Appendix D: Maximum, Range, Mean, and Standard Deviation for Independent and
Dependent Variables

	VERT	HORI	EXCH	SOCI	MORA	DETE	PENA	TAXC	GOVT	TAXE	TAXA
max =	5.00	5.00	5.00	5.00	5.00	5.00	5.00	6.00	1.00	5.00	5.00
range =	4.00	4.00	4.00	4.00	4.00	4.00	4.00	5.00	1.00	4.00	4.00
mean =	3.56	3.98	3.58	3.95	3.95	3.99	3.95	4.61	0.65	3.90	3.98
std dev =	1.34	1.09	1.29	0.97	0.96	0.96	0.93	1.19	0.48	0.99	0.89