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HE INFLUENCE OF SOCIAL NORMS, TRUST IN GOVERNMENT, PERCEPTION OF TAX JUSTICE, PERCEPTION OF GOVERNMENT SPENDING, AND GENDER ON INDIVIDUAL TAX PAYER COMPLIANCE IN SEMARANG CITY

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ABSTRACT

Tax compliance is a crucial factor in ensuring the sustainability of national revenue, especially in Indonesia, where the compliance rate remains suboptimal. This study aims to explore the effects of social norms, trust in government, perception of tax justice, perception of government spending, and gender on individual taxpayer compliance in Semarang City.

Drawing on the Theory of Planned Behavior (TPB) and Attribution Theory, this research adopts a quantitative approach, using a structured questionnaire administered to 200 individual taxpayers. The data were analyzed using Partial Least Squares Structural Equation Modeling (PLS-SEM).

The findings reveal that social norms (descriptive, injunctive, subjective, and personal), trust in government, perceptions of tax justice, perceptions of government spending, and gender significantly influence taxpayer compliance in Semarang City. Descriptive norms (t = 3.972, p = 0.000), injunctive norms (t = 3.086, p = 0.015), subjective norms (t = 4.030, p = 0.000), and personal norms (t = 2.967, p = 0.003) all have positive and significant effects on tax compliance. Trust in government also positively impacts the perception of tax justice (t = 3.148, p = 0.002), which in turn strongly influences tax compliance (t = 8.563, p = 0.000). Trust in government has a direct effect on tax compliance (t = 2.333, p = 0.020) and an indirect effect mediated by tax justice (t = 2.879, p = 0.004). Perceptions of government spending (t = 2.719, p = 0.007) and gender (t = 2.444, p = 0.015) also significantly influence tax compliance, where men exhibit higher compliance rates compared to women. These results underscore that non-economic factors rooted in social and psychological dimensions are crucial in shaping tax compliance behavior.

Keywords: Social Factors, Tax Compliance, PLS-SEM, Semarang City

INTRODUCTION

It is the duty of a government to make development efforts to meet the demands of its people, as achieving an equitable and successful society is impossible unless the government plays a significant role in implementing policies by using various regional revenue sources. Large sums of money are needed for development projects, and these can be obtained from natural resources and contributions made by local people in each area. One of the most important internal revenue streams is taxes. Pursuant to Law Number 16 of 2009 on General Provisions and Tax Procedures in Indonesia, taxes are obligatory remittances that individuals or entities are mandated to remit to the state. These payments are compelled by law without any form of compensation and are designated for public purposes to improve societal well-being. This allotment includes public spending, employee pay, and other essential costs intended to improve the welfare of the public (Theodora, 2024). The main source of income for state budgets and national advancement is taxation.

Tax revenues in Indonesia have experienced a notable surge recently. Nonetheless, the nation's tax-to-GDP ratio remains comparatively subdued in relation to other countries of similar

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scale. Indonesia saw a drop in its tax ratio to 10.21% in 2023, from 10.39% in the previous year. This pattern emerged when the tax ratio fell to single digits for three consecutive years, from 2019 to 2021, hitting all-time lows of 9.77% in 2019, 8.33% in 2020, and 9.12% in 2021. This indicates that the capacity of the government to collect taxes does not increase in line with GDP growth (Theodora, 2024). Sri Mulyani Indrawati, Indonesia's Minister of Finance, underscored that the nation's low tax-to-GDP ratio arises from a substantial segment of the population and corporations neglecting their fiscal responsibilities. Due to limited tax revenues, the government cannot fully fund important social initiatives and projects (Kementerian Keuangan, 2016). Thus, for this function to be employed successfully, the public and the government must work together effectively. To gain public trust, the government must maintain openness and explain all tax laws and procedures. In a similar vein, the public needs easy access to thorough tax information and efficient government services to fulfill their tax obligations.

Furthermore, out of the 45,950,440 registered taxpayers, only 33,622,163 filed tax returns in 2019, yielding a compliance percentage of 73.06%, indicating that Indonesia has not achieved maximum taxpayer compliance. By 2020, the number of tax returns filed had reached 35,933,685, increasing the compliance rate to 77.63% even though the number of registered taxpayers had increased to 46,380,119. The trend of increasing compliance rates continued in 2021 and 2022, with rates of 84.07% and 86.80%, respectively, indicating a significant increase in taxpayers fulfilling their reporting requirements. On the one hand, however, even when there was an overall increase in the number of taxpayers between 2019 and 2022, the issue of an unoptimized tax compliance rate persisted across all taxpayers, reflecting the need to ensure that all taxpayers complete their paying and reporting obligations on time. Conversely, although the proportion of corporate taxpayers and financial officers has expanded over time, individual taxpayers continue to represent the predominant segment. This highlights the critical importance of individual contributions to the nation’s fiscal revenue. Therefore, the development and implementation of strategies to bolster individual tax compliance should be accorded high priority.

Earlier paradigms conceptualize tax compliance as a rational choice predicated on expected utility (Allingham & Sandmo, 1972). Concurrent behavioral research on tax compliance similarly scrutinizes responses through frameworks such as accountability (Sanders et al., 2008) and framing (McCaffery & Baron, 2004). However, subsequent studies reveal that the decision to comply is also significantly influenced by social contexts (Torgler, 2007). While economic determinants such as penalties and the probability of detection are extensively examined in tax compliance literature, it is imperative to acknowledge the substantial impact of social factors, including cultural values, conformity to social norms, and trust in governmental institutions, on tax compliance behavior.

This study utilizes the variables of descriptive norms, injunctive norms, subjective norms, personal norms, trust in government, perception of tax justice, gender, and perception of government spending to elucidate tax compliance, given that these elements are pivotal to the social and psychological processes influencing individual behavior. Descriptive norms relate to perceptions of others' conduct (Aronson et al., 2010), whereas injunctive and subjective norms pertain to societal expectations and the influence of significant others, respectively (Aronson et al., 2010; Bobek et al., 2013). Personal norms are associated with internal moral imperatives (Wenzel, 2004), and trust in government impacts perceptions of the tax system's equity (Torgler, 2007). The perception of tax justice has a direct effect on the propensity to fulfill tax obligations (Holtz, 2013). Gender is incorporated to address potential variations in risk attitudes and compliance behaviors between males and females, thus facilitating the tailoring of strategies for different demographic segments (Cyan et al., 2016). The perception of government spending influences taxpayer compliance, as individuals are more inclined to meet their tax obligations if they believe their contributions are allocated effectively and for public benefit, whereas perceptions of wasteful or corrupt expenditure can undermine compliance (Abdu & Adem, 2023). These variables were chosen because they collectively capture the social pressures, personal convictions, and perceptions of fairness and legitimacy that drive tax compliance, offering a nuanced understanding of voluntary compliance behavior that other factors may not fully encompass.

Studies have indicated that the influence of non-economic factors namely descriptive norms, injunctive norms, personal norms, trust in government, perception of tax justice, perception of government spending, and gender on tax compliance has produced heterogeneous results. Some studies reported that the impact of descriptive norms (Shaharuddin et al., 2018), injunctive norms (Alm et al., 2019), subjective norms (Bobek et al., 2013), personal norms (Yıldırım et al., 2016), trust in government (Aktaş Güzel et al., 2019), perception of government spending (Nugraheni & Purwanto, 2015), and gender (SURYATI, 2019) showed positive results. Meanwhile, other studies on the impact of descriptive norms (Mohdali et al., 2015), injunctive norms (Hallsworth et al., 2017), subjective norms (Shaharuddin et al., 2018), trust in government (Sari & Hermanto, 2020), perception on government spending (Wulandari & Budiaji, 2018), and gender (Nugraha, 2019) revealed opposing results. Non-economic factors are intrinsically subjective, and their significant impact may vary across different regions. Thus, it is essential to scrutinize the social determinants affecting tax compliance, as they are often neglected and inadequately investigated.

Among other large cities in Indonesia, Semarang City was selected as a representative for this study due to its higher number of individual taxpayers compared with other cities in Central Java and its state as a prominent economic hub. Semarang's large taxpayer base makes it possible to examine a wider range of tax-influencing variables. According to the Regional Office of Central Java I of the Directorate General of Taxation, there was an initial increase in individual and business taxpayers in 2019 of total of 348,387 with a 44.68% compliance rate. The compliance percentage, however, fell to 39.93% in 2020, 32.02% in 2021, and 29.17% in 2022, indicating inconsistency in taxpayer compliance in Semarang City. This highlights the necessity for further investigation to increase compliance rates. Although prior research has provided significant insights into the effects of various factors across different regions, gender and perceptions of government spending are novel variables that will be rigorously analyzed in this study, as they have not been concurrently explored within the same context. By integrating these variables to assess their impact on tax compliance in Semarang, this study delivers a fresh perspective on the complexities of tax compliance, potentially offering more refined and pertinent insights while establishing a basis for subsequent research in this domain.

THEORETICAL FRAMEWORK AND HYPOTHESIS FORMULATION

Theory of Planned Behavior

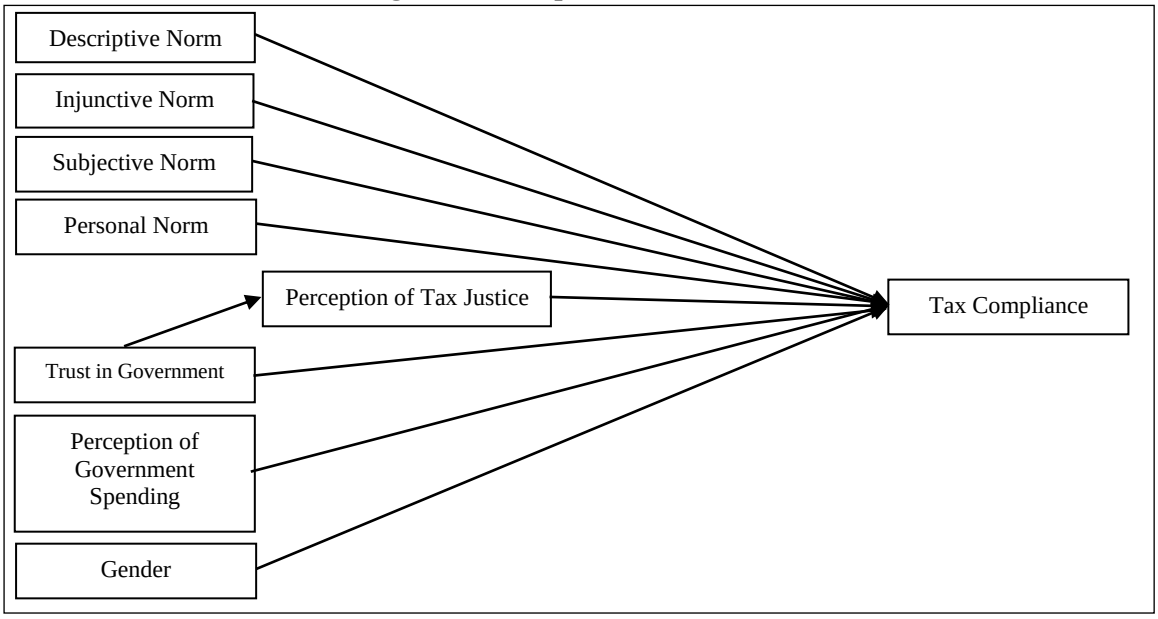
The theory of planned behavior posits that an individual's intentions substantially shape the behavior they ultimately perform. Tax compliance is influenced by attitudes, normative beliefs, and perceived behavioral control. The more positive an individual's attitudes, subjective norms, and perceived control, the more crucial their intention to execute specific behaviors becomes (Ajzen, 2006b). Tax compliance behavior is driven by personal evaluations and convictions regarding the anticipated outcomes. An individual is predisposed to adhere to tax obligations when their conduct is consistent with normative expectations, whether self-imposed or externally derived, and when facilitating conditions for compliant behavior are present (Ajzen, 1991).

Attribution Theory

According to attribution theory, a person's behavior is determined by circumstances (external variables) or character (internal elements) (Weiner & Weiner, 1985). Because both internal and external factors influencing taxpayers' compliance or non-compliance with tax filing and payment, attribution theory is applicable in this study. While external factors are typically produced by the environment in which individuals live, internal factors are typically induced by psychological or personality traits (Sulistianingtyas et al., 2018)

Conceptual Framework

Figure 1 Conceptual Framework



Hypothesis Formulation

The influence of descriptive norms on tax compliance

Descriptive norms denote how people behave when they believe that certain behaviors are common in a given situation. Empirical expectation and motivating action are the two basic components that descriptive norm use to affect individual behavior (Cialdini et al., 1991). Furthermore, descriptive norms provide direction for expected behaviors, which can help individuals fulfill their tax compliance obligations. Theodora (2024) found that descriptive norms have a positive impact on tax compliance. People tend to imitate other people or taxpayers when they are insecure about fulfilling their tax commitments. Consequently, the following hypothesis regarding the descriptive norm variable is established.

H1: Descriptive norms positively and significantly affect tax compliance.

The influence of injunctive norms on tax compliance

Injunctive norms refer to rules or restrictions that direct people to participate or abstain from specific actions. The term "injunctive norms" describes how a group's moral standards regarding what is considered proper or improper influence an individual's behavior. Setting normative expectations and inciting action are two basic ways in which influence behavior Cialdini et al. (1991). Injunctive standards are plausibly followed by individuals who aspire to fit in with their group. Hence, an individual who is likely to adhere to injunctive norms should respect pertinent laws, such as taxes (Bobek et al., 2007). Empirical studies by Alm et al. (2019) indicate that the existence of injunctive norms conveyed by letters to US taxpayers affects compliance with tax reporting. Consequently, the following hypothesis regarding the injunctive norm variable is established

H2: Injunctive norms positively and significantly affect tax compliance

The influence of subjective norms on tax compliance

Subjective norms describe how people's behaviors are influenced by perceived social pressure from others to either support or oppose specific behaviors. Normative views and individual's propensity to follow these standards are the two main ways in which these norms have an impact (Ajzen, 2006). Subjective norms, which originate from guilt feelings or external pressure, significantly influence people's actions. People tend to watch and emulate the actions of others, regardless of whether those actions are good or bad. Bobek et al. (2013) discovered that compliance with tax legislation is directly impacted by subjective standards. This assertion is supported by Mohdali et al. (2015), who contend that subjective standards improve tax compliance. Consequently, the following hypothesis regarding the subjective norm variable is established.

H3: Subjective norms positively and significantly affect tax compliance

The influence of personal norms on tax compliance

A person who follows their internal standards based on their sense of self-worth is said to adhere to personal norms as opposed to following social norms. According to Janmaimool (2017), these personal norms influence conduct through two main channels, individual beliefs and self-imposed standards. Personal norms influence tax compliance by shaping individuals' beliefs regarding the legality and morality of adhering to tax regulations and meeting tax obligations (Bobek et al., 2007). Thus, personal norms directly impact tax compliance. In addition, Yıldırım et al. (2016) states that personal norms have the greatest impact on tax compliance. Their findings show that personal norms directly influence adherence to tax law. This finding is further elaborated by Kostritsa & Sittler (2017), in which people have a tendency to adhere to social norms within their recognized groups. Consequently, the following hypothesis regarding the personal norm variable is established.

H4: Personal norms positively and significantly affect tax compliance

The influence of trust in government on the perception of tax justice

The perception of tax justice among taxpayers influences their confidence in the government. This, in turn, positively affects their level of tax compliance (Güzel et al., 2019). According to research by Güzel et al. (2019), increased trust in the government enhances taxpayers' views of fairness and thus positively impacts tax compliance. In this context, trust precedes the perception of justice; taxpayers use their trust in the government to assess the fairness of the system. In other words, if taxpayers trust the government, they are more likely to believe that the system is applied fairly. Other studies indicate that when taxpayers perceive government practices as fair, their trust in the government increases, showing a correlation between fairness perceptions and trust in government (Tarmidi & Nurlita, 2018). Therefore, a hypothesis concerning the impact of government trust is proposed.

H5: Trust in government positively and significantly affects the perception of tax justice.

The influence of perception of tax justice on tax compliance

Research by Alm et al. (2019) emphasizes the crucial role of tax justice encouraging taxpayer compliance. It has been demonstrated that a carefully considered and equally applied tax system by the government increases taxpayer compliance. This emphasizes how important it is for taxpayers to understand the tax system in place because compliance is positively correlated with a just and efficient system. Numerous studies, such as those by Al Seddig Alshadli (2015), Güzel et al. (2019), and Casal et al. (2016) have confirmed that tax equity and compliance are positively correlated. Furthermore, Schisler (1995) claims that attitudes toward tax fairness have a major impact on compliance behavior, frequently surpassing the influence of tax rates. Notably, Kirchler (2007) and Gilligan & Richardson (2005) stressed how important it is for tax compliance behavior to be formed by one's perception of tax justice. Consequently, the following hypothesis regarding the perception of tax justice variable is established.

H6: Perception of tax justice positively and significantly affects tax compliance.

The influence of trust in government on tax compliance mediated by the perception of tax justice

Perception of tax justice is highly correlated with fair government activities, leading to increase in taxpayers' trust (Tarmidi & Nurlita, 2018). Hence, government efforts in acting justly and using a customer-focused mindset are expected to build trust (Kirchler et al., 2008; Kogler et al., 2013; Roberts & Hite, 1994). Taxpayer compliance frequently results from the perception that tax officers perform their responsibilities in a courteous, unbiased, and professional manner (McFarlin & Sweeney, 1992). Conventional view holds that justice in tax affairs leads to trust, however a new study disagrees, arguing that trust influences how people perceive justice (Alexander & Ruderman, 1987). This study disproves the idea that justice comes before trust by demonstrating how much trust affects an individual's view of justice. Although the majority of research has focused on trust as a function of fairness (Jimenez & Iyer, 2016; Kirchler et al., 2008; Kogler et al., 2013; Roberts & Hite, 1994; Wenzel, 2002), other studies have demonstrated that trust is an important component of how people perceive justice (Alexander & Ruderman, 1987; Becerra & Gupta, 2003; Holtz & Harold, 2008; Krosgaard et al., 2002). Crucial roles in tax compliance are determined by the degree of taxpayer perception of tax justice and the level of faith in government performance. The association between tax compliance and government trust is completely mediated by tax justice perception (Alexander & Ruderman, 1987). Consequently, the following hypothesis regarding the trust in government variable mediated by the perception of tax justice is established.

H7: Trust in government affects tax compliance with perception of tax justice as a mediating variable.

Perception of Government Spending

Taxpayers see government expenditure as something they obtain in exchange for taxes. They feel content with the contributions the government makes to society, which motivates them to fulfill their tax duties. People either ascribe their conduct to external circumstances (situational pressure) or internal variables (personal control), according to attribution theory. Nugraheni & Purwanto (2015) and Palil (2010) conducted earlier research that lends credence to the notion that taxpayers' perceptions of government spending impact their level of compliance. Promoting tax compliance requires an understanding of these beliefs and elements such as accountability and transparency. Hence, analyzing government communication tactics may be considered to improve taxpayer compliance. Consequently, the following hypothesis regarding the perception of government spending variable is established.

H8: Perception of government spending positively and significantly affects taxpayer compliance

Gender

Gender is one of the many variables that can affect a taxpayer's compliance behavior. This is influenced by how committed a male or female taxpayer to engaging in tax compliance activities. Gender, duties, and responsibilities are intimately associated for both men and women. While a study by Surya (2018) indicated that marital status and gender variables have little effect on taxpayer compliance, Suryati (2019) indicated that gender variables have a considerable impact on taxpayer compliance. Consequently, the following hypothesis regarding the gender variable is established.

H9: Gender specifically men positively and significantly affects tax compliance.

RESEARCH METHODOLOGY

Population and Sample

This study focuses on individual taxpayers in Semarang City registered in 2023, totaling 695,037 (Direktorat Jendral Pajak Kanwil Jateng I). Data was collected using surveys to reflect the population accurately (Sekaran, 2016; Zaluchu, 2020). The sample, a subset of the population, consists of 200 taxpayers, determined using guidelines from Latan et al. (2017) and Ferdinand (2014), who recommend a sample size between 100 to 200 for Structural Equation Modeling (SEM) analysis. Semarang City was chosen due to its inadequate individual tax return reporting levels.

Variable and Measurement

This study uses nine variables: dependent variable (tax compliance), independent variables (descriptive norm, injunctive norm, subjective norm, personal norm, trust in government, gender, perception of government spending), and mediating variable (perception of tax justice), The following are the variables used in this study along with their measurements:

Tabel 1
Variable & Measurement

Variable	Measurement
Independent Variable	
- Descriptive norm	- Likert scale 1-5
- Injunctive norm	- Likert scale 1-5
- Subjective norm	- Likert scale 1-5
- Personal norm	- Likert scale 1-5
- Trust in government	- Likert scale 1-5
- Perception of tax justice	- Likert scale 1-5
- Perception of government spending	- Likert scale 1-5
- Gender	- Woman (0) & Men (1)
Dependent Variable	
- Tax Compliance	- Likert scale 1-5

Source and Type of Data

This study used primary data collected directly from individual taxpayers in Semarang City via Google Forms, ensuring accuracy and reliability. The research is quantitative, using numerical data to test hypotheses and analyze findings (Kasiram, 2008; Darmawan & Latifah, 2013). Questionnaires were distributed to 200 respondents out of 695,037 registered taxpayers in 2023 (Direktorat Jendral Pajak Kanwil Jateng I), with participation being voluntary.

Analysis Method

This study used the Partial Least Squares (PLS) method for data analysis, a variance-based SEM approach ideal for theory development and prediction with small sample sizes and non-normal data (Latan et al., 2017). Data were processed using SmartPLS software, which employs bootstrapping for reliability. The analysis included two sub-models: the measurement model, tested for validity and reliability using convergent validity, discriminant validity, and composite reliability, and the structural model, assessed through R-square and F-square values to evaluate predictive power and effect size. Path coefficients were estimated using bootstrapping to determine the significance of relationships between variables.

RESULT AND DISCUSSION

Research Sample Description

Samples were collected through a questionnaire administered to 200 individual taxpayers in Semarang City, focusing on eight independent variables: descriptive norms, injunctive norms, subjective norms, personal norms, trust in government, perception of tax justice, gender, and perception of government spending, with taxpayer compliance as the dependent variable. The gender distribution showed that 55% of respondents were female (110 participants) and 45% were male (90 participants). In terms of district representation, Tembalang had the highest frequency with 26 respondents (13%), followed by Genuk and West Semarang (21 respondents each, 10.5%). Other districts included Gajahmungkur (10%), Banyumanik (8.5%), and South and North Semarang (5.5% each). The districts with the lowest participation were East Semarang (3 respondents, 1.5%) and Gunungpati (7 respondents, 3.5%). Overall, Tembalang, Genuk, and West Semarang had the highest representation, while East Semarang had the lowest.

Outer Model Analysis Results

Three processes are involved in the outer model analysis with SmartPLS: composite reliability, discriminant validity, and convergent validity. Testing the outer loading value on the outer model was the first step in the data analysis process. The first outer loading test was then conducted based on the outer model. The degree of correlation between the indicator and latent variable is displayed in the loading factor table (table 3). If the loading factor exceeds 0.7 and is positive, the indicator is considered valid. Each indicator or item's weight is displayed as a measure of each variable according to the loading factor value. It is clear from the preceding table that every indication satisfies the minimum criterion of 0.7. As a result, every indicator used in this research is valid.

Table 3
Convergent Validity Test Results

Variables	Outer loadings	Description
X1.1 <- Descriptive Norm	0.852	Valid
X1.2 <- Descriptive Norm	0.831	Valid
X1.3 <- Descriptive Norm	0.823	Valid
X1.4 <- Descriptive Norm	0.824	Valid
X2.1 <- Injunctive Norm	0.711	Valid
X2.2 <- Injunctive Norm	0.752	Valid
X2.3 <- Injunctive Norm	0.831	Valid
X2.4 <- Injunctive Norm	0.863	Valid
X3.1 <- Subjective Norm	0.820	Valid
X3.2 <- Subjective Norm	0.790	Valid
X3.3 <- Subjective Norm	0.817	Valid
X3.4 <- Subjective Norm	0.773	Valid
X3.5 <- Subjective Norm	0.739	Valid
X3.6 <- Subjective Norm	0.780	Valid
X4.1 <- Personal Norm	0.886	Valid
X4.2 <- Personal Norm	0.721	Valid
X4.3 <- Personal Norm	0.820	Valid
X4.4 <- Personal Norm	0.819	Valid
X5.1 <- Trust in Government	0.930	Valid
X5.2 <- Trust in Government	0.844	Valid
X5.3 <- Trust in Government	0.857	Valid
X6.1 <- Perception of Government Spending	0.741	Valid
X6.2 <- Perception of Government Spending	0.740	Valid
X6.3 <- Perception of Government Spending	0.799	Valid
X6.4 <- Perception of Government Spending	0.756	Valid

X6.5 <- Perception of Government Spending	0.743	Valid
X6.6 <- Perception of Government Spending	0.701	Valid
Y1.1 <- Tax Compliance	0.781	Valid
Y1.2 <- Tax Compliance	0.746	Valid
Y1.3 <- Tax Compliance	0.800	Valid
Y1.4 <- Tax Compliance	0.757	Valid
Y1.5 <- Tax Compliance	0.870	Valid
Y1.6 <- Tax Compliance	0.798	Valid
Y1.7 <- Tax Compliance	0.759	Valid
M1.1 <- Perception of Tax Justice	0.841	Valid
M1.2 <- Perception of Tax Justice	0.784	Valid
M1.3 <- Perception of Tax Justice	0.743	Valid
M1.4 <- Perception of Tax Justice	0.822	Valid
M1.5 <- Perception of Tax Justice	0.875	Valid
M1.6 <- Perception of Tax Justice	0.841	Valid
D1.1 <- Gender	1.000	Valid

Discriminant validity testing is performed by analyzing the cross-loading value with the correlation of variable-forming constructs. The correlation between each construct and the other constructs in the model, or the square root value of the average variance extracted (AVE) of each construct, must be greater than 0.7 to be used as the standard value for cross-loading. The condition that needs to be fulfilled is that the indicator construct's correlation with the variable it forms must be higher than the values of the other variables. The cross-loading value of the indicator construct with the variable it produces is greater than the other variables. Hence, all indicators have complied with the requirements, indicating that the indicators are valid (Table 4).

Table 4
Cross-loading Value

	Gender (X0)	Perception of Tax Justice (X1)	Descriptive Norms (X1)	Injunctive Norms (X2)	Subjective Norms (X3)	Personal Norms (X4)	Trust in Government (X5)	Perception of Government Spending (X7)	Tax Compliance (Y)	Description
D1.1	1	-0.038	-0.038	0.147	0.081	0.001	-0.094	0.168	0.118	Valid
M1.1	0.017	**0.841**	-0.018	0.249	0.164	0.084	0.176	0.208	0.541	Valid
M1.2	0.009	**0.784**	0.054	0.172	0.181	0.025	0.158	0.081	0.513	Valid
M1.3	-0.061	**0.743**	0.015	0.296	0.2	0.098	0.162	0.083	0.465	Valid
M1.4	-0.07	**0.822**	0.015	0.125	0.185	0.125	0.184	0.079	0.505	Valid
M1.5	-0.004	**0.875**	0.045	0.147	0.127	0.139	0.183	0.092	0.462	Valid
M1.6	-0.052	**0.841**	-0.011	0.145	0.234	0.037	0.205	0.072	0.527	Valid
X1.1	-0.044	0.033	**0.852**	-0.008	0.066	0.064	0.012	0.046	0.196	Valid
X1.2	0.023	0.052	**0.831**	-0.043	0.079	0.094	-0.053	0.071	0.165	Valid
X1.3	-0.046	-0.001	**0.823**	-0.011	0.084	0.126	0.009	0.036	0.193	Valid
X1.4	-0.06	0.002	**0.824**	0.049	0.056	0.025	-0.02	0.085	0.179	Valid
X2.1	0.089	0.156	-0.044	**0.711**	0.109	0.194	0.09	0.187	0.254	Valid
X2.2	0.177	0.133	0.076	**0.752**	0.145	0.131	0.007	0.182	0.268	Valid
X2.3	0.144	0.249	-0.029	**0.831**	0.174	0.135	0.093	0.302	0.384	Valid
X2.4	0.126	0.147	-0.004	**0.803**	0.254	0.169	0.136	0.249	0.332	Valid
X3.1	0.039	0.202	0.123	0.148	**0.82**	0.14	0.096	0.143	0.365	Valid
X3.2	0.033	0.203	0.04	0.239	**0.79**	0.053	0.162	0.127	0.384	Valid
X3.3	0.081	0.241	0.05	0.269	**0.837**	0.127	0.076	0.071	0.404	Valid
X3.4	0.079	0.151	0.041	0.156	**0.775**	0.124	0.135	0.136	0.31	Valid
X3.5	-0.052	0.139	0.08	0.076	**0.709**	-0.016	0.164	0.147	0.268	Valid
X3.6	-0.048	0.115	0.07	0.121	**0.78**	0.137	0.056	0.12	0.322	Valid
X4.1	0.021	0.068	0.077	0.16	0.102	**0.886**	-0.096	0.084	0.219	Valid
X4.2	0.027	0.094	0.056	0.023	0.173	**0.721**	0.029	0.135	0.156	Valid
X4.3	-0.009	0.096	0.105	0.195	0.143	**0.82**	0.028	0.069	0.276	Valid
X4.4	-0.016	0.096	0.047	0.187	0.062	**0.859**	-0.057	0.071	0.189	Valid
X5.1	-0.098	0.236	0.004	0.089	0.148	-0.057	**0.93**	-0.136	0.22	Valid
X5.2	-0.048	0.193	0.031	0.045	0.165	-0.01	**0.846**	-0.129	0.196	Valid
X5.3	-0.096	0.19	-0.049	0.1	0.102	-0.021	**0.857**	-0.077	0.195	Valid
X6.1	0.214	0.097	0.065	0.177	0.158	0.056	-0.114	**0.741**	0.237	Valid
X6.2	0.157	0.026	0.026	0.211	0.161	0.097	-0.02	**0.74**	0.226	Valid
X6.3	0.159	0.061	-0.059	0.237	0.044	0.053	-0.138	**0.799**	0.251	Valid
X6.4	0.081	0.194	0.087	0.254	0.11	0.07	-0.119	**0.756**	0.237	Valid
X6.5	0.067	0.116	0.113	0.206	0.092	0.124	-0.102	**0.743**	0.276	Valid
X6.6	0.056	0.05	0.032	0.256	0.124	0.093	-0.014	**0.701**	0.187	Valid
Y1.1	0.11	0.602	0.124	0.274	0.08	0.112	0.188	0.266	**0.781**	Valid
Y1.2	0.13	0.455	0.131	0.294	0.311	0.139	0.201	0.222	**0.746**	Valid
Y1.3	0.093	0.562	0.17	0.286	0.402	0.187	0.239	0.256	**0.8**	Valid
Y1.4	0.113	0.532	0.144	0.155	0.316	0.128	0.052	0.226	**0.757**	Valid
Y1.5	0.058	0.517	0.133	0.188	0.412	0.108	0.208	0.239	**0.87**	Valid
Y1.6	0.042	0.446	0.089	0.106	0.351	0.14	0.259	0.231	**0.798**	Valid
Y1.7	0.119	0.489	0.094	0.412	0.274	0.231	0.112	0.251	**0.759**	Valid

Source: Output SmartPLS 2024

In addition, the Fornell-Larcker Criterion also support this finding (Table 5). The Fornell-Lacker criterion value for each construct is shown for each bolded number. The Fornell-Lacker criterion value of each construct has the highest value for each latent variable tested with other latent variables, which indicates that each indicator can be predicted well by each latent variable. Thus, it can conclude that every construct satisfies the requirements for discriminant validity.

Table 5
Fornell-Larcker Criterion Value

	Descriptive Norms (X1)	Gender (X8)	Injunctive Norms (X2)	Perception of Government Spending (X7)	Perception of Tax Justice (X6)	Personal Norms (X4)	Subjective Norms (X3)	Tax Compliance (Y)	Trust in Government (X5)
Descriptive Norms _(X1)	**0.833**								
Gender_(X8)	-0.038	**1**							
Injunctive Norms_(X2)	-0.002	0.167	**0.792**						
Perception of Government Spending_(X7)	0.071	0.163	0.321	**0.747**					
Perception of Tax Justice_(X6)	0.02	-0.028	0.222	0.126	**0.819**				
Personal Norms_(X4)	0.093	0.001	0.187	0.105	0.095	**0.814**			
Subjective Norms_(X3)	0.086	0.031	0.22	0.155	0.225	0.147	**0.787**		
Tax Compliace_(Y)	0.226	0.128	0.403	0.308	0.631	0.263	0.449	**0.788**	
Trust in Government_(X5)	-0.006	-0.094	0.091	-0.13	0.217	-0.036	0.15	0.233	**0.878**

Source: Output SmartPLS 2024

Outer-loading was followed by composite reliability testing in the analysis process. The Cronbach alpha and composite reliability values are used in PLS to measure dependability. The reliability of a variable can be verified if Cronboach's alpha > 0.70; Composite reliability > 0.70; and AVE > 0.50. All of the variables in table 6 have Cronbach's alpha values greater than 0.70; composite reliability values greater than 0.70; and AVE values greater than 0.50, indicating that all indicators are reliable.

Table 6
Composite Reliability

Variables	Cronbach's alpha	Composite reliability (rho_a)	Composite reliability (rho_c)	Average variance extracted (AVE)	Description
Descriptive Norm	0.853	0.854	0.900	0.693	Reliable
Injunctive Norm	0.800	0.823	0.870	0.627	Reliable
Subjective Norm	0.877	0.885	0.907	0.619	Reliable
Personal Norm	0.832	0.873	0.886	0.662	Reliable
Trust in Government	0.851	0.875	0.910	0.771	Reliable
Perception of Tax Justice	0.901	0.904	0.924	0.670	Reliable
Perception of Government Spending	0.842	0.847	0.883	0.558	Reliable
Gender	1.000	1.000	1.000	1.000	Reliable
Tax Compliance	0.898	0.902	0.920	0.621	Reliable

Source: Output SmartPLS 2024

Inner Model Analysis Results

Inner model analysis is used to determine how the variables relate to one another. This structural model analysis examines the links between variables and their significance values by

examining both structural path parameters and R-square values. In this study, there are one endogenous variable, tax compliance; one mediating variable, perception of tax justice; and seven exogenous variables – descriptive norms, injunctive norms, subjective norms, personal norms, trust in government, perception of government spending, and gender. Initially, inner model research was performed to examine each variable's R-square value to determine how exogenous variables affect endogenous variables when they have a significant impact.

Table 7
R-Square

Path	R-square	R-square adjusted
Perception of Tax Justice	0.047	0.042
Tax Compliance	0.629	0.613

Source: Output SmartPLS 2024

The R-square value of the perception of tax justice and tax compliance variables are 0.042 and 0.613, respectively (Table 7). These percentages both fall into the small and medium value category, indicating that their respective levels of effect are low to moderate. Furthermore, the relative influence of external constructs on endogenous constructs can be evaluated using the F-square values. Three criteria were used to aggregate the F-square results: 0.02, 0.15, and 0.35 denote minor, medium, and major impacts, respectively. According to Hair et al. (2019), an effect size value of less than 0.02 denotes no effect.

Table 8
F-square

Path	F-square	Impact
Descriptive Norm -> Tax Compliance	0.085	Minor
Injunctive Norm -> Tax Compliance	0.048	Minor
Subjective Norm -> Tax Compliance	0.126	Medium
Personal Norm -> Tax Compliance	0.041	Minor
Trust in Government -> Perception of Tax Justice	0.050	Minor
Perception of Tax Justice -> Tax Compliance	0.573	Major
Trust in Government -> Tax Compliance	0.029	Minor
Perception of Government Spending -> Tax Compliance	0.040	Minor
Gender -> Tax Compliance	0.028	Minor

Source: Output SmartPLS 2024

F-square values indicate varying degrees of influence of different variables on dependent variable Y, ranked by their predictive power. Overall, while perception of tax justice is the dominant predictor of tax compliance, other variables – in order of subjective norms, descriptive norms, injunctive norms, personal norms, perception of government spending, trust in government, and gender – also contribute to varying extents.

Hypothesis Test Results

This study employs nine hypotheses and the bootstrapping test was used for hypothesis testing. The effect of exogenous variables on endogenous variables can then be determined by the level of significance using T-statistics and P-values derived from this bootstrapping test. A construct relationship between variables can be said to have a significant relationship if the P-value < 0.05 (significance level = 5%) and T-statistic > 1.96. The path coefficient computation was performed using SmartPLS, and the results are shown in tables 9 and 10.

Table 9
Direct Path Coefficient

Path	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Descriptive Norm -> Tax Compliance	0.180	0.183	0.045	3.972	0.000
Injunctive Norm-> Tax Compliance	0.150	0.147	0.048	3.086	0.002
Subjective Norm-> Tax Compliance	0.230	0.228	0.057	4.030	0.000
Personal Norm -> Tax Compliance	0.127	0.132	0.043	2.967	0.003
Trust in Government -> Perception of Tax Justice	0.217	0.214	0.069	3.148	0.002
Perception of Tax Justice -> Tax Compliance	0.493	0.490	0.058	8.563	0.000
Trust in Government -> Tax Compliance	0.110	0.109	0.047	2.333	0.020
Perception of Government Spending -> Tax Compliance	0.133	0.139	0.049	2.719	0.007
Gender -> Tax Compliance	0.104	0.104	0.043	2.444	0.015

Source: Output SmartPLS 2024

Table 10
Indirect Path Coefficient

Path	Original sample (O)	Sample mean (M)	Standard deviation (STDEV)	T statistics (|O/STDEV|)	P values
Trust in Government -> Perception of Tax Justice -> Tax Compliance	0.107	0.105	0.037	2.879	0.004

Source: Output SmartPLS 2024

The study investigates various factors influencing tax compliance, beginning with **H1**, which confirms that descriptive norms positively impact compliance, evidenced by a T-statistic of 3.972 and a P-value of 0.000 (Table 9). This finding aligns with Jimenez & Iyer (2016), who argue that when individuals observe their peers fulfilling tax obligations, they are likely to internalize this behavior, enhancing compliance through social proof. According to the theory of planned behavior (TPB), these descriptive norms create social pressure, motivating individuals to adhere to tax laws. Additionally, attribution theory suggests that individuals attribute their compliance to the normative behavior they observe in their social circles, reinforcing their intention to pay taxes. **H2** reveals that injunctive norms significantly affect compliance, with a T-statistic of 3.086 and a P-value of 0.002 (Table 9). This supports Bobek et al. (2007), who state that societal expectations around tax payment frame evasion as socially unacceptable, thereby deterring non-compliance. The TPB posits that when individuals understand that society disapproves of tax evasion, they are more likely to comply to align with societal expectations. Attribution theory further explains that over time, individuals internalize these expectations, leading to a personal belief in the importance of tax compliance. **H3** indicates that subjective norms positively influence compliance, shown by a T-statistic of 4.030 and a P-value of 0.000 (Table 9). This finding is consistent with Mohdali et al. (2015), demonstrating that perceived social approval from friends and family significantly affects attitudes toward tax compliance. In TPB, subjective norms generate social pressure, prompting individuals to comply with tax laws to avoid disapproval from their close social networks. According to attribution theory, the perceived support for compliance from one's social circle leads

to internalizing tax compliance behaviors as personal values. **H4** presents evidence that personal norms also play a crucial role in compliance, with a T-statistic of 2.967 and a P-value of 0.003 (Table 9). This finding aligns with Yıldırım et al. (2016) and Kostritsa & Sittler (2017), who emphasize that internal moral beliefs and the sense of civic duty drive individuals to comply voluntarily with tax laws. The TPB indicates that personal norms shape attitudes toward tax compliance, as individuals consider social expectations while forming their internal standards. Attribution theory reinforces this by suggesting that when compliance is driven by internal moral values rather than external pressures, individuals are more likely to maintain consistent compliance. **H5** supports the hypothesis that trust in government positively affects perceptions of tax justice, with a T-statistic of 3.148 and a P-value of 0.002 (Table 9). This finding is corroborated by Güzel et al. (2019), indicating that when citizens trust their government to act fairly and competently, they are more likely to view the tax system as equitable. The TPB asserts that trust in government fosters a positive attitude toward tax compliance, while attribution theory suggests that citizens attribute their perceptions of fairness to the government's actions, reinforcing their willingness to comply. **H6** further confirms that perceptions of tax justice significantly impact compliance, evidenced by a T-statistic of 8.563 and a P-value of 0.000 (Table 9). This supports research by Widuri & Irawan (2019), which demonstrates that when taxpayers perceive the tax system as fair, they are more inclined to fulfill their obligations. According to TPB, favorable perceptions of tax justice create a more positive attitude toward compliance, while attribution theory suggests that when individuals believe the system operates justly, they are more likely to attribute their compliance to this fairness. **H7** shows that trust in government affects tax compliance through perceptions of tax justice as a mediating factor, the data supports this hypothesis, showing a significant impact of trust in government on taxpayer compliance, evidenced by a T-statistic of 2.333 and a P-value of 0.020 (Table 9). Additionally, trust in government positively influences tax compliance indirectly through perceptions of tax justice, with a T-statistic of 2.879 and a P-value of 0.004 (Table 10), both indicating significance. This aligns with findings from Widuri & Irawan (2019), emphasizing that trust fosters a belief in the fairness of tax laws, promoting compliance. TPB indicates that when individuals trust their government, they are more likely to comply due to the positive social pressures created by this trust. Attribution theory supports this by suggesting that trust leads to internalized beliefs about fairness, enhancing the likelihood of compliance. **H8** indicates that perceptions of government spending positively impact tax compliance, with a T-statistic of 2.719 and a P-value of 0.007 (Table 9). This finding is consistent with research by e Hassan et al. (2021) and Abdu & Adem (2023), suggesting that when citizens believe their taxes are effectively utilized for public goods, they feel a greater civic responsibility to comply. The TPB posits that effective government spending generates positive attitudes towards tax compliance, while attribution theory suggests that when citizens see their contributions making a difference, they attribute their compliance to a sense of civic duty and accountability. Lastly, **H9** demonstrates that gender significantly influences tax compliance, with a T-statistic of 2.444 and a P-value of 0.015 (Table 9). This finding shows that male taxpayers exhibit higher compliance rates than females, supported by Prasetyo et al. (2020) and Cyan et al. (2016). The study suggests that men may be more risk-averse and feel a stronger sense of duty toward tax compliance, which can be explained through TPB as men may have a more favorable attitude toward tax payment. Attribution theory suggests that men attribute their compliance to an intrinsic sense of duty, while women may view non-compliance as justified by perceived inequities in the tax system.

CONCLUSION AND RECOMMENDATIONS

This section contains the conclusions of the research, and recommendations for future research.

Conclusion

The research findings on various factors affecting taxpayer compliance among Semarang City taxpayers reveal several key conclusions. Descriptive norms significantly and positively influence taxpayer compliance, supported by a T-statistic of 3.972, a P-value of 0.000, and a moderate effect size (F-square = 0.085), indicating that individuals' perceptions of others' compliance are crucial in shaping their own behavior. Injunctive norms, reflecting perceived social expectations, also positively affect tax compliance, as evidenced by a T-statistic of 3.086 and a P-value of 0.015, with a small effect size (F-square = 0.048), suggesting that social approval or disapproval plays a moderate role in compliance decisions. Subjective norms exhibit a strong positive effect, demonstrated by a T-statistic of 4.030 and a P-value of 0.000, highlighting their significant influence on compliance behavior (F-square = 0.126). Personal norms similarly impact compliance, with a T-statistic of 2.967, a P-value of 0.003, and a small effect size (F-square = 0.041), where individual moral standards modestly contribute to tax obligation adherence. Trust in government is shown to significantly influence the perception of tax justice (T-statistic = 3.148, P-value = 0.002, F-square = 0.050), indicating that greater trust correlates with a fairer tax system perception. Furthermore, the perception of tax justice has a robust positive impact on compliance (T-statistic = 8.563, P-value = 0.000, F-square = 0.573), marking it as the most influential factor in compliance decisions. Trust in government also impacts tax compliance both directly (T-statistic = 2.333, P-value = 0.020) and indirectly through tax justice perception (T-statistic = 2.879, P-value = 0.004), with a small effect size for the direct effect (F-square = 0.029). Additionally, perceptions of government spending (T-statistic = 2.719, P-value = 0.007, F-square = 0.040) and gender differences (T-statistic = 2.444, P-value = 0.015, F-square = 0.028) contribute modestly to variations in tax compliance behavior. Overall, these findings underscore the complex interplay of social norms, trust in government, and perceptions of justice and spending in influencing taxpayer compliance in Semarang City.

Recommendations

1. Incorporate additional variables, combining between economic variable and non-economic variable
2. Combine quantitative and qualitative research to identify missing factors: To identify other relevant factors that might not have been captured by the current quantitative approach, consider conducting qualitative research. Focus groups or in-depth interviews with taxpayers can provide insights into unmeasured variables or latent factors that significantly impact tax compliance but were not included in the initial model.

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