

Implementation of E-Filling and Taxpayer Awareness of Taxpayer Compliance with Tax Socialization as a Moderator

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ABSTRACT

This study aims to analyze the effect of the implementation of E-Filling and Taxpayer Awareness on Taxpayer Compliance, with Tax Socialization as a moderating variable. The study examines taxpayer compliance at KPP Pratama Gresik with a research population of individual taxpayers in Gresik registered at KPP Pratama Gresik totaling 275,042 taxpayers. Sampling using purposive sampling technique of 80 respondents with primary data sources obtained through questionnaires distributed according to sample criteria. Data analysis using Structural Equation Modeling (SEM-PLS) to assess the relationship between variables. The results of the analysis show that the implementation of E-Filling and Taxpayer Awareness have a positive effect on Taxpayer Compliance, but Tax Socialization does not moderate the relationship between the two variables on Taxpayer Compliance.

Keywords: E-Filling; Compliance; Awareness; Taxation; Socialization

Penerapan E-Filling Dan Kesadaran Wajib Pajak Terhadap Kepatuhan Wajib Pajak Dengan Sosialisasi Perpajakan Sebagai Pemoderasi

ABSTRAK

Penelitian ini bertujuan menganalisis pengaruh penerapan E-Filling dan Kesadaran Wajib Pajak terhadap Kepatuhan Wajib Pajak, dengan Sosialisasi Perpajakan sebagai variabel moderasi. Penelitian meneliti kepatuhan wajib pajak di KPP Pratama Gresik dengan populasi penelitian wajib pajak orang pribadi di Gresik yang terdaftar di KPP Pratama Gresik sejumlah 275.042 wajib pajak. Pengambilan sampel menggunakan teknik purposive sampling sebanyak 80 responden dengan sumber data primer diperoleh melalui kuesioner yang disebarakan sesuai kriteria sampel. Analisis data menggunakan Structural Equation Modeling (SEM-PLS) untuk menilai hubungan antar variabel. Hasil analisis menunjukkan bahwa penerapan E-Filling dan Kesadaran Wajib Pajak berpengaruh positif terhadap Kepatuhan Wajib Pajak, namun Sosialisasi Perpajakan tidak memoderasi hubungan kedua variabel tersebut terhadap Kepatuhan Wajib Pajak.

Kata Kunci: E-Filling; Kepatuhan; Kesadaran; Perpajakan; Sosialisasi

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INTRODUCTION

In today's era, amidst social change and sustainable economic development, the government is often faced with the problem of increasing tax compliance, which is an important issue and requires effective solutions (Romadhon & Diamastuti, 2020). Low levels of compliance can threaten the reliability of the tax system as the country's main source of revenue. Therefore, the role of the government is very important in encouraging and maximizing taxpayer compliance (Herviana & Halimatusadiah, 2022). Tax is the main foundation of state financing, so the level of taxpayer compliance determines the government's success in securing revenue. Tax non-compliance is not only a threat to fiscal regulations, but also a structural obstacle in realizing sustainable development and public services (Abdu & Adem, 2023). The government has taken various actions to maximize tax revenue, one of which is by introducing electronic tax reporting (Yulianti & Satyawati, 2021). The realization of low tax revenues is often due to a lack of compliance when taxpayers carry out their obligations (Situmeang & Pesireron, 2021). Tax compliance is an individual's obedient attitude in carrying out tax obligations according to existing regulations. However, the abundant corruption in the context of taxation makes people reluctant to pay taxes (Lestari et al., 2023).

Various factors play a role in increasing taxpayer compliance, one of which is the use of E-filing. Digitizing the system through E-filing can provide convenience when reporting guaranteed and accountable Annual Tax Returns. Its wide accessibility makes the tax reporting system more effective and efficient (Meidawati & Waluristyaningtyas, 2023). According to attribution theory, the use of E-filing is an external factor that impacts taxpayers' actions when making decisions and forming attitudes of compliance with tax obligations. Individual perceptions of E-filing have a significant impact on their attitudes in using the system, thereby creating better tax compliance. With a more practical and transparent tax reporting and payment process through easy, accurate, and user-friendly e-filing services, taxpayers will feel more comfortable and confident in the tax system, thus encouraging active participation and increasing compliance in carrying out tax obligations sustainably (Bakar & Melan, 2018). Research conducted by Kesaulya et al. (2022), Adi et al. (2022), and Saadah et al. (2023) revealed that the use of E-filing affects tax compliance. However, research by Sulbahri & Kusuma (2022) and Lestari et al. (2023) revealed that the use of e-filing does not have a significant effect on tax compliance.

Tax awareness plays an important role in shaping tax discipline as an internal aspect, as explained in attribution theory which emphasizes that compliance can be triggered by internal motivation influenced by individual attitudes and perceptions (Lestari et al., 2023). This awareness arises when individuals understand tax obligations and have the drive to fulfill them voluntarily (Cahyani & Mustofa, 2024). In this context, tax awareness not only reflects administrative compliance, but also becomes a form of active participation in supporting development and increasing state revenue (Adi et al., 2022). The higher a person's awareness of the role and benefits of taxes, the greater their commitment to fulfilling tax obligations seriously (Gukguk, 2021). Taxpayer awareness and social responsibility are also key factors in encouraging sustainable compliance, because both strengthen the perception that taxes are a strategic

instrument in public financing (Boualam, 2018). Tax awareness reflects an individual's understanding of the function of taxes in national life, where compliance arises not because of coercion, but grows as a form of collective responsibility for sustainable development. The synergy between knowledge, will, and ethics is the main foundation in realizing tax compliance that is carried out consciously, on time, and in accordance with regulations (Ay et al., 2021). According to research by Adi et al. (2022) and Lestari et al. (2023), taxpayer awareness affects tax compliance. This is different from research by Faidani et al. (2023) and Afrida & Kusuma (2022) where tax awareness does not affect tax compliance.

Increasing tax compliance requires effective socialization support. Socialization functions as an educational tool that conveys information and influences individual thinking before acting (Hartinah et al., 2023). According to attribution theory, socialization from tax agencies can form internal perceptions and external impressions that influence individual assessments of tax obligations (Tambunan, 2021). Lack of socialization regarding taxation can reduce public understanding and awareness in fulfilling their obligations, which has an impact on low levels of taxpayer compliance (Gantino et al., 2021). The implementation of intensive and quality socialization has the potential to increase taxpayer knowledge and understanding, thus becoming an effective strategy in encouraging tax compliance (Situmeang & Pesireron, 2021). Research from Kesaulya et al. (2022) shows that tax socialization as a moderator can strengthen the relationship between the use of e-filing and tax compliance. However, studies from Saadah et al. (2023) and Sulbahri & Kusuma (2022) state that tax socialization does not strengthen this relationship. On the other hand, research by Hartinah et al. (2023) and Faidani et al. (2023) indicates that tax socialization supports the correlation between tax awareness and tax compliance. However, a study by Afrida & Kusuma (2022) proved conflicting findings.

Based on the findings of various studies regarding the components that have an impact on tax compliance, further testing is needed regarding "Implementation of E-Filing and Taxpayer Awareness of Taxpayer Compliance with Tax Socialization as a Moderator" with X_1 understanding changed to the use of e-filing which was tested by Afrida & Kusuma's research (2022).

Attribution theory is a theory that explains the factors that drive individuals to behave and provides an understanding of the causes of their behavior (Ndalu & Wahyudi, 2022). Attribution theory explains that individual perceptions in assessing others are greatly influenced by internal factors, such as individual characteristics and external factors, such as the environment, situations, and social pressure (Khodijah et al., 2021). Internal behavioral causes are the result of individual personal control, while external behavior is caused by external influences that force individuals to act (Tambunan, 2021). In the context of tax compliance, this theory is relevant to understanding how taxpayers' views and attitudes towards taxation are formed. Compliance is not only determined by an understanding of the regulations, but also by the taxpayer's subjective perception of the tax itself, which is influenced by a combination of internal and external factors. Internal factors include an awareness of a sense of responsibility in fulfilling tax obligations, while external factors are reflected in the use of the e-

filing system provided by the government to facilitate digital tax reporting. With this comprehensive approach, if all taxpayers have a positive attitude and comply with tax provisions, the potential for tax gaps can be optimally reduced (Djafri et al., 2023).

E-filling is a digital change of the taxation system developed by the Directorate General of Taxes with modern services using a digital platform in the tax reporting process quickly and efficiently (Putri & Junaidi, 2023). Digitalization through *E-filling* is a transformational strategy of the tax system that aims to increase transparency and accountability of administration, while strengthening taxpayer compliance as an effort to maintain the sustainability of state revenues (Kamil, 2022). According to attribution theory, *E-filling* is considered an external factor that influences taxpayer perceptions and actions in reporting taxes. Ease of access, time efficiency, and cost reduction allow taxpayers to report their SPT anytime and anywhere without having to come to the tax office, thus creating a practical and positive experience (Supriatiningsih & Jamil, 2021). This positive attribution builds the perception that the e-filing system is a reliable and efficient system, which ultimately encourages taxpayer compliance. The research results of Adi et al. (2022), Amanda et al. (2023), and Risinia & Poniman (2023) support this theory by stating that the implementation of *E-Filling* has an impact on tax compliance. So the proposed hypothesis is:

H₁: Implementation of E-Filling Has a Positive Impact on Taxpayer Compliance

Tax awareness is an internal factor based on attribution theory that encourages individuals to voluntarily fulfill their tax obligations as a form of responsibility and contribution to national development (Elsani & Tanno, 2023). Taxpayers with a high understanding of the role of taxes in development will be more disciplined and motivated to fulfill their obligations in accordance with applicable regulations, thereby creating a fair and sustainable taxation system (Ramadhanty & Zulaikha, 2020). Tax awareness reflects an individual's attitude based on personal commitment and an understanding that tax compliance is not only a legal obligation but also a real contribution to the common welfare (Amanda et al., 2023). High tax awareness will encourage the creation of a tax compliance culture as a form of social responsibility of citizens, because the higher the awareness of taxpayers, the greater the likelihood that they will comply with tax regulations voluntarily and consistently (Prasetyawati et al., 2022). Research conducted by Janiman & Firasati (2023), Adi et al. (2022), and (Lestari et al. (2023) supports this view by stating that tax awareness affects taxpayer compliance. Individuals who have a clear understanding of the importance of taxes tend to be more compliant because they realize the role of taxes in economic development and improving community welfare. So the proposed hypothesis is:

H₂: Taxpayer Awareness Has a Positive Influence on Taxpayer Compliance

The presence of new technological innovations *E-filling* that facilitate electronic reporting of SPT requires effective tax socialization support. Socialization plays an important role as a guide to prevent errors in the use of the system (Ramdan & Rachman, 2023). Socialization is a means for tax officers to build harmonious relationships with taxpayers so that they can improve

understanding and ease in reporting SPT independently (Sulbahri & Kusuma, 2022) . Research conducted by Kesaulya et al. (2022) , Situmeang & Pesireron (2021), and Limaheluw et al. (2023) shows that tax socialization as a moderator can strengthen the relationship between *E-filling* and tax compliance. Thus, the following hypothesis is proposed:

H3: Tax Socialization Moderation related to the relationship between E-Filling Implementation and Taxpayer Compliance

The activities of tax officials in providing education and conveying tax provisions comprehensively to foster tax awareness is the meaning of tax socialization (Agustin, 2022). The understanding gained through tax socialization forms a new perspective for taxpayers that taxes are not just obligations, but strategic instruments in supporting national development and public welfare (Fuliyanto, 2022) . By understanding the real benefits of taxes, taxpayers will be more motivated to comply because they realize that their contributions will return in the form of sustainable public services and facilities. External factors such as tax counseling are established to deepen taxpayer knowledge. Effective and equitable education helps understand tax reporting procedures and creates the perception that reporting taxes is easy. Ultimately, it encourages individuals to fulfill their obligations in order to achieve state revenue targets (Zaikin et al., 2023) . Studies by Faidani et al. (2023) , Hartinah et al. (2023) , and Suriambawa & Setiawan (2018) stated that tax socialization strengthens the bond between tax awareness and tax compliance. Thus, the hypothesis is formulated as follows:

H4: Tax Socialization Moderation related to the relationship between Taxpayer Awareness and Taxpayer Compliance

The theoretical structure related to the improvement of hypothesis assumptions can be designed in the following form:

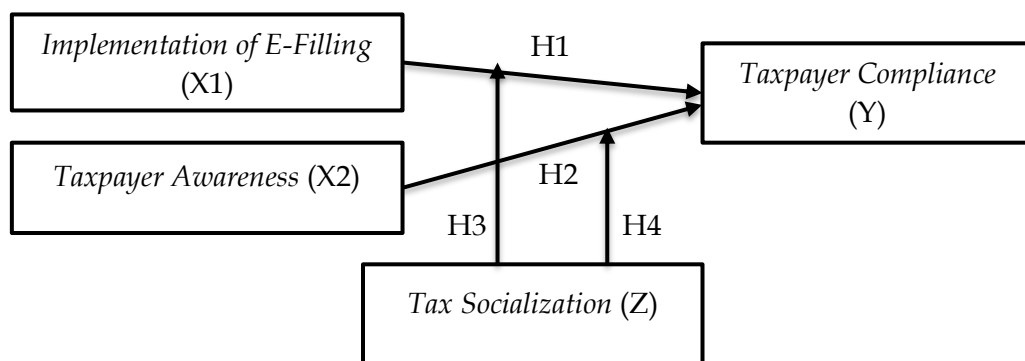


Figure 1. Research Model

Source: Research Data, 2024

RESEARCH METHODS

The research method in this research is quantitative because the data collected is in the form of numbers or numerics. According to Djaali (2020:3) quantitative research is research whose conclusions are based on the results of statistical hypothesis testing with empirical data collected through measurements to test the

causal relationship between variables. The research model used is a causal model, which analyzes the influence between variables. The analysis is carried out to measure the magnitude of the influence between variables and to test its significance statistically.

The population in the study were individual taxpayers in Gresik City who reported Annual Tax Returns. Purposive sampling is applied for sampling by applying certain characteristics that are relevant to the research needs of Chandrarin (2017:127). The sample includes individuals who are registered with NPWP and submit SPT in accordance with applicable regulations. The number of samples is determined using the hair formula because the exact number of the population is not known. Hair et al. (2010) suggest that the minimum sample size is at least 5-10 times the research indicators used. So that the number of samples in this study can be determined:

$$\text{Sample} = 5 \times \text{number of indicators used} = 5 \times 16 = 80$$

The research data were obtained from primary data sources through a survey by distributing questionnaires to participants via *Google Form* containing statements regarding the research variables. The variable measurement scale uses a five-point Likert scale with a value range of 1 (strongly disagree) to 5 (strongly agree).

Tax compliance is the level of willingness of taxpayers to fulfill tax obligations without being involved in arrears, avoidance, embezzlement, or neglect of the assessment standards set by the state (Twum et al., 2020). Taxpayer compliance describes the compliant attitude and behavior of individuals in carrying out their tax obligations in accordance with applicable regulations (Suratminingsih et al., 2021). This is reflected in the awareness of taxpayers to pay and report taxes on time and accurately as a form of responsibility towards the state (Bahir et al., 2022). The indicators include registration as a taxpayer, compliance with applicable tax regulations, accurate and timely reporting of SPT, and the absence of any tax arrears.

E-Filling system facilitates electronic reporting of Annual Tax Returns through collaboration with application providers that are connected to the Directorate General of Taxes in *real-time* and integrated (Arief & KH, 2023). This system increases efficiency by reducing manual errors, administrative costs, and processing time, so it needs to be supported by education and digital literacy of taxpayers (Hashim et al., 2022). Indicators of *E-Filling implementation* include ease of operating the *E-Filling system*, an easier Annual Tax Return reporting process, accuracy and speed in reporting Tax Returns so that it is more efficient, and savings in costs, time, and energy in reporting Tax Returns using e-filling so that it is more practical.

Tax awareness is a condition when taxpayers understand and accept the importance of voluntary tax obligations, based on administrative knowledge and belief in the function of taxes for the state (Mugarura et al., 2021). Understanding the purpose of taxes encourages high awareness, which directly contributes to

increased tax compliance (Hidayat & Maulana, 2022). The indicators include taxpayers' understanding and knowledge of tax provisions, knowing the role of taxes in supporting state revenues, realizing that tax obligations must be carried out in accordance with applicable laws, and calculating, paying, and reporting taxes voluntarily.

Tax socialization in this study is a moderating variable that strengthens or weakens the relationship between the independent and dependent variables. Tax socialization is an effort by the Directorate General of Taxes to convey information to taxpayers regarding tax laws and procedures effectively (Agustin, 2022). Intensive and ongoing socialization through various media builds public trust and a positive perception that taxes support development, thereby encouraging tax compliance (Luthfiana et al., 2023). Indicators of tax socialization include the implementation of socialization such as counseling, benefits of socialization, face-to-face and digital socialization activities.

Data testing method with *Structural Equation Modeling* (SEM-PLS) to test the relationship between variables and each hypothesis is tested through *the SmartPLS application*. Descriptive statistical tests are applied to describe the questionnaire data that will be processed in a structured manner to provide estimates of the average value, standard deviation, variance, maximum and minimum.

Data quality testing uses the Partial Least Square approach, which is an SEM analysis that focuses on variance in testing measurement models and structural models. This method allows researchers to test the validity and reliability of the measurement model and test the structural model for relationships between variables according to the hypothesis (Mianti & Budiwitjaksono, 2021).

According to Duryadi (2021:61) outer model evaluation is a process to assess the validity and reliability of data collection tools. The outer model functions to identify the relationship between each indicator and other variables. Tests carried out on the outer model include:

Construct validity test: this test consists of convergent validity test and discriminant validity test. In the convergent validity test, 2 parameters are used, namely the loading factor parameter >0.70 , which means that the validity and reliability construct values are considered valid and the loading factor is acceptable if >0.50 . The Average Variance Extracted (AVE) must exceed 0.50. In addition, the discriminant validity test involves 2 main parameters, namely cross loading must be above 0.70 and the square root of AVE must exceed the correlation between latent constructs (Duryadi, 2021:62). Reliability test to determine the suitability and accuracy of the research measuring instrument. Reliability testing in PLS can be done through 2 methods, namely the use of the Cronbach's alpha method, a construct is considered reliable if it exceeds 0.60. While the composite Reliability value of a construct is considered reliable if its value is >0.70 , although >0.60 is still acceptable (Duryadi, 2021:62).

According to Duryadi (2021:62), the evaluation of the inner model aims to assess R square (R^2), path coefficient, model validity and level of research

observation. The first stage of the inner model is to evaluate the significance of the relationship between constructs through the path coefficient *according* to the research hypothesis analyzed from the t test value (*critical ratio*). The next step is to evaluate the R² value. A value of 0.19 indicates a weak effect, 0.33 a moderate effect, and 0.67 a strong effect.

Hypothesis Testing: according to Ghozali & Latan (2021:65) hypothesis testing is a statistical method for testing the truth of an assumption based on sample data. This test is considered significant if the p-value <0.05, which means the null hypothesis (H_0) can be rejected. In the statistical t-test, the alternative hypothesis is accepted if the t value > 1.96 at a significance level of 5%. The smaller the p-value and the larger the t value, the stronger the evidence that the variables in the study have a significant effect.

RESULTS AND DISCUSSION

This study collected primary data from individual taxpayers in Gresik who have income and have reported Annual Tax Returns through a survey using *Google Form*. A total of 80 respondents have met the research sample criteria to test the hypothesis.

Table 1. Respondent Characteristics

Characteristics		Amount
Gender	Man	33
	Woman	57
	Amount	90
Age	20 - 30 Years	30
	30 - 40 Years	28
	40 - 50 Years	21
	50 > Years	11
	Amount	90
Last education	Junior High School	2
	High School/Vocational School/Equivalent	30
	Diploma	10
	S1	42
	S2	5
	Pharmacist	1
	Amount	90
Have a Taxpayer Identification Number (NPWP)	Yes	80
	No.	10
	Amount	90
Reporting Annual Tax Returns	Yes	80
	No.	10
	Amount	90

Source: Research Data, 2024

From table 1, it can be seen that the characteristics of the male gender are 33 respondents and the female respondents are 72 respondents. The characteristics of the age of 20-30 years amounted to 30 respondents, the age of 30-40 years amounted to 28 respondents, the age of 40-50 years amounted to 21 respondents, and the age of 50> years amounted to 11 respondents. Then the last educational characteristics there were 2 respondents from junior high school graduates, 30 respondents from high school/vocational high school/equivalent graduates, 10 respondents from diploma graduates, 42 respondents from bachelor's degree graduates, 5 respondents from master's degree graduates, and 1 respondent from pharmacist graduates. For respondents who met the criteria of having a NPWP, there were 80 respondents and those who did not have a NPWP were 10 respondents. While for the criteria of reporting Annual Tax Returns, there were 80 respondents and those who did not report Tax Returns were 10 respondents.

Descriptive statistical tests to evaluate respondents' responses to each variable. This analysis provides an initial description of research data that includes the average, median, maximum, minimum, and standard deviation values. The following is a description of the characteristics of this research data:

Table 2. Results of Descriptive Statistical Tests

Variables	Average	Median	Min scale	Max scale	Standard deviation
Taxpayer Compliance	4.287	4.000	1.000	5.000	0.741
Implementation of E-Filing	4.192	4.000	2.000	5.000	0.714
Taxpayer Awareness	4.285	4.000	1.000	5.000	0.670
Taxation Socialization	3.931	4.000	1.000	5.000	0.865

Source: Research Data, 2024

The taxpayer compliance variable has an average value of 4.287 and a median of 4.000 indicating that respondents tend to agree with statements that reflect an attitude of compliance with tax obligations. The minimum value of 1.00 and the maximum of 5.00 reflect the presence of respondents with very low to very high levels of compliance. This value shows that not all respondents have the same level of compliance which can be caused by differences in understanding and tax experience. The standard deviation of 0.741 reflects a relatively low level of data spread, meaning that respondents' perceptions of tax compliance are quite consistent.

The e-filing implementation variable has an average of 4.192 and a median of 4.000, indicating a positive response from respondents regarding the ease of the electronic reporting system. The minimum value of 2.00 and the maximum of 5.00 indicate that some respondents have not fully felt the convenience of the e-filing system, while others feel the benefits optimally depending on the level of digital literacy and experience of the respondents. With a standard deviation of 0.714, the respondents' responses are considered quite even without significant deviations.

The Taxpayer Awareness variable has an average of 4.285 and a median of 4.000, indicating that the level of tax awareness of respondents is relatively high.

The minimum value of 1.00 and the maximum of 5.00 indicate that respondents have a high awareness of tax obligations, while some others are not fully aware of the important role of taxes in national development. With the smallest standard deviation of 0.670, the data shows that respondents' perceptions tend to be homogeneous and stable.

The Tax Socialization variable has the lowest average of 3.931, indicating that although the responses tend to be positive, there is inequality in experience with tax socialization activities. The median value of 4.000 indicates that most respondents consider the socialization activities quite good. The minimum value of 1.00 and the maximum value of 5.00 indicate that not all respondents received the same socialization. The standard deviation value of 0.865 is the highest among other variables, indicating that there are greater differences in perception in this variable, possibly due to differences in region, access to information, or the intensity of socialization activities received.

The use of SmartPLS analysis techniques has three criteria for assessing *the outer model*, namely, convergent validity, discriminant validity, and *Composite Reliability*. All three are used to ensure that the indicators used are valid and reliable in measuring constructs, and distinguish between constructs accurately.

Table 3. Convergent Validity Test Results

Variables	Instrument	Outer Loading	Information
Implementation of E-Filling	X1.1	0.816	Valid
	X1.2	0.923	Valid
	X1.3	0.877	Valid
	X1.4	0.862	Valid
	X1.5	0.862	Valid
	X1.6	0.760	Valid
Taxpayer Awareness	X2.1	0.926	Valid
	X2.2	0.789	Valid
	X2.3	0.837	Valid
	X2.4	0.871	Valid
	X2.5	0.937	Valid
Taxpayer Compliance	Y1.1	0.930	Valid
	Y1.2	0.904	Valid
	Y1.3	0.910	Valid
	Y1.4	0.894	Valid
	Y1.5	0.838	Valid
Taxation Socialization	Z.1	0.728	Valid
	Z.2	0.838	Valid
	Z.3	0.745	Valid
	Z.4	0.845	Valid
	Z.5	0.897	Valid
	Z.6	0.874	Valid

Source: Research Data, 2024

A construct is said to be valid if its loading factor value is > 0.70 , indicating that the items in the construct contribute significantly to the measured latent variable. This test involves 16 indicators that produce the following picture:

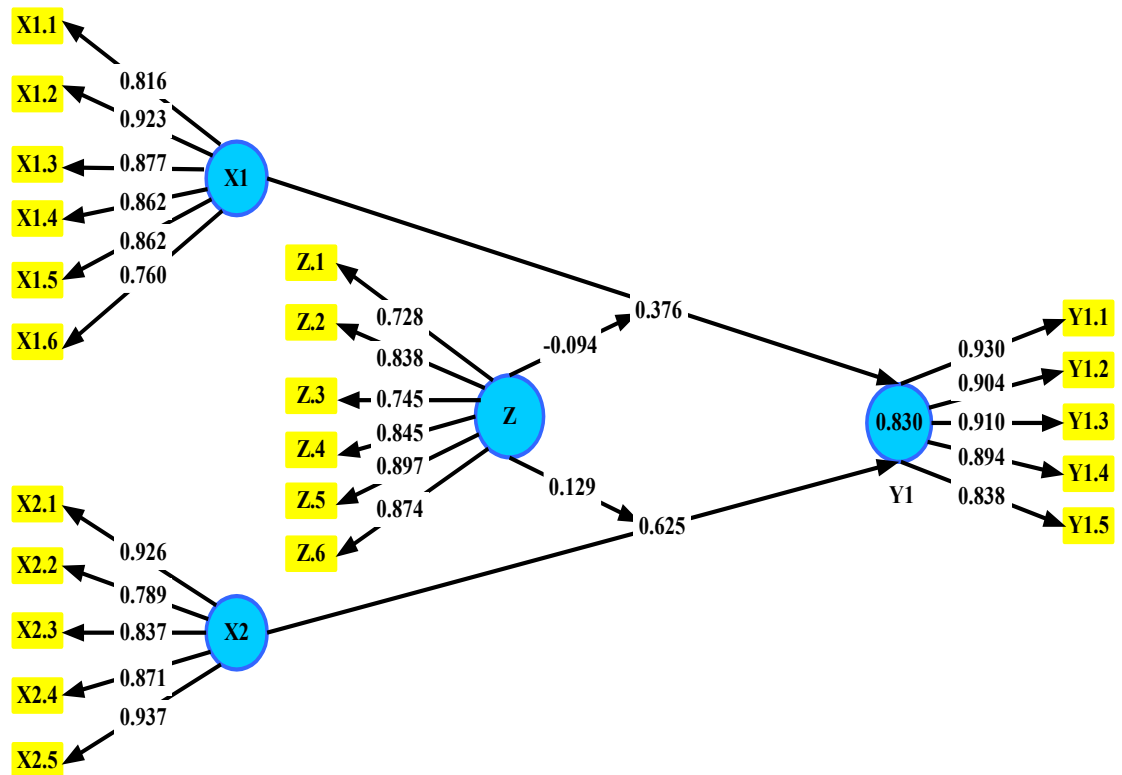


Figure 2. Relationship between variables

Source: Research Data, 2024

Table 4. AVE Value Results (Average Variance Extracted)

Variables	AVE Value	Information
Implementation of E-Filing (X1)	0.725	Valid
Taxpayer Awareness (X2)	0.763	Valid
Taxpayer Compliance (Y)	0.607	Valid
Tax Socialization (Z)	0.679	Valid

Source: Research Data, 2024

Average Variance Extracted (AVE) is used to measure convergent validity in the SEM measurement model, where an AVE value > 0.50 indicates that the construct can explain more than 50% of the variance of its indicators, so its validity is acceptable. AVE is an important standard for assessing the quality of a measurement model, although PLS-SEM is more flexible towards AVE values approaching 0.50. Therefore, AVE that meets the validity criteria allows for further analysis that is more accurate and reliable (Ghozali & Latan, 2021).

Cross Loadings value of each variable must be > 0.70 to ensure discriminant validity. If the Cross Loadings value of a variable is higher against its own indicators than against other indicators, this indicates good discriminant validity.

Table 5. Cross Loadings Results

Variables	X1	X2	Y	Z	Z x X1	Z x X2
X1.1	0.816	0.621	0.670	0.563	-0.192	-0.246
X1.2	0.923	0.633	0.725	0.635	-0.267	-0.273
X1.3	0.877	0.582	0.705	0.545	-0.218	-0.213
X1.4	0.862	0.574	0.649	0.470	-0.012	-0.012
X1.5	0.862	0.511	0.649	0.415	-0.089	-0.034
X1.6	0.760	0.689	0.692	0.529	-0.280	-0.313
X2.1	0.692	0.926	0.817	0.582	-0.273	-0.288
X2.2	0.518	0.789	0.595	0.576	-0.286	-0.403
X2.3	0.618	0.837	0.718	0.535	-0.179	-0.183
X2.4	0.550	0.871	0.741	0.579	-0.211	-0.278
X2.5	0.696	0.937	0.855	0.533	-0.205	-0.276
Y1.1	0.788	0.830	0.930	0.676	-0.332	-0.327
Y1.2	0.697	0.736	0.904	0.434	-0.148	-0.060
Y1.3	0.721	0.748	0.910	0.468	-0.147	-0.043
Y1.4	0.760	0.826	0.894	0.696	-0.263	-0.340
Y1.5	0.612	0.701	0.838	0.409	0.042	0.016
Z.1	0.507	0.444	0.429	0.728	-0.125	-0.198
Z.2	0.518	0.441	0.423	0.838	-0.232	-0.283
Z.3	0.475	0.424	0.413	0.745	-0.169	-0.259
Z.4	0.457	0.542	0.515	0.845	-0.147	-0.193
Z.5	0.490	0.601	0.568	0.897	-0.253	-0.270
Z.6	0.619	0.641	0.605	0.874	-0.355	-0.300
Z x X1	-0.218	-0.320	-0.179	-0.305	0.823	1.000
Z x X2	-0.211	-0.261	-0.199	-0.268	1.000	0.823

Source: Research Data, 2024

The results of *Cross loadings* show that the relationship between latent variables and their indicators shows a stronger correlation compared to the correlation of indicators on other latent variables. Thus, there is no problem of discriminant validity in this *Cross loadings analysis*.

Table 6. Reliability Test Results

Variables	Composite Reliability	Cronbach's Alpha	Information
Implementation of E-Filling (X1)	0.940	0.923	Reliable
Taxpayer Awareness (X2)	0.942	0.922	Reliable
Taxpayer Compliance (Y)	0.953	0.938	Reliable
Tax Socialization (Z)	0.926	0.904	Reliable

Source: Research Data, 2024

Composite Reliability is at above 0.70 It is said that the reliability is good, *Cronbach's Alpha* is more than 0.60 on all variables indicating reliability. The instruments used in this study can be said to be consistent in measuring each variable. This strengthens the reliability of the data for further analysis in hypothesis testing.

According to Ghozali and Latan (2015), they explain that in estimating a structural model using SmartPLS, the initial stage begins by estimating the *R-square value* of the dependent variable to measure the predictive strength of the

model. *R-square* criteria are 0.25 (weak), 0.50 (moderate), and 0.75 (strong). The *R-square value* obtained from SmartPLS shows the magnitude of the variability value of the dependent variable shown in the model.

Table 7. *R-square* results

Information	<i>R-Square</i>	<i>R-Square Adjusted</i>
Taxpayer Compliance (Y)	0.830	0.819

Source: Research Data, 2024

R-square value results reached a strong prediction level of 0.830, indicating that 83% of the variability in taxpayer compliance can be explained by the independent variables in the model. This reflects that the model has strong and relevant predictivity. Thus, the independent variables used provide a significant contribution to taxpayer compliance.

To estimate the structural model with SmartPLS, it is necessary to pay attention to the *F-square value* of the direct variables and the moderating variables to assess the effect size. The effect size criteria are 0.02 (weak), 0.15 (moderate), and 0.35 (strong). The *F-square value* generated by SmartPLS provides the following picture:

Table 8. *F-square* results

Information	<i>F-Square</i>
Implementation of E-Filling (X1)	0.370
Taxpayer Awareness (X2)	0.964
Taxpayer Compliance (Y)	
Tax Socialization (Z)	0.000
Tax Socialization x Implementation of E-Filling (Z x X1)	0.031
Tax Socialization x Taxpayer Awareness (Z x X2)	0.079

Source: Research Data, 2024

F-square analysis for variable X1 of 0.370 indicate a strong effect on Y. Variable X2 shows a value of 0.964 which means that *the effect size* is strong, meaning it has a very strong influence on the dependent variable in the model. *F-square* value for the moderating variables, namely Tax Socialization x E-Filling Implementation (Z x X1) shows a value of 0.031, which means it is between 0.02 and 0.15, which means it has a moderate effect on the dependent variable in the model. While Z x X2 has a moderate effect of 0.079.

Table 9. Hypothesis Testing

Keterangan	Original Sample (O)	Sampel Mean (M)	Standard deviation	T statistik	P-Values
X1. → Y1	0.376	0.374	0.116	3.243	0.001
X2. → Y1	0.625	0.615	0.117	5.337	0.000
Z. x X1. → Y1	-0.094	-0.075	0.104	0.906	0.365
Z x X2. → Y1	0.129	0.082	0.125	1,034	0.301

Source: Research Data, 2024

The results of the H_1 hypothesis study show that the implementation of e-filling has a positive contribution to tax compliance, as indicated by the H_1 path coefficient of 0.376, the t-statistic value of 3.243 which is greater than 1.96, and the

p-value of 0.001 which is less than 0.05, so that the H_1 hypothesis is accepted. This finding indicates that the higher the use of e-filing, the higher the level of taxpayer compliance. This result is in accordance with the Attribution Theory which states that external factors, such as e-filing, can influence individual perceptions and actions in reporting their taxes. The ease and accessibility of e-filing make taxpayers more compliant because this system is more efficient compared to manual methods. This study is in line with the findings (Meidawati & Waluristyaningtyas, 2023) which show that the ease of use of e-filing increases tax compliance, and is supported by research by Jatnika et al. (2024) and Tarigan et al. (2022) which states that the effectiveness of e-filing in increasing transparency and efficiency of tax reporting contributes to taxpayer compliance. Thus, the results of this study have a strong theoretical basis and are consistent with previous studies that prove the positive impact of implementing e-filing on tax compliance.

The results of the H_2 hypothesis test show that taxpayer awareness contributes positively to tax compliance, as evidenced by the t-statistic value of $5.337 > 1.96$, and the path coefficient of 0.625, which is positive, and the p-value of $0.000 < 0.05$. With these results, the hypothesis H_2 is accepted, which means that the higher the taxpayer's awareness, the higher the level of compliance in fulfilling tax obligations. These results can be explained in the Attribution Theory which states that attitudes and behavioral control influence an individual's intention to act on an obligation. Tax awareness is an internal factor that shapes the attitude of taxpayers in assessing and responding to tax obligations. Taxpayers with high awareness tend to be more responsible, understand the importance of paying taxes, and are more motivated to obey tax laws and carry out their obligations in a timely manner. This finding is supported by previous studies, such as Azam (2021) and Lestari et al. (2023) which indicate that taxpayer awareness plays an important role in increasing tax compliance. The study emphasized that when taxpayers have a high level of awareness, they are more disciplined in fulfilling their obligations, even without the threat of sanctions or law enforcement actions. Thus, the results of this study further strengthen the empirical evidence that increasing taxpayer awareness has a direct impact on the level of tax compliance.

The results of the H_3 hypothesis test indicate that socialization does not have a significant impact in strengthening the relationship between e-filing and tax compliance, as evidenced by the t-statistic of $0.906 < 1.96$, the path coefficient of -0.094 is negative, and the p-value of $0.365 > 0.05$. Thus, the H_3 hypothesis is rejected, which means that tax socialization does not act as a moderating variable in the relationship between e-filing and tax compliance.

The difference in these results with the initial hypothesis can be caused by several factors. One possible cause is that tax socialization, although aimed at increasing public understanding, does not always succeed in building individual commitment to comply. In addition, the effectiveness of tax socialization is highly dependent on the method, intensity, and media used. If socialization is only one-way or less interactive, taxpayers may not feel motivated to increase their

compliance. Individuals still need to have personal awareness and commitment to comply. Without clear incentives or strong encouragement from other factors (eg, sanctions or tax incentives), socialization alone is not enough to increase tax compliance. These results are in line with research by Saadah et al. (2023) which shows that tax socialization does not directly increase compliance through e-filing. Therefore, a more interactive and taxpayer-based approach is needed, such as direct assistance, e-filing simulations, and the use of more attractive and easily accessible digital media.

The results of testing the H_4 hypothesis show that tax socialization does not act as a moderator in the relationship between tax awareness and tax compliance, as indicated by the path coefficient of 0.129 which is positive, t-statistic $0.301 < 1.96$, and p-value $0.301 > 0.05$. Thus, hypothesis H_4 is rejected, because the assumed effect is not statistically proven.

These results indicate that although tax socialization can increase taxpayer awareness, its impact in strengthening the relationship between awareness and compliance is still limited. One possible reason is that tax compliance is more influenced by internal factors, such as personal understanding and motivation, rather than mere exposure to information through socialization. If socialization is not followed by concrete steps such as assistance or compliance incentives, its effectiveness as a moderator becomes weak. This finding is in line with the research of Afrida & Kusuma (2022), which also found that tax socialization did not have a significant effect on the relationship between tax awareness and tax compliance. Therefore, a more strategic and adaptive approach is needed, such as more interactive education programs, providing incentives for compliant taxpayers, and increasing community involvement in the tax system.

CONCLUSION

Data analysis shows that the use of e-filing and taxpayer awareness has an impact on the level of community compliance in fulfilling their taxes. However, tax socialization efforts have not had a significant impact on the level of tax compliance growth achieved through e-filing and tax awareness.

This study has limitations in terms of coverage area, variables studied and using a simple analysis model so that subsequent researchers are advised to deepen the coverage area or respondent segmentation to obtain more representative results. Researchers can also add other variables that have the potential to influence tax compliance and consider the use of other research models, such as intervening to explore the mechanisms that connect existing variables in more detail. Further researchers can also conduct more comprehensive and diverse studies to better understand what variables play a role in increasing tax compliance.

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