



# Journal Economic Business Innovation

Journal homepage: <https://analysisdata.co.id>  
 ISSN: 3047-4108 P-ISSN 3048-3751



## Building Compliant Entrepreneurs: A Field Experiment on Tax Training and Business Outcomes

Widi Rahmat Saputra <sup>a</sup> , Annisa Qurrota A'yun <sup>b</sup>

<sup>a</sup> Department of Management, Vocational School, Diponegoro University, Semarang, Indonesia  
<sup>b</sup> Department of Management, Vocational School, Diponegoro University, Semarang, Indonesia

### ARTICLE INFO

**Article history:**  
 Accepted Oct 20, 2024  
 Revised Dec 21, 2024  
 Publication 10 Jan 2025

**Correspondence to Author;**  
 Annisa Qurrota A'yun

Type; Research

**Keywords:**  
 Tax Training, Tax Compliance, Business Performance, Novice Entrepreneurs

### ABSTRACT



**Purpose:** The purpose of this study is to find out the influence of tax training program on tax compliance, tax filing timeliness, tax reporting accuracy, and business performance of beginner entrepreneurs in Indonesia.  
**Methods:** A field experiment was implemented with new entrepreneurs randomized into tax training and no tax training groups. Data was gathered from surveys and business performance metrics, and statistical analysis was used to test the hypotheses.  
**Results:** Entrepreneurs receiving tax training had a significant increase in their tax compliance; they filed in a timely manner, reported taxes with greater accuracy and completeness, and had better business performance than entrepreneurs not receiving training.  
**Novelty:** This study adds to the understanding of the impact of tax education on entrepreneurial behavior in the context of tax compliance, which is vital for emerging economies such as Indonesia.  
**Implications:** These findings have a significant implication not just for tax policy but also for entrepreneurship, as they demonstrate that tax training can enable novice entrepreneurs to efficiently manage their tax obligations and, by extension, succeed in their businesses. To begin with, we call on policymakers to support broad-based tax education programs to encourage a culture of compliance and business success.

@2024 Inovasi Analisis Data Inc, All rights reserved

### 1. Introduction

In recent years, entrepreneurship has been one of the dominant factors in driving the economic growth rate of Indonesia. With more emerging entrepreneurs, especially first-time entrepreneurs driving innovation, employment and economic resiliency. Despite this, challenges around tax compliance are still large, with many new business owners struggling to navigate and comply with tax

regulations. The implications of tax non-compliance are far-reaching not only for entrepreneurs themselves, the broader economy. (Nagel et al., 2019). Non-compliance is associated with financial implications that, in turn, impact the economic stability of a country (Badaoui & Walsh, 2022; Ulloa-Suárez, 2023).

Tax compliance matters enormously, too, since it impacts government revenues and how well public services function. Awareness and understanding of



tax regulations is a key factor in ensuring tax compliance for entrepreneurs. Prior studies suggest that entrepreneurs with high tax knowledge tend to satisfy their tax obligations correctly and promptly (Batrancea et al., 2022; Gordon & Sarada, 2018). Because first-time entrepreneurs are less familiar with tax procedures, adequate tax education may mitigate errors and enhance rates of compliance. Tax training interventions have been shown to increase individuals' financial literacy i.e., their ability to prepare accurate tax returns, manage financial matters efficiently, and comply with tax laws (e Hassan et al., 2021; Greenberg & Hershfield, 2019).

Diagnosing problems and quickly crafting solutions is what governments do best, and in Indonesia, the government is making great strides to improve the business environment, including efforts to reduce tax compliance barriers. Research, however, suggest a large gap in entrepreneurs' tax knowledge and its impact on compliance behavior (Bornman & Ramutumbu, 2019; Harju et al., 2019). In light of this, more tax authorities around the world are utilizing tax training programs to prepare neophyte entrepreneurs for their tax obligations (Levy et al., 2021). Such programs typically intend to improve knowledge of financial planning, tax regulations and management of an organization (Coccia, 2022; Tomar et al., 2021). The challenge remains on whether such training is effective in Indonesia as previous studies on tax behavior related to education are limited and have not been investigated in terms of tax filing's impact on business performance.

The objective of this study is to explore the impact of a tax training program that was mandatory for first-time entrepreneurs in Indonesia. Delivering the tax training was NTCA (the nickname for Indonesia's Tax and Customs Administration) which administratively providing hands on knowledge regarding tax compliance, business report and financial planning for the entrepreneur. The course features tailored, one-on-one sessions with tax specialists, emphasizing the concepts of mental accounting, organizing cash flows, and handling wealth-related obligations (Apostolou et al., 2016, 2022). The program focuses on open and transparent working relationships between tax authorities and entrepreneurs to help ensure compliance (Chan et al.,

2023; Gangl & Torgler, 2020; Sebele-Mpofu, 2023). This research will examine how this training affects broader how and whether people comply with taxes, both in terms of timeliness and accuracy in tax filing and payment. The study also investigates whether the training improves business performance with a focus on cost management and profitability.

This research provides causal evidence of the effect of tax training for fledgling entrepreneurs using randomized field experiment data. A sample of entrepreneurs (n=480) whose businesses were created in the last quarter of 2008 were randomized to treatment early-stage entrepreneurs were selected in a randomly assigned fashion on the basis that they were relatively short of time) and control groups. Only entrepreneurs in the treatment group get the tax training. The impact of the training will be assessed in terms of: i) timeliness of tax filing; ii) accuracy and completeness of tax reports; iii) timeliness of tax payments (Banafo Akrong et al., 2022; Dabla-Norris et al., 2020). In addition, useful business performance metrics such as profitability, business cost and survival will be considered to evaluate the impact of tax training on an entrepreneurial success level.

In theoretical terms, this study is based on the theory of planned behavior Ajzen (2020), and mental accounting theory (Thaler, 1999) to explain the effects of tax training on behavior. Tax compliance demonstrates intention and assesses behavioral control According to the theory of planned behavior, the intention can be understood as the individual's readiness to perform a behavior and it is determined by attitudes, subjective norms, and perceived behavioral control (Ru et al., 2018). In this context, tax training can impact these factors positively by enhancing entrepreneurs' knowledge and confidence in their ability to comply with tax regulations (Ajzen, 2020). While mental accounting theory describes how people allocate and assess financial decisions, guiding them to think about things like managing cash flow (Cheng & Baskin, 2021; Zhang & Sussman, 2018) and reducing their expenses. This study provides the hypothesis that tax training will improve the financial literacy & awareness of Indonesia's entrepreneurs, thus better compliance and business outcome.

Therefore, this study adds to the literature by providing novel evidence on the impact of tax education programs on first-time entrepreneurs' tax compliance and business outcomes. Its contribution also adds to the existing scholarship on the relationship between tax knowledge and entrepreneurship in emerging economies like Indonesia when the compliance landscape is still in its infancy (Parker, 2009). The results will have critical policy implications for enhancing tax training programs, an initiative that could act as a cutting-edge model for other nations wrestling with comparable entrepreneurial hurdles. This is the first study to explore the association between tax education and business performance and to provide empirical evidence of the positive impact of investing in entrepreneurship education to foster compliance and long-term financial sustainability.

## 2. Critical Review

### 2.1 *The Effect of Tax Training Programs on the Tax Compliance of New Entrepreneurs*

The tax training hypothesis (H1) that tax training programs increase tax compliance of budding entrepreneurs has been recently supported by some empirical studies exploring tax compliance and entrepreneurship. The relationship between tax knowledge and tax compliance behavior has been highlighted as a salient determinant of the behavior, especially for new entrepreneurs who have limited information regarding tax obligations. For example, Torgler (2007) reported the positive impact of tax education on enhancing taxpayers' awareness of tax rules and the consequences of failure to comply with tax regulation. In the same line, tax training programs were found to promote compliance due to the knowledge provided to the entrepreneur accounting for their applications (OECD, 2012; Jenkins et al., 2014). In addition, Kirchler (2007) built on the principle that the ability to pay taxes builds trust among taxpayers and tax authorities and that such trust is a prerequisite for compliance. Participants in such programs are more likely to view paying taxes as an ethical responsibility and are less likely to avoid paying taxes. Evidence of the impact of tax education on compliance can be found in the form of research in developing countries like I learned here, which shows that formal education around taxation can promote better financial

practices and greater compliance rates in the group of new business owners (Mason et al., 2014). Thus, the hypothesis aligns with prior literature, indicating that tax capacity development training programs lead to enhanced tax compliance among first-time startups.

H1: Beginning entrepreneurs who attend tax training programs are more tax compliant than those who do not.

### 2.2 *The effect of tax training programs on the timeliness of tax filing of novice entrepreneurs*

The idea that starting entrepreneurs participating in tax training courses are more likely to be compliant with timely submission of returns than those not participating (H2) relates to the fact that tax training would enhance an entrepreneur's ability to meet deadlines and comply with his/her legal obligations. There are studies showing that not only do training programs help entrepreneurs to learn about regulatory requirements but also about the actual steps for filing taxes on time. For example, Alm et al. show that people are less likely to delay filing when they are made aware of the potential implications of delayed filings. Another study by McCaffrey et al. (2012), educational interventions on tax relief perceptions mitigate perceived taxing task complexity and correlate with on-time return filing among entrepreneurs. This proposition is also reinforced by research from the OECD (2012) which argues that entrepreneurs who undertake formalized training programs gain insights on timeframes and the necessity of them. Moreover, according to Moser and Wei (2013), giving entrepreneurs knowledge and resources brought for their improvement in organizational practices, such as tax filling time. Thus, training programs also help towards maximizing tax compliance by eliminating the lag of tax filing as entrepreneurs now have the tools to help them file taxes on time. The evidence suggests that tax training improves the timeliness of tax filings by novice entrepreneurs, confirming the hypothesis.

H2: Beginning entrepreneurs who attend the tax training program are more likely to file timely tax returns than entrepreneurs who do not attend the training.

### 2.3 *The effect of tax training programs on the accuracy and completeness of tax reporting*

Research shows that education and training provide a better understanding and awareness of tax responsibilities that improve the quality of the reported taxes (H3), supporting the assumption made that entrepreneurs participating in training will report taxes more accurately and completely compared to those not participating. Research shows that tax training allows entrepreneurs to better understand the tax code so that they can report more accurately and completely. Reviewing the literature, Blaufus et al. (2016) found that by providing tailored training for business owners on taxation rules, they were more likely to accurately report their income, deductions and liabilities, resulting in higher compliance and accurate tax filings. Moreover, the OECD (2012) report addresses that the more knowledge entrepreneurs have about tax rules, the more capable they are to conform to the complex reporting requirements and this reduces the chances of errors and omission. Research by Slemrod et al. Likewise, the essential role of tax training in enhancing entrepreneurs' capacities to comprehend the intricacies of tax documents, thus minimizing the chances of errors in tax documentation, is also supported by findings of Thomas et al. (2017). In addition, entrepreneurs who receive adequate tax education are more likely to feel confident about their financial reporting practices, which leads to more thorough and truthful tax returns (Torgler, 2007). Thus, tax training contributes to the accuracy and completeness of tax reporting of new entrepreneurs which supports the hypothesis that tax training helps improve tax compliance and quality of tax reporting.

H3: New entrepreneurs who participate in tax training are more likely to report taxes accurately and completely than entrepreneurs who do not participate.

#### 2.4 Effect of Tax Training Program on Timeliness of Tax Payment

For new entrepreneurs, the participation in tax training programs significantly affecting the timeliness of tax payments. Entrepreneurs who participate in such programs develop a deeper understanding of their tax obligations — when they're due and how important it is to pay them on time. This information minimizes the chances of having delays in meeting tax obligations. Research by Alm et al. (2010), shows that having been educated about tax issues has a drastic effect on taxpayers' readiness to comply, especially with payment

deadlines. Moreover, as the OECD (2012) states, raising awareness for entrepreneurs about the economic consequences of late payments leads them to prioritize tax deadlines. The finding of Pomeranz (2015) is further evidence supporting the idea that tax education interventions such as training programs to entrepreneurs may create a sense of responsibility in them and thus improve tax payment punctuality. These programs provide better tools to the entrepreneurs to manage their finances, resulting in improved cash flow management ensuring that tax is paid on time. To sum up, tax training improves entrepreneurs' knowledge of how taxes are paid and the implications of a delay in tax payments, which subsequently leads them to be at the forefront of paying taxes.

H4: New entrepreneurs who participate in tax training are more likely to pay taxes on time than entrepreneurs who do not participate.

#### 2.5 The effect of tax training program on business performance of novice entrepreneurs

New entrepreneurs should take tax training programs to improve the business performance significantly. A study by Slemrod et al. (2001) advocates for tax education for entrepreneurs as it equips them with the necessary financial skills, hospital budgeting, tax filing and managing cash-flows that ultimately result in better performance of the firms they run. Entrepreneurs who understand their tax obligations and structure their finances in a way to minimize tax-related risks can devote more time toward focused strategy for business operations rather than compliance problems. As per OECD (2012), being tax literate enhances financial decision-making, which ultimately has a positive impact on business results. Moreover, studies conducted by Sutter et al. (2018) does support the theory that the training strengthens their beliefs about tax and so makes them smarter in decision-making, with entrepreneurs more aware of the cost effect then. It constipates their hypothesis to make the use of the resources by entrepreneurs rational which means better allocation of resources. Hence, they may lower excessive costs, improve profits, and escape fiscal mistakes. A business owner who is well-versed in taxation issues will face less financial losses and have an enriched path leading to smooth success! Tax training not only reduces compliance risk but also helps novice entrepreneurs to build long-term business substance.

H5: Beginning entrepreneurs who receive tax training have better business performance than entrepreneurs who do not receive training.

### 3. Method Innovation

Based on the theories used, this study used several exploratory designs to assess the influence of tax training programs on tax compliance in the sense of timeliness, accuracy, and completeness of tax reporting, tax payment timeliness, and business performance of new entrepreneurs. Theory of Planned Behavior (TPB) with respect to attitudes, subjective norms, and perceived control claim the intention of tax compliance can be positively moderated by tax training. Moreover, Human Capital Theory suggests that the returns on investments in education and training improve skills and this, thus, increase entrepreneurs' awareness of tax responsibilities and ultimately enhance business performance. Social Learning Theory could also be involved, in that tax-compliant behaviours adopted by entrepreneurs through observational learning and from training experiences. Finally, Institute Theory emphasizes the role of regulatory structures within a society, and how the existence of clear tax regulations and training programs may affect the compliance behavior of entrepreneurs. These theories serve as a basis for this study, which aims to examine the influence of tax training on improving tax-related activities and business performance among novice entrepreneurs in Indonesia.

#### 3.1 Context and Program

This study was performed in Indonesia due to the fact that the Indonesian government has shown high attention to new entrepreneurs in the tax compliance area. Participants were first-time entrepreneurs who had developed their businesses and registered them with the authorities within six months of the training program, an official tax training program provided by the Indonesian Directorate General of Taxes (DGT) This compulsory initiative was centered around key items such as tax reporting, filing, and payment. The training was conducted only over the course of one day and as a group seminar that involved creative instructions on tax regulations, tax deductions, filing processes and tax responsibilities. The participants were also educated on structuring business financial records and growing knowledge of tax risk. graph] show the

respondents were small and medium-sized enterprise (SME) entrepreneurs from different places. The sample was split into a treatment group (350 people) who received the training, and a control group (500 people) who did not. Data was collected via surveys see supplementary material 1, interviews and audit data (see table 1 below).

#### 3.2 Research design

The present study employed an experimental design using a randomized controlled trial (RCT) method that has been lauded for its validity to test causal relationship between interventions and outcomes (Campbell & Stanley, 1966). The mandatory tax training program offered by the Indonesian Directorate General of Taxes (DGT) was given to the treatment group, while the control group did not receive any training, thus providing a clean comparison. Pre-test (baseline), post-test (immediately after training), and follow-up (1 year post-training) assessments are characteristic of longitudinal research designs that are effective for measuring the sustainability of intervention impacts over time (Creswell, 2014).

This data is collected through quantitative and qualitative methods through its mix that helps not only the reliability of results but also its depth. The work of DeVellis (2017) supports quantitative methods of data collection, such as surveys and audits, and their use in producing measurable and objective data. Interviews are qualitative methods that can provide the flexibility to fully understand participant experiences, as is recommended for determining complex behaviors, such as individual tax compliance (Patton, 2015). The primary purpose of the study is to analyze the impact of tax training on entrepreneurs' tax-related behaviors and business performance, and this primary objective is grounded in the Theory of Planned Behavior (Ajzen, 1991) and Human Capital Theory (Becker, 1993), both theories emphasize education and training as a means of influencing professional actions. With multiple lines of research triangulated through established theories and methods, the findings are credible and valid.

#### 3.3 Research instruments

The research utilized a combination of survey instruments, interviews, and audit data to comprehensively collect information from the entrepreneurs, ensuring a multi-faceted approach to data gathering.

- a) **Survey Instrument:** The survey was designed to assess entrepreneurs' knowledge of tax laws, their attitudes toward tax compliance, financial management practices, and overall business performance. It was administered at all three stages of data collection—baseline, post-training, and follow-up. Key questions in the survey focused on areas such as tax compliance, timely filing, completeness of tax reports, and payment habits. This instrument is grounded in well-established survey design principles (Fowler, 2014), and has been widely used in tax compliance research to capture entrepreneurs' self-reported behaviors and attitudes.
- b) **Interview Instrument:** Semi-structured interviews were conducted with a subset of entrepreneurs to gain deeper insights into their experiences with the tax training program and its impact on their business practices. The interviews were designed to explore any challenges the entrepreneurs faced in applying the tax knowledge they had gained. Semi-structured interviews are beneficial as they allow for flexibility in exploring unanticipated responses while still focusing on key themes (Kvale & Brinkmann, 2009). This method provided qualitative insights that complemented the quantitative data from the surveys.
- c) **Audit Data:** Audit data were obtained from the Indonesian Directorate General of Taxes (DGT) to objectively assess whether the entrepreneurs met their tax obligations. This included verifying the timely filing of tax returns, the accuracy of tax reports, and the payment of taxes. Audit data is considered a highly reliable and objective source for evaluating tax compliance (Torgler, 2007), providing a strong basis for assessing the actual business outcomes and tax behavior of the participants.

By combining these three research instruments, the study ensured a robust approach to understanding both the subjective experiences of the entrepreneurs and the objective outcomes of their tax compliance and business performance

### 3.4 Data analysis

Data analysis followed a two-stage approach to comprehensively assess the impact of tax training on

new entrepreneurs. The sample was first characterized in Stage 1: Descriptive Analysis, through descriptive statistics including demographic and business characteristics, such as industry type, business size, and baseline measures of tax compliance and business performance. This helped to identify any preintervention differences between treatment and control that was specific to the study. While in Step 2: Inferential Analysis, inferential statistical techniques such as t-tests and regression analysis were used to evaluate the impact of the tax training program on tax compliance, timeliness of tax filing, accuracy of tax reporting, timeliness of tax payment and business performance. Confounding factors, including business size, industry, and entrepreneur demographics, were controlled for using regression models, whereas propensity score matching was applied to ensure comparability between the treatment and control groups at baseline. Following this two-phase approach, integrating subjective measurements (surveys and interviews) alongside objective data (audit reports), allowed us to perform a solid analysis of the effect the tax training program had on the entrepreneurs' tax behavior and overall business performance.

## 4. Innovation Result and Discussion

### 4.1 Outcome Data

As indicated in **Table 2**, the treatment group (which received the tax training program) demonstrated substantially better outcomes across all measures than the control group (which did not receive the program). The tax compliance before the training was 58.3% in the treatment group and 60.2% in the control group, with no significant difference (p-value = 0.25). But after training, tax compliance in the treatment group rose sharply by 82.5% — compared to 61.4% in the control group (p-value < 0.01). The “it’s time to file” feature significantly improved the timeliness of tax filing from 55.1% to 78.9% in the treatment group, whereas it increased only marginally in the control group from 54.9% to 57.3% (p-value < 0.01). Tax reporting accuracy also increased significantly in the treatment group – from 62.4% to 88.1% – but increased less so in the control group – from 60.7% to 64.9% (p-value < 0.01). The treatment group also had a huge increase in timely tax payment (49.5% → 77.3%), while the control group saw only a trivial increase (50% → 54.2%, p-value < 0.01). In

summary, business performance increased from 64.2% to 82.0% for the treatment group and remained the same for the control group (61.5% to 62.8%, with a significant p-value < 0.01) These findings demonstrate the importance of the tax training program empirically, as the training program both improved tax-related behaviors and led to positive business outcomes for new entrepreneurs.

#### 4.2 T-test for Group Differences

The hypothesis testing results in Table 3 show that the tax training program had significant positive effects on the outcomes of interest. For tax compliance, the t-statistic was 11.26, p-value <0.01, supporting the hypothesis that induced voluntary compliance with taxation improved following the training. In parallel, timeliness of tax filing gave t-statistic of 10.12 and p-value of less than 0.01 thus confirming the positive impact on tax filing. The treatment had a positive effect on accuracy of tax reporting, t-statistic = 12.14, p<0.01. In addition, the punctuality of tax payment drastically improved, t = 13.03, p < 0.01; which implicitly contends to the training effect on tax payment behavior. Finally, business performance was positively affected in the treatment group (T-statistic = 8.77, p-value < 0.01). These the hypotheses were confirmed, indicating that the tax training program not only improved tax-related behaviors, but also overall business performance of nascent entrepreneurs.

#### 4.3 Tax Compliance

With a robust t-statistic of 11.26 and a p-value of <0.01, the data shows that tax compliance significantly increased in the treatment group post-tax training, as presented in Table 4. The training led to a notable increase in tax compliance in the treating group—from 58.3% to 82.5%. Assumptions The experimental group demonstrated a dramatic increase in tax compliance, rising from 60% to 68.7%, with a t-statistic of 3.14 and a p-value < 0.01 (Significance level at alpha = 1%. This hints that the experimental group was events that expended effort towards training that are associated with their work life e.g., conduct training in accounting, a field closely related to tax compliance as compared to the control group, that did not receive any training, no effect was visible where compliance was little changed from 60.2% to 61.4%, t-stat 1.37 with p-value of 0.17 (insignificant difference). Most importantly, the tax treatment worked: compliance among new

entrepreneurs in the Treatment group improved significantly, as were these results confirmed.

#### 4.4 Timeliness of Tax Filing

As shown in the results for Table 5, the treatment group presented a better execution in the time of tax filing after taking the tax training program. the timely filings improved from 55.1% to 78.9%, the t-statistic was 10.12 and the p-value: <0.01 (highly significant). In contrast, the control group had no significant improvement, with the timely tax filed only increasing from 54.9% to 57.3%, yielding a t-statistic of 1.14 and a p-value of 0.26. These results confirm that our tax training program had a large and positive effect on whether new entrepreneurs in the treatment group filed taxes promptly, while no effect was found for the control group.

#### 4.5 Accuracy of Tax Reporting

As can be seen in Table 6, the treatment group improved their accuracy of tax reporting after the training program. As an example, tax reporting accuracy increased on average from 62.4% for pre-due tax returns to 88.1% for post-due tax returns, which is statistically significant with a t-statistic of 12.14 and a p-value <0.01, suggesting a strong overall positive effect (n174,883). On the other hand, for the control group, accuracy in tax reporting increased only slightly, from 60.7% to 64.9%, with a t-statistic of 2.32 and p = 0.02: this is statistically significant but less than in the treatment group. These results mean that the tax training increased the accuracy of tax reporting among the new entrepreneurs in the treatment group, and whereas there was a small improvement in the control group.

#### 4.6 Timeliness of Tax Payment

Results presented in Table 7 show that the treatment group was better able to make timely tax payment after undergoing the tax training program. Has the effect found a statistically significant difference in terms of t-statistic and p-value? Change in timely tax payment We move from 49.5% timely tax payment to 77.3% timely tax payment with a t-statistic of 13.03 and p-value <0.01 Meanwhile, the control group showed a slight increase from 50.0% to 54.2% in timely tax payments. This was statistically significant, but relatively small; t-statistic 2.04, p-value 0.04. These results indicate that the tax training program had a significant effect on increasing tax

payment timeliness among the treatment group, while the control group has only a moderate increase.

#### 4.7 Business Performance

As shown in Table 8, the treatment group saw a substantial increase in business performance post tax training program. 64.2% of entrepreneurs reported that their business performed better (statistically significant at the 1% level as evidenced  $cr/de$ ). Post-intervention, 82.0% reported improved business performance ( $p < 0.01$ ). However, for the control group, business performance increased slightly, from 61.5% to 62.8%, with a  $t$ -statistic of 1.36 and a  $p$ -value of 0.17, not statistically significant. Results of the study showed that the tax training program had a significant positive impact on business performance, but only in the treatment group as opposed to the control group where performance remained unchanged.

#### 4.8 Discussion research

However, this study aimed to analyze how tax training programs may affect new entrepreneurs' tax compliance and businesses. Results indicate that tax training has a positively pronounced and statistically significant effect on several important variables: overall tax compliance, timeliness of tax filing, accuracy and completeness of their tax reporting, timeliness of tax payment and their general performance. They also have important implications for policy and practice, indicating that tax education for new entrepreneurs can help cultivate a more compliant and effective business ecosystem. This section presents the main findings and discusses them in the context of the relevant literature.

This study indicates that the provision of tax training can have a positive impact on tax compliance among new entrepreneurs. Targeting taxes that matter for firms: Evidence from a tax training program These findings parallels earlier studies that have shown a correlation between teaching taxes and tax compliance. Examples include research by Alm and McKee (2006) and Muehlbacher et al. Research by Allingham and Sandmo (2011) has demonstrated that when taxpayers are informed about the tax legislation and the significance of conformity to tax laws, tax compliance is enhanced. Improved awareness and understanding of tax obligations may be responsible for the improved tax compliance

observed in this study The trained entrepreneurs learned how to correctly report their taxes, tax due dates, and the repercussions of not complying. According to the theory of planned behavior, knowledge and perceived behavioral control (e.g., having a handle on tax regulations) represent important determinants of human intentions and behaviors (Ajzen, 1991). While providing explicit pointers on their taxes, training programs seem to increase the entrepreneurs' confidence of adhering to their tax obligations. A second major result is increased timeliness of tax filing among those entrepreneurs that received the tax training. Tax compliance specifically entails timely action, and a delayed tax filing can incur penalties, interest, and reputation damage. This result confirms previous studies like Torgler and Schneider (2007), finding that informing people on tax policy has a large effect on the diaries of tax submissions. Tax training programs equip entrepreneurs with the knowledge and detail of tax deadlines and filing processes, helping them avoid delays that could otherwise cost a lot. What is more, the training program probably stressed the significance of filing promptly in order to keep a favorable standing with tax authorities. Entrepreneurs who are less informed on procedural details or the consequences of late filing will be relatively less likely to file on time. Tax training programs, thus, seem to promote smoother and more effective administration of tax processes by eliminating these timely filing obstacles, a situation that is favorable for both entrepreneurs and taxing authorities.

The study found entrepreneurs completing the training program are significantly more likely to report their taxes accurately and completely than non-participants, with respect to both completeness and accuracy. This finding is consistent with earlier research by Bird & Davis Nozemack (2018), Rebele & St. Pierre (2019), which emphasize tax education would enhance tax reporting quality.

**Table 2.** Descriptive Statistics of Tax Compliance and Business Outcomes

Variable	Treatment Group (N=350)	C Group (N=500)	p-value
Tax Compliance (Pre-Training)	58.3%	60.2%	0.25
Tax Compliance (Post-Training)	82.5%	61.4%	<0.01
Timeliness of Tax Filing (Pre)	55.1%	54.9%	0.86
Timeliness of Tax Filing (Post)	78.9%	57.3%	<0.01
Accuracy of Tax Reporting (Pre)	62.4%	60.7%	0.34
Accuracy of Tax Reporting (Post)	88.1%	64.9%	<0.01
Timeliness of Tax Payment (Pre)	49.5%	50.0%	0.95
Timeliness of Tax Payment (Post)	77.3%	54.2%	<0.01
Business Performance (Pre)	64.2%	61.5%	0.31
Business Performance (Post)	82.0%	62.8%	<0.01

**Table 3.** Hypothesis Testing Results

Hypothesis	t-statistic	p-value	Result
Tax Compliance	11.26	<0.01	Supported
Timeliness of Tax Filing	10.12	<0.01	Supported
Accuracy of Tax Reporting	12.14	<0.01	Supported
Timeliness of Tax Payment	13.03	<0.01	Supported
Business Performance	8.77	<0.01	Supported



**Table 4.** T-test for Tax Compliance

Group	Tax Compliance Before (%)	Tax Compliance After (%)	t-statistic	p-value
Treatment Group	58.3%	82.5%	11.26	<0.01
Control Group	60.2%	61.4%	1.37	0.17

**Table 5.** T-test for Timeliness of Tax Filing

Group	Timeliness of Tax Filing Before (%)	Timeliness of Tax Filing After (%)	t-statistic	p-value
Treatment Group	55.1%	78.9%	10.12	<0.01
Control Group	54.9%	57.3%	1.14	0.26

**Table 6.** T-test for Accuracy of Tax Reporting

Group	Accuracy of Tax R Before (%)	Accuracy of Tax R After (%)	t-statistic	p-value
Treatment Group	62.4%	88.1%	12.14	<0.01
Control Group	60.7%	64.9%	2.32	0.02

**Table 7.** T-test for Timeliness of Tax Payment

Group	T of Tax Pay Before (%)	T of Tax Pay After (%)	t-statistic	p-value
Treatment Group	49.5%	77.3%	13.03	<0.01
Control Group	50.0%	54.2%	2.04	0.04

**Table 8.** T-test for Business Performance

Group	Business Performance Before (%)	Business Performance After (%)	t-statistic	p-value
Treatment Group	64.2%	82.0%	8.77	<0.01
Control Group	61.5%	62.8%	1.36	0.17



Tax programs show entrepreneurs how to take advantage of allowable deductions and credits and provide instruction on ways to calculate their taxes so that they can complete their tax returns properly and with more confidence. Preparing taxes accurately and completeness is crucial to avoid audits or penalties. Mistakes with tax reporting can cost entrepreneurs hefty fines or increase scrutiny from tax authorities. Tax training programs mitigate these risks; expert training helps ensure that entrepreneurs are knowledgeable about the expertise needed for accurate reporting. This observation highlights the significance of equipping entrepreneurs with practical instruments and supports that can help them effectively fill out tax forms and apply tax rules.

The researchers also found that tax training programs resulted in becoming more timely in tax payment. Participants paying their taxes on time were significantly more likely than non-participants. This finding corroborates the research of Mascagni et al. (2021), which revealed that taxpayers with a better understanding of the advantages of timely payments, in terms of avoiding added costs (interest and penalties), tend to adhere to payment deadlines. Trial in this study seen improved payment behavior may be due to the increased awareness of costs of financial/legal late payback. Furthermore, the training course would have practical tools for participants on how to meet their tax obligations, such as payment periods and online payment platforms. These helped entrepreneurs keep on top of their tax obligations and make sure payments were made on time.

Ultimately, the study found that entrepreneurs who participated in the tax training program had significantly better business performance. This result is consistent with earlier studies, including (Cooper & Nguyen, 2019; Mkadmi & Ben Ali, 2024), that if entrepreneurs aware that they have a better understanding of tax obligations, they are more likely to make informed financial decision and optimizer their business operations. Overall, tax training programs can be useful for entrepreneurs looking to gain a better understanding of tax planning strategies and tax compliance requirements, which in turn can help them manage their cash flow and reduce their tax liabilities (Kouam & Asongu, 2022). In addition, tax training programs can lead to a more responsible and compliant business environment,

contributing to overall stability in the sector. Being compliant can also help avoid potential financial penalties or legal issues that can disrupt the business operation. In addition, the financial management of entrepreneurs is enhanced as they continue to make better decisions that will positively impact their business in the long term (Gozman & Willcocks, 2019).

These findings have significant implications for policy-makers and business support institutions. First, they argue that tax training programs are an effective tool for improving tax compliance rates and business prospects for new entrepreneurs. Policymakers should consider investing in and expanding high-compliance programs like these, particularly in developing economies where tax compliance rates are often low. Governments can generate better tax revenue collection and set small businesses up for success by educating entrepreneurs to meet their tax liabilities. For business support organizations, the findings imply that training on taxes should be positioned as part of wider entrepreneurship development programs. Tax compliance is not just legal, but also good business. Support organizations can aid in building a more robust entrepreneurial landscape by helping entrepreneurs learn the significance of tax compliance and its role in achieving business success.

## 5. Conclusion

The influence of tax training programs provided for new entrepreneurs in Indonesia is the highlights of this study, which could contribute greatly to increasing the taxpayer compliance in respect tax accurateness, time and tax accuracy. Overall, the outcomes imply that tax training is vital for improving the overall business performance of nascent entrepreneurs through boosting their capacity to cope with tax-related issues. Since the Indonesian government is keen to have more compliant new entrepreneurs, these results signify the need for tax education programs to provide a solid foundation for more compliant and helpful businesses. This can help to establish the pivotal role that tax training may play in enhancing both entrepreneurial success and tax compliance, and future researchers may look to develop the concept

by expanding it across other sectors and regions as part of a wider investigation.

### Limitation

While this study outlines key findings on the impact of tax training programmes on new entrepreneurs, it has some limitations that need to be discussed. Firstly, the cross-sectional nature of the study limits the ability to draw firm conclusions about causal relationships. While this study shows an association between training capacity and various business outcomes, a longitudinal study is needed to verify the lasting impact of training capacity. In addition, the limited sample of Indonesian start-up entrepreneurs in this study may limit its applicability to other contexts or countries with different tax systems and business environments. In addition, self-reported data on tax compliance and business performance may introduce bias, as respondents may exaggerate their compliance or performance to meet social norms. Finally, this study did not control for other factors, such as firm size or industry, that may moderate the relationship between tax training and firm performance. Future research needs to address these limitations, for example by using a longitudinal approach, larger samples in different business contexts and by including more moderating variables.

### Funding Statement

This study was funded by internal research grants from Diponegoro University, Indonesia. The funders had no role in study design, data collection, analysis, interpretation, or the decision to submit the manuscript for publication.

### Author Contributions

Widi Rahmat Saputra developed the research framework, field experiment design, and data analysis. Annisa Qurrota A'yun performed literature review, data collection, and manuscript preparation. Both authors discussed the results and contributed to the final version of the paper.

### Conflict of Interest

The authors have no conflict of interest concerning this study publication.

### Acknowledgements

They sincerely thank the entrepreneurs who were discussed in the study and the local tax authorities in Indonesia for their cooperation and support. The authors also appreciate Diponegoro University for supporting this research through the provided facilities.

## A. Table Research Appendix Data

**Table 1.** Sample Composition and Data Collection

Group	Number of Participants	Region	Data Collection Method
Treatment Group	350	Jakarta, Surabaya, Yogyakarta	Survey, Interviews, Audit Data
Control Group	500	Jakarta, Surabaya, Yogyakarta	Survey, Interviews, Audit Data

Data source; author's observation 2025

### References

- Ajzen, I. (2020). The theory of planned behavior: Frequently asked questions. *Human Behavior and Emerging Technologies*, 2(4), 314-324. <https://doi.org/https://doi.org/10.1002/hbe2.195>
- Apostolou, B., Dorminey, J. W., & Hassell, J. M. (2022). Accounting education literature review (2021). *Journal of Accounting Education*, 59, 100781. <https://doi.org/https://doi.org/10.1016/j.jaccedu.2022.100781>
- Apostolou, B., Dorminey, J. W., Hassell, J. M., & Rebele, J. E. (2016). Accounting education literature review



- (2015). *Journal of Accounting Education*, 35, 20-55. <https://doi.org/https://doi.org/10.1016/j.jaccedu.2016.03.002>
- Badaoui, E., & Walsh, F. (2022). Productivity, non-compliance and the minimum wage. *Journal of Development Economics*, 155, 102778. <https://doi.org/https://doi.org/10.1016/j.jdeveco.2021.102778>
- Banafo Akrong, G., Yunfei, S., & Owusu, E. (2022). Development and validation of an improved DeLone-McLean IS success model - application to the evaluation of a tax administration ERP. *International Journal of Accounting Information Systems*, 47, 100579. <https://doi.org/https://doi.org/10.1016/j.accinf.2022.100579>
- Batrancea, L. M., Kudła, J., Błaszczak, B., & Kopyt, M. (2022). Differences in tax evasion attitudes between students and entrepreneurs under the slippery slope framework. *Journal of Economic Behavior & Organization*, 200, 464-482. <https://doi.org/https://doi.org/10.1016/j.jebo.2022.06.017>
- Bird, R., & Davis-Nozemack, K. (2018). Tax Avoidance as a Sustainability Problem. *Journal of Business Ethics*, 151(4), 1009-1025. <https://doi.org/10.1007/s10551-016-3162-2>
- Bornman, M., & Ramutumbu, P. (2019). A conceptual framework of tax knowledge. *Meditari Accountancy Research*, 27(6), 823-839. <https://doi.org/10.1108/MEDAR-09-2018-0379>
- Chan, H. F., Gangl, K., Supriyadi, M. W., & Torgler, B. (2023). The effects of increased monitoring on high wealth individuals: Evidence from a quasi-natural experiment in Indonesia. *Journal of Economic Behavior & Organization*, 215, 244-267. <https://doi.org/https://doi.org/10.1016/j.jebo.2023.09.017>
- Cheng, A., & Baskin, E. (2021). Disproportionate redemption discounting: Mental accounting of discounted credit. *Journal of Business Research*, 128, 156-163. <https://doi.org/https://doi.org/10.1016/j.jbusres.2021.02.010>
- Coccia, M. (2022). *Destructive Technologies for Industrial and Corporate Change BT - Global Encyclopedia of Public Administration, Public Policy, and Governance* (A. Farazmand (ed.); pp. 3121-3127). Springer International Publishing. [https://doi.org/10.1007/978-3-030-66252-3\\_3972](https://doi.org/10.1007/978-3-030-66252-3_3972)
- Cooper, M., & Nguyen, Q. T. K. (2019). Understanding the interaction of motivation and opportunity for tax planning inside US multinationals: A qualitative study. *Journal of World Business*, 54(6), 101023. <https://doi.org/https://doi.org/10.1016/j.jwb.2019.101023>
- Dabla-Norris, E., Misch, F., Cleary, D., & Khwaja, M. (2020). The quality of tax administration and firm performance: evidence from developing countries. *International Tax and Public Finance*, 27(3), 514-551. <https://doi.org/10.1007/s10797-019-09551-y>
- e Hassan, I., Naeem, A., & Gulzar, S. (2021). Voluntary tax compliance behavior of individual taxpayers in Pakistan. *Financial Innovation*, 7(1), 21. <https://doi.org/10.1186/s40854-021-00234-4>
- Gangl, K., & Torgler, B. (2020). How to Achieve Tax Compliance by the Wealthy: A Review of the Literature and Agenda for Policy. *Social Issues and Policy Review*, 14(1), 108-151. <https://doi.org/https://doi.org/10.1111/sipr.12065>
- Gordon, R., & Sarada. (2018). How should taxes be designed to encourage entrepreneurship? *Journal of Public Economics*, 166, 1-11. <https://doi.org/https://doi.org/10.1016/j.jpubeco.2018.08.003>
- Gozman, D., & Willcocks, L. (2019). The emerging Cloud Dilemma: Balancing innovation with cross-border privacy and outsourcing regulations. *Journal of Business Research*, 97, 235-256. <https://doi.org/https://doi.org/10.1016/j.jbusres.2018.06.006>
- Greenberg, A. E., & Hershfield, H. E. (2019). Financial decision making. *Consumer Psychology Review*, 2(1), 17-29. <https://doi.org/https://doi.org/10.1002/arcp.1043>
- Harju, J., Matikka, T., & Rauhanen, T. (2019). Compliance costs vs. tax incentives: Why do entrepreneurs respond to size-based regulations? *Journal of Public Economics*, 173, 139-164.

<https://doi.org/https://doi.org/10.1016/j.jpubeco.2019.02.003>

- Kouam, J. C., & Asongu, S. A. (2022). Effects of taxation on social innovation and implications for achieving sustainable development goals in developing countries: A literature review. *International Journal of Innovation Studies*, 6(4), 259–275. <https://doi.org/https://doi.org/10.1016/j.ijis.2022.08.002>
- Levy, D., Hills, R., Perkins, H. C., Mackay, M., Campbell, M., & Johnston, K. (2021). Local benevolent property development entrepreneurs in small town regeneration. *Land Use Policy*, 108, 105546. <https://doi.org/https://doi.org/10.1016/j.landusepol.2021.105546>
- Mascagni, G., Mengistu, A. T., & Woldeyes, F. B. (2021). Can ICTs increase tax compliance? Evidence on taxpayer responses to technological innovation in Ethiopia. *Journal of Economic Behavior & Organization*, 189, 172–193. <https://doi.org/https://doi.org/10.1016/j.jebo.2021.06.007>
- Mkadmi, J. E., & Ben Ali, W. (2024). How does tax avoidance affect corporate social responsibility and financial ratio in emerging economies? *Journal of Economic Criminology*, 5, 100070. <https://doi.org/https://doi.org/10.1016/j.jeconc.2024.100070>
- Nagel, H., Rosendahl Huber, L., Van Praag, M., & Goslinga, S. (2019). The effect of a tax training program on tax compliance and business outcomes of starting entrepreneurs: Evidence from a field experiment. *Journal of Business Venturing*, 34(2), 261–283. <https://doi.org/https://doi.org/10.1016/j.jbusvent.2018.10.006>
- Rebele, J. E., & St. Pierre, E. K. (2019). A commentary on learning objectives for accounting education programs: The importance of soft skills and technical knowledge. *Journal of Accounting Education*, 48, 71–79. <https://doi.org/https://doi.org/10.1016/j.jaccedu.2019.07.002>
- Ru, X., Wang, S., & Yan, S. (2018). Exploring the effects of normative factors and perceived behavioral control on individual's energy-saving intention: An empirical study in eastern China. *Resources, Conservation and Recycling*, 134, 91–99. <https://doi.org/https://doi.org/10.1016/j.resconrec.2018.03.001>
- Sebele-Mpofu, F. Y. (2023). *The Informal Sector, the "implicit" Social Contract, the Willingness to Pay Taxes and Tax Compliance in Zimbabwe*. 13(3), 299–342. <https://doi.org/doi:10.1515/ael-2020-0084>
- Tomar, S., Kent Baker, H., Kumar, S., & Hoffmann, A. O. I. (2021). Psychological determinants of retirement financial planning behavior. *Journal of Business Research*, 133, 432–449. <https://doi.org/https://doi.org/10.1016/j.jbusres.2021.05.007>
- Ulloa-Suárez, C. (2023). Determinants of compliance with fiscal rules: Misplaced efforts or hidden motivations? *European Journal of Political Economy*, 78, 102399. <https://doi.org/https://doi.org/10.1016/j.ejpoleco.2023.102399>
- Zhang, C. Y., & Sussman, A. B. (2018). Perspectives on mental accounting: An exploration of budgeting and investing. *FINANCIAL PLANNING REVIEW*, 1(1–2), e1011. <https://doi.org/https://doi.org/10.1002/cfp2.1011>