

**IJFBS**

Finance &amp; Banking Studies

# Finance & Banking Studies

**IJFBS, VOL 10 NO 1 ISSN: 2147-4486**Contents available at [www.ssbfn.net/ojs](http://www.ssbfn.net/ojs)<https://doi.org/10.20525/ijfbs.v10i1.1159>

## Tax Comprehension and Ethics Education Integration in Improving Tax Compliance Among Accounting Students: An Experimental Study

**I Nyoman Putra Yasa**

Corresponding Author: Department of Economic and Accounting, Ganesha University of Education, Singaraja, Indonesia. 08179784093

**Nyoman Ari Surya Dharmawan**

Department of Economic and Accounting, Ganesha University of Education, Singaraja, Indonesia. 08193642215

**I Made Pradana Adiputra**

Corresponding Author: Department of Economic and Accounting, Ganesha University of Education, Singaraja, Indonesia. 082146187373

**I Putu Hendra Martadinata**

Corresponding Author: Department of Economic and Accounting, Ganesha University of Education, Singaraja, Indonesia. 085738423853

**Nyoman Trisna Herawati**

Corresponding Author: Department of Economic and Accounting, Ganesha University of Education, Singaraja, Indonesia. 082146187373

### Abstract

Tax education, especially at college level, has so far focused on academic aspects and tends to ignore ethical aspects. So far, ethics education has shown its role in increasing individual moral sensitivity. Given the importance of ethics education, an integration of ethics is needed in tax education, so that it is expected to help in shaping tax-compliant behavior among students. Based on these issues, this study aims to examine the combined effect of tax ethics education and tax comprehension on tax compliance. This research was conducted on 81 undergraduate accounting students with an experimental method. Based on the analysis using ANOVA, this study found that the integration of ethics in tax education can improve tax compliance, especially for students who have low tax comprehension. The results of this study indicate the importance of ethics integration in tax education, especially at the university level. Therefore, the results of this study are expected to be a consideration for universities to integrate ethical aspects of tax education, thus helping in the process of forming student moral awareness as taxpayers in the future.

**Keywords:** Tax Comprehension; Ethics Education Integration; Tax Compliance

**JEL Classifications:** G40; H26; I21

## **Introduction**

Taxation system alteration as a result of taxation reformation system in 1983 from withholding system to self-assessment system has brought a significant impact towards government revenues from tax sector (I. N. Yasa & Martadinata, 2019). Tax is currently the largest State Budget revenues source in APBN. APBN data in 2020 stated that the total state revenue was Rp. 2,233.3 trillion, and tax sector contributed around Rp. 1,865.7 trillion (83.5%) while the rest as much as Rp. 367 trillion (16.4%) was from non-tax revenue and Rp. 500 billion was from grant ([www.kemenkeu.go.id](http://www.kemenkeu.go.id)). Regarding the large revenue from tax sector, various approaches are made by the government and Directorate General of Taxes (DGT/DJP) as the field executor to secure tax revenue potential, especially in order to improve compliance.

Taxpayer compliance of a country is based on taxation ration. Throughout 2015 to 2017 tax ration in Indonesia was constantly decreasing; which was as much as 11.6% in 2015, 10.8% in 2016, and another decline to 10.7% in 2017 ([www.pajak.go.id](http://www.pajak.go.id)). This tax ration decrease showed that tax collection in Indonesia is not yet optimum (Cahyonowati & Ratmono, 2012). Aside from that, this decrease is caused by taxpayer disobedience (Pasaribu & Tjen, 2016); (I. N. Yasa, 2018). There was an increase above tax ratio in Indonesia in 2018; which was 10.7% in 2017 rose as much as 0.8% into 11.5% in 2018. Furthermore, revenues from tax sector also increased from Rp. 1,331 trillion to Rp. 1,542.14 trillion in 2018 (12.5%) ([www.pajak.go.id](http://www.pajak.go.id)). Not only nationwide, one of the regions which experienced an increase in tax revenues was Bali. Up until December 12, 2018 the amount of revenues received from tax sector rose 16.03% from 2017. Based on receiving aspect, a further increase ensued from compliance. The increase taxpayer compliance hiked to 98% in 2018 ([bali.tribunnews.com](http://bali.tribunnews.com)).

Related to compliance, numerous of researches have been conducted by previous researchers; some among others were by Ezer & Ghozali (2017); which revealed that there was a positive influence between income amount level and application of sanctions towards taxpayer compliance. Besides, Yasa (2018) proved that cost spent on increasing compliance correlated negatively with taxpayer compliance. Some of those researches merely focused on economic factor utilized as an approach in measuring taxpayer compliance. Daniel & Wong (2008), who conducted a taxpayer compliance research in Hongkong, stated that ethical belief was a measure that enabled compliance increase, especially for taxpayer who had lower moral development. Moreover, due to higher compliance when taxpayer believed upon stronger moral to prove that tax embezzlement became an unethical action. Aside from that, more comprehensive law enforcement effort may produce overall positive impact upon taxpayer compliance. Taxpayer compliance research based on tax moral aspect has become an interesting matter to be studied further. That was proven with Torgler (2006) research result; in general Asia had higher tax moral than OECD countries (e.g. Canada, USA, and England). That was due to culture difference.

However, according to Damayanti, and friends (2015), a research on taxpayer compliance would be better supposing that another approach other than economic factor was utilized in examining a relation between compliance aspect and behavior in fulfilling tax paying obligation. It was supported with an opinion from (Pope & Mohdali, 2010) that previous researches related to taxpayer compliance were more focused on economic problems, yet lately psychological aspect has become more intriguing to be studied related to taxpayer compliance. James & Alley (2009) stated that with psychological approach not only did individuals maximize utilities owned, they also interacted with other individuals according to manner, norm, and role. One of the social psychological aspects that was able to affect an individual in making decisions was ethics. Ethical aspect that was a part of taxpayer moral tuned out to play a significant role aside from economic aspect in taxpayer compliance context. (Ashby, et al. (2009). Taxpayer was demanded not only to gain comprehension upon tax, but also obliged to have ethics related with whether taxpayer had the honesty or not to perform their taxation compliance (Widyaningrum, and friends 2017); (Widyaningrum, 2018); (Vadelin & Susilawati, 2019).

Based on approach developing phenomenon utilized in research on taxpayer compliance, the aim of this research was to test taxpayer taxation compliance behavior built upon taxation ethics. This was due to taxation problem in Indonesia; which was still seen as oriented on taxpayer elevation compliance programs, such as taxpayer comprehension improvement including taxation intensification program aiming for new taxpayers like college students. Nevertheless, the comprehension improvement was more focused on students' academic factor by ignoring ethics factor that aimed to individual self as a student as a future taxpayer (Triyuwono, 2010); (Widyaningrum, 2018). Therefore, aside from stressing on students' comprehension on taxation knowledge, this research considered that ethics integration in taxation education played an important role in increasing students' ethical awareness to oblige taxation regulations.

In order to fill the gap in previous researches on social psychological aspect, in this case taxation ethical factor, this research would conduct tax ethics education aspect and tax comprehension towards taxpayer compliance behavior. Experiment method was applied in this research in order to analyze the relation between those variables. Experiment method utilization based on a research result by Cahyonowati & Ratmono (2012) advised future research to apply experiment material in testing the relation between taxpayer compliance on types of income. The experiment was conducted on 96 students of undergraduate accounting at Ganesha University of Education, with 2x1 between subject design. Tax ethics education integration variable was used as treatment in experiment. Whilst tax comprehension variable was a variable measured on each participant.

This research was expected to make a contribution in the form of theory development specifically in accounting and taxation regarding taxpayer compliance, mainly profession relation in both fields to achieve taxpayer compliance increment in the future. Darmayasa & Aneswari (2015) explained that the job of tax consultant was not to deal with the government and defend taxpayer while they had to face the fact of defending tax payer's interest who committed tax offence. Professional ethics played an important role to maintain professional performance (Ludigdo & Kamayanti, 2012).

This research was also expected to provide literature contribution, especially about elements in tax education and its role in shaping students' tax compliance, in this case tax comprehension and integrated ethics education. Integrated ethics education is expected to strengthen the role of tax comprehension in shaping tax compliance behavior. Therefore, the results of this study are expected to add to the literature review related to taxpayer compliance behavior, by analyzing the role of integrated ethics education as a counterweight to the academic aspects which have been more focused on tax education. The practical aim of this research was to become an input for the government and regulation maker to improve and even formulate policies in pursuance of taxpayer compliance behavior escalation thus it can increase revenues.

## **Literature Review**

### **Ethics in tax**

According to Indonesian Dictionary /Kamus Besar Bahasa Indonesia, ethics is a science that studies behavior, whether it is related with good and bad behavior and rights and obligations fulfillment. Moreover, ethics is a collection of principles/values related to moral. In other matter, ethics is also values related with the do's and don'ts behavior, in terms of rights and wrong applied in society. Ethics tends to discuss related moral views on certain behaviors. Meanwhile, morality refers to behavior standard applied by people to judge and specifically behavior standard where people are judged in their relation with others (Daniel & Wong, 2008). Gul and friends (2003) stated that an individual would perform unethical behavior depending on favorable benefit expected from being unethical (or lose whatever expected should that unethical action be performed), individual perception upon the possibility of being caught for unethical action, individual attitude towards risks, and individual ethical reasoning level.

Ethical option in taxation problem is basically based on taxpayer's personal moral philosophy. Weiss (2003) mentioned there were five ethics basics that could be utilized in ethical reasoning to decide on alternatives and justify decision and action taken. Those five principles mentioned by Weiss (2003) are as followed:

**Ethical Relativism.** Morality in this principle emphasizes self-interest, and views that there are no standard or universal rules to guide moral action.

**Utilitarianism.** Based on this principle, an action is morally right if the positive impact of an action outweighs the negative impact. In other words, utilitarianism emphasizes the magnitude of the benefits of an action. Therefore, ethical behavior is behavior whose benefits outweigh costs.

**Universalism.** This principle basically refers to duty. This principle does not emphasize the consequences of an action to judge right or wrong, but rather emphasizes the nature of the action itself.

**Rights.** This principle emphasizes individual rights. Moral action in this principle is an act that does not violate the rights owned by individuals.

**Justice.** This principle refers to justice and equality. An action is considered morally right if it is fair and equal to all individuals.

## Tax compliance

Proceeding from a number of researches that focused on utilizing experiment approach that studies behavior in laboratory arrangement as their research methodology, Alm & Torgler (2011) stated that various things could influence taxpayer compliance behavior and expected classic utility theory usage was unable to explain those behaviors. Other than that, Alm & Torgler (2011) emphasized their concept on tax compliance; the basis for a person to comply with tax due to a higher level of compliance when taxpayer received some benefits upon the disposal of fund source from the tax paid.

Compliance is a taxpayer condition who has already fulfilled all his obligation and exercised the taxation rights in accordance with applicable regulations without coercion (Harinurdin, 2009). Tax compliance is an attitude adjusted to the function of tax, in the form of constellation of cognitive, effective, and conative components that interact in comprehending, feeling, and behaving towards the meaning and function of tax (Yadnyana & Sudiksa, 2011).

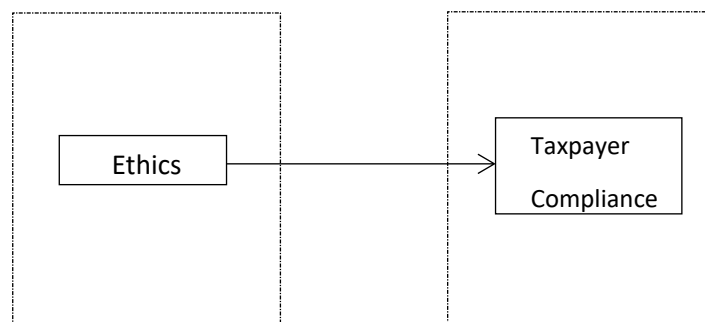
Ho (2008) elaborated that there were four model dimensions that affected taxpayer compliance behavior. First, demographic dimension that covered taxpayer's age and sex. Second, disobedience opportunity that captured taxpayer's education level, income, source of income, and types of occupation. Third, behavior and perception dimension that covered taxpayer's moral development and their attitude towards taxation system justice. Fourth, tax system or provisions that deal with tax system complexity, relation with tax party, sanction application, precaution and tax tariff amount. The description of those dimensions in research showed that higher education level was related to lower compliance level. From cultural difference perspective, a significant result was found that taxpayer based on collectivism (individualism) applied lower (higher) moral sense, had a less (more) favorable attitude towards tax system and less (more) compliant towards their taxation obligation (Ho, 2008).

## The relation between ethics and taxpayer compliance

Chung & Trivedi (2003) expressed that in order to increase compliance level on income tax, ethics in taxation was an important matter for tax authorities of countries where most government expenses were funded by cut or collected taxes.

According to Ho (2008), taxpayers emphasize the consequences of paying taxes. If taxpayers feel that they will benefit from paying taxes, then they will comply. However, taxpayers will not comply if tax compliance does not provide benefits and instead burdens them. Therefore, taxpayers use utility as an ethical value in determining their actions related to taxation (Ho, 2008). Nevertheless, a different taxpayer might see tax disobedience differently because each person might have different ethical values. Meanwhile, Alm & Torgler (2011) uttered that questions about compliance behavior could be answered, although partly, by recognizing ignored ethical benefit in individual behavior; individual did not always behave as a rational individual and put himself first as described in standard neoclassic paradigm, but more motivated by plenty of other things that had their main foundation as a number of ethical aspects.

Based on several of those conceptual studies, the relation between ethics and taxpayer's compliance behavior could be illustrated according to this research context as followed.



**Figure 1:** Relation between Ethics and Taxpayer Compliance

Several researches have tested the relation between ethics towards taxpayer compliance. Daniel & Wong (2008) uttered that ethical belief had become a useful item to increase taxpayer compliance behavior in

Hongkong. Torgler (2016) proved that Asia had higher tax moral than OECD countries (e.g. Canada, USA, England) and cultural factor of each country. Ethical aspect that was a part of tax payer's moral significantly influenced their compliance behavior (Ashby et al., 2009). Not only did taxpayer have comprehension on tax but they had to have ethics related with their tax compliance (Widyaningrum et al., 2017); (Vadelin & Susilawati, 2019). Yeom, et al. (2017); Park, et al. (2012); Lau (2010), and Bennie & Mladenovic (2015) proved that ethical education integrated in tax study could increase students' sensitivity in responding to ethics in taxation. A research by Yasa & Prayudi (2019) on the role of local cultural ethics Tri Kaya Parisudha towards compliance upon 400 personal taxpayer in Bali. The research result showed that three components of Balinese society local behavior, which were holy mind (manacika), good deed (kayika) and good words (wacika) affected one's intention to comply to pay taxes.

In behavioral aspect there was an idea known as psychological contract (Yuhertina, et al. (2016). That concept embodied as a consequence of a relation between society as taxpayer and state as infrastructure provider for society and tax collector (fiscus). Basically, each individual has the interest to obtain utilities upon what he does, mainly upon his obligation as society to his country. Each individual has a moral hazard in his life aspect, especially those which are related to his taxation obligations. Students as future taxpayers have tax comprehension since they learn tax knowledge through their education process at university. That tax comprehension will give good impact from moral and ethical aspect of that student to realize that tax compliance is also a part of moral and ethics of taxpayer.

As elaborated by Damayanti, and friends (2015), there was an approach outside economic influence behavior in paying tax. That opinion was supported by Pope & Mohdali (2010) which stated that previous researches related with taxpayer compliance focused more on economic problems, however, lately they have turned to social psychological approach with outside economic factor approach. Essentially tax compliance is a behavior that can be developed within various aspects such as economic, psychological, and sociologic (Alm & Torgler, 2011). In terms of psychological, it has already been proven that taxpayer compliance increases taxation performance (Kariyoto, 2012). Alm & Torgler (2011) research result proved that tax disobedience was considered unethical and immoral.

### **Tax comprehension, ethics education, and individual morality**

As previously stated, tax comprehension is one of non-economic factors that can raise tax compliance awareness. Tax comprehension can be regarded as a matter that influences taxpayer's moral to comply. Comprehension in question is knowledge and awareness towards regulations as well as issues in taxation, and the application in taxation activities (Newman, and friends (2018); (Sari, and friends (2019). Regarding taxpayer comprehension, several researches for example Arisandy (2017) and Tene & Sondakh (2017) found that comprehension upon regulations as well as taxation issues was able to increase taxpayer's awareness behavior in paying taxes. Tax aspect comprehension could be shaped during education period at university. Nevertheless, this research suspected that comprehension accompanied with ethical education could increase students' awareness to pay taxes.

Ethical education is one amongst various factors that can increase individual morality, specifically for university students. Several researches have tested the role of ethical education in increasing individual concern in varied ethical problems. A study conducted by Yeom and friends (2017) discovered that ethical education was significantly able to elevate students' moral sensitivity. Park, and friends (2012) found that students who had taken ethical education showed higher sensitivity and moral reasoning. Aside from that, Lau, (2010) stated that ethical education was highly important to be taught at university with a result of increasing sensitivity and students' moral reasoning.

In overall students' morality can be shaped through ethics subject at university level. Early morality shaping is expected to create individuals with ethical sensitivity once they enter employment. One of the alternatives in giving ethics course besides providing a special ethics course, is by integrating ethical education in certain subjects. In other words, students are able to learn ethics without having to go through ethics subject in particular.

Bennie & Mladenovic (2015) have tested ethical education affectivity that was integrated in accounting classes. The research was back grounded by criticism directed to academic community on their failure in integrating sufficient ethical education in accounting curriculum. Research result from Bennie & Mladenovic (2015) discovered that integrated ethical education increased their students' ethical sensitivity. In their opinion, integrated ethical education could expose students to various ethical problems. Thus, the expose

could increase students' ethical sensitivity, which was an important component in starting ethical decision making process.

Other than accounting subject, ethical education integration could be accomplished in taxation subject. That is on the base of some ethical problems that frequently surface in taxation world, which is compliance in paying taxes. Students are perpetually demanded to comprehend taxes formally, yet tend to ignore discussions on ethical issues that often occur in taxation. Therefore, based on a research of Yeom, and friends (2017); Park and friends (2012); Lau (2010), as well as Bennie & Mladenovic (2015), it was suspected that integrated ethical education in lectures, in this case taxation lecture, could increase students' sensitivity in responding to ethical issues in taxation.

### **Hypothesis development based on literature findings**

Newman, and friends (2018) stated that one of the causes of taxpayer disobedience was lack of comprehension towards taxation system. In order to increase compliance, some efforts are needed in increasing comprehension towards taxation system. One of taxation knowledge increase efforts is applied at university education level. However, this research suspected that knowledge alone was not enough to shape compliance behavior; ethical integration was required to increase tax compliance behavior.

Students who received integrated ethical education in taxation lecture were presumed to demonstrate high compliance behavior, without being affected with students' understanding towards taxation. It was because ethical education exposure that increased students' moral awareness to comply in paying taxes. Although students did not completely understand taxation science, their moral consciousness would encourage them to intend on paying taxes obediently.

A different compliance was presumed to be displayed by students who did not receive integrated ethical education in taxation lecture. Students who had understanding on taxation did not necessarily have moral awareness to pay taxes, and neither did students with low understanding. This research presumed that lower compliance was demonstrated by students who did not receive integrated ethical education in taxation lecture, either those with high or low understanding, compared with students who received integrated ethical education.

On the whole, inclusion of integrated ethical education in taxation lecture could increase students' moral awareness to pay taxes. Even though taxation understanding could affect compliance, it would be strengthened by integrated tax ethical education exposure. Based on the exposed elucidation, the proposed research hypothesis are:

H1: There is no significant compliance difference between students who receive integrated ethical education and have high tax comprehension with students who receive integrated ethical education and have low tax comprehension.

H2: There is no significant compliance difference between students who do not receive integrated ethical education and have high tax comprehension with students who do not receive integrated ethical education and have low tax comprehension.

H3: Students who receive integrated ethical education and have high tax comprehension demonstrate significantly higher compliance level compared with students who do not receive integrated ethical education and have high tax comprehension.

H4: Students who receive integrated ethical education and have high tax comprehension demonstrate significantly higher compliance level compared with students who do not receive integrated ethical education and have low tax comprehension.

## **Research and Methodology**

In order to test proposed hypothesis, this research utilized experiment method with a design of 2x1 between subjects. Tax ethics education integration was used as treatment variable in experiment. Whilst tax comprehension variable was a variable measured on each participant. Experiment participants consisted of accounting students of Bachelor degree at Ganesha Education University who were taking taxation lecture. There were two treatment scenarios conducted in this experiment, which were treatment class and non-treatment class. Students division of each class were previously conducted randomly by Undiksha Accounting Undergraduate Program. In scenario 1, students were given ethical materials that were integrated

in taxation lecture (treatment class). Ethical education inclusion was undertaken for 2 weeks (2 sessions). Meanwhile in scenario 2, students were given taxation lecture regularly without being given taxation ethical materials (non-treatment class). The following is a description on experiment design in this research:

**Table 1: Experimental design**

Experiment Treatment	Tax Comprehension	
	High	Low
Scenario 1 (treatment class)	1	2
Scenario 2 (non-treatment class)	3	4

Research instrument distribution was undertaken to collect data from research respondents. Research instrument was given to each experiment participant in an experiment laboratory. Distribution was executed after experiment treatment was administered to participant. The following is a description on data collecting technique in this research:

In treatment class researcher administered taxation lecture materials that had been integrated with tax ethics materials. Ethical integration element emphasized in treatment class was material presentation on taxpayer obligations, positive benefits on paying taxes, and negative effect if taxpayer committed tax avoidance. It was aimed to increase students' moral sensitivity regarding obligations of a taxpayer. In non-treatment class researcher administered taxation lecture materials without taxation ethical materials integration. After experiment period ended, instrument in the form of questionnaire was distributed to experiment participants. Participants were directed to fill in demographical data, read case materials, and requested to provide response to cases given as well as answer manipulation check questions to assess provided treatment's success.

Independent variables utilized in this research was tax ethics education and tax comprehension. Tax ethics education integration variable was the treatment variable in experiment. On the other hand, dependent variable in this research was compliance in paying taxes.

Ethics was norms related with one's behavior that was acceptable or could be utilized by individual or certain group (Wati & Sudiby, 2019). Taxation ethical education designated was taxation learning by integrating ethical values to comply to pay taxes. Meanwhile, taxpayer comprehension was a process where taxpayer acknowledged applicable taxation regulation and then applied it in taxation activity (Sari, and friends, 2019). Tax comprehension was measured utilizing a questionnaire adapted from a research by Oktaviani (2015) that had been modified.

To measure taxpayer's compliance behavior level this research utilized a scenario adapted from a research by Wahl, and friends (2010) and Benk, and friends (2011). In that scenario participants were requested to mention their income as a basis in tax payment. The higher the income, the more honest participant in paying taxes, so in this showed an increase in tax paying compliance behavior.

To test the hypotheses proposed, this research used two-way analysis of variance (ANOVA) method. This analysis was used to test the extent to which the relationship between the tested variables, with significance degree ( $\alpha$ ) as much as 0.05 (5%). The ANOVA assumption and hypothesis testing was administered with the aid of Statistical Package for the Social Sciences (SPSS) application version 25.

## **Empirical Data and Analysis**

Experiment was conducted on 96 students of undergraduate accounting at Ganesha University of Education. Based on respondent's data, 15 data was excluded from analysis since it was detected as outlier, so the data used for analysis was as much as 81 data. From 81 participant data, data where the number of male participants was obtained in the amount of 36 (44.44%), and female in the amount of 45 (55.56%). Average age of participants was 20 years old. Based on treatment provided, 40 participants were in treatment group, and 41 participants were in non-treatment group which were previously grouped randomly.

Once all the data was collected, participants were grouped based on tax comprehension. Utilizing median split method (tax comprehension score median was 46), 38 participants were in the group with high tax comprehension (comprehension score > median), and 43 participants were in the group with low tax

comprehension (comprehension score < median). Participant data grouping was based on treatment and tax comprehension and reported amount of income in experiment is presented in Table 2.

Based on data in Table 2, participants in Integration group (students who received integrated ethics education) reported a larger sum of income compared with Non-Integration group (students who did not receive integrated ethics education). Viewed from comprehension level in Table 3, it was visible that participants in High Comprehension group (students with high tax comprehension) reported a slightly larger amount of income compared with participants in Low Comprehension group (students with low tax comprehension). Meanwhile according to data in Table 4, it showed that Integration with High Comprehension group reported the highest average of income (107.50 million Rupiah) amongst other groups. On the other hand, Non-Integration with Low Comprehension group reported the lowest average income (102.61 million Rupiah).

**Table 2:** Participant data based on treatment group

Note		Number of Participant	Average of Reported Income (in million Rupiah)
Treatment Group	Integration	40	107
	Non Integration	41	103,53

**Table 3:** Participant data based on tax comprehension

Note		Number of Participant	Average of Reported Income (in million Rupiah)
Tax comprehension	High	38	105,95
	Low	43	104,56

**Table 4:** Participant data based on a combination of treatment group and tax comprehension

Note			Number of Participant	Average of Reported Income (in million Rupiah)
Treatment Group	Integration	High Comprehension	20	107,50
		Low Comprehension	20	106,50
	Non Integration	High Comprehension	18	104,44
		Low Comprehension	23	102,61

## Results and Discussion

Prior to hypothesis testing, normality and homogeneity tests were conducted as a prerequisite ANOVA method testing. Normality test result showed that the data was abnormal. That was due to data skewness from participants' responses. ANOVA test could be proceeded despite data abnormality, under the condition that data was free from outlier and data abnormality was due to data skewness (Gudono, 2015). To test homogeneity, Levene's test was utilized with a result displayed in Table 5. Based on data in Table 5, it could be seen that data fulfilled the homogeneity assumption with the value of Sig. > 0.05. Based on ANOVA assumption testing, data could be proceeded further.

**Table 5:** Homogeneity test result utilizing Levene's test

		Levene Statistic	df1	df2	Sig.
Tax	Based on Mean	2.006	3	77	.120
	Based on Median	.710	3	77	.549
	Based on Median and with adjusted df	.710	3	75.953	.549
	Based on trimmed mean	2.006	3	77	.120

Once ANOVA assumption test was done, the next stage would be ANOVA two-way test to examine interaction among tested independent variables, which were tax comprehension and treatment of taxation ethics education integration towards tax compliance. Based on data in Table 6, there was a significant main



effect influence towards tax compliance, which was experiment treatment (p-value 0,001). That showed that ethics education integration increased participants' compliance in paying taxes. Whilst for Comprehension variable; previously it was found that participants with high tax comprehension reported a larger amount of income in comparison with participants with low tax comprehension. However, ANOVA test did not show significant difference in compliance based on students' tax comprehension (p-value 0.182). In other words, tax comprehension did not affect participants' compliance in paying taxes.

**Table 6:** Two-way ANOVA test result

Source	Type III Squares	Sum of Squares	df	Mean Square	F	Sig.
Corrected Model	304.300a		3	101.433	4.546	.005
Intercept	890731.786		1	890731.786	39924.001	.000
Comprehension	40.403		1	40.403	1.811	.182
Treatment	242.466		1	242.466	10.868	.001
Comprehension * Treatment	3.509		1	3.509	.157	.693
Error	1717.923		77	22.311		
Total	898200.000		81			
Corrected Total	2022.222		80			

a. R Squared = .150 (Adjusted R Squared = .117)

Next, post hoc Tukey's HSD test was conducted to examine proposed hypothesis more intensely. Post hoc Tukey's HSD test result demonstrated the influence of a combination between tax comprehension and treatment given towards participants' tax compliance. The following is post hoc Tukey's HSD test result.

**Table 7:** Post hoc Tukey's HSD test result

(I) Group	(J) Group	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
					Lower Bound	Upper Bound
Integration-High Comprehension	Integration-Low Comprehension	1.000	1.494	.908	-2.92	4.92
	Non Integration-High Comprehension	3.056	1.535	.200	-.97	7.09
	Non Integration-Low Comprehension	4.891*	1.444	.006	1.10	8.68
Integration-Low Comprehension	Integration-High Comprehension	-1.000	1.494	.908	-4.92	2.92
	Non Integration-High Comprehension	2.056	1.535	.541	-1.97	6.09
	Non Integration-Low Comprehension	3.891*	1.444	.042	.10	7.68
Non Integration-High Comprehension	Integration-High Comprehension	-3.056	1.535	.200	-7.09	.97
	Integration-Low Comprehension	-2.056	1.535	.541	-6.09	1.97
	Non Integration-Low Comprehension	1.836	1.486	.607	-2.07	5.74
Non Integration-Low Comprehension	Integration-High Comprehension	-4.891*	1.444	.006	-8.68	-1.10
	Integration-Low Comprehension	-3.891*	1.444	.042	-7.68	-1.10
	Non Integration-High Comprehension	-1.836	1.486	.607	-5.74	2.07

\*. The mean difference is significant at the 0.05 level.

Based on post hoc Tukey's HSD testing result in Table 7 it could be viewed that:

There was no significant compliance between Integration-High Comprehension group with Integration-Low Comprehension group (p-value 0.908). In other words, there was no difference in compliance behavior between students who received integrated ethics education and had high tax comprehension with students who received integrated ethics education and had low tax comprehension, so H1 was accepted.

There was no significant compliance behavior difference between Non Integration-High Comprehension group with Non Integration-Low Comprehension group (p-value 0.607). Strictly speaking, there was no significant compliance behavior difference between students who did not receive integrated ethics education

and had high tax comprehension with students who did not receive integrated ethics education and had low tax comprehension, so H2 was accepted.

There was no significant compliance between Integration-High Comprehension group with Non Integration-High Comprehension group (p-value 0.200). In other words, there was no difference in compliance behavior between students who received integrated ethics education and had high tax comprehension with students who did not receive integrated ethics education and had high tax comprehension, so H3 was declined.

There was a significant compliance between Integration-High Comprehension group with Non Integration-Low Comprehension group (p-value 0.006). In other words, students who received integrated ethics education and had high tax comprehension demonstrated higher compliance behavior compared with students who did not receive integrated ethics education and had low tax comprehension, so H4 was accepted.

An interesting finding was seen in Integration-Low Comprehension group and Non Integration-Low Comprehension group. This research found that there was a significant compliance behavior difference between those groups (p-value 0.006). Integration-Low Comprehension group reported higher income than Non Integration-Low Comprehension group. Based on that finding, it could be stated that ethics education integration was capable of increasing compliance behavior among students with low comprehension. On the contrary, this behavior elevation did not take place among students with high comprehension, as hypothesized previously in H3.

Based on main effect testing against tested variables, the result achieved was that ethics integration in taxation education could increase students' compliance behavior in paying taxes. The result was consistent with a research by Yeom, and friends. (2017), Park, and friends. (2012), Lau (2010), as well as Martinov-Bennie and Mladenovic (2015) who found empirically that integrated ethics education could increase students' sensitivity in responding to ethical issues, in this case ethical issues in taxation. However, tax comprehension did not show significant influence towards students' compliance behavior. This was presumably caused by individual perception toward taxation system (Fauziati, and friends (2016); Newman and Nokhu, 2018). Compliance behavior in paying taxes would be higher if individual had positive perspective toward taxation system regardless individual tax comprehension. Oppositely, compliance behavior in paying taxes would be low if individual had negative perspective towards taxation system regardless their tax comprehension.

For hypothesis testing, this research found that there was no significant compliance behavior difference between students who received integrated ethics education and had high tax comprehension with students who received integrated ethics education and had low tax comprehension. Both groups accumulatively reported higher income than students who did not receive integrated ethics education. That indicated an important role of ethics education integration to grow students' moral sensitivity as future taxpayers, regardless students' knowledge or comprehension upon taxation system. This result is in line with studies conducted by Yeom, and friends (2017); Park and friends (2012); Lau (2010), as well as Bennie & Mladenovic (2015), that integrated ethical education in taxation lecture could increase students' awareness to comply with taxes.

Should this be studied more intensely, a significant difference was displayed by some experiment groups. Integration-High Comprehension group had significantly higher compliance behavior than Non Integration-Low Comprehension group. Other than that, an interesting finding of this research was that Integration-Low Comprehension group had significantly higher compliance behavior than Non Integration-Low Comprehension. Nevertheless, there was no significant compliance difference between Integration-High Comprehension with Non Integration-High Comprehension.

Based on that finding it was visible that taxation ethics education integration had a powerful influence towards students who had low tax comprehension. This showed the importance of shaping morality amongst students who were lack of comprehension in taxation. Lack of taxation knowledge could potentially shape tax avoidance behavior; hence taxation ethics education could suppress avoidance behavior and increase individual conscience to pay taxes. On the contrary, weak influence occurred among students with high tax comprehension. Although compliance data direction was in accordance with what previously hypothesized (students who received integrated ethics education and had high tax comprehension demonstrated significantly higher compliance behavior compared with students who did not receive integrated ethics education and had high tax comprehension), yet statistic test result did not show any significant difference.

It is thought to be caused by tax comprehension that has formed students' awareness of tax compliance (Arisandy, 2017; and Tene & Sondakh, 2017), so that ethics education has little effect on the behavior of students who are already aware to comply with taxation.

Even though this research found that taxation ethics education had a weak influence on students with high tax comprehension, it did not mean that ethics education was unnecessary for students who comprehended taxation. The weakness of the influence was presumably because of tax comprehension that shaped positive perception toward taxation system, so that perception indirectly grew students' intention to pay taxes obediently. Ethics education inclusion at least could maintain students' morality who had high comprehension on taxation. It was proven with the high compliance behavior demonstrated by students who received integrated ethics education and had high tax comprehension; the highest amongst other experiment groups.

## Conclusions

In overall this research concluded that integrated ethics education administration in taxation education could increase and maintain students' morality to comply with taxation regulation. Ethics education integration in taxation was highly important to be applied in order to shape morality from an early beginning, especially for students with low tax comprehension. Lack of taxation knowledge could potentially decrease compliance to pay taxes; however, that could be anticipated with ethics-based taxation education administration so that it could suppress tax avoidance behavior and increase students' awareness of the importance of paying taxes. Moreover, integrated ethics education in taxation education could also maintain morality that had been shaped from students' adequate comprehension in taxation.

This research result was consistent with researches of Yeom, and friends (2017), Park, and friends (2012), Lau (2010), as well as Martinov-Bennie and Mladenovic (2015) that integrated ethics education could increase students' sensitivity in responding to ethical issues. Therefore, theoretically, this research developed theoretical study on the importance of ethics education integration on students, specifically in taxation lecture. Practically, this research was expected to become an input for university to include ethical aspect in taxation education, regarding the importance of students' moral conscience shaping as future taxpayers.

Although this research has several contributions, it also has several limitations. Firstly, the utilization of experiment method to test compliance in paying taxes did not reflect the real condition or situation. Although experiment is a relevant method to test a theory, circumspection is required in generalizing this research results. Secondly, this research does not test students' morality development to comply with tax paying. Further research is expected to perform students' compliance testing prior to ethics education inclusion (pre-test) and after administering ethics education inclusion (post-test), thus it broadens research coverage on the importance of ethics integration in taxation education.

## References

- Alm, J., & Torgler, B. (2011). Do Ethics Matter? Tax Compliance and Morality. *Journal of Business Ethics*, 101(4), 635–651. <https://doi.org/10.1007/s10551-011-0761-9>
- Arisandy, N. (2017). Pengaruh Pemahaman Wajib Pajak, Kesadaran Wajib Pajak, dan Sanksi Pajak terhadap Kepatuhan Wajib Pajak Orang Pribadi yang Melakukan Kegiatan. In *Jurnal Ilmiah Ekonomi dan Bisnis*.
- Ashby, J., Webley, P., & Haslam, A. (2009). The role of occupational taxpaying cultures in taxpaying behaviour and attitudes. *Journal of Economic Psychology*, 30(2), 216–227.
- Benk, S., Çakmak, F., & Ahmet. (2011). An Investigation of Tax Compliance Intention: A Theory of Planned Behavior Approach. In *European Journal of Economics, Finance and Administrative Sciences*.
- Cahyonowati, N., & Ratmono, D. (2012). PERANAN ETIKA, PEMERIKSAAN, DAN DENDA PAJAK UNTUK MENINGKATKAN KEPATUHAN WAJIB PAJAK ORANG PRIBADI. In *Jurnal Akuntansi dan Keuangan Indonesia* (Vol. 9, Issue 2).
- Chung, J., & Trivedi, V. U. (2003). The Effect of Friendly Persuasion and Gender on Tax Compliance Behavior. *Journal of Business Ethics*, 47(2), 133–145. <https://doi.org/10.1023/A:1026004716676>
- Damayanti, T., Sutrisno, T., Subekti, I., & Z Baridwan. (2015). The role of taxpayer's perception of the government and society to improve tax compliance.
- Daniel, D., & Wong, B. (2008). Issues on compliance and ethics in taxation: what do we know? *Journal of Financial Crime*, 15(4), 369–382. <https://doi.org/10.1108/13590790810907218>

- Darmayasa, I., & Aneswari, Y. (2015). The ethical practice of tax consultant based on local culture. *Procedia-Social and Behavioral Sciences*.
- Ezer, E., & Ghozali, I. (2017). PENGARUH TINGKAT PENDAPATAN, TARIF PAJAK, DENDA PAJAK, DAN PROBABILITAS PEMERIKSAAN PAJAK TERHADAP KEPATUHAN PAJAK | Ezer | Diponegoro Journal of Accounting. *Diponegoro Journal of Accounting*, 6(3), 1–28.
- Fauziati, P., Minovia, A., ... R. M.-J. of A., & 2016, undefined. (n.d.). The impact of tax knowledge on tax compliance case study in Kota Padang, Indonesia. *Researchgate.Net*.
- Gul, F. A., Ng, A. Y., & Tong, M. Y. J. W. (2003). Chinese Auditors' Ethical Behavior in an Audit Conflict Situation. In *Journal of Business Ethics* (Vol. 42, Issue 4, pp. 379–392). <https://doi.org/10.1023/A:1022504712186>
- Harinurdin, E. (2009). Corporate Taxpayer Compliance Behavior. *Journal of Administrative Sciences and Organization*, 16(2), 96–104.
- Ho, L. A. (2008). What affects organizational performance? the linking of learning and knowledge management. *Industrial Management and Data Systems*, 108(9), 1234–1254. <https://doi.org/10.1108/02635570810914919>
- James, S., & Alley, C. (2009). ORE Open Research Exeter TITLE Tax Compliance, Self-Assessment and Tax Administration A NOTE ON VERSIONS. *Journal of Finance and Management in Public Services*, 2(2), 27–42.
- Johanes Herbert Tene, Jullie J. Sondakh, J. D. L. W. (2017). PENGARUH PEMAHAMAN WAJIB PAJAK, KESADARAN PAJAK, SANKSI PERPAJAKAN DAN PELAYANAN FISKUS TERHADAP KEPATUHAN WAJIB PAJAK. *Jurnal EMBA: Jurnal Riset Ekonomi, Manajemen, Bisnis Dan Akuntansi*, 5(2).
- Kariyoto, K. (2012). Pengaruh Kesadaran dan Kepatuhan Wajib Pajak Terhadap Kinerja Perpajakan. *Jurnal Akuntansi Multiparadigma*, 3(1), 71–85. <https://doi.org/10.18202/jamal.2012.04.7145>
- Lau, C. L. L. (2010). A step forward: Ethics education matters! *Journal of Business Ethics*, 92(4), 565–584. <https://doi.org/10.1007/s10551-009-0173-2>
- Ludigdo, U., & Kamayanti, A. (2012). Pancasila as Accountant Ethics Imperialism Liberator. In *World Journal of Social Sciences* (Vol. 2, Issue 6).
- Martinov-Bennie, N., & Mladenovic, R. (2015). Investigation of the Impact of an Ethical Framework and an Integrated Ethics Education on Accounting Students' Ethical Sensitivity and Judgment. *Journal of Business Ethics*, 127(1), 189–203. <https://doi.org/10.1007/s10551-013-2007-5>
- Newman, W., Mwandambira, N., Charity, M., & Ongayi, W. (2018). Literature review on the impact of tax knowledge on tax compliance among small medium enterprises in a developing country. *Journal of Legal, Ethical and Regulatory Issues*, 22(4).
- Oktaviani, R. M. (2015). Determinan Kepatuhan Wajib Pajak Badan Dengan Niat Sebagai Pemediasi Dari Perspektif Planned Behaviour Theory. *Jurnal Bisnis Dan Ekonomi (JBE)*.
- Park, M., Kjervik, D., Crandell, J., & Oermann, M. H. (2012). The relationship of ethics education to moral sensitivity and moral reasoning skills of nursing students. *Nursing Ethics*, 19(4), 568–580. <https://doi.org/10.1177/0969733011433922>
- Pasaribu, G. F., & Tjen, C. (2016). Dampak Faktor-Faktor Demografi Terhadap Kepatuhan Perpajakan di Indonesia. In *Berkala Akuntansi dan Keuangan Indonesia* (Vol. 1, Issue 2).
- Pope, J., & Mohdali, F. (2010). The role of religiosity in tax morale and tax compliance. *Accounting Research Journals*, 27(1), 71–91.
- Sari, P. D., Putra, B. R., Fitri, H., Ramadhanu, A., & Putri, C. F. (2019). Pengaruh Pemahaman Pajak, Pelayanan Aparat Pajak, Sanksi Perpajakan, dan Preferensi Risiko Perpajakan Terhadap Kepatuhan Wajib Pajak (Studi Kasus UMKM Toko Elektronik di Kecamatan Sitiung Dharmasraya). *Journal of Chemical Information and Modeling*. <https://doi.org/10.1017/CBO9781107415324.004>
- Torgler, B. (2016). Tax Compliance and Data: What Is Available and What Is Needed. *Australian Economic Review*, 49(3). <https://doi.org/10.1111/1467-8462.12158>
- Triyuwono, I. (2010). "Mata Ketiga": Sè Laèn, Sang Pembebas Sistem Pendidikan Tinggi Akuntansi. *Jurnal Akuntansi Multiparadigma*. <https://doi.org/10.18202/jamal.2010.04.7077>
- Vadelin, V., & Susilawati, C. (2019). Efek Mediasi Self Efficacy Terhadap Penerapan Etika Dalam Pendidikan Akuntansi. *Jurnal Akuntansi Dan Bisnis*, 17(2), 172–191.
- Wahl, I., Kastlunger, B., & Kirchler, E. (2010). Trust in authorities and power to enforce tax compliance: An empirical analysis of the "slippery slope framework." *Law and Policy*, 32(4), 383–406. <https://doi.org/10.1111/j.1467-9930.2010.00327.x>
- Wati, M., & Sudibyo, B. (2019). PENGARUH PENDIDIKAN ETIKA BISNIS DAN RELIGIUSITAS TERHADAP PERSEPSI ETIS MAHASISWA AKUNTANSI. *Jurnal Economia*, 12(2), 183–201.
- Weiss, J.W. (2003) *Business Ethics A Stakeholder and Issues Management Approach*. South-Western, Thomson Learning, Mason. - References - Scientific Research Publishing. (n.d.).

- Widyaningrum, T. R. (2018). STUDI FENOMENOLOGIS TERHADAP PERAN ETIKA DALAM PENDIDIKAN PERPAJAKAN. *Jurnal Ilmiah Bisnis Dan Ekonomi Asia*, 11(2), 54–58. <https://doi.org/10.32812/jibeka.v11i2.51>
- Widyaningrum, T. R., Stie, D., Malang, A., Triyuwono, I., & Djamhuri, A. (2017). REKONSTRUKSI PENDIDIKAN PERPAJAKAN: SUATU KAJIAN KRITIS TENTANG ETIKA PROFESI DALAM PERSPEKTIF KRITIS KI HADJAR DEWANTARA (Vol. 11).
- Yadnyana, I., & Sudiksa, I. (2011). Pengaruh peraturan pajak serta sikap wajib pajak terhadap kepatuhan wajib pajak koperasi di kota Denpasar. *Dalam Jurnal Akuntansi*, 17(2).
- Yasa, I. N. (2018). PENGUJIAN KEWAJIBAN MORAL DAN BIAYA KEPATUHAN TERHADAP KEPATUHAN WAJIB PAJAK | *Jurnal Riset Akuntansi (JUARA)*. *Jurnal Riset Akuntansi*, 8(1), 50–57.
- Yasa, I. N., & Martadinata, I. P. (2019). Taxpayer Compliance from the Perspective of Slippery Slope Theory: An Experimental Study. *Jurnal Akuntansi Dan Keuangan*, 20(2), 53. <https://doi.org/10.9744/jak.20.2.53-61>
- Yasa, I., & Prayudi, A. (2019). Nilai-nilai etika berbasis kearifan lokal dan perilaku kepatuhan perpajakan I N F O A R T I K E L. *Jurnal Ekonomi Dan Bisnis*, 22(Oktober), 361–390.
- Yeom, H. A., Ahn, S. H., & Kim, S. J. (2017). Effects of ethics education on moral sensitivity of nursing students. *Nursing Ethics*, 24(6), 644–652. <https://doi.org/10.1177/0969733015622060>
- Yuhertina, I., Setyaningrum, R. M., Hastuti, S., & Sundari, S. (2016). Etika, Organisasi dan Kepatuhan Wajib Pajak. *Jurnal Akuntansi Multiparadigma*, 7(1). <https://doi.org/10.18202/jamal.2016.04.7012>