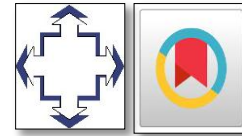# Causal Relations Between Knowledge, Norms, and Tax: A Study of Gender Differences on Taxpayers

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ABSTRACT

This research analyzes whether tax knowledge and social norms positively influence tax compliance and whether gender differences will moderate their relation. A web-based survey used to spread questionnaires to 145 taxpayers that domiciled in Cikarang. The results revealed that tax knowledge significantly affects tax compliance, but there are no gender differences between tax knowledge and tax compliance. In contrast, social norms positively affect tax compliance, and gender differences also exist between social norms and tax compliance. As there are no gender differences in tax knowledge and tax compliance, socialization can be done with the same approach towards both males and females. However, gender differences in social norms lead to a difference between males and females in their point of view regarding tax. As most of the female internalized norms more than males, therefore a group with the majority of females more efficient in socialization. On the other hand, providing detail information and fact in socialization is more suitable for a male.

1. Introduction

Tax defined as a fee levied to both individuals, and corporations need to be paid involuntarily by the taxpayer as enforced by the government in order to finance the country activities ("Investopedia," n.d.). Directorate General of Taxation (2015) stated that tax becomes the most significant income source for a country. They added that as the tax itself cover more than half of a country's expense, tax issue become the central issue in discussing the country's economic. Every government tries to accelerate their tax income. The level of tax income usually seen from the country's tax compliance level. High compliance leads to great tax income and vice versa. However, tax compliance itself has a grave, complex issue to resolve.

Tax compliance issue has existed since decades ago. Tax compliance issues are as old as taxes. Sri Mulyani, as Indonesia's Minister of Finance, claimed that the tax compliance issue is one of the foundations of a low tax ratio ("Kemenkeu," 2016). The tax ratio itself shows the comparison between the number of taxpayers and residents who supposed to pay tax. She also added that Indonesia's tax ratio as of the beginning of 2017, which is 11% is the lowest in the world if compared with the national income ("Kemenkeu," 2017). As many as 70% of Indonesia's source of national income comes from tax, and it is essential to optimize tax revenue.

All those issues started from national revenue, tax revenue, tax compliance, and tax ratio are interconnected ("Directorate General of Taxation," 2013). The way to strengthen the tax ratio is increasing national revenue through tax revenue by boosting tax compliance ("Directorate General of Taxation," 2013). Revamping tax compliance begins with exploring the source of problems. Several factors are affecting tax compliance, such as age, gender, education, income level, income source, occupation, and tax fairness. It is compressed into one framework that mostly known as Fischer's Tax Compliance Framework (Fischer et al. 1992). The well-known framework categorized all the aspects into four main groups consists of demographics, non-compliance opportunities, attitudes and perceptions, and tax systems/structure. The culture variable later included in the modified version of the framework (Chau and Leung, 2009). In this research, the researcher intends to analyze two factors from the tax compliance framework, which are tax knowledge and social norms.

Kasipillai and Jabbar (2006) stated that tax knowledge is an essential element related to tax compliance. Kirchler et al. (2006) and Saad (2014) stated that taxpayer tends not to comply either intentional or unintentional if tax knowledge not involve. Besides, Eriksen and Fallan (1996) stated that knowledge influences someone's preferences and attitudes towards taxation. Previous studies (Bornman and Ramutumbu, 2019; Richardson, 2006; Chan et al. 2000) reveal that the level of education and knowledge regarding tax affect positively towards taxpayer attitude and compliance level. This study argues that tax knowledge is a necessary component to led compliance.

If tax knowledge is an essential item related to tax compliance, social norms are one of the potentially relevant factors, as stated by Bobek et al. (2007), and Wenzel (2004). Also, Wenzel (2004) also indicates that the taxpayer expected to internalized social norms from its society that lead to their decision to comply with the tax. Social norms influence taxpayer decision making the process by penetrating their ethical belief and point of view (Blanthorne and Kaplan, 2008). As everyone has a different way of thinking and point of view affected by their surroundings, everyone can have a different opinion regarding norms (Cialdini and Trost, 1998). In sum, the one who internalized norms more and though norms are important proved to be more compliant.

Some researchers have analyzed gender as demographic factor (D'Attoma et al. 2017; Amponsah and Adu, 2017; and Lohse and Qari, 2014) which is played a significant role in taxpayers' compliance. All finding on those researches demonstrate that females are more likely to comply than man. However, research from Kastlunger et al. (2010); Kasipillai and Jabbar (2006); Houston and

Tran (2001); and Kichcher and Maiejovsky (2001) revealed different, where men are more obedient to taxes than woman. Furthermore, Kastlunger et al. (2010) stated that gender needs to be examined with caution as it affects socialization, education, and interest in variable tested that will lead to a mixed result.

The motivation of this research is to extending Eriksen and Fallan's (1996) and Bobek et al. (2007) research. In their research, Eriksen and Fallan (1996) analyzed the influence of gender towards tax knowledge and tax compliance. On the other hand, Bobek et al. (2007) examine the impact of social norms on tax compliance in Australia, Singapore, and the United States. Both studies that were done by Eriksen and Fallan (1996) and Bobek et al. (2007) took students as its sample. In this research, instead of students, taxpayers will be the sample subjects. It will increase the validity of the results as taxpayers are the benchmark in measuring compliance level. Besides, previous studies (Houston and Tran, 2001; Kassipilai and Jabbar, 2006) tested gender as the independent variable.

2. Literature Review

Tax Knowledge

Tax knowledge refers to the ability of taxpayers to comprehend and comply or not comply with tax laws. Fallan (1999) stated that tax knowledge consists of the information own by taxpayers' regarding the rules and financial knowledge, such as calculation of tax. Saad (2010) grouping tax knowledge into three main categories, that is general knowledge, legal knowledge, and technical knowledge. As indicated, general knowledge relates to standard information about current tax systems such as the purpose and tax structure. Legal knowledge connected with things within the law, for instance, the responsibility of taxpayers and the consequences or penalties and fines. The last group, technical knowledge associated with taxpayers' ability to fill, reported, and paid their tax or, in short, the practical things taxpayers need to do. All that group of knowledge will sum up the detail and facts known and understand by taxpayers regarding the applied tax system.

Tax knowledge, which classifies as education in Fischer's Tax Compliance Framework (1992), claimed to be essential factors that affect tax compliance (Eriksen and Fallan, 1996; Chan et al. 2000; Saad, 2010). Kirchler et al. (2006) claimed that the taxpayer tends to avoid tax, whether intentionally or intentionally, when they did not have knowledge and understanding regarding tax. Someone's compliance level is likely improved positively after they learn and understand more about the applied tax system and rules (Tan and Chin-Fatt, 2000). In contrast, someone with a low level of compliance usually causes by a lack of understanding regarding both the tax system and rules. Statements revealed tax knowledge positive influence towards compliance (Fallan, 1999; Saad, 2010, 2014). In sum, the influence level of both variables depends on the measurements used and the research area.

Social Norms

Cialdini and Trost (1998) defined social norms as rules and standards that comprehend by the group as later, they voluntarily used as guidance in behaving. Both of them classify social norms into four categories as follows: descriptive norms, injunctive norms, subjective norms, and personal norms. Descriptive norms are more about standards developed as a result of someone's perception regarding their surroundings. On the other side, injunctive norms describe how someone should act in a group or, short, the groups' moral standards. If descriptive more like perceptions and injunctive is groups' perception, subjective norms related to referent others' perception, namely family and friends. The last one, personal norms, are the internalization of all the previous norms that become one's sense of self-worth. While descriptive norms stated what someone thinks others should do, the last three norms indicate what someone should act in a situation.

Bobek et al. (2007) stated that social norms would affect someone's decision, including their decision to comply or not comply. All previous studies (Wenzel, 2005; Bobek et al. 2007; Bobek et al. 2013) also revealed the significant impact social norms brings towards tax compliance. Bobek et al. (2011) stated that all types of social norms are interrelated and have an impact on compliance. As there are several types of social norms, each type gives a different level of influence towards compliance. Bobek et al. (2007), on his cross-country research, also discover that every country resulted in a varying ratio of each type of social norms. Regardless, all of the social norms types still gave impact, either significant or insignificant.

Gender

Gender defined by Anselmi and Law (1998) as a "social category of shared meaning about characteristics and behavior of male and female, attitudes and feelings related to the characteristics, how we view ourselves and how others treat us based on the social category. Both also stated that gender is different from sex. Gender more related to someone's identity, cultural influence, and social category. In another way, sex purely characteristics caused by biological differences. In sum, while sex is more physically related, gender correlated more to differences in role-orientation and characteristics.

Jackson and Milliron's (1986) research of 43 tax compliance studies that conducted for 11 years, reveals that gender has a significant role in affecting taxpayer compliance attitudes and behavior. However, the differences between male and female significant levels are not high and lead to mixed results of the research. The mixed results may cause by differences of culture as one of the factors affecting gender (Kassipilai and Jabbar, 2006). Kastlunger et al. (2010) stated that gender differences should be analyzed with caution as it affected by demographic sex that consists of socialization, education, interest, and involvement in the topic. In conclusion, the influence of gender towards tax compliance are varying depends on the culture and ethics of where the research conducted.

Tax Compliance

There is no specific definition for tax compliance, as based on Fischer et al. (1992), the concept of tax compliance appears more straightforward at the intuitive level. Most of the research regarding tax compliance used the definition by Roth et al. (1989). It defines compliance as "the taxpayer files all required tax returns at the proper time and that the returns accurately report tax liability following the Internal Revenue Code, regulations, and court decisions applicable at the time the return is filed." In the research, Roth et al. (1989) state and distinguishes between under and over-reporting situations in tax compliance to which taxpayers report tax liability lower or higher than it should be.

The particular model used for measuring tax compliance is Fischer's Tax Compliance Framework (Fischer et al. 1992). Most of the research done after 1992 is based on Fischer's model (e.g., Richardson, 2006). Chau and Leung (2009), in their critical review regarding Fischer's model, simplify and analyze all the factors and categorizes them into four groups. The groups starting from demographics (consists of age, gender, and education), non-compliance opportunity (consists of income level and source, occupation), taxpayer attitudes and perceptions (consist of tax system fairness and peer influence) and tax system (consists of tax complexity, probability of detection and penalties, tax rates). Besides the original framework of tax compliance, there is also a modification model of Fischer's Tax Compliance Framework. In the revamp model by Chau and Leung (2009), culture variables added to the four groups. Cultural variables consist of social norms and ethical values. Both factors considered a potent trigger to tax compliance.

Hypotheses Development

Tax knowledge claimed as an essential point in determining tax compliance behavior under the self-assessment system (Loo, 2006). Saad (2014) and Fallan (1999) also stated that a rise of tax knowledge would boost taxpayers' perception regarding the tax system and compliance attitudes. Chan et al. (2000) added that higher tax knowledge would directly increase tax compliance. The increased amount of knowledge will directly improve taxpayer compliance as they got to understand more about tax, including how important it is. The hypotheses being develop from the explanation is:

H_1: Tax knowledge have positive influences on the taxpayer compliance level.

Fallan (1999), on his research regarding gender differences in knowledge, revealed that both men and females got exposed to tax knowledge differently. The one who exposed more to knowledge supposed to be more compliant. However, the research revealed a non-significant result where gender has no predictive power. Also, Chung and Trivedi (2003) founded that females are more compliant than males. However, they stated that the results could be different across the country in the form of different ways of absorbing information, gender-role orientation, and varying characteristics of each gender. Based on the explanation, the hypotheses being develop is:

H_2: There are gender differences in the relation of tax knowledge towards tax compliance.

Researchers identify that social norms affect tax compliance as it has a role in the taxpayer's reporting decision (Wenzel, 2005). Social norms claimed as an essential factor in tax compliance decision-making by several researchers (Bobek et al. 2007; Wenzel, 2004). The effect given by social norms holds a crucial role in compliance and has a significant impact. Social norms can have a significant impact as taxpayers adopt the norms from their surroundings and internalize them into their ethical value, later the value taken as a consideration in their decision-making process (Wenzel, 2005). As people tend to consider rules ad standards applied in their society and the opinion of others, a reasonable opinion will lead to better compliance. The hypotheses being develop from the explanation above is:

H_3: Social norms have positive influences on the taxpayer compliance level.

As social norms internalized into someone's way of thinking, Jimenez (2016) added that it does not only affect taxpayers' compliance decisions but also how they feel regarding the importance of compliance. Sevilla (2010), on his research on 13 countries, stated how male and female behavior affect by social norms. Venkatesh and Morris (2000) revealed that compared with the male, female thought than social norms more critical. Females used to internalize norms more than males by considering other opinions, rules, and standards exists in deciding the decision to either comply with tax or not. Based on the explanation, the hypotheses being develop is:

H_4: There are gender differences in the relation of social norms towards tax compliance.

Theoretical Framework

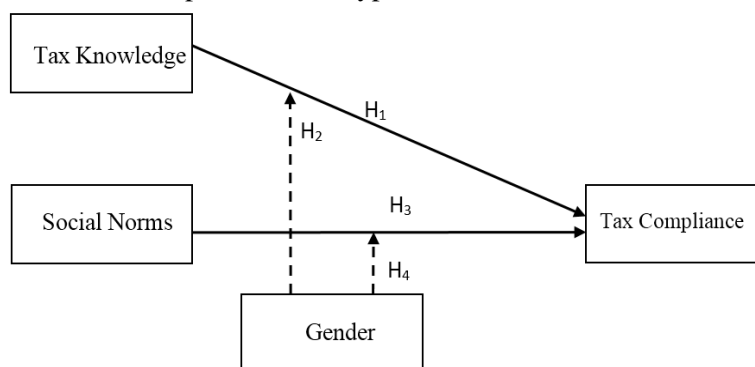The theoretical framework developed from the hypothesis is as follows:

Figure 1. Theoretical Framework

3. Research Method

Sample and Procedures

To conduct this research, the researcher adopted measurement from three international journals (Saad, 2010; Bobek et al. 2007; Kirchler and Wahl, 2010). All the measurement items being translated into Bahasa then continue to the pilot test to increase understandability (Hair et al. 2010).A web-based questionnaire chosen and follow the procedure from Dillman, (2000).

Variable Measurements

Tax Knowledge (TK) in this research is measured by items adopted from Saad's (2010) questionnaire. Example items such as: "Individuals are subject to income tax", "Non-compliment taxpayers can be imprisoned if they found out evading tax", and "I can calculate my own tax liability". All items measured using the 5-Likert scale.

Social Norms (SN) measured using three items adopted from Bobek et al. (2007). The items statement such as "Most people will do anything to avoid paying tax". The items will be measured using the 5-Likert scale.

Tax Compliance (TC), which measured by eight items using a measurement approach done by Kirchler and Wahl (2010). The items used to measure enforced tax compliance. All the items will be measured using the 5-Likert scale in which one means strongly disagree, and five means strongly agree. The items will be in the form of a direct statement such as "I would really prefer not to pay any tax."

Statistical Analysis

This research will utilize Structural Equation Modeling (SEM) with Partial Least Squares (PLS) as statistical analysis tools. SEM-PLS was chosen as it is a tool that significant enough to analyze complex constructs (Hair et al. 2013). Besides, based on Joe et al. (2014), it can be used to analyze research with a small sample size. In this research, SEM-PLS that used to run the data is Wrap PLS 6.0.

4. Results and Discussion

Data Demographic

The sample chosen by the researcher is the taxpayer who has Tax Payer Identity Number (Nomor Pokok Wajib Pajak) or NPWP. The total questionnaire spread is 300 questionnaires, with a

57% response rate. Responses received are 171 questionnaires, but only 145 questionnaires are usable. Thereby, the total of respondents is 84.79%. The demographic data of respondents consists of gender, age, and domicile is also being gathered. The researcher also agrees with respondents in order to let respondents know that data gathered are confidential and only used for research purpose. With that agreement, respondents can answer honestly without any pressure.

In the last section of the questionnaire, the researcher asked several demographic data about respondents. Based on the data, 30% of respondents are male, while 70% of the rest are female. Respondent's age is 25 – 30 years old, with 75 respondents or 51.7% of total respondents. The last, respondents who are older than 42 years old are 28 respondents or 19.3% of total respondents.

Respondents domiciled in a different area in Cikarang. Six respondents or 4.1% of the total respondent's domicile in Cikarang Timur. Majority of respondents which is 83 respondents or 57.2% domicile in Cikarang Selatan. Nineteen respondents or 13.1% in Cikarang Barat while 24 respondents or 16.6% in Cikarang Utara and respondents 8.97% in Cikarang Pusat.

Measurement Model Test

Validity tests aimed to measure the validity level of an item in the questionnaire. There are two types of validity being tested which is convergent and discriminant validity. For convergent validity, the item determined as valid if the loading value is 0.5 or above the loading of other measurement models and the p-value < 0.05 (Hair et al. 2010). AVE for each item must have a value of more than 0.50. For discriminant validity, all average variance extracted (AVE) must be higher than the correlation of the same column latent variable.

Table 1. Convergent Validity

	AVE	Loading Value
Tax Knowledge	0.55	
I believe that I do not have to abide by the deadline for the submission of tax return as the deadline does not result in penalties.		0.581
I am sure that I am not required to file a tax return on interest income as it will be directly deducted by bank.		0.749
To my knowledge, I can deduct allpersonal expenses in calculating my tax liability		0.794
I have little idea about the deductions that I can claim as a taxpayer in the computation of my tax liability.		0.820
Social Norm	0.79	
Most people will do anything to avoid paying taxes.		0.891
It is ethical to do anything to avoid paying taxes.		0.891
Tax Compliance	0.58	
I pay my taxes because tax audits are often carried out		0.714
I pay my taxes because the tax office often carries out audit		0.844
I pay my taxes because I know I will be audited		0.758
I pay my taxes because the punishments for tax evasion are very severe		0.779
I pay my taxes because I do not know exactly how to evade taxes without attracting attention		0.731

Nine of twenty items did not pass the convergent validity test as the loading value are lower than 0.5. The items are five items from tax knowledge, one item from social norms, and three items from tax compliance. For the rest eleven items, all the loading values are higher than 0.5 and the p-

value < 0.001. As for the AVE, all variables have AVE value more than 0.50 and pass the requirements. All the variables also pass the discriminant validity as the cross-loading value (in bracket) is higher than other loading values (out the bracket).

Table 2. Discriminant Validity

	Tax Compliance	Tax Knowledge	Social Norm
Tax Compliance	(0.767)		
Tax Knowledge	0.623	(0.742)	
Social Norm	0.424	0.316	(0.891)

Source: PLS

Reliability test used to measure the reliability level of the item in the questionnaire whether the respondents answer the questions consistently from time to time. The variables are reliable if the composite reliability value is more than 0.70 (Nunnally, 1978). The Cronbach's alpha is considered good if equal or higher than 0.70 and weak if the value is 0.50 – 0.60 (Fornell and Larcker, 1981).

Table 3. Reliability Test

Variable	Cronbach's Alpha	Composite Reliability
Tax Knowledge	0.721	0.828
Social Norms	0.740	0.885
Tax Compliance	0.823	0.877

Source: PLS

Table 3 shows the results of the reliability test. The composite reliability for tax knowledge is 0.828; social norms are 0.775, and tax compliance is 0.877. All the composite reliability is passed the requirements. The Cronbach's alpha for tax knowledge is 0.721; social norms are 0.740, and tax compliance is 0.823. Thus, all of Cronbach's alpha passed the requirements.

Structural Model Test

In this research, the moderating variable, which is gender measure in categorical and acts as the grouping variable. To test the categorical moderating effect, a multi-group analysis conducted (Kock, 2014). The analysis aims to test whether or not the grouping sample is a moderating variable. The multi-group analysis also used to compare the path coefficients for the same model with a different sample, such as male and female

From Figure 2 it can be seen that tax knowledge has p-value < 0.001 and path coefficients of 0.65. It means that tax knowledge has 0.65 direct effects on tax compliance. As the value is lower than 0.05 significant value, it shows that tax knowledge significantly or positively influences tax compliance. This result leads to the acceptance of hypotheses 1 (H_1).

$\beta = 0.65$
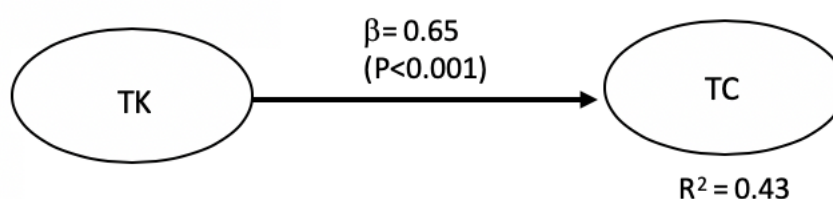$(P<0.001)$

TK

TC

$R^2 = 0.43$

Figure 2. Tax Knowledge and Tax Compliance Direct Effect

Table 4 shows the results of tax knowledge towards tax compliance multi-group analysis. From the analysis, the p-value is 0.149. As the p-value is higher than 0.05 but lower than 0.95, it can be said that the result is not significant. In another word, there are no gender differences in tax knowledge towards tax compliance. Thus, hypotheses two (H₂) rejected.

Table 4. Tax Knowledge and Tax Compliance Multi-Group Analysis

	n	Path Coefficients	t-value	P-value
Female	100	0.619	1.043	0.149
Male	45	0.763		

Source: PLS

From figure 3 it can be seen that social norms have p-value < 0.001 and path coefficients of 0.44. It means that social norms have a 0.44 direct effect on tax compliance. As the value is lower than 0.05 significant value, it shows that social norms significantly or positively influence tax compliance. This result leads to the acceptance of hypotheses 3 (H₃).
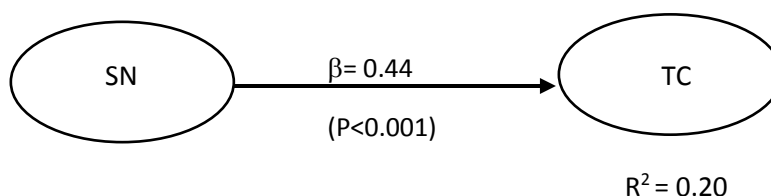

Figure 3. Social Norms and Tax Compliance Direct Effect

Table 5 shows the results of social norms and tax compliance multi-group analysis. From the analysis, the p-value is 0.042. As the p-value is lower than 0.05 and higher than 0.95, it can be said that the result is significant. In other words, there are gender differences where the value of the social norms of females is higher than males. Thus, hypotheses four (H₄) accepted.

Table 5. Social Norms and Tax Compliance Multi-Group Analysis

	n	Path Coefficients	t-value	P-value
Female	100	0.533	1.701	0.042
Male	45	0.360		

Source: PLS

Discussions

The first hypotheses showed that tax knowledge has a significant influence on tax compliance. The rise of information and knowledge regarding tax resulted in the compliance of the taxpayer. It because they get to know the importance of tax and how tax contributes to the expansion of the country. The results supported previous studies from Fallan (1999), Chan et al. (2000) and Saad (2010). All three research claimed that the increase of knowledge correlates with the rise of compliance level. Also, Mei Tan and Chin-Fatt (2000) added that the definite increase of compliance comes from after the taxpayer learns and understands more about tax, such as the rules and system. As they gathered more information about tax, their compliance attitudes will grow positively.

The second hypothesis resulted that gender does not influence the relation between tax knowledge and tax compliance. The same source or media use to get information such as the internet, news portal, and social media lead to the same amount of information being shared. There is a possibility that both males and females absorb the same amount of knowledge as they use the same

media. It leads to the differences between male and female compliance levels is not significant. The result supported Fallan's (1999) research. Fallan (1999) stated that although males and females have different tax knowledge, the differences are not significant, so there is no predictive power from gender. In sum, although tax knowledge itself directly influence tax compliance, there are no significant differences between male and female compliance level.

Then, the hypothesis three-show social norms' positive direct effect on tax compliance. The taxpayer took their peer and family opinion and internalized it for their decision-making process. It supported Wenzel (2005), and Bobek et al. (2007) research. Social norms give influence by affecting taxpayers' decisions. Besides, social norms also affect tax compliance by rationalizing the taxpayer's behavioral choices (Wenzel, 2005). Bobek et al. (2007), in their cross-country research, conclude that social norms assist in interpreting tax compliance intention. The taxpayer internalized social norms and used it for consideration whether to comply or not.

In the last hypotheses, in contrast with tax knowledge, there is the influence of gender differences in the relation of social norms and tax compliance as males and females have a different point of view regarding things, how their internalized norms also different. Females that internalized norms more into their decision revealed to be more compliant than males. The results support Sevilla (2010) and Jimenez (2016) research. Gender differences exist as there are differences in the male and female points of view about the importance of compliance (Jimenez, 2016) and the way males and females behave towards tax (Sevilla, 2010). Venkatesh and Morris (2000), where female social norms value has a stronger influence than males. Females tend to consider other people's opinions, rules, and standards in their society more than males, while males prefer relevant data than other's opinions in making the decision. It leads to the female that value social norms more than male.

5. Conclusion

This research aims to analyze the gender differences in tax knowledge and social norms towards tax compliance. The results of this research show that tax knowledge and social norms both have a positive effect on tax compliance. As both factors significantly affect compliance, the Directorate General of Taxation (DGT) can consider both factors in the way they conduct socialization. DGT can conduct socialization in an exciting and straightforward approach, so it easier to understand. Rather than a formal seminar, DGT can do more socialization using advertisements on social media platforms. Taxpayers proved to comply more when they have more understanding of tax (Mei Tan and Chin-Fatt, 2000). For social norms cases, as people take others' opinions in their decision (Wenzel, 2005; Bobek et al. 2007; Bobek et al. 2013). It is essential to create an environment where peoples have a favorable view of tax. The positive view will increase the compliance of taxpayers. Unbiased opinions from their family and peer will change the taxpayer mindset from positive and negative. In sum, more exposure to knowledge and the creation of a positive view regarding tax will increase the compliance level of taxpayers.

Also, the research revealed the non-existence of gender differences in tax knowledge and the existence of gender differences in social norms. As there are no gender differences, DGT can make the same socialization approach to increase the knowledge for both males and females. As gender differences exist in the relationship between social norms and tax compliance, the different approaches needed for males and females. Most of the female have a favorable view of tax (Venkatesh and Morris, 2000) that lead to their higher compliance level. It will be more effective if the tax office appoints an agent of change in a group with the majority of the female so the agent can spread a positive view of tax to other female members. While for the group with the majority of male socialization with detailed data regarding tax can be conducted to boost the positive male view of tax.

This research is not without any limitations, as there are costs and time constraints. First, this research only test tax knowledge and social norms as the independent variable. For the next research, the other variable can be tested, such as tax fairness, tax complexity, and culture. Second, the questionnaire items for social norms only consists of three items with one item invalid. It better for the next researcher to change the measurement using experiments such as Bobek et al. (2007) research. Third, social norms measure as a whole in general. For the next research, social norms can be measured based on the type, which is personal norms, injunctive norms, and subjective norms. Fourth, this research only conducted in Cikarang; the next research can be conducted in other regions outside Java, such as Bali or Sumatra. By researching another region, the result can be compared to see whether differences in the research area will provide a different result. The last but not least, the moderating variable, which is gender is only one of the demographic factors; age can be used as consideration since age proved to influence tax compliance (Fischer et al. 1992). As the factor is different, the result they give will be different.

References

Amponsah, S. & Adu, K.O., 2017, "Socio-demographics of tax stamp compliance in upper Denkyira east municipal and upper Denkyira west district in Ghana". *International Journal of Law and Management*, 59(6), 1315-1330.

Anselmi, D. L., & Law, A. L., 1998, *Questions of gender: Perspectives and paradoxes*. McGraw-Hill Humanities, Social Sciences & World Languages.

Blanthorne, C., & Kaplan, S., 2008, "An egocentric model of the relations among the opportunity to underreport, social norms, ethical beliefs, and underreporting behavior", *Accounting, Organizations, and Society*, 33(7), 684-703.

Bobek, D. D., Hageman, A. M., & Kelliher, C. F, 2011, "The social norms of tax compliance: Scale development, social desirability, and presentation effects", *Advances in Accounting Behavioral Research* (pp. 37-66). Emerald Group Publishing Limited.

Bobek, D. D., Hageman, A. M., & Kelliher, C. F., 2013, "Analyzing the role of social norms in tax compliance behavior", *Journal of Business Ethics*, 115(3), 451-468.

Bobek, D. D., Roberts, R. W., & Sweeney, J. T., 2007, "The social norms of tax compliance: Evidence from Australia, Singapore, and the United States", *Journal of Business Ethics*, 74(1), 49-64.

Bornman, M. & Ramutumbu, P., 2019, "A conceptual framework of tax knowledge". *Meditari Accountancy Research*, 27(6), 823-839.

Chan, C. W., Troutman, C. S., & O'Bryan, D, 2000, "An expanded model of taxpayer compliance: Empirical evidence from the United States and Hong Kong", *Journal of International Accounting, Auditing, and Taxation*, 9(2), 83-103.

Chau, G., & Leung, P., 2009, "A critical review of Fischer tax compliance model: A research synthesis", *Journal of Accounting and Taxation,* 1(2), 34-40.

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.

Cialdini, R. B., & Trost, M. R, 1998, "Social influence: Social norms, conformity, and compliance. In D. T. Gilbert, S. T. Fiske. & G. Lindzey (Eds.)". *The Handbook of Social Psychology* (pp. 151 – 192). New York, NY, US: McGraw-Hill.

D'Attoma, J., Volintiru, C. & Steinmo, S., 2017, "Willing to share? Tax compliance and gender in Europe and America", *Research and Politics*, 4(2), 1-10.

Dillman, D. A., 2000, *Mail and Internet Survey: The Tailored Design Method*, Second Edition, John Wiley and Sons., New York

Directorate General of Taxation. 2019, February 20, "Kompleksitas Kepatuhan Pajak", *Direktorat Jenderal Pajak Kementrian Keuangan*, Retrieved from http://www.pajak.go.id/.

Directorate General of Taxation. 2019, January 15. "Pajak Sebagau Ujung Tombak Pembangunan", *Direktorat Jenderal Pajak Kementrian Keuangan*, Retrieved from http://www.pajak.go.id/.

Eriksen, K., & Fallan, L., 1996, "Tax knowledge and attitudes towards taxation; A report on a quasi-experiment", *Journal of Economic Psychology*, 17(3), 387-402.

Fallan, L., 1999, "Gender, exposure to tax knowledge, and attitudes towards taxation: An experimental approach", *Journal of Business Ethics*, 18(2), 173-184.

Fischer, C. M., Wartick, M., & Mark, M. M., 1992, "Detection probability and taxpayer compliance: A review of the literature", *Journal of Accounting Literature*, 11, 1 - 46.

Fornell, C., & Larcker, D. F., 1981, "Evaluating structural equation models with unobservable variables and measurement error", *Journal of Marketing Research*, 18(1), 39-50.

Hair, J. F., Black, W.C., Barry, J. B., & Anderson, R.E., 2010, *Multivariate Data Analysis (7th ed.).* Pearson Education International.

Hair, J. F., Hult, G. T., Ringle, C., and Sarstedt, M., 2013, *A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM)*, SAGE Publications.

Houston, J., & Tran, A., 2001, "A survey of tax evasion using the randomized response technique", *Advances in Taxation,* 69-94.

Investopedia. (n.d.). Retrieved from https://www.investopedia.com/terms/t/taxes.asp.

Jimenez, P., & Iyer, G. S., 2016, "Tax compliance in a social setting: The influence of social norms, trust in government, and perceived fairness on taxpayer compliance", *Advances in Accounting*, 34, 17-26.

Jackson, B. R., & Milliron, V. C., 1986, "Tax compliance research: Findings, problems, and prospects", *Journal of Accounting Literature*, *5*(1), 125-165.

Kasipillai, J., & Abdul-Jabbar, H., 2006, "Gender and ethnicity differences in tax compliance", *Asian Academy of Management Journal*, 11(2), 73-88.

Kastlunger, B., Dressler, S. G., Kirchler, E., Mittone, L., & Voracek, M., 2010, "Sex differences in tax compliance: Differentiating between demographic sex, gender-role orientation, and prenatal masculinization (2D: 4D)", *Journal of Economic Psychology*, 31(4), 542-552.

Kemenkeu, 2016, October 21, "Menkeu Nilai Tingkat Kepatuhan Wajib Pajak Indonesia Masih Rendah" *Kementrian Keuangan Republik Indonesia*. Retrieved from https://www.kemenkeu.go.id/.

Kirchler, E., & Wahl, I., 2010, "Tax compliance inventory TAX-I: Designing an inventory for surveys of tax compliance". *Journal of Economic Psychology*, 31(3), 331-346.

Kichcher, E., & Maiejovsky, B., 2001, "Tax compliance within the context gain and loss situation expected and current asset position, and professional", *Journal of Economic Psychology*, 22(2), 173-194.

Kirchler, E., Niemirowski, A. & Wearing, A., 2006, "Shared subjective views, intent to cooperate and tax compliance: Similarities between Australian taxpayers and tax officers", *Journal of Economic Psychology*, 27(4), 502-517.

Kock, N., 2014, "Advanced mediating effects tests, multi-group analyses, and measurement model assessments in PLS-based SEM", *International Journal of e-Collaboration*, 10(1), 1-13.

Loo, E. C., 2006, "Tax knowledge, tax structure, and compliance: A report on a quasi-experiment", *New Zealand Journal of Taxation Law and Policy*, 12(2), 117-140.

Lohse, T. & Qari, S., 2014, "Gender differences in deception behavior: The role of the counterpart", *Applied Economics Letters*, 21(10), 702-705.

Tan, L. M., & Chin-Fatt, C., 2000, "The impact of tax knowledge on the perceptions of tax fairness and attitudes towards compliance", *Asian Review of Accounting, 8*(1), 44-58.

Nunnally, J. C., 1978, *Psychometric Theory. 2nd eds.* (McGraw-Hill, NY).

Richardson, G., 2006, "Determinants of tax evasion: A cross-country investigation", *Journal of International Accounting, Auditing, and Taxation*, 15(2), 150-169.

Roth, J. A., & Scholz, J. T., 1989, *Taxpayer Compliance, Volume 1: An Agenda for Research* (Vol. 1). University of Pennsylvania Press.

Saad, N, 2010, "Fairness perceptions and compliance behavior: The case of salaried taxpayers in Malaysia after implementation of the self-assessment system", *E-Journal of Tax Research*, 8(1), 32-63.

Saad, N., 2014, "Tax knowledge, tax complexity, and tax compliance: Taxpayers' view", *Procedia-Social and Behavioral Sciences*, 109, 1069-1075.

Sri Mulyani: Tax Ratio Indonesia Terendah, (2017, January 10), Retrieved from https://www.wartaekonomi.co.id/.

Venkatesh, V., & Morris, M. G, 2000, "Why don't men ever stop to ask for directions? Gender, social influence, and their role in technology acceptance and usage behavior", *MIS Quarterly*, 115-139.

Wenzel, M., 2004, "An analysis of norm processes in tax compliance", *Journal of Economic Psychology*, 25(2), 213-228.

Wenzel, M., 2005, "Motivation or rationalization? Causal relations between ethics, norms, and tax compliance", *Journal of Economic Psychology*, 26(4), 491-508.