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## PUBLIC SUBSIDIES AND TAX MORALE: EVIDENCE FROM UNIVERSITY STUDENTS

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### ABSTRACT

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The phenomenon of individuals enjoying direct tax benefits yet exhibiting low compliance intention provides the context for this research. Students at government-affiliated colleges (Perguruan Tinggi Kementerian Lain/ PTKL) are a unique group that benefits from tax-funded education, such as full tuition waivers. However, prior studies indicate that their willingness to underreport income remains high. This study investigates the determinants of tax morale among these students. Employing a quantitative approach, survey data from 1,341 students were analyzed using regression models. The findings indicate that tax awareness, fairness, and gender significantly predict tax morale. It implies that receiving direct benefits from taxpayer money can foster higher tax morale. The Directorate General of Taxes (DGT) should develop tailored tax education programs by highlighting these benefits. Practical recommendations include curricular integration and targeted outreach via campus tax centers and social media. The study's unique contribution is its focus on students receiving direct tax-funded benefits, in contrast to prior research on self-funded students. It offers novel insights into how perceived personal benefits shape tax morale. Key limitations include the use of non-probabilistic sampling and a focus on a specific student context, limiting the generalizability of the findings.

**Keywords:** Tax Morale, Tax Awareness, Tax Fairness, Gender, PTKL Students.

### INTRODUCTION

Creating a tax-compliant society remains a significant challenge for tax authorities, especially in emerging economies such as Indonesia (Alshira'h et al., 2021). Although Indonesia's tax filing rate in 2020 reached 77.63% (an increase of about 6.26%) from 2019, non-compliant taxpayers persist. It is evidenced by ongoing tax enforcement actions, including 97 completed investigation files and 9 cases of tax hostage-taking (Directorate General of Taxation, 2021).

Indonesia's self-assessment system entrusts taxpayers with calculating and reporting their tax liabilities (Anastasya Sinambela & Rachman Putra, 2021). However, a gap exists between policy and practice. The continued prevalence of tax audits triggered by non-compliant taxpayers indicates doubts regarding taxpayer honesty and adherence to tax regulations. In 2020, the Directorate General of Taxes (DGT) audit coverage ratio was 2.42% for corporations and 1.11% for individuals (Directorate General of Taxation, 2021).

Prior research identified tax morale, an intrinsic willingness to pay taxes, as a determinant of tax compliance (Ghani et al., 2020; Taing & Chang, 2021; Timothy & Abbas, 2021). Consequently, enhancing tax morale through education is considered a strategy for fostering voluntary compliance (Ansong et al., 2024; Hassan et al., 2016; Susila et al., 2016). Higher education levels correlate with better tax morale (Ansong et al., 2024; Rodriguez-Justicia & Theilen, 2018). Susila et al. (2016) also mentioned that Indonesian students' work ethic and tax morale are pretty good.

One unique segment of Indonesia's higher education system is government-affiliated colleges (Perguruan Tinggi Kementerian Lain/ PTKL), which are run by specific ministries to meet specialized human resource needs (Wijayanti & Selawati, 2020). Many of these colleges are state-funded to attract top talent, offering tuition waivers and other benefits financed directly by the state budget. Given that taxes constituted approximately 81.87% of state revenue in 2022, PTKL students are direct beneficiaries of taxpayer money. This context of direct fiscal benefit makes them a compelling group for studying tax morale.

Despite this unique context, research on tax morale among PTKL students is scarce. One exception is Prasetyo & Sinaga's (2017) experimental study on Polytechnic of State Finance STAN students. Their findings were surprising. Participants tended to underreport income despite receiving free education and having a career path in public finance. This counterintuitive result highlights a critical gap in understanding the attitudes of students who directly benefit from the tax system.

Tax morale is one of the main assets in encouraging voluntary compliance. This type of compliance is built on mutual trust, respect, and willingness to cooperate between citizens and tax authorities. The Fisher's Fiscal Psychology Model (development of the Allingham and Sandmo Deterrent model) states that there are four categories of determinants of individual tax compliance: (1) demographic factors; (2) opportunities for non-compliance (source and amount of income); (3) perceptions and behaviors (fairness and norms); and (4) the structure of the tax system (complexity of penalties and likelihood of detection). Another study categorized these factors as formal and informal (Horodnic, 2018). Based on the Fischer framework and Horodnic's review, this study examines the relationship between PTKL students' tax morale and demographic factors, such as gender, education level, perceived fairness, and tax system complexity. Although much work has been done before, the varied empirical findings indicate the complexity of the relationship between these factors. Therefore, further studies are required.

Regarding gender and tax compliance, most studies have found that women tend to be more compliant (Cao & Zhou, 2018; Süer et al., 2025), while other evidence finds no difference between men and women for tax morale (Ariyanto et al., 2020; McGee et al., 2022; Pasaribu & Tjen, 2016). Studies on education levels also show that the higher the level of education, the better the tax morale and compliance (Cyan et al., 2016; Hassan et al., 2016; McCulloch et al., 2021; Rodriguez-Justicia & Theilen, 2018) found that the relationship between the two tends to be ambiguous. Higher education is also one way to

build tax awareness, especially in helping students understand the tax system (Oladipupo & Obazee, 2016; Remali & Jalil, 2021). Individuals with better tax awareness generally have better tax morale (Alarcón-García et al., 2025; Le et al., 2024), encouraging them to be more compliant. Understanding the tax system can affect individuals' perceptions of tax fairness. Individuals who perceive that the tax system implemented is fair tend to support it, indicating good tax morale and, in turn, encouraging voluntary compliance (Ahmad et al., 2019; Enyi et al., 2019; Wulandari, 2021).

Graduates of PTKL are intended to become key figures in the nation's financial landscape, primarily as public servants (Aparatur Sipil Negara/ ASN) who are expected to serve as models of tax compliance. While their primary income as public servants will be taxed via a withholding system, compliance regarding any additional income relies on self-reporting, making their intrinsic tax morale crucial. Therefore, understanding the factors that shape students' tax morale during their formative university years is paramount. The primary research question is "What factors influence the tax morale of PTKL students?".

By surveying 1,341 PTKL students, this study makes two significant contributions, academically and practically. Academically, it enriches the tax compliance literature by providing a unique perspective on future taxpayers directly beneficiaries of tax payments, such as education facilities. By confirming the significant relationship between tax awareness, fairness, gender, and tax morale, the findings offer valuable insights for the DGT in designing more effective and targeted tax education policies.

The concept of tax morale is linked to the broader tax compliance theory. Fischer's fiscal psychology is a comprehensive framework for understanding these factors, supported by empirical findings (Horodnic, 2018). This model integrates demographics, attitudes, perceptions, and structural variables, expanding upon Allingham and Sandmo's earlier deterrence model, which narrowly viewed taxpayers as rational actors primarily motivated by audits and sanctions. In contrast, Fischer's model acknowledges the crucial role of intrinsic motivation, often conceptualized as tax morale, in fostering voluntary compliance (Ghani et al., 2020; Timothy & Abbas, 2021).

Tax morale is broadly defined as a person's willingness to pay taxes, encompassing "the moral obligation to pay taxes" or "the belief that paying taxes brings benefits to society" (Alasfour et al., 2017). It represents the non-monetary issues, ethical dimensions influencing taxpayers' decisions, such as peer effect, social influence, culture in the form of perceptions of fairness, altruism, reciprocity, trust, and social norms (Cahyonowati et al., 2022; Castañeda-Rodríguez, 2025). This study focuses on two key perceptual determinants from this framework: tax awareness and tax fairness, alongside demographic factors. In line with Fischer's fiscal psychology framework, this study focuses on how the perceptual determinants (tax awareness and tax fairness), alongside demographic factors, shape tax morale as a driver of voluntary compliance.

Tax awareness involves understanding the tax system, its purpose, and its procedures (Bornman & Ramutumbu, 2019). Formal education can develop this knowledge (Mohamad et al., 2023; Remali & Jalil, 2021). Empirical findings showed that students studying taxation had higher tax morale than students not studying taxation (Yazar et al., 2023). In contrast, Ahmad et al. (2019) and Yoga & Suwardi (2020) found no significant difference between the two groups. These findings indicate the need for further investigation. This study posits that higher tax awareness is associated with stronger tax morale based on findings that link knowledge and attitudes. Therefore, we hypothesize:

H<sub>1</sub> : The Higher The Tax Awareness, The Higher The Tax Morale

Taxpayers are more willing to comply when they perceive that the tax system is fair regarding horizontal and vertical equity and its administration (Horodnic, 2018). If tax authorities treat them fairly, they will voluntarily pay taxes. The concept of tax justice can be found in research by Faizal & Palil (2015) and Nguyen (2022). Numerous studies have confirmed that tax justice enhances tax morale (Ahmad et al., 2019; Castañeda et al., 2020; Enyi et al., 2019; Wulandari, 2021) and can be moderated by financial and tax literacy (Alexander & Balavac-Orlic, 2022). In line with extensive research confirming fairness as a cornerstone of voluntary compliance, this study expects a positive association between tax awareness and tax morale. Therefore, we hypothesize:

H<sub>2</sub> : The Higher The Perception of Tax Fairness, The Higher The Tax Morale

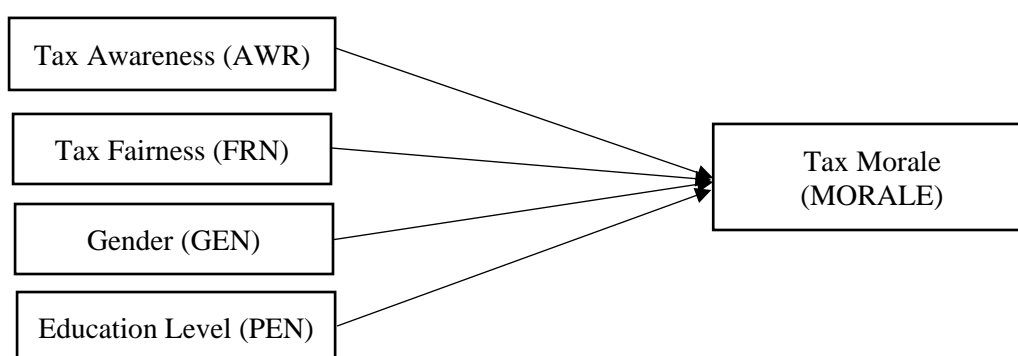
Previous studies have shown that women are more likely to be compliant than men. Research that supports this finding includes Cao & Zhou (2018) and Fotiadis & Chatzoglou (2022). However, Ariyanto et al. (2020), McGee et al. (2022), Pasaribu & Tjen (2016), and Ramadhan & Helmy (2020) found that gender has an indirect effect on tax morale and does not significantly differ between women and men.

Consistent with most studies suggesting gender-based differences in compliance attitudes, we hypothesize that male students exhibit lower tax morale than female students.

H<sub>3</sub> : Male Students' Tax Morale is Lower Than Female Students

Most studies suggest that the higher the level of education, the higher the tax morale (Castañeda-Rodríguez, 2025; Rodriguez-Justicia & Theilen, 2018; Soufiene et al., 2024). It is also consistent with Pasaribu & Tjen (2016), who found that the higher the level of education, the higher the level of tax compliance. Meanwhile, Rodriguez-Justicia & Theilen (2018) found that individuals who receive direct benefits from the state (government) have higher tax morale. Furthermore, the effect is more substantial when individuals are more educated because their level of education reflects their awareness of the link between tax payments and government benefits. However, McCulloch et al. (2021) conducted research in Nigeria and provided different results. They found that the relationship between informal schooling and higher education tends to be ambiguous when considering different levels of education, such as primary school, secondary school, and higher education. In line with Castañeda-Rodríguez (2025), Rodriguez-Justicia & Theilen (2018), and Soufiene et al. (2024), this study argues that a higher level of education is associated with higher tax morale.

H<sub>4</sub> : The Higher The Education Level, The Higher The Tax Morale



**Figure 1. Research Framework**

Source: Data Processed, 2025

## RESEARCH METHODS

This study employs a quantitative survey design to examine the association between demographic and perceptual variables on student tax morale. Based on data from the Directorate General of Higher Education (2021), the target population for this study was 174,218 students enrolled in PTKL. Data were collected from July to August 2022 using a non-probabilistic convenience sampling method. Based on Hair et al. (2022), a minimum sample size of 212 is required.

Data collection used an online questionnaire distributed through two separate channels. For Polytechnic of State Finance STAN students, distribution is facilitated by the Character Development Unit (Unit Pembangunan Karakter/ UPK). From students from other PTKL, a mixed approach was used, combining formal request letters (S-591/PKN/2022 dated July 25, 2022) sent to 141 colleges (e.g, Institut Pemerintahan Dalam Negeri/ IPDN; Politeknik Statistika STIS; Sekolah Tinggi Pertanahan Nasional) with informal distribution via student WhatsApp groups. All participants were informed about the study's purposes and assured of the anonymity and confidentiality of their responses.

The research instrument was an electronic-form questionnaire, adopted from previous studies. All perceptual variables were measured using a 5-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree). For instance, tax awareness was measured using five items, including the statement "I know the punishment for non-compliant taxpayers." Similarly, tax fairness was assessed with five items, one of which was "In my opinion, the government has provided good services and facilities in return for the payment of taxes."

A reliability analysis was conducted to ensure the instrument's internal consistency for the current sample. The Cronbach's alpha coefficients were (0.5095) for tax morale, (0.7046) for tax awareness, and (0.7885) for tax fairness. Cronbach's alpha for tax morale tends to be low because of the limited number of indicators. Nevertheless, this value can still be used considering the research's exploratory nature, particularly in the under-researched context of PTKL students.

There are 5 (five) variables used in this study: the dependent variable of tax morale and four independent variables, including tax awareness, tax fairness, gender, and education level. The perceptual variables were constructed as composite scores by averaging their respective indicators. Table 1 presents each variable's operational definition.

**Table 1.1. Operational Definition of The Variables**

Variable	Definitions	Measurement	Expected Sign
Tax Morale (MORALE)	Intrinsic factors to pay taxes related to the study	Likert Scale 1-5	
Tax awareness (AWR)	Perception of understanding the tax system.	Likert Scale 1-5	+
Tax Fairness (FRN)	Perception that the tax system is fair	Likert Scale 1-5	+

**Table 1.2. Operational Definition of The Variables (Continuation)**

Variable	Definitions	Measurement	Expected Sign
Gender (GEN)	Respondent's biological sex	dummy variable with a value of 1 for females and 0 for males	-
Education level (PEND)	respondent's current program of study (Diploma III and Diploma IV)	dummy variable with 1 for Diploma IV and 0 for Diploma III.	+

Source: Data Processed, 2025

The hypotheses were tested using Stata's ordinary least squares (OLS) regression model. Before the analysis, the data were cleaned, checked for outliers, and the model was tested for classical assumptions to ensure the validity of the results. Robust standard errors were employed in the regression to mitigate the potential issues of heteroscedasticity. The model is specified in Equation (1).

$$\text{MORALE}_i = \beta_0 + \beta_1\text{AWR}_i + \beta_2\text{FRN}_i + \beta_3\text{GEN}_i + \beta_4\text{PEND}_i + \varepsilon_i \quad (1)$$

MORALE is the dependent variable, representing the tax morale score for respondent *i*. The independent variables are tax awareness (AWR), tax fairness (FRN), gender (GEN), and education level (PEND), with  $\varepsilon_i$  as the error term. Detailed operational definitions and measurements for each variable are presented in Table 1.

## RESULTS AND DISCUSSION

The final sample (N = 1,341) consisted of two distinct groups, students from Polytechnic of State Finance STAN (PKN STAN) (53.10%) and students from various other PTKL/non-PKN STAN (46.90%). The sample was balanced by gender but showed notable ethnic concentrations, with Javanese students dominating the PKN STAN group (58.00%) and Balinese students dominating the non-PKN STAN group (64.10%). Most participants were Diploma III students (78.70%) aged between 20 and 22.

The PKN STAN sample (N=712) primarily consists of students from Diploma III and IV study programs such as Accounting, Tax, Assets Management, etc. These respondents represent a homogenous group from a single institution focused on state finance. The non-PKN STAN sample (N=629) was recruited more broadly from PTKL students under various ministries, including those focused on statistics (Politeknik Statistika STIS), local government (Institut Pemerintahan Dalam Negeri), and health (Politeknik Kesehatan). Due to the limitations of the instrument, the specific institution for each non-PKN STAN respondent could not be individually traced. However, demographically, this group comprises students from various academic programs and geographic locations across Indonesia. Detailed demographic information is presented in Table 2.

**Table 2.1. Sample Characteristics**

Characteristics	PKN STAN (712)		Non-PKN STAN (629)		Total (1,341)		
	Number	%	Total	%	Total	%	
Gender	Male	409	57.44%	316	50.24%	725	54.06%
	Female	303	42.56%	313	49.76%	616	45.94%
Tribe	Java	413	58.01%	75	11.92%	488	36.39%

**Table 2.2. Sample Characteristics (Continuation)**

Characteristics	PKN STAN (712)		Non-PKN STAN (629)		Total (1,341)		
	Number	%	Total	%	Total	%	
Sunda	38	5.34%	8	1.27%	46	3.43%	
Batak	101	14.19%	6	0.95%	107	7.98%	
Bali	16	2.25%	403	64.07%	419	31.25%	
Bugis	12	1.69%	48	7.63%	60	4.47%	
Chinese	4	0.56%	17	2.70%	21	1.57%	
Others	128	17.98%	72	11.45%	200	14.91%	
Education level	Diploma IV	92	12.92%	194	30.84%	286	21.33%
	Diploma III	620	87.08%	435	69.16%	1.055	78.67%
Age	16-20 years	168	23.60%	560	89.03%	728	54.29%
	21-25 years	544	76.40%	67	10.65%	611	45.56%
	>25 years	0	0.00%	2	0.32%	2	0.15%

Source: Data Processed by STATA, 2025

A correlation analysis was conducted on all variables before the regression analysis. The results showed no high correlation between the variables, with all correlation coefficients between the independent variables falling below 0.80. The correlation matrix is presented in Table 3.

**Table 3. Matrix of The Correlation**

Variables	(1)	(2)	(3)	(4)	(5)
(1) MORALE	1.000				
(2) AWR	0.409	1.000			
(3) FRN	0.367	0.431	1.000		
(4) GEN	0.001	0.110	0.053	1.000	
(5) PEND	-0.037	-0.011	-0.048	-0.181	1.000

Source: Data Processed by STATA, 2025

Next, the regression analysis was conducted according to Equation (1). Regression was conducted using robust standard errors to mitigate heteroscedasticity and autocorrelation problems. Table 4 presents the regression analysis results.

**Table 4. Results of The Regression Estimation**

MORALE	Coef.	Robust St.Err.	t-value	p-value	[95% Conf Interval]	Sig
AWR	.340	.032	10.73	.000	.278 .403	***
FRN	.216	.029	7.55	.000	.160 .272	***
GEN	-.071	.034	-2.10	.035	-.139 -.005	**
PEND	-.054	.042	-1.29	.198	-.140 .028	
Constant	2.011	.115	16.88	.000	1.709 2.158	***
Mean dependent var		3.886	SD-dependent var			0.688
R-squared		0.215	Number of obs			1,341.000
F-test		81.492	Prob > F			0.000
Akaike crit. (AIC)		2,486.303	Bayesian crit. (BIC)			2,512.308

\*\*\*  $p < .01$ , \*\*  $p < .05$ , \*  $p < .1$

Source: Data Processed by STATA, 2025

Based on the estimation results (Table 4), the overall model was statistically significant (prob F < 0.001) and explained 21.500% of the variance in tax morale

( $R^2=0.215$ ). Consistent with  $H_1$  and  $H_2$ , both tax awareness ( $\beta=0.340$ ,  $p\text{-value}<0.001$ ) and tax fairness ( $\beta=0.216$ ,  $p\text{-value}<0.001$ ) were significant positive predictors of tax morale. In support of  $H_3$ , gender was also significant, with male students exhibiting lower tax morale ( $\beta=-0.071$ ,  $p\text{-value}<0.050$ ). However, the level of education was not significantly related to tax morale ( $p=0.198$ ); thus,  $H_4$  was rejected.

Although the main model provides an overall picture, further analysis (not tabulated) revealed important nuances. A t-test confirmed a significant difference in tax morale between the PKN STAN and non-PKN STAN groups ( $p\text{-value}<0.001$ ). Subgroup regression revealed that gender had a significant effect only on the non-PKN STAN sample. This complex finding will be explored further in the Discussion section.

The findings support  $H_1$ , suggesting that tax awareness is positively associated with tax morale. This finding aligns with prior research (Alexander & Balavac-Orlic, 2022; Herawati et al., 2022; Yazar et al., 2023), which indicates that knowledge and formal education on taxation foster higher tax morale. This effect is likely reinforced by the unique characteristics of the PTKL sample, which receives financial subsidies from citizens' taxes. PTKL students receive various facilities during their studies, so they directly benefit from taxes. Consistent with Rodriguez-Justicia & Theilen (2018) and Pillai et al. (2024), this direct benefit likely enhances their tax morale.

This study also finds that perceived tax fairness positively relates to tax morale, supporting  $H_2$ . It is consistent with a large body of literature (Ahmad et al., 2019; Castañeda, 2024; Castañeda et al., 2020; Enyi et al., 2019; Wulandari, 2021). Citizens are more willing to pay taxes if they are satisfied with public goods (Castañeda et al., 2020). The allocation of funds to the education sector can convince students that tax funds are used effectively and efficiently for the public interest. This is supported by many PTKL students coming from community groups with below-average incomes. Individuals who perceive the tax structure as fair are encouraged to view tax payment as a trait of good citizenship (Castañeda, 2024). Both findings ( $H_1$  and  $H_2$ ) confirm that attitudes and perceptions are associated with tax morale as components of the Fischer psychology model.

This study also highlights the nuances within the demographics category of Fischer's model. This study finds that male students exhibit lower tax morale than female students, supporting  $H_3$ . However, a particularly nuanced finding exists. While the overall model supports prior research that women have higher tax morale (Cao & Zhou, 2018; Fotiadis & Chatzoglou, 2022), this effect disappeared within the PKN STAN sub-sample. Exposure to a state finance-focused curriculum may mitigate traditional gender-based differences in taxation risk perception (Toly et al., 2021). Male students are more aware of the crucial role of taxes, thereby overriding their general tendency to be greater risk-takers and increasing their motivation to comply.

Finally, this study found that education level is unrelated to tax morale (rejected  $H_4$ ), unlike previous studies (Pasaribu & Tjen, 2016; Rodriguez-Justicia & Theilen, 2018). The results of the sub-sample analysis were also similar. The variable measurement can explain this discrepancy in findings. Previous studies measured the respondents' level of education from the last level of education completed, whereas this study measured the current state of their studies. From the demographic of the respondents, the Diploma IV level students from PKN STAN were still in the early stages (second semester), so their understanding of taxes is not as deep and is similar to that of Diploma IV students from non-PKN STAN or Diploma III students. It aligns with the findings that work experience can weaken the relationship between formal education and

compliance (Kwok & Yip, 2018). These results suggest that higher education alone does not guarantee better compliance; without a supportive and ethical environment, advanced knowledge could instead create opportunities for sophisticated tax evasion.

Overall, the results of the study confirm the fiscal psychology model by Fischer, as well as the formal and informal factors mentioned by Horodnic (2018) and underscore the importance of demographics and perceptions in shaping tax morale and tax compliance, especially in young adults who are direct beneficiaries of tax payment, i.e., PTKL students. By demonstrating that tax awareness and fairness are significant determinants, this study reinforces the shift in tax administration strategy. Historically, tax administrators have adhered to the deterrence principle based on the economic principle that people act on incentives (or disincentives) (Alm, 2019). However, due to the high cost of this approach (Pomeranz, 2015), some researchers recommend combining the deterrence strategy with increasing voluntary compliance based on tax morale (da Silva et al., 2019). This research provides interesting information regarding the compliance of Generation Z and Generation Alpha, who will become potential taxpayers in 10-15 years.

This study offers several policy implications for the Directorate General of Taxes (DGT) as a tax administrator in Indonesia. Since tax awareness is the strongest predictor of tax morale, awareness campaigns should move beyond generalities. Active promotion and student education should be part of the routine tax campaign agenda (Sanusi et al., 2021). Specifically, awareness campaigns are needed to highlight the direct link between tax contributions and the public services students concretely enjoy, such as subsidized education and university tuition subsidies (Uang Kuliah Tunggal/UKT) in general public universities. Building tax awareness can also start at the early stages of education, from their elementary years, to prepare young people to contribute positively to the tax as a national economic system (Manolakou, 2024).

The second significant predictor of tax morale is the perception of tax fairness. To bolster the perception of tax fairness, the DGT should produce targeted content showcasing integrity and good governance to counter student cynicism about how tax money is used. Collaborating with tax-compliant influencers on social media to promote the benefits of taxation and explain regulation in simpler, less technical language could effectively reach this younger demographic and potential future taxpayers.

Owing to the different effects of gender and education in shaping tax morale, this study reveals that a “one-size-fits-all” approach to tax education may be insufficient. Programs for students with less financial background must be designed differently from programs for students already familiar with state finance. Collaboration between the DGT and the Ministry of Education to integrate practical tax material into mandatory courses, such as Pancasila, Civic Education, or character building, supported by universities' tax centres and tax volunteers, could be a highly effective strategy to cultivate a new generation of compliant taxpayers.

## **CONCLUSION**

This study investigated the determinants of tax morale among PTKL students. The regression results indicate that perception of tax awareness, fairness, and gender are positively associated with tax morale. In contrast, the education level was found to have no significant association. The respondents' characteristics can explain this insignificant

result: D-IV students in the sample were mostly beginners (second semester), whose taxation knowledge was not yet deep. This profile is similar to students at other PTKLs, whose curricula have minimal contact with tax subjects. Furthermore, the subsampling analysis showed that these findings remained consistent for both the PKN STAN and non-PKN STAN groups, with the notable exception of the gender variable. In sum, this study's findings support the proposed fiscal psychology model, highlighting the importance of sociodemographic factors, perception of justice in the tax system, and tax awareness in shaping tax morale.

The findings offer several implications. The DGT should pursue tax guidance and education through collaboration with the Ministry of Education to embed tax literacy in higher education curricula. The DGT could also collaborate with tax-compliant influencers on social media to promote taxation benefits and explain regulations in simpler, less technical language, which could effectively reach this younger demographic and potential future taxpayers. Periodic awareness campaigns can also be tailored to highlight the direct link between tax contributions and the public services that students concretely enjoy, such as their own subsidized education and university tuition subsidies.

Despite its findings, this study has several limitations. First, although the sample size is large, PKN STAN dominates its composition. Although sub-sample analyses showed that most results remained consistent, future research should aim to include a more balanced representation from other PTKLs and students from public and private universities. Second, the OLS regression model may have a limitation in capturing latent variables measured using the Likert scale. Future studies could employ methods such as the Structural Equation Model- Partial Least Squares (SEM-PLS) to better model these constructs. Third, a quantitative approach alone cannot comprehensively analyze the tax morale phenomenon. Future research could use a qualitative or mixed-methods approach to gain richer insights.

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