MULTI-REGRESSION ANALYSIS OF FACTORS INFLUENCING PERCEIVED ACADEMIC WRITING COMPETENCE (PAWC) OF VOCATIONAL SCHOOL STUDENTS

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ABSTRACT

Most upper-semester students who fail to graduate have an issue with their perceived academic writing competence (PAWC). PAWC is associated with writing self-efficacy (WSE) and writer's block (WB). Thus, improving WSE and decreasing WB are crucial for succeeding in the final project writing of the upper-semester students. Only limited studies focused on exploring academic writing practice for vocational students by survey strategy. This study used a quantitative approach to test the hypothesis that WSE and WB positively affect PAWC. Respondents were selected using random sampling involving 200 students from a vocational school in Surakarta. Respondents filled survey about PAWC, WSE, and WB consisting of 18 items. The hypothesis was tested by multiple regression analysis. The study results revealed that WSE and WB are positively correlated with PAWC. This research implies that faculty members are advised to focus on encouraging WSE and reducing WB to improve AW competence through curriculum improvements. With the increase in students' academic writing skills, the classic problem of late completion of studies due to late writing of the final project can be solved.

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A. Introduction

Academic writing is one of the major areas in English for Academic Purposes (EAP). Academic Writing (AW) ability is a crucial need, especially for students at the university level. Students need academic writing competence, mainly to equip students to write scientific articles. Academic writing ability is used in almost all student assignments, and in particular, this ability is the main requirement for students to be able to write a final project. Weak academic writing skills will result in the low quality of student scientific writing, affecting student learning outcomes. In addition, the bottleneck phenomenon for final students has the potential to occur if students have low academic writing skills. Academic writing (AW) is inseparable from academic activities in the form of

research.[1] This competence is critical because it becomes the foundation for academics to achieve future careers.[2] Furthermore, it also functions as a starting point in publishing works to communicate the interests of the authors.[3]

AW is associated with specific academic writing genres. Specifically for scientific writing with a specific audience with a distinct writing style designed to give readers information that will lead to new insight/enlightenment. Scientific writing must be able to persuade readers by using logical structures, sound arguments, and coherence.[4] It can be an excellent reference source for communicating between researchers and the academic community who use distinct discourse markers.[5] Mastery of academic writing skills is a must for students, especially to succeed in academia, where assignments often involve the academic genre.

Recently there has been a massive growth of research, particularly in the area of AW. Several previous studies have found that college students need support to improve their academic writing skills.[6] In the meantime, there is a growing interest in researching academic writing in Indonesia. The previous studies investigate the role of critical thinking,[7] the significance of

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Robert Garvey, Paul Strokes, and David Megginson, "Coaching and Mentoring: Theory and Practice" (Sage Publications Sage India: New Delhi, India, 2010).

[3] Li-hua Chou, "An Investigation of Taiwanese Doctoral Students' Academic Writing at a U.S. University," *Higher Education Studies* 1, no. 2 (2011): 47–60, https://doi.org/10.5539/hes.v1n2p47.

[4] Drew H. Bailey, "Correlational Data Analysis in Cognitive Development: The Primacy of Risky Tests," in *Cognitive Development from a Strategy Perspective: A Festschrift for Robert Siegler* (Routledge, 2017), 194–206, https://doi.org/10.4324/9781315200446.

[5] M S Plakhotnik and T S Rocco, "Organizational Culture: A Literature Review of the AHRD 1994-2005 Proceedings," no. 1994 (2006): 94–99.

[6] Ariyanti Ariyanti, "Shaping Students' Writing Skills: The Study of Fundamental Aspects in Mastering Academic Writing," *Indonesian Journal of EFL and Linguistics* 1, no. 1 (2016): 63–77,
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https://doi.org/10.1080/07294360.2020.1773770;
Kate Morss and Rowena Murray, "Researching Academic Writing within a Structured Programme: Insights and Outcomes," *Studies in Higher Education* 26, no. 1 (2001): 35–52, https://doi.org/10.1080/03075070020030706; Yenni Rozimela et al., "Reading-Based Writing: A Model to Foster EFL Learners' Academic Writing Skill," in *67th TEFLIN International Virtual Conference & the 9th ICOELT 2021 (TEFLIN ICOELT 2021)* (Atlantis Press, 2022), 319–21.

[7] Aunurrahman, Fuad Abdul Hamied, and Emi Emilia, "Teaching Critical Thinking through Academic Writing to Tertiary EFL Students in Pontianak Indonesia: An Utilization of a Genre-Based Approach," *Asian EFL Journal* 24, no. 1 (2020): 6–25.

technological literacy,[8] and the difficulties.[9] In addition, the effect of writing variables on writing skills, such as metacognitive prompts[10] and metacognitive knowledge and regulation[11] were also investigated. However, to the best of our knowledge, no prior studies have been oriented toward self-assessment strategies on variables influencing students' academic writing abilities. Hence, this present study seeks to fill this literature void by conducting a quantitative study using a survey strategy to test the correlation between WSE (Writing Self-Efficacy) and WB (Writer's Block) toward PAWC (Perceived Academic Writing Competence).

WSE is the first dimension that supports AW. Self-efficacy relates to personal preferences, objectives, motivations, and anticipated outcomes,[12] which contribute significantly to academic achievement, especially in writing.[13] Conceptually, self-efficacy is a personal perception of one's ability to carry out specific tasks in the field.[14] Several previous studies have highlighted that writing self-efficacy has a positive relationship with adaptive writing learning outcomes in the form of usefulness, mastery, and pleasure in writing.[15] Additionally, another research reveals a substantial correlation between WSE and writing performance, which is critical, particularly for thesis writing.[16]

The circumstance that needs serious attention in the academic writing process is WB. One obstacle that prevents researchers from writing is the phenomenon of WB. This phenomenon appears in the writing process, which is the cause of the researcher vacuum to write. According to previous studies, WB rises by

[8] Tedi Supriyadi et al., "Students' Technological Literacy to Improve Academic Writing and Publication Quality," *Universal Journal of Educational Research* 8, no. 11B (2020): 6022–35, https://doi.org/10.13189/ujer.2020.082238.

[9] Muhammad Furqan, Maulidia Rahmawati Nur, and Syfa Athifah, "Students' Voices on Academic Writing Activities At Tertiary Level," *English Journal* 15, no. 1 (2021): 35, https://doi.org/10.32832/english.v15i1.4561.

[10] Mark Feng Teng, "The Effectiveness of Incorporating Metacognitive Prompts in Collaborative Writing on Academic English Writing Skills," *Applied Cognitive Psychology* 35, no. 3 (2021): 659–73.

[11] Mark Feng Teng, "The Role of Metacognitive Knowledge and Regulation in Mediating University EFL Learners ' Writing Performance," *Innovation in Language Learning and Teaching*, 2019, 1–15, https://doi.org/10.1080/17501229.2019.1615493.

[12] D. H. Schunk and F. Pajares, "Self-Efficacy: Educational Aspects," in *International Encyclopedia of the Social & Behavioral Sciences* (Elsevier, 2001), 13820–22, 668; Dale H. Schunk and Maria K. DiBenedetto, "Motivation and Social Cognitive

Theory," *Contemporary Educational Psychology* 60, no. 1–46 (2020): 101832, https://doi.org/10.1016/j.cedpsych.2019.101832.

[13] Albert Bandura, "Social Cognitive Theory: An Agentic Perspective," *Annual Review of Psychology* 52, no. 1 (2001): 1–26, https://doi.org/10.1146/annurev.psych.52.1.1.

[14] Man–Kit Lee and Michael Evans, "Investigating the Operating Mechanisms of the Sources of L2 Writing Self-Efficacy at the Stages of Giving and Receiving Peer Feedback," *Modern Language Journal* 103, no. 4 (2019): 831–47, https://doi.org/10.1111/modl.12598.

[15] Rebecca J. Collie, Andrew J. Martin, and Jen Scott Curwood, "Multidimensional Motivation and Engagement for Writing: Construct Validation with a Sample of Boys," *Educational Psychology* 36, no. 4 (2016): 771–91, https://doi.org/10.1080/01443410.2015.1093607.

[16] Sharon Zumbrunn et al., "Examining the Multidimensional Role of Self-Efficacy for Writing on Student Writing Self-Regulation and Grades in Elementary and High School," *British Journal of Educational Psychology* 90, no. 3 (2020): 580–603, https://doi.org/10.1111/bjep.12315.

the students' attitudes, insufficient AW, and dispositions.[17] In addition, negative feelings, perfectionism, and time pressure contribute to WB.[18] Numerous additional research contends that WB does not affect performance.[19] However, it is assumed that WB has contributed to student delays in completing final project writing assignments in the Indonesian context.

Academic writing is challenging for EFL students. They are forced to master the linguistic feature of the academic writing genre.[20] In addition, AW is seen as a burden due to limited knowledge of research methodologies, AW, limitations in obtaining writing sources, and the quality of feedback on the research writing process.[21] Poor mastery of AW has also headed to dropouts.[22]

Another finding indicates the students usually never expand their AW competence, which is exacerbated by the limited support to guide writing.[23] Mastery of academic writing skills is very critical to be mastered by students, especially to be successful in academia. This research aims to explore the variables influencing students' academic writing skills. This research contributes preliminary empirical information to be developed as teaching materials in the following research scheme. With this planning, it is hoped that the research results can be practically applied to overcome academic problems, especially for students' academic writing.

In this decade, there has been a growing interest in research on topics steeped in academic writing globally.

[17] Muhammet Baştuğ, "Effects of Primary School Fourth-Grade Students' Attitude, Disposition and Writer's Block on Writing Success," *Egitim ve Bilim* 40, no. 180 (2015): 73–88, https://doi.org/10.15390/EB.2015.4279; Noor Hanim Rahmat, "Problems with Rhetorical Problems Among Academic Writers," *American Journal of Social Sciences and Humanities* 4, no. 4 (2019): 506–15, https://doi.org/10.20448/801.44.506.515.

[18] Ashraf Atta M. S. Salem, "Engaging ESP University Students in Flipped Classrooms for Developing Functional Writing Skills, HOTs, and Eliminating Writer's Block," *English Language Teaching* 11, no. 12 (2018): 177, https://doi.org/10.5539/elt.v11n12p177.

[19] Muhammet Bastug, Ihsan Seyit Ertem, and Hasan Kagan Keskin, "A Phenomenological Research Study on Writer's Block: Causes, Processes, and Results," *Education and Training* 59, no. 6 (2017): 605–18, https://doi.org/10.1108/ET-11-2016-0169; Juhee Lee, "Effects of Linguistic and Affective Variables on Middle School Students' Writing Performance in the Context of English as a Foreign Language: An Approach Using Structural Equation Modeling," *Reading and Writing* 33, no. 5 (2020): 1235–62, https://doi.org/10.1007/s11145-019-10007-2.

[20] Linda Y. Li and Joelle Vandermensbrugghe, "Supporting the Thesis Writing Process of International Research Students through an Ongoing Writing Group," *Innovations in Education and Teaching International* 48, no. 2 (2011): 195–205, https://doi.org/10.1080/14703297.2011.564014; Aek Phakiti and Lulu Li, "General Academic Difficulties and Reading and Writing Difficulties Among Asian ESL Postgraduate Students in TESOL at an Australian University," *RELC Journal* 42, no. 3 (2011): 227–64, https://doi.org/10.1177/0033688211421417.

[21] Gurnam Kaur Sidhu et al., "Assessing the Critical Reading Skills of Postgraduate Students: Perspectives of Supervisors and Supervisees," in *Assessment for Learning Within and Beyond the Classroom* (Springer, 2016), 43–52, https://doi.org/10.1007/978-981-10-0908-2_4.

[22] Sara Cotterall, "Doctoral Students Writing: Where's the Pedagogy?," *Teaching in Higher Education* 16, no. 4 (2011): 413–25.

[23] Emilie Tremblay-Wragg et al., "Writing More, Better, Together: How Writing Retreats Support Graduate Students through Their Journey," *Journal of Further and Higher Education* 45, no. 1 (2021): 95–106, https://doi.org/10.1080/0309877X.2020.1736272.

Numerous prior research has established the critical nature of academic writing abilities at the postsecondary level.[24] In addition, several recent studies underscore that publishing research articles is closely related to academic writing ability.[25] Then, several previous studies also indicated the importance of workshops in improving academic writing skills.[26]

Specifically in Indonesia, previous researchers have conducted academic writing research. Several of them are devoted to conducting research that focuses on teaching critical thinking within the AW context.[27] In addition, other studies demonstrate a reasonable level of awareness regarding bibliography management for academic writing activities at the university level.[28] In addition, emphasizing digital literacy is crucial for improving AW competence and research quality.[29] In addition, students face various challenges in academic writing, including ability, motivation, technical problems, and support from teachers.[30] Based on the prior study on academic writing, there have been few attempts to perform quantitative research to determine the correlations between the variables of WSE, WB, and PAWC. Thus, this research develops hypotheses as follows:

1. H1: WSE has a positive correlation with PAWC
2. H2: WB has a positive correlation with PAWC

[24] Ariyanti, "Shaping Students' Writing Skills: The Study of Fundamental Aspects in Mastering Academic Writing"; Fadda, "Difficulties in Academic Writing: From the Perspective of King Saud University Postgraduate Students"; Fernsten and Reda, "Helping Students Meet the Challenges of Academic Writing"; Heron, Gravett, and Yakovchuk, "Publishing and Flourishing: Writing for Desire in Higher Education"; Morss and Murray, "Researching Academic Writing within a Structured Programme: Insights and Outcomes."

[25] Shulin Yu and Lianjiang Jiang, "Doctoral Students' Engagement with Journal Reviewers' Feedback on Academic Writing," *Studies in Continuing Education*, 2020, 1–18, https://doi.org/10.1080/0158037X.2020.1781610; Rui Yuan, Barry Bai, and Shumeng Hou, "Unpacking Vulnerability in Academic Writing and Publishing: A Tale of Two Non-Native English Speaker Scholars in China," *Higher Education Research and Development*, 2020, 1–15, https://doi.org/10.1080/07294360.2020.1865282; Dubravka Zarkov, "What We Do and What We Don't: Paradoxes of Academic Writing for Publishing," *European Journal of Women's Studies* (SAGE Publications Sage UK: London, England, 2019), https://doi.org/10.1177/1350506819870632.

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[27] Aunurrahman, Hamied, and Emilia, "Teaching Critical Thinking through Academic Writing to Tertiary EFL Students in Pontianak Indonesia: An Utilization of a Genre-Based Approach."

[28] N. Setiani et al., "A Study on Awareness of Bibliographic Management Software for the Academic Writing Activity in Higher Education," in *Journal of Physics: Conference Series*, 1st ed., vol. 1823 (IOP Publishing, 2021), 12035, https://doi.org/10.1088/1742-6596/1823/1/012035.

[29] Supriyadi et al., "Students' Technological Literacy to Improve Academic Writing and Publication Quality."

[30] Furqan, Rahmawati Nur, and Athifah, "Students' Voices on Academic Writing Activities At Tertiary Level."

B. Method

A quantitative approach was chosen to carry out this proposed research. By choosing a survey strategy, empirical information was able to be obtained. In addition, a survey was beneficial to assess students' abilities and perceptions as it was convenient to conduct.[31] The data were gathered from respondents studying in Vocational School in Central Java using a simple random sampling strategy. This study was involved 200 respondents that the demographic can be seen in Table 1.

Table 1.
Respondents Demographic Information

Variables	N	%
Gender		
Male	95	47.40
Female	105	52.60
Owned Devices		
Laptop	115	57.70
Smartphone	182	91
Tablet	8	3.80
Basic Phone	10	5.10

The survey was conducted using a closed questionnaire that measured three variables. The instrument for measuring the variables in this study was modified from previous studies, which include the variable of writer's block (WB)[32] consisting of six items, self-efficacy in writing (WSE)[33] consisting of five items, and perceived academic writing competence (PAWC)[34] consisting of seven items. Before the questionnaire was distributed to respondents, validity and reliability tests were conducted through pilot testing on 50 respondents and face validity. Experts from linguists and applied linguistics (see Table 2) were involved in the face validity analysis of the questionnaire.

Table 2.
Expert Demographic Information

	Expert 1	Expert 2
Affiliation	Universitas Sebelas Maret	Universitas Sebelas Maret
Qualification	Professor	Professor
Teaching experiences	29 Years	35 Years
Gender	Male	Male
Expertise	Linguist	Applied linguistics

The writer measured the reliability and validity of the questionnaire using SPSS 23. The obtained value was 0.847 (Cronbach Alpha) and the value of validity was between 0.71-0.81 (R-value).[35] It can be concluded that the obtained value of the questionnaire was valid and reliable; thus, the researcher distributed the research instrument to respondents via an online strategy (google form).

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[31] Jerome Delaney et al., "Students' Perceptions of Effective Teaching in Higher Education," *Distance Education, Learning and Teaching Support (DELTS)*, 2010, 1–19.

[32] Bastug, Ertem, and Keskin, "A Phenomenological Research Study on Writer's Block: Causes, Processes, and Results."

[33] Roger Bruning et al., "Examining Dimensions of Self-Efficacy for Writing," *Journal of Educational*

Psychology 105, no. 1 (2013): 25–38, https://doi.org/10.1037/a0029692.

[34] Chiaki Iwasaki et al., "Design of E-Learning and Online Tutoring as Learning Support for Academic Writing," *Asian Association of Open Universities Journal* 14, no. 2 (2019): 85–96, https://doi.org/10.1108/aaouj-06-2019-0024.

[35] J. D. Brown, "The Cronbach Alpha Reliability Estimate," *Shiken: JALT Testing & Evaluation SIG Newsletter* 6, no. 1 (2002): 17–18.

The researcher used SPSS 23 to carry out data analysis. The first stage was conducting descriptive statistical analysis using frequency distributions. The study was then undertaken to determine normality, multicollinearity, and heteroscedasticity. Then in drawing the hypothesis, the researcher performed multiple linear regression analysis and ANOVA.

C. Results

1. Descriptive Analysis

The frequency analysis was used to describe the respondents' perception of the variables of WSE, WB, and PAWC. Table 3 illustrates the frequency analysis of the related variables.

Table 3.
Frequency Analysis (Percentage)

Items	SD	D	N	A	SA
WSE_1	8,9	20,4	31,8	23,6	15,4
WSE_2	6,4	10,4	31,1	27,9	24,3
WSE_3	8,9	10	31,8	25	24,3
WSE_4	5,4	9,6	25	28,6	31,4
WSE_5	4,3	7,1	26,1	34,6	27,9
WB_1	14,3	18,9	34,6	16,1	16,1
WB_2	7,5	8,9	32,9	26,1	24,6
WB_3	12,9	12,1	31,4	23,6	20,0
WB_4	10,4	11,1	30,4	23,6	24,6
WB_5	8,6	12,1	35,4	21,4	22,5
WB_6	10,4	13,2	34,3	18,9	23,2
PAWC_1	7,5	14,3	33,2	25,7	19,3
PAWC_2	9,3	25,4	33,6	19,6	12,1
PAWC_3	12,9	17,5	33,2	20,7	15,7
PAWC_4	11,8	14,6	37,9	21,1	14,6
PAWC_5	7,1	8,9	25,0	24,6	34,3
PAWC_6	7,5	17,5	41,4	20,0	13,6
PAWC_7	6,8	12,9	38,9	25,4	16,1

SD: Strongly Disagree, D: Disagree, N: Neutral, A: Agree, SA: Strongly Agree

Based on descriptive statistical analysis in frequency (see Table 3 or appendix for the items), on the variable writing self-efficacy (WSE), the activity of drafting ideas into writing (WSE_1) is still difficult for respondents (23,6% agree and 15,4% strongly agree). Meanwhile, the majority of students have difficulty concentrating on writing (WSE_3), especially if they feel frustrated due to the pressure of writing activities (25% agree and 24,3% strongly agree). In addition, the obstacles faced in writing also made respondents find it challenging (27,9% agree and 24,3% strongly agree) to create final assignment (WSE_5).

The researcher focuses on the writer's block (WB) variable in the following description. The WB_1 indicates that there are enough encouragement for improving students writing during the learning process. However, a high standard of writing quality (WB_2) is considered by respondents as one of the contributors to writer's block (26,1% agree and 24,6% strongly agree). On the other hand, the final project writing format is complicated (WB_3), making students still have not started/continued to write. Anxiety of writing, lack of confidence in writing skills, and fear of getting a bad score on final project exams (WB_5) were also factors that hindered writing (22,5% of respondents' stated strongly agree).

The third variable focuses on perceived academic writing performance. Almost half of the respondents (25,7% agree and 19,3% strongly agree) perceive that the research background chapter is confusing (PAWC_1). In addition, 34.3% of

respondents agree that decreasing similarity index is complicated (PAWC_3). Meanwhile, the research methodology section (PAWC_7) were also considered confusing by respondents (25,4% agree and 16,1% strongly agree). However, the majority of respondents generally have a neutral perception (37,9%) of the obligation to write outlines (PAWC_4).

Next, the researcher analyses WSE and PAWC's influence on WB by performing multiple linear regression. Writing self-efficacy (X_1) and writer's block (X_2) were determined as independent variables and academic writing performance (Y) as the dependent variable. Before performing multiple linear regression analyses, the classical assumptions test is necessary to meet the requirements for the validity of the linear regression model. It involves normality, multicollinearity, and heteroscedasticity tests. Classical assumption test using SPSS 23.

2. Normality test

The researchers analyze the data to determine the distribution of research data. In the normality test in linear regression analysis, the data tested is residual data. It is emphasized that the residual data is normally distributed so that it can proceed to linear regression analysis. In this study, the normality test used the Kolmogorov-Smirnov test. The basis for the decision is that if the residual data has a significance value > 0.05, then the data is normally distributed. The following is the output of SPSS 23 for the significant value in the Kolmogorov-Smirnov test.

Table 4.
The Normality Test Result

One-Sample Kolmogorov-Smirnov Test	Unstandardized Residual
Asymp. Sig. (2-tailed)	0,404

Test distribution is Normal.

The table above shows a significance value of 0.404 > 0.05, so it can be concluded that the residual data is normally distributed.

3. Multicollinearity Test

This part aims to ascertain the correlation between the independent variables in the regression model (X_1) and (X_2). It is underlined that there is no correlation between the independent variables and that the regression model is not multicollinear. This study carried out the multicollinearity test by looking at the values of the tolerance and VIF (variance inflating factor). Based on the decision, if the tolerance value is > 0.10 and the VIF value is < 10.00, there is no multicollinearity in the regression model. The following is the output of SPSS 23 for the tolerance value and the VIF value in the multicollinearity test.

Table 5.
The Multicollinearity Test Result

Coefficients[a]		
Model	Collinearity Statistics	
	Tolerance	VIF
1 (Constant)		
writing self-efficacy (X_1)	0,669	1,495
writers' block(X_2)	0,669	1,495

a. Dependent Variable: academic writing performance (Y)

By looking at the tolerance value of 0.669 > 0.10 and the VIF value of 1.495 < 10.00, it can be concluded that there is no multicollinearity in the regression model.

4. Heteroscedasticity Test

This section aims to find the difference in residual data variance from one observation to another. It is emphasized that there is no heteroscedasticity in a good regression model. The heteroscedasticity test was carried out using the Spearman rank method. Based on the decision, if the significance value is > 0.05, there is no heteroscedasticity. The following is the output of SPSS 23 for the significant value in the heteroscedasticity test.

Table 6.
The Heteroscedasticity Test Result

Correlations		
Model		Unstandardized Residual
Spearman's rho	writing self-efficacy (X_1) Sig. (2-tailed)	0,869
	writers' block (X_2) Sig. (2-tailed)	0,760

**. Correlation is significant at the 0.01 level (2-tailed)

The table above shows the significant value of the writing self-efficacy variable (X_1) of 0.869 and the writer's block variable (X_2) of 0.760. The significance value of the two independent variables is > 0.05, so it can be concluded that there is no heteroscedasticity. The three necessary tests indicate that the regression model utilized in this study satisfies the validity analysis requirements.

5. Multiple Linear Regression Analysis

In the multiple linear regression equation, the magnitude and direction of the influence of each independent variable, in this case, self-efficacy (X_1) and writer's block (X_2), on academic writing performance (Y) is determined by the beta values ($\beta1$ and 2). The following table is the output of SPSS 23 regarding the constant values 1 and 2 in the multiple linear regression equation.

Table 7.
The Multiple Linear Regression Result

Model	Coefficients
(Constant)	2,792
writing self-efficacy (X_1)	0,444
writers' block(X_2)	0,609
Dependent variable: academic writing performance (Y)	

By using the regression equation formula: $Y = a + 1X_1 + 2X_2$, the regression equation in this study is $Y = 2.792 + 0.444X1 + 0.609X2$. A value of 2.792 means that if the WSE and WB are zero, PAWC is 2.792. The value of 1 is 0.444, meaning that for every one-unit increase in writing self-efficacy, academic writing performance increases by 0.444. The value of 2 is 0.609, meaning that for every unit increase in WB, PAWC increases by 0.609.

Meanwhile, to see the effect of WSE (X_1) and WB (X_2) partially on PAWC (Y), it can be determined using a partial t-test. Based on the decision based on the significance value (sig.), if the significance value is < 0.05, then the independent variable has a partially positive effect on the dependent variable and vice versa. The

following is the output of SPSS 23 regarding the significance value of the t-test.

Table 8.
The t-test and Significance Result

Model	t-test	Sig.
(Constant)	2,877	0,004
writing self-efficacy (X_1)	7,147	0,000
writers' block (X_2)	13,031	0,000
Dependent variable: academic writing performance (Y)		

The researcher was proposing a partial hypothesis for the variable WSE (X1) on PAWC (Y) based on the significance value (sig.) as follows:

1. Ho: There is no positive effect of WSE on PAWC
2. Ha: There is a positive effect of WSE on PAWC

Table 8 shows that the significance value (sig.) of 0.000 <0.05 means that Ho is rejected and Ha is accepted. This means that writing self-efficacy has a positive effect on academic writing performance.

In addition, the researchers proposed a hypothesis for the variable WB (X2) on PAWC (Y) based on the significance value (sig.) as follows:

1. Ho: There is no positive influence of WB on PAWC.
2. Ha: There is a positive influence of WB on PAWC.

Table 8 shows a significance value (sig.) of 0.000 < 0.05, meaning Ho is rejected and Ha is accepted. This means that there is a positive influence of writer's block on academic writing performance.

Next, researchers perform a simultaneous F test which aims to see the effect of WSE (X_1) and WB (X_2) simultaneously on PAWC (Y). The decision was based on the significance value (sig.). If the significance value < 0.05, then there is a positive effect of the independent variables simultaneously on the dependent variable and vice versa. The following is the output of SPSS 23 regarding the significance value of the F test.

Table 9.
The Result of ANOVA

ANOVA[b]						
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	7037.252	2	3518.626	245.292	.000[a]
	Residual	3973.458	277	14.345		
	Total	11010.711	279			

a. Predictors: (Constant), writers' block(X2), writing self-efficacy (X1)

b. Dependent Variable: academic writing performance (Y)

The researcher was proposing a hypothesis for the variable WSE (X_1) and WB (X_2) simultaneously on PAWC (Y) based on the significance value (sig.) as follows.

1. Ho: There is no positive effect of WSE and WB simultaneously on PAWC.
2. Ha: There is a positive effect of WSE and WB simultaneously on PAWC.

According to Table 9, the significance value (sig.) for Ho is 0.000 < 0.05, indicating that Ho is rejected and Ha is accepted. This suggests that both writing self-efficacy and writer's block have a beneficial effect on academic writing performance.

After knowing that there is a positive influence of WSE and WB simultaneously on PAWC, the next step is to analyze the coefficient of determination of the extent of the positive influence of WSE and WB on PAWC. The coefficient of determination refers to the value of R square. The following is a table of SPSS 23 output related to the value of R square.

Table 10.
R square Result

Model Summary[b]

Model	R	R Square
1	0,799[a]	0,639

a. Predictors: (Constant), writers' block (X_2), writing self-efficacy (X_1)

b. Dependent Variable: academic writing performance (Y)

The coefficient of determination is 0.799, or 79.9 %, as shown in Table 10. This suggests that WSE and WB contribute favorably to PAWC by 79.9 %, while the remaining 20.1 % is influenced by other variables or factors not addressed in this study.

This study aims to determine whether WSE and WB affect PAWC based on empirical data. According to the descriptive analysis, students often have insufficient WSE. Students experienced lack confidence related to their writing. In addition, they often face difficulties in mastering academic writing conventions as well as how to self-regulate their writing. On the other hand, previous studies indicate the necessity of WSE by considering it as important as the cognitive aspect.[36] Zhang adds that WSE substantially affects the writing ability of the students. Insufficient WSE of vocational students is assumed based on the students' experience in high school with minimum exposure to writing skills.[37] The previous study supports the findings that indicate low WSE is linked to a lack of writing activities.[38]

WB is the second variable investigated in the study. This variable is influenced by several other factors, including personal competence and time management. While lecturers provide adequate support for students to improve academic writing mastery, this support has

[36] Jing Chen and Lawrence Jun Zhang, "Assessing Student-Writers' Self-Efficacy Beliefs about Text Revision in EFL Writing," *Assessing Writing* 40 (2019): 27–41, https://doi.org/10.1016/j.asw.2019.03.002.
[37] Chen and Zhang.

[38] Stephanie Daniels et al., "Evaluating the Effects of a Writing Self-Efficacy Intervention on Writing Quantity in Middle School Students," *Reading and Writing Quarterly* 36, no. 1 (2020): 48–64, https://doi.org/10.1080/10573569.2019.1618226.

an insufficient impact on WB. This circumstance may be linked to respondents' negative attitudes toward self-directed learning (SDL). The previous study has linked SDL to writing. SDL is essential for writing as students set their targets, plan, and monitor their writing progress.[39] In addition, respondents are suspected of viewing lectures, particularly writing activities, as stressful and unpleasant. This view may stimulate students for the lack of SDL.

Meanwhile, SDL students are formed when they view their learning process as relevant to their needs and have an enjoyable experience.[40] Educators play a critical role in stimulating students to have SDL attitudes. SDL attitudes can also be promoted through various learning materials and assessments.[41]

The final variable examined in this study is PAWC. The introduction chapter is

considered a difficult task for students. In addition, they have an intriguing problem related to decreasing the plagiarism (similarity) value.[42] These findings expand on the previous results suggesting that academic writing difficulties are linked to perfectionism. In addition, several studies argue that the non-cognitive variables, which include meta-cognition and learning experience, contribute to academic writing performance.[43]

According to the accepted hypothesis, self-efficacy affects perceived academic writing performance. This study's findings align with several previous studies that underlined the importance of mastering self-efficacy in improving academic writing skills.[44] In addition, students often experience writer's block, which comes from perfectionism and procrastination, affecting students' writing attitudes and understanding of writing

[39] Eman Mohammed Abdel-Haq, Hussein Taha Atta, and Abeer Ahmed Hammad Ali, "A Suggested Web-Mediated Process Genre -Based Program for Developing Writing Autonomy of EFL Prospective Teachers," *Sohag University International Journal of Educational Research* 2, no. 2 (2020): 30–50, https://doi.org/10.21608/suijer.2020.97630.

[40] Fera Sulastri, Nita Sari, and Narulita Dewi, "The Role of Autonomy on Students ' Creativity in Writing Short Story : A Narrative Inquiry," *Extended Summaries* 1, no. 1 (2019): 32–36.

[41] Tham My Duong and Sirinthorn Seepho, "Implementing a Portfolio-Based Learner Autonomy Development Model in an EFL Writing Course," *Suranaree Journal of Social Science* 11, no. 1 (2017): 29–46.

[42] Lijing Lin, "Perfectionism and Writing Performance of Chinese EFL College Learners," *English Language Teaching* 13, no. 8 (2020): 35, https://doi.org/10.5539/elt.v13n8p35.

[43] Lin; Maxine Brodie, Christopher Tisdell, and Judyth Sachs, "Online Writing Feedback: A Service and Learning Experience," *Student Support Services*, 2021, 1–18, https://doi.org/10.1007/978-

981-13-3364-4_13-2; Bin Shen, Barry Bai, and Moonyoung Park, "Exploring Hong Kong Primary Students' English Writing Motivation: Relationships between Writing Self-Efficacy and Task Value," *Journal of Multilingual and Multicultural Development*, 2020, 1–15, https://doi.org/10.1080/01434632.2020.1823397.

[44] Catherine G.P. Berdanier, "Linking Current and Prospective Engineering Graduate Students' Writing Attitudes with Rhetorical Writing Patterns," *Journal of Engineering Education* 110, no. 1 (2021): 207–29, https://doi.org/10.1002/jee.20368; Cynthia Vincent et al., "How Writing Retreats Represent an Ideal Opportunity to Enhance PhD Candidates' Writing Self-Efficacy and Self-Regulation," *Teaching in Higher Education*, 2021, 1–20, https://doi.org/10.1080/13562517.2021.1918661; Kalinka Velasco Zárate and José Manuel Meza Cano, "Self-Efficacy for the Learning of Academic Writing in Esl Mediated by Webquest-Wiki in a Group of Pre-Service Language Teachers in Mexico," *Ikala* 25, no. 2 (2020): 289–305, https://doi.org/10.17533/udea.ikala.v25n02a07.

rhetorical patterns.[45] On the other hand, affective factors such as anxiety also contribute to writer's block, affecting academic achievement in writing activities.[46] In connection with the context of data collection, namely at one of the vocational schools in Central Java, faculty members should focus more on the research findings of this study, namely issuing policies to increase writing self-efficacy while reducing writer's block. This policy will increase students' competence in academic writing so that classic problems in the form of delays in the study period caused by the slow completion of the final project can be resolved.

D. Conclusion

This study found that WSE and WB positively correlate to PAWC. Based on this finding, faculty members are urgently advised to consider issuing a practical policy to solve the poor level of students' academic writing competence. To date, AW is considered challenging and threatening to students in the Indonesian context as they have poor academic writing mastery. In addition, the findings indicate that students need more attention to improve non-cognitive and cognitive aspects to support AW assignments, which are crucial for students succeeding in their academic life. Empirical data from this study is expected to be developed in more in-depth research by adding several other potential variables which correlate to academic writing competence. On the other hand, in a limited way, this research only takes research subjects in Central Java, which is expected to be expanded to a more extensive subject from other provinces of Indonesia to understand better the empirical condition of the vocational school student regarding their academic writing competence.

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[45] Berdanier, "Linking Current and Prospective Engineering Graduate Students' Writing Attitudes with Rhetorical Writing Patterns."

[46] Oktay Yağız, Kemalettin Yiğiter, and Nalan Büyükkantarcıoğlu, "The Affective Domains in L2

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Appendix 1.
The survey to measure writing self-efficacy (WSE), writer's block (WB), and perceived academic writing competence (PAWC).

Please respond to each question. Check the box that best reflects your opinions; please remember there are no right or wrong answers.		Strongly disagree	Disagree	Neutral	Agree	Strongly agree
Writing Self-efficacy						
1	For me, putting ideas into writing may be challenging at times.					
2	It's challenging to write a research proposal/thesis in formal language.					
3	I have difficulty concentrating for an hour on drafting a proposal/thesis.					
4	When writing a proposal/thesis, the irritation I experience frequently disrupts my attention.					
5	I struggle to write when facing challenges while creating a proposal/thesis.					
Writer's block						
1	I'm not receiving as much motivation from instructors to enhance my scientific writing abilities.					
2	Lecturers who establish high criteria for thesis writing cause anxiety.					
3	I have not begun/continued my writing because it is sometimes difficult to grasp the structure of a thesis.					
4	When I begin writing my thesis, I occasionally get fear/Anxiety.					
5	My confidence in my ability to write a thesis has diminished.					
6	I struggle writing because I am terrified/concerned about receiving a bad test result.					
Perceived academic writing competence						
1	I'll be perplexed if I'm required to conduct background research.					

2	For me, writing research objectives is a difficult task.					
3	The framework for creating a research proposal/thesis is somewhat perplexing.					
4	I object to the need that I create an outline/plan for the author of a research proposal/thesis.					
5	Revision to reduce Turnitin levels is a difficult task.					
6	I'm less confident in the chapter on the literature review I wrote.					
7	I would be perplexed if I were to write a chapter on research method.					