International Journal of Economy, Education, and Entrepreneurship
p-ISSN: 2798-0138 | e-ISSN: 2798-012X
Vol. 6, No. 1, April 2026
https://doi.org/10.53067/ije3.v6i1

IMPROVING TEACHERS' WORK PRODUCTIVITY THROUGH THE DEVELOPMENT OF A GROWTH MINDSET, TRANSFORMATIONAL LEADERSHIP, COLLABORATION, WORK MOTIVATION, AND CREATIVITY

Fitria Iswari[1*], Sri Setyaningsih[2], Suhendra[3]
[1]Program Studi Desain Komunikasi Visual, Universitas Indraprasta PGRI
[2]Program Doktor Manajemen Sekolah Pascasarjana, Universitas Pakuan
[3]Program Doktor Manajemen Sekolah Pascasarjana, Universitas Pakuan
Corresponden Email: *fitriaiswari@gmail.com[1]*

Abstract
This study aims to test the hypothesis that independent variables namely, growth mindset, transformational leadership, and cooperation along with intervening variables namely, work motivation and creativity influence the dependent variable of teacher work productivity. The research employed a quantitative method and tested 13 research hypotheses. The respondents were 140 public special education school (SLB) teachers in the Province of Jakarta. The instruments used for each research variable were questionnaires that had previously undergone validity and reliability testing. Data analysis employed path analysis using the SEM-PLS 3 software. The results indicated that 6 hypotheses were accepted regarding direct effects, while 3 hypotheses were rejected. In testing indirect effects, 2 hypotheses were accepted, and 2 were rejected. Furthermore, using SITOREM analysis to classify indicators within the research variables, 18 indicators were improved, and 13 were retained or developed. It is hoped that the implications of this study can improve the work productivity of public special education teachers in Jakarta Province by strengthening a growth mindset, transformational leadership, cooperation, work motivation, and creativity.
Keywords: Growth Mindset, Transformational Leadership, Collaboration, Work Motivation, Creativity

INTRODUCTION

Education is one of the key factors influencing a country's overall development. In Indonesia, education has been the focus of sustained attention and efforts to bring about positive change in society. Through its education system, Indonesia strives to produce a generation that is intelligent, creative, ethical, and capable of competing globally. Special Education Schools (SLB) serve as the hub for inclusive education. It is reinforced by the guidebook on the implementation of inclusive education, which states that a Special Education Teacher (GPK) is a teacher assigned to assist students with special needs at the school, whether they come from that educational institution or from the nearest special education school (Farah Arrian, Agustiyawati, Alifia Rizki, Ranti Widiyanti & Tulalessy, Christina, Fera Herawati, 2022). The effect of salary on teacher productivity and the effect of work motivation on teacher productivity (Kamaruddin et al., 2023). Work discipline can have a significant positive impact on work productivity. Organisational climate can have a significant positive impact on work productivity. Organisational commitment can have a significant positive impact on work productivity (Ariani et al., 2020). There is a relationship between work productivity and work culture (support, innovation, and bureaucracy) (Aliazas & Chua, PhD, 2021). The work environment significantly impacts teacher productivity and job satisfaction (Hestianingtias et al., 2022). There is a direct and indirect relationship between professional competence, communication,

discipline, and work productivity (Halimah, Ahmad Suriansyah, 2022). The impact of job satisfaction on productivity (Dila et al., 2022).

Special Education Schools (SLB) are designed to meet the educational needs of children with disabilities, offering adapted teaching methods and curricula. They focus on character development, skill enhancement, and basic academic skills, promoting independence and social integration for students (Gultom et al., 2024). Special Education Schools (SLB) are educational institutions specifically designed for students with learning difficulties resulting from physical, emotional, or mental disabilities, yet who possess exceptional intellectual potential and talents, such as the visually impaired, the hearing impaired, and those with physical disabilities (Latersia & Ginting, 2024). The SIWI learning strategy at SLB Lamongan, a special school for deaf students, focuses on improving their writing skills through effective teaching methods tailored to their unique learning needs (Khoirul Huda et al., 2023).

The state of the art in this study lies in its research focus, as few studies have examined teacher productivity, particularly in special education schools. Additionally, this study employs a mixed-methods approach, using the POP-SDM framework and SITOREM for indicator analysis. Based on previous research on productivity and studies of children with special needs at the special education school level, there remains a scarcity of in-depth research on educational governance/management, particularly regarding teacher productivity in special education schools. It is noteworthy because, as it turns out, there are still a few researchers focusing on special education schools.

METHOD

This study uses quantitative methods to test hypotheses. The study involved 140 special education teachers teaching at SLBN 1, SLBN 3, SLBN 4, SLBN 7, and SLBN 10 in the Province of Jakarta. A questionnaire was used for each research variable. The data analysis technique employed path analysis via SEM-PLS, with three independent variables, two mediating variables, and one dependent variable. The research model is illustrated in Figure 1.

Figure 1. Research Framework

RESULTS AND DISCUSSION

Table 1. Frequency Distribution of Research Variables

Score	Y	X1	X2	X3	X4	X5
Mean	148.36	149.98	156.94	149.66	124.09	119.19
Median	154.00	154.00	163.00	153.00	128.00	124.50
Mode	150.00	153.00	159.00	150.00	145.00	135.00
Standard deviation	25.16	28.03	30.32	22.98	21.77	23.86
Variance	633.18	785.73	919.13	528.13	473.77	569.38
Skewness	-1.40	-1.22	-1.27	-1.34	-0.55	-0.32
Kurtosis	1.20	0.97	0.98	1.82	(0.66)	-0.95
Minimum value	81.00	61.00	76.00	71.00	72.00	70.00
Maximum value	184.00	189.00	195.00	185.00	156.00	164.00
Total score	20,770.00	20,997.00	21,971.00	20,952.00	17,373.00	16,687.00

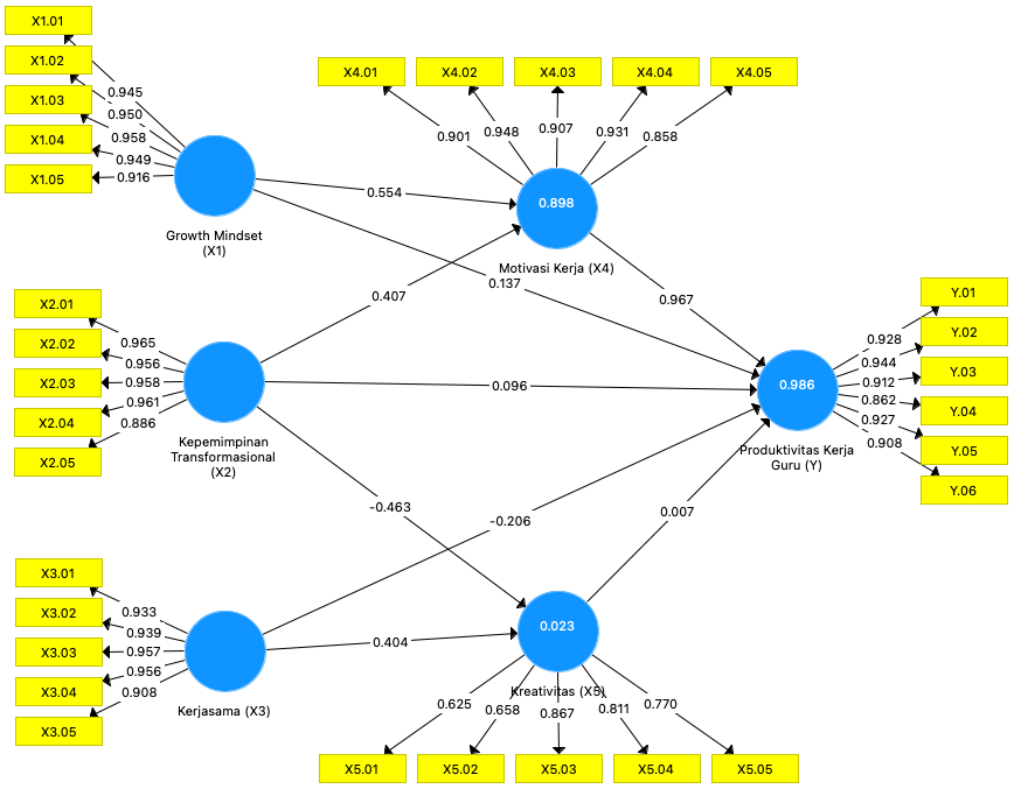

Figure 2. Structural Model of the Results of Indicator Testing Against Latent Variables

Figure 2 shows that the factor loadings for the indicators of each latent variable all meet the criterion of>0.70. Based on this, the indicators for each latent variable demonstrate good convergent validity, indicating that they are acceptable for reflecting the latent variables in the structural model. Thus, no indicators were removed from the tested model.

Inner Model Analysis, or structural model analysis, was conducted to assess the extent of the relationship between the exogenous and endogenous variables in the model. This analysis provides

insight into the strength of the relationships among the variables involved in the constructed model. The following are the results of the PLS algorithm iterations for the structural model of Teacher Work Productivity, along with their path coefficients (β). There are 9 paths based on the teacher work productivity model constellation (Research Model Constellation). "Model estimation" refers to the process of calculating and estimating parameters in the constructed model using the Structural Equation Modelling Partial Least Squares (SEM-PLS) method; the purpose of this model estimation is to obtain information about the relationships among the variables included in the model, including the strength and direction of those relationships.

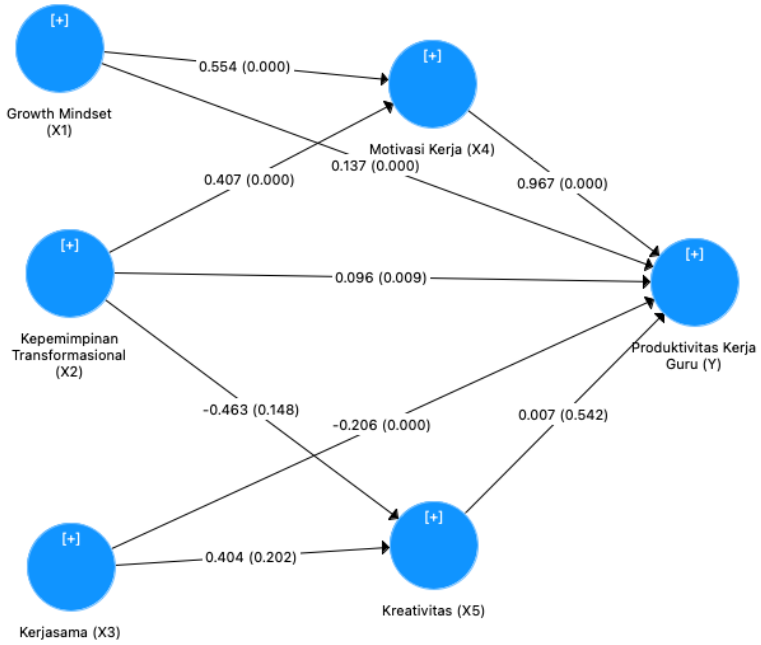

Figure 3. Path Coefficients (β) and p-Values for the Teacher Work Productivity Model Test

The path coefficient for the growth mindset variable on teacher work productivity is 0.137. Given that the p-value is 0.000 < 0.05, the hypothesis test indicates a positive direct effect of growth mindset on teacher work productivity. A growth mindset is positively correlated with motivation, which, in turn, can increase teachers' work productivity (Nalipay et al., 2021). A growth mindset encourages teachers to innovate and adapt, thereby contributing to their productivity and effectiveness in teaching students (Lee et al., 2023).

The path coefficient value of transformational leadership on teacher work productivity is 0.096. As for the hypothesis test regarding the positive direct effect of transformational leadership on teacher work productivity, with a p-value of 0.009 < 0.05, it can be concluded that transformational leadership has a positive direct effect on teacher work productivity. Transformational leadership has a direct and significant effect on collaboration and teacher work productivity (Dedy Yusuf Aditya et al., 2024). The study's results indicate that transformational leadership enhances productivity through

teachers' relational identification and self-efficacy. A positive direct effect (β = 0.35) was confirmed through a mediation model (Walumbwa & Hartnell, 2011).

The path coefficient for the cooperation variable on teacher productivity is -0.206. As for the hypothesis test regarding the positive direct effect of cooperation on teacher productivity, with a p-value of 0.000 < 0.05, it can be concluded that cooperation has a positive direct effect on teacher productivity. Cooperation can increase teachers' work productivity; this can lead to greater teacher unity in the long term as they work together in groups to provide even better instruction (Utami et al., 2019). Collaboration, an indicator of cooperation, can improve teacher performance, which in turn can boost teacher productivity. One way to achieve this is through regular meetings to foster collaboration (Nargis Shamim & Munawer Sultana, 2023).

The path coefficient value of the work motivation variable on teacher productivity is 0.967. As for the hypothesis test of the positive direct effect of work motivation on teacher productivity, with a p-value of 0.000 < 0.05, it can be concluded that work motivation has a positive direct effect on teacher productivity. The results of the study indicate that teachers' work motivation (particularly intrinsic motivation) directly enhances teaching efficacy and job satisfaction, which are positively correlated with productivity (r = 0.45, p < 0.01) (Collie et al., 2012). High job motivation reduces burnout and increases teacher productivity by enhancing self-efficacy (β = 0.38, p < 0.05) (Skaalvik & Skaalvik, 2010).

The path coefficient for the creativity variable on teacher work productivity is 0.007. As for the hypothesis test regarding the positive direct effect of creativity on teacher work productivity, with a p-value of 0.542 > 0.05, it can be concluded that there is no such effect. Teacher creativity is not always directly related to work productivity, especially without adequate environmental support (Manguatosha et al., 2017). Although it lacks a direct impact, creativity remains a key component of teaching, contributing to an innovative school environment and potentially enhancing other aspects of teaching effectiveness. However, its impact on productivity is often indirect and mediated by factors such as leadership, engagement, and motivation, highlighting the need for a supportive environment to harness creativity (Yüner & Özdemir, 2020) effectively.

The path coefficient value of the growth mindset variable on work motivation is 0.554. As for the hypothesis test of the positive direct effect of growth mindset on work motivation, with a p-value of 0.000 < 0.05, it can be concluded that growth mindset has a positive direct effect on work motivation. The path coefficient value of the transformational leadership variable on work motivation is 0.407. As the p-value (0.000) is < 0.05, the hypothesis test indicates a positive direct effect of transformational leadership on work motivation. The path coefficient value of the transformational leadership variable on creativity is -0.463. As for the hypothesis test regarding the positive direct effect of transformational leadership on creativity, with a p-value of 0.148 > 0.05, the null hypothesis is not rejected. The path coefficient value of the cooperation variable on creativity is 0.404. As for the

hypothesis test of a positive direct effect of cooperation on creativity, with a p-value of 0.202 > 0.05, the null hypothesis is not rejected. A growth mindset has a positive direct effect on employee work motivation, with psychological capital as a mediator (Zakaria et al., 2021). A direct positive relationship between a growth mindset and work motivation via work engagement (Pitman et al., 2020). A growth mindset positively contributes to work motivation, particularly in the context of job search and vocational behaviour (Milot-Lapointe et al., 2018).

The path coefficient between growth mindset and teacher work productivity via motivation is 0.536. As for the hypothesis test of the indirect effect of growth mindset on teacher work productivity via work motivation, with a p-value of 0.000 < 0.05, it can be concluded that there is an indirect effect of growth mindset on teacher work productivity via work motivation. The path coefficient between transformational leadership and teacher work productivity via work motivation is 0.394. Regarding the hypothesis test for the indirect effect of transformational leadership on teacher work productivity through work motivation, with a p-value of 0.000 < 0.05, it can be concluded that there is an indirect effect of transformational leadership on teacher work productivity through work motivation. The path coefficient between transformational leadership and teacher work productivity through creativity is -0.003. As for the hypothesis test of the indirect effect of transformational leadership on teacher work productivity through creativity, with a value of 0.630 > 0.05, it can be concluded that there is no indirect effect of transformational leadership on teacher work productivity through creativity. The path coefficient value between cooperation and teacher work productivity through creativity is 0.003. As for the hypothesis test of the indirect effect of cooperation on teacher work productivity through creativity, with a value of 0.641 > 0.05, it can be concluded that there is no indirect effect of cooperation on teacher work productivity through creativity. A growth mindset is positively correlated with motivation, which in turn can enhance teacher work productivity (Nalipay et al., 2021). *A growth mindset encourages teachers to innovate and adapt, thereby contributing to their productivity and effectiveness in teaching students* (Lee et al., 2023).

CONCLUSION

The results of the study showed that six hypotheses related to direct effects were accepted, while three hypotheses were rejected. In the testing of indirect effects, two hypotheses were accepted and two others were rejected, indicating that not all mediating relationships were statistically significant. Furthermore, the SITOREM analysis was used to classify indicators within the research variables and determine priorities for improvement. The analysis identified eighteen indicators that need to be improved, while thirteen indicators should be maintained or further developed because they already demonstrate satisfactory conditions. These findings provide important practical implications for enhancing the work productivity of public special education teachers in Jakarta Province. Efforts to increase productivity can be carried out by strengthening several key factors, including the

development of a growth mindset, the implementation of transformational leadership practices, stronger cooperation among teachers and stakeholders, higher work motivation, and the encouragement of creativity in teaching and professional activities. These strategies are expected to support sustainable educational performance improvement.

REFERENCES

Aliazas, V. M., & Chua, PhD, E. (2021). Work Culture and Learning Organisation Practices in Promoting Work Productivity among Public Elementary School Teachers. *International Journal of Educational Management and Development Studies*, *2*(3), 39–60. https://doi.org/10.53378/348735

Ariani, D., Saputri, I. P., & Suhendar, I. A. (2020). Pengaruh Disiplin Kerja, Iklim Organisasi Dan Komitmen Organisasi Terhadap Produktivitas Kerja Guru. *Jurnal Ilmu Manajemen Terapan*, *1*(3), 268–279. https://doi.org/10.31933/jimt.v1i3.110

Collie, R. J., Shapka, J. D., & Perry, N. E. (2012). School climate and social–emotional learning: Predicting teacher stress, job satisfaction, and teaching efficacy. *Journal of Educational Psychology*, *104*(4), 1189–1204. https://doi.org/10.1037/a0029356

Dedy Yusuf Aditya, Setyaningsih, S., & Laihat, G. H. (2024). Optimising Teacher Work Productivity through Transformational Leadership, Organisational Climate, and Teamwork. *Jurnal Iqra' : Kajian Ilmu Pendidikan*, *9*(2), 220–241. https://doi.org/10.25217/ji.v9i2.5258

Dila, M., Ambarwati, A., & Wulansari, A. D. (2022). Determinasi Produktivitas Guru di SD Muhammadiyah Terpadu Ponorogo. *Journal of Islamic Education & Management*, *2*(1).

Farah Arrian, Agustiyawati, Alifia Rizki , Ranti Widiyanti, S. W., & Tulalessy, Christina, Fera Herawati, T. M. (2022). Pendidikan Inklusif. In *BADAN STANDAR, KURIKULUM, DAN ASESMEN PENDIDIKAN KEMENTERIAN PENDIDIKAN, KEBUDAYAAN, RISET, DAN TEKNOLOGI REPUBLIK INDONESIA*.

Gultom, M., Pianda, L. D., Manurung, T., Sinuraya, S., & Tambunan, Y. A. (2024). Pengamatan Cara Belajar Siswa di SLB C Karya Tulus. *JGEN : Jurnal Pengabdian Kepada Masyarakat*, *2*(2), 366–370. https://doi.org/10.60126/jgen.v2i2.494

Halimah, Ahmad Suriansyah, S. (2022). The Effect of Professional Competency and Communication on Work Productivity through Teacher Work Discipline. *International Journal of Social Science And Human Research*, *5*(9).

Hestianingtias, D., Ruhiat, Y., & Faturohman, N. (2022). Pengaruh Iklim Kerja dan Kepuasan Kerja terhadap Produktivitas Guru Sekolah Dasar. *Edukatif : Jurnal Ilmu Pendidikan*, *4*(3), 4048–4055. https://doi.org/10.31004/edukatif.v4i3.2753

Kamaruddin, I., Tannady, H., Al Haddar, G., Sembiring, D., & Qurtubi, A. (2023). The Effect of Direct Compensation and Work Motivation on Teacher Productivity at Private Senior High School in Jakarta. *Edunesia: Jurnal Ilmiah Pendidikan*, *4*(2), 472–482. https://doi.org/10.51276/edu.v4i2.380

Khoirul Huda, Oikurema Purwati, & Pratiwi Retnaningdyah. (2023). Implementation of the SIWI Learning Strategy to Encourage Deaf Students' Writing Skills At Extraordinary School (SLB) Lamongan. *International Journal Of Humanities Education and Social Sciences (IJHESS)*, *3*(1). https://doi.org/10.55227/ijhess.v3i1.600

Latersia, E., & Ginting, H. B. (2024). Pembelajaran SLB-C Di Sekolah Karya Tulus Medan. *Jurnal Pengabdian Masyarakat Bangsa*, *2*(9), 3932–3935. https://doi.org/10.59837/jpmba.v2i9.1590

Lee, S.-L., Chan, H.-S., Tong, Y.-Y., & Chiu, C.-Y. (2023). Growth mindset predicts teachers' life satisfaction when they are challenged to innovate their teaching. *Journal of Pacific Rim Psychology*, *17*. https://doi.org/10.1177/18344909231167533

Manguatosha, G. M., Shumba, A., & Taodzera. (2017). The Relationship Between Creativity and Productivity Among Teachers in Zimbabwe. *Journal of Education and Practice*, *8*(12), 1–8.

Milot-Lapointe, F., Savard, R., & Le Corff, Y. (2018). Intervention components and the working alliance as predictors of the effect of individual career counselling on career decision-making difficulties. *Journal of Vocational Behaviour*, *107*, 15–24. https://doi.org/10.1016/j.jvb.2018.03.001

Nalipay, Ma. J. N., King, R. B., Mordeno, I. G., Chai, C.-S., & Jong, M. S. (2021). Teachers with a growth mindset are motivated and engaged: the relationships among mindsets, motivation, and engagement in teaching. *Social Psychology of Education*, *24*(6), 1663–1684. https://doi.org/10.1007/s11218-021-09661-8

Nargis Shamim, & Munawer Sultana. (2023). Impact of Collaboration on Teachers' Professional Performance in Private Higher Education Institutions of Karachi. *Voyage Journal of Educational Studies*, *3*(4), 155–177. https://doi.org/10.58622/vjes.v3i4.100

Skaalvik, E. M., & Skaalvik, S. (2010). Teacher self-efficacy and teacher burnout: A study of relations. *Teaching and Teacher Education*, *26*(4), 1059–1069. https://doi.org/10.1016/j.tate.2009.11.001

Utami, P. P., Matin, M., & Sutjipto, S. (2019). Analysis of the Effect of Group Cohesiveness on Teacher Productivity in a State High School. *Proceedings of the First International Conference on Technology and Educational Science*. https://doi.org/10.4108/eai.21-11-2018.2282206

Walumbwa, F. O., & Hartnell, C. A. (2011). Understanding transformational leadership–employee performance links: The role of relational identification and self-efficacy. *Journal of Occupational and Organisational Psychology*, *84*(1), 153–172. https://doi.org/10.1348/096317910X485818

YÜNER, B., & ÖZDEMİR, M. (2020). Okul Yenilikçiliği ile Öğretmen Yaratıcılığı Arasındaki İlişkinin İncelenmesi. *Pamukkale University Journal of Education*, 1–18. https://doi.org/10.9779/pauefd.538207

Zakaria, W. N. A., Mohd Yunus, N., Yaacob, N. M., Omar, J., Wan Mohamed, W. M. I., Sirajudeen, K. N. S., & Tuan Ismail, T. S. (2021). Association between Vitamin D Receptor Polymorphisms (BsmI and FokI) and Glycemic Control among Patients with Type 2 Diabetes. *International Journal of Environmental Research and Public Health*, *18*(4), 1595. https://doi.org/10.3390/ijerph18041595