

Does Teacher Certification Promote Work Motivation and Teacher Performance? A Lesson from Indonesia

Bambang Suratman^{a*}, Siti Sri Wulandari^b, Jaka Nugraha^c, Bagus Shandy Narmaditya^d, ^{a,b,c}Faculty of Economics, Universitas Negeri Surabaya, Indonesia, ^dFaculty of Economics Business, Universitas Negeri Malang, Indonesia, Email: ^{a*}bambangsuratman@unesa.ac.id

Over the past decade, an increase in teacher performance covering various contexts may be noted. This study attempts to examine the role of teacher certification on teacher performance in Indonesia. In addition, this paper also provides work motivation and its impact on teacher performance. This study applied a quantitative research method using linear regression analysis. The research was conducted by observing the certified teachers at vocational high schools in East Java of Indonesia. The sample of this research was approximately 297 certified teachers at vocational high schools in East Java. In addition, the sample was determined using proportional random sampling. The data were gathered using questionnaires given to the respondents with five scales criteria. Furthermore, the data were analysed using linear regression analysis. The findings showed that teacher certification positively affects work motivation. Indeed, teacher certification also positively impacts teacher performance.

Key words: *Certification, work motivation, teacher performance, vocational high school.*

Introduction

Education is fast becoming a vital instrument in enhancing the quality of human life. Education allows people more bias to understand opportunities and challenges. Previous studies by Reza and Widodo (2013) suggest that education has a correlation with economic development of a nation. Therefore, the quality of education is a crucial term to be enhanced. The quality of education in schools is determined by teacher performance in the learning

process (Roth et al, 2000; Sato et al, 2014; Hildebrandt & Eom, 2011). Cantrell et al. (2008); Cavalluzzo et al. (2014) added that the educational component of human resources in particular has an important role in determining school achievement on educational purposes. Teacher performance is reflected by teacher quality in lesson planning and learning implementation. Meanwhile, the teacher quality is expressed from lesson planning, learning implementation and result evaluation (McMillan, 2016; Goldhaber & Brewer, 2000; Elfers & Plecki, 2014; Cowan & Goldhaber, 2015; Darling-Hammond, 2000). The teacher occupies a central position and is very strategic in the education system. Teachers are the dominant factor in relation to improving the quality of education. This is because the teacher is an inseparable part of the overall education system, which is directly involved in the teaching and learning process. For these matters, various programs need to be carried out to improve the quality of teacher performance in developing aspects of education and learning (Ardiana, 2017). Various attempts have been made to improve the quality of teachers, such as increasing teacher competence through training, procuring books and learning tools, and implementing teacher certification (Cowan & Goldhaber, 2016; Cavaluluzzo et al., 2015; Park et al., 2007). This program is expected to boost teachers' performance in the learning process (Bennel, 2004; Parker, 2003; Boyd et al., 2004).

However, based on the initial survey conducted in several vocational schools (SMK) in Indonesia, the quality of the learning process in the classroom is not optimal yet. Comparisons between certified and non-certified teachers show an indifferent result. This condition implies that, with regard to the implementation of teacher certification, which is conducted through competence tests, neither assessment of portfolio documents nor training certification is optimal in improving competence of teachers. Setyawati (2015) remarked that the issue should be noted regarding the professionalism of teacher and education staff.

On the other hand, work motivation has an important role for achieving maximum organisational goals. It is because with motivation, the teacher can complete the work in accordance with predetermined standards. In the learning and teaching process, the role of motivation both internal and external is highly needed. With a great work motivation, a teacher could develop their creativity and activity in the classroom that could lead to more exceptional achievement. Hamdani et al. (2018), stated that a motivational characteristic possessed by an individual, is namely, material incentives, non-material incentives, a combination of both material and non-material incentives. However, with the provision of a professional certificate accompanied by a professional allowance for teachers, it will increase work motivation of the teachers themselves. In relation to their ability and motivation to work, Arifin (2015) stated that performance has resulted between interaction ability and motivation.

Several previous studies of teacher performance have been proposed (Tehseen & Hadi, 2015; Kusumaningtyas & Setyawati, 2015; Chen, 2017; Abarro, 2018; Adriani et al., 2018). Tehseen and Hadi (2015), were concerned with the effects of intrinsic and extrinsic motivational factors to assess teacher's performance in Malaysia. Kusumaningtyas and Setyawati (2015), focused on the relationship between job satisfaction, teachers' competencies and teacher performance. Abarro (2018) highlighted that civil status, highest educational attainment, and local seminars attended and scholastic performance are factors affecting the performance of teachers in Philippines. Chen (2017) offered insight on the causality of principal leadership and teacher performance in Taiwan. Similarly, Adriani et al. (2018) have invited attention on transformational leadership and teacher performance in Indonesia. However, very little attention has been paid to the role of teacher certification and motivation. Therefore, this study attempts to examine the relationship between teacher certification, work motivation and teacher performance in vocational schools in Indonesia.

Method

This study applied a quantitative method using linear regression analysis. The research was conducted on the certified teachers of vocational high schools in East Java of Indonesia. The sample of this research was approximately 297 certified teachers of vocational high schools in East Java. In addition, the sample was determined using proportional random sampling. Data was collected using a questionnaire given to respondents with five scale criteria. In this study, the teacher certification was measured by ten indicators including 1) certification carried out with the aim to determine the feasibility of teachers in carrying out duties as learning agents and realising the objectives of national education; 2) certification carried out with the aim to improve the quality of education results; 3) The benefit of certification is to protect the teacher's profession from incompetent practices, which could damage the teacher's professional image; 4) the benefit of certification is protecting the public from unqualified educational practices which are unprofessional 5) the benefit of certification is improving the welfare of teachers; 6) the portfolio assessment is the right method for obtaining teacher certification; 7) portfolios in the certification process illustrate the knowledge, skills and qualifications of teachers to obtain a certificate of educators; 8) education and teacher professional training is the right method for obtaining teacher certification; 9) education and training professional teachers in certification can improve teacher knowledge about the professionalism of work; 10) education and professionally training teachers in certification can improve the experience of teachers in teaching.

Meanwhile, the motivation of work is proxied by ten indicators namely 1) teachers carry out duties and obligations as educators because they are motivated to achieve; 2) teachers strive to achieve by improving the quality of work and working professionally; 3) teachers carry out duties and obligations as educators because they are motivated to get awards or

recognition from superiors or from institutions; 4) teachers carry out duties and obligations as educators because they assume that the teacher's work is a challenge to be faced; 5) teachers carry out duties and obligations as educators because they assume that the work is a responsibility to be resolved; 6) teachers consider that the responsibilities of the work must be completed properly and with the maximum quality ; 7) teachers carry out duties and obligations as educators because they can develop their own potential; 8) teachers always take an improvement in the performance of the work so that self-potential can be developed maximally and positively over time; 9) teachers perform duties and obligations as educators because they are motivated to be involved or participate in school decisions; 10) teachers perform duties and obligations as educators because they are motivated to achieve a more advanced opportunity in a career.

Lastly, the teacher's performance is measured by ten indicators covering 1) at the time of teaching the teacher explains what students must accomplish after the process of learning to teach is performed; 2) after the process of learning to teach in class, the teacher explains its relation to the daily life of students; 3) teachers explain what skills and knowledge students must master after learning to teach; 4) teachers explain in detail about the terms that are difficult to understand; 5) teachers provide examples of lesson subjects with easy-to-understand examples; 6) teachers explain the subjects in the learning according to the order of the books; 7) teachers are always on time and the subject is always completed before learning time expires; 8) at the time of teaching in the classroom, the teacher carries the *RPP* (Lesson Plan); 9) in addition to opening the textbook, the teacher also opens the Learning Plan of implementation at the time of explaining the points of discussion; 10) the teacher uses media at the time of explaining the subject that requires the media. Subsequently, data was analysed using a linear regression analysis.

Results and Discussion

Table 1 provides information about the model summary to show the coefficient determination between variables. In general, both models have coefficient determination under 15 percent, which is shown by the value of R-square. In more detail, Model 1 shows a coefficient determination of about 13.9 percent. It implies that the teacher certification variable explained work motivation for about 13.9 percent. However, approximately 86 percent is explained by other variables that are not included in this model. On the other hand, for the second model, the value of R-Square is about 10 percent. It means that the teacher certification variable is explained by teacher performance at 10.0 percent, then the remaining of 90.0 percent is explained by other variables that are not included in this model.

Table 1: Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.373 ^a	.139	.136	.4352
2	.317 ^a	.100	.097	.3632

Model 1: a. Predictor: (Constant), X; b. Dependent Variable: Y₁

Model 2: a. Predictor: (Constant), X; b. Dependent Variable: Y₂

Table 2: Anova Test Result

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	9.028	1	9.028	47.673	.000 ^a
	Residual	55.863	295	.189		
	Total	64.891	296			
2	Regression	4.333	1	4.333	32.854	.000 ^a
	Residual	38.906	295	.132		
	Total	43.239	296			

Model 1 a. Predictors: (Constant), X; b. Dependent Variable: Y₁

Model 1 a. Predictors: (Constant), X; b. Dependent Variable: Y₂

Table 2 informs about the result of the Anova test for both models. The Anova test is intended to determine whether there are any statistically significant results between variables by comparing the significance level to the alpha (5 percent). From the table, it is known that both variables have a significance level of 0.000. It implies that teacher certification has an impact on both work motivation and teacher performance.

Table 3 explains the coefficient level for both models. From the table, it can be drawn that teacher certification may result in a change in work motivation level at 2.019 of 0.514 in constant and vice versa. On the other hand, in the second model, the level of unstandardised coefficient B is about 0.356. It implies that the implementation of teacher certification may result in a changed teacher performance level at 2.584 of 0.356 in constant.

Table 3: Coefficients^a

Model		Unstandardised Coefficients		Standardised Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	2.019	.308		6.551	.000
	X	.514	.074	.373	6.905	.000
2	(Constant)	2.584	.257		10.046	.000
	X	.356	.062	.317	5.732	.000

Model 1 a. Dependent Variable: Y_1

Model 2 a. Dependent Variable: Y_2

The Impact of Teacher Certification on Work Performance

Teacher certification is intended for teachers who have academic qualifications, competencies, educator certificates, who are healthy physically and spiritually, and can realise the goals of National education in Indonesia. Teacher certification aims to improve the teacher's performance by giving one basic salary, hence teachers will be more focused on the learning process, both inside and outside the classroom, rather than thinking of additional income outside the teacher's profession. This can be seen from the teacher's performance, that will increase, including participation in scientific forums, following education and training, improving academic qualifications, improving work for professional development, and being able to increase academic performance .

Work motivation refers to the psychological processes that influence individual behaviour with respect to the attainment of workplace goals and tasks. However, measuring the determinants and consequences of work motivation is complex, because of psychological reviews. These processes are not directly observable (Bennel, 2004; Park, 2003). Certification of the teaching profession that has been done indirectly provides teacher behaviour change in their duties. Motivation will be able to encourage people to achieve organisational goals and will be a factor that affects an individual's competence to realise the goals of the organisation. Cavalluzzo (2014) stated that certified teachers who taught students had an impact on student achievement. Teacher certification has a strong relationship to increased student achievement in learning (Heck, 2007). A highly qualified teacher with competence and skills in the field finds it easier to complete daily tasks and improve performance. The effective and efficient learning process will be carried out well when a teacher teaches according to their field. The ability of the students to understand the concepts described will be easier and will positively affect their learning achievements.

The Influence of Teacher Certification on Teacher Performance

The professionalism of teachers needs to be developed at the Indonesian Institute of Education. The development process can be initiated from teaching and learning activities in classrooms and educational activities in teachers' organisations. Teachers who pass certification tests are able to perform roles in educating, teaching, training, guiding and assessing students' learning outcomes, which will affect the students' academic achievements by increasing the quality of their results. Another thing to note is that a teacher must pursue creativity in terms of technology and non-technology. The certification of teachers is also able to strengthen the socialisation of teachers, because there is a professional benefit; they can share with peers so that fraternities become closer.

Teacher certification influences professionalism and teacher performance, and then the students' learning outcomes are achieved (Cavalluzzo, 2014; Cowan & Goldhaber, 2015). Teacher certification is a signal about the quality and performance of teachers (Goldhaber & Anthony, 2004; Cowan & Goldhaber, 2016). In addition, professional certification is able to assist the development of professionalism through increasing the reflection in teaching practices, raising the professional scientific community, enhancing the performance standards of learning, and facilitating a collaboration (Park et al., 2007). The results of this study show that there is a reasonable perception by teachers in SMK with the office administration teacher professional certification program in Indonesia. This means, the higher the teacher perception regarding professional teacher's certification, then teacher performance will be increased, because once certified educators, teachers will continue to build teacher reputations in work, improve their quality, and be an excellent example for students and the surrounding community.

Education agencies that have certified teachers will be able to improve the quality of education. Activation, skills and student learning achievement are increasing as teachers are more motivated to use a variety of models and learning methods in carrying out daily teacher functions and task activities. The certification of teachers can improve the competence of professionals in teaching, ranging from mastery of teaching materials, implementation of learning plans and the utilisation of educational media.

Conclusion

Based on the results of this study, it can be concluded that first, there is a significant effect between teacher certification and work motivation. In addition, teacher certification also positively affects teacher performance in the vocational schools in Indonesia. These findings indicate that the implementation of teacher certification becomes an important aspect in supporting improvement of the quality of learning and education. It is necessary to highly



motivate teachers and be able to assist teachers in the fulfillment of qualification and competence standards that have been determined. The implementation of the certification will improve teacher performance through increasing pedagogical competence, personal competence, social competence and professional competence.

REFERENCES

- Abarro, J. O. (2018). Factors Affecting the Performance of Public School Teachers in the Division of Antipolo City, Philippines. *International Research Journal of Engineering and Technology*, 5(11), 1284-1290.
- Andriani, S., Kesumawati, N., & Kristiawan, M. (2018). The Influence of The Transformational Leadership And Work Motivation On Teachers Performance. *International Journal of Scientific & Technology Research*, 7(7).
- Ardiana, T. E. (2017). Pengaruh Motivasi Kerja Guru terhadap Kinerja Guru Akuntansi SMK di Kota Madiun. *Jurnal Akuntansi dan Pajak*, 17(2), 14-23.
- Arifin, H. M. (2015). The Influence of Competence, Motivation, and Organisational Culture to High School Teacher Job Satisfaction and Performance. *International Education Studies*, 8(1), 38-45.
- Bennell, P. (2004). Teacher motivation and incentives in sub-Saharan Africa and Asia. *Knowledge and Skills for Development*, Brighton.
- Boyd, D., Goldhaber, D., Lankford, H., & Wyckoff, J. (2007). The Effect of Certification and Preparation on Teacher Quality. *The Future of children*, 17(1), 45-68.
- Cantrell, S., Fullerton, J., Kane, T. J., & Staiger, D. O. (2008). *National board certification and teacher effectiveness: Evidence from a random assignment experiment* (No. w14608). National Bureau of Economic Research.
- Cavalluzzo, L., Barrow, L., & Henderson, S. (2014). National Board Certification as Professional Development: An Empirical Study of the National Board for Professional Teaching Standards Process, Final Report. CNA Corporation.
- Cavalluzzo, L., Barrow, L., Mokher, C., Geraghty, T., & Sartain, L. (2015). From Large Urban to Small Rural Schools: An Empirical Study of National Board Certification and Teaching Effectiveness. *CNA Analysis and Solutions*, 89(1), 134-150.
- Chen, Y. G. (2017). Exploring differences from principals' leaderships and teachers' teaching performances in public and private schools. *The Journal of International Management Studies*, 12(2), 65-85.
- Cowan, J., & Goldhaber, D. (2015). Do bonuses Affect teacher staffing and student achievement in high-poverty schools? Evidence from an Incentive for National Board Certified Teachers in Washington State. Center for Education Data & Research.
- Cowan, J., & Goldhaber, D. (2016). National Board Certification and Teacher Effectiveness: Evidence from Washington State. *Journal of Research on Educational Effectiveness*, 9(3), 233-258.
- Darling-Hammond, L. (2000). Teacher Quality and Student Achievement. *Education Policy Analysis Archives*, 8(1), 1-44.
- Elfers, A. M., & Plecki, M. L. (2014). Results of A State Incentive Program on the Supply and Distribution of National Board Certified Teachers. *Leadership and Policy in Schools*, 13(2), 147-168.

- Goldhaber, D. D., & Brewer, D. J. (2000). Does the Teacher Certification Matter? High school Teacher Certification Status and Student achievement. *Educational Evaluation and Policy Analysis*, 22(2), 129-145.
- Hamdani, H., Kesumawati, N., & Kristiawan, M. (2018). The Influence of Teachers' Work Motivation And Principals' Managerial Competence on Teachers' Performance. *Sriwijaya University Learning and Education International Conference*, 3(1), 674-681.
- Heck, R. H. (2007). Examining the relationship between teacher quality as an organizational property of schools and students' achievement and growth rates. *Educational administration quarterly*, 43(4), 399-432.
- Hildebrandt, S. A., & Eom, M. (2011). Teacher professionalization: Motivational factors and the influence of age. *Teaching and Teacher Education*, 27(2), 416-423.
- Kusumaningtyas, A., & Setyawati, E. (2015). Teacher Performance of the State Vocational High School Teachers in Surabaya. *International Journal of Evaluation and Research in Education*, 4(2), 76-83.
- McMillan, J. H. (2016). National board certified teachers' perspectives on using measures of student learning for teacher evaluation. *The Educational Forum*, 80(1), 48-60.
- Park, S., Oliver, J. S., Johnson, T. S., Graham, P., & Oppong, N. K. (2007). Colleagues' Roles in the Professional Development of Teachers: Results from A Research Study of the National Board Certification. *Teaching and Teacher Education*, 23(4), 368-389.
- Parker, A. (2003). Motivation and incentives for distance faculty. *Online journal of distance learning administration*, 6(3), 1-6.
- Reza, F., & Widodo, T. (2013). The Impact of education on economic growth in Indonesia. *Journal of Indonesian Economy and Business*, 28(1), 23-44.
- Roth, D., & Swail, W. S. (2000). Certification and Teacher Preparation in the United States.
- Sato, M., Hyler, M. E., & Monte-Sano, C. B. (2014). Learning to Lead with Purpose: National Board Certification and Teacher Leadership Development. *International Journal of Teacher Leadership*, 5(1), 1-23.
- Tehseen, S., & Hadi, N. U. (2015). Factors influencing teachers' performance and retention. *Mediterranean Journal of Social Sciences*, 6(1), 233.