

Analysis of the Effect of Group Cohesiveness on Teacher Productivity in a State High School

Purwani Puji Utami¹, Matin², Sutjipto³
{purwanipuji_mp15s3@mahasiswa.unj.ac.id¹, matin.unj@gmail.com²,
sutjipto1745@gmail.com³}

Universitas Negeri Jakarta, Indonesia¹²³

Abstract. The aim of this study was to analyze the influence of group cohesiveness on teacher productivity in state senior high schools. The research design used was path analysis with quantitative approaches and survey methods to test the hypothesis. The data collection method was a questionnaire given to a sample of 198 civil servant teachers out of 394. The sample was selected using the Slovin formula and taken in a simple random sampling by drawing. Based on the results of the study obtained, there is a positive direct effect of group cohesiveness on teachers' productivity in a state senior high school. The indicator of the group cohesiveness that has the most influence in increasing teacher's productivity is togetherness for a long time.

Keywords: Group Cohesiveness, Productivity, and Teachers.

1 Introduction

Education is the process of training and developing knowledge, skills, thoughts and characters through in/formal education. The teacher occupies a strategic position in knowing the goals of national education as they are directly engaged with students in the classroom, hence serving as a key determinant in the success of pupils acquiring knowledge and furthering their studies. Teachers are always required to set productive work in the learning process, as the most important factor among other factors in the organization that serves to plan, implement, and control every activity to achieve school goals. Until now, research about productivity in the education field is minimal due to it having a direct correlation to wealth acquisition. A number of journals do discuss this topic however, including one by Shamaki, E. B. who examines work productivity in Nigeria using a questionnaire on 165 teachers, with the aim of identifying the best leadership style that encourages teachers to work efficiently. It was found that among a myriad of leadership varieties, democratic styles contributed more to teacher productivity than autocratic ones. Based on this conclusion, it was emphasised that democratic leadership practices should be implemented by principals in school administration, and teachers must regularly attend workshops and seminars to stay up to date. It is important to note that this study only looked at teachers' productivity through the influence of the principal's leadership style[1].

Likewise, Mirela suggests that using leadership styles correctly can affect satisfaction, commitment, and productivity[2]. On the other hand, Karim conducted a study suggesting job satisfaction has a significant influence on several school organization variables including productivity[3]. Annierah Maulana Usopin agrees, her research on job satisfaction of the Cotabato City Division teachers indicates that a teacher who is satisfied with their job will work

productively[4]. Research by George pagekos and Dimitrios Bousinakis found that productivity is strongly influenced by two factors: stress and satisfaction[5]. The findings of both Amaka S. Obineli and Arshad Ali, demonstrate that staff promotion helps increase employee morale, which becomes a source of motivation and in turn boosts productivity levels.[6];[7]. In Shahzad's research, it was concluded that a healthy school culture had a strong influence on improving student achievement and teacher productivity[8], while according to Rebecca, the work environment or working conditions can directly affect productivity and work efficiency[9]. Differing from the previous findings, Meindinyo recommends regular workshop training for teachers in an effort to motivate, and therefore increase productivity[10].

Teacher productivity is defined as a comparative measurement of performance between the results achieved with the overall resources used. In today's reality, many teachers are not considered productive, relying too heavily on student worksheets and textbooks and lacking the skills in making efficient teaching aids. There is also a lack of experience and fundamental training, teachers are reluctant to develop scientific intellectuality in order to have the ability to create scientific papers needed to further their career paths, and therefore become stuck in their positions (class IIIB) rather than progressing. This was confirmed by the statement of the Bekasi City Education Office[11]. The lack of productive teachers, is caused by (among others) teachers no longer making the effort to learn[12]. On another occasion, the Chairperson of the teacher association of the Republic of Indonesia (TARI) stated that the ability of teachers writing scientific papers in general was still weak[13]. The quality of teachers to date remains an important issue, because the existence of teachers at various levels is considered far from standardized productivity. In fact, according to the Head of the Bekasi Education Service, some teachers do not teach according to their scientific field competencies[14]. In response to this statement, chairman of the Teacher Association of the Republic of Indonesia, Najela Shihab, states that the initiator of the teacher community learning to address the chronic diseases of Indonesian education is not suggesting the poor quality of teachers, but the cessation of teacher learning[15].

Confirmed by Mohd Zainal Munshid Bin Harun and Rosli Bin Mahmood in his journal, group cohesiveness measures the extent to which the workgroup is closely knit and works together as a cohesive unit[16];[17]. Teacher productivity must be a concern because it can affect the achievement of overall school organization goals. The productivity of teachers in schools is largely dependent on the cohesiveness of groups whose members support each other in achieving organizational goals. Productivity is defined as the output produced by a person or unit of people, and is generally associated with business, however, based on several previous research journals, it turns out that productivity can be applied to the world of education. Results gathered from previous studies suggest that factors that influence productivity in the education system vary, the most common being leadership style, staff empowerment, job satisfaction, stress (or lack thereof), promotion, work motivation, school culture, and working conditions. Previous studies produced different factors that influence teacher productivity according to different researchers, so that the research gap emerged. In contrast, what was wanted to be explored in this study was the influence of group cohesiveness on teacher productivity in terms of the writing produced. This was inspired by the rise in low scientific writing by teachers in the ministry of education compared to the increased quality assessment of the implementation of teacher productivity standards from year to year, which raises the gap phenomenon.

Based on the description above, there is an opportunity (gap) to conduct research on teacher efficiency in State High Schools. The output factor used in this study is group cohesiveness towards the productivity of state high school teachers developed from previous research. So, Novelty in this study is the influence of group cohesiveness on teacher productivity.

Conclusions can be drawn to better understand the level of closeness of group cohesiveness, which in turn can be applied to create an increase in teacher productivity. Based on this, this study is aimed at testing and analyzing the influence of group cohesiveness on teacher productivity, with the research sample being state high school teachers.

Productivity is a very expected factor in work because it directly contributes to the achievement of organizational goals. Conceptually, the notion of productivity is defined by Mejia, Balkin, and Cardy as a measurement of how much value added employees have on goods or services produced by the organization. The keyword of this definition is 'value-added', meaning high productivity performance indicates a higher level of value added to a business/organisation. Added value, in this case, is related to goods, services, or jobs produced by someone[18];[19]. Based on the above, productivity is the work of employees who contribute positively to organizational goals: it can be measured by indicators of work efficiency, quality, and effectiveness. The indicators are: a) added value for carrying out tasks; b) work effectiveness; c) work efficiency; d) quality of work; and e) achievement of organizational goals.

Many experts such as Schermerhorn define group cohesiveness as the level at which each member will be attracted to each other and motivated to remain part of the group[20];[21]. From several concepts, it can be surmised that group cohesiveness is the closeness of the bond between members that gives positive value in the work done together so as to produce better work in accordance with the group's goals. The indicators are a) interested in a group; b) participate in achieving common goals, and c) togetherness for a long time.

A study on productivity conducted by Fred C. Lunenburg and Melody R. Lunenburg concluded that group cohesiveness can affect productivity through the norms associated with a group performance[22]. Stephen P. Robbins and Timothy A. Judge said that group cohesiveness affects productivity[23]. Luthans provides the theory that the more close a group of people are with each other, the higher the levels of productivity[24]. Kimberley L. Gammage Albert V. Carron and Paul A. Estabrooks state that, cohesiveness and norms for productivity are significantly positively related. This means that the stronger the bond of a group, the higher labor productivity will be[25]. From this description, it is assumed that there is a positive influence between group cohesiveness and productivity.

From the stated information, it can be suggested that many factors influence the productivity of teachers, including but not limited to, group cohesiveness (job satisfaction), job satisfaction and absenteeism: this study has been conducted to further investigate that. The subjects of this study is limited to only a sample of civil servant teachers in State High Schools in Bekasi City.

2 Methodology

This study uses a survey method with a quantitative approach, the research design used is the path analysis method, which analyzes the effect of one variable on the others. Endogenous variables are productivity (Y) and exogenous variables are group cohesiveness (X1). The target population is the civil servant teachers of state High School of Bekasi City, with 646 teachers from 22 different State High Schools of Bekasi City. Affordable population with 394 teachers. Research sample size using the Slovin formula obtained 198 teachers. The Research datasets can be accessed in <https://osf.io/q9sXu/> [26].

3 Results and discussion

Based on the results of the Liliefors statistical calculation, it is evidenced that the normality for the estimation error Y on X_1 is obtained by L_{count} at 0.0409. Liliefors L_{table} critical value for $n = 198$ at $\alpha = 0.05$ is 0.0630. From these results, it is known that $L_{count} \leq L_{table}$, so it can be concluded that the error distribution of productivity (Y) estimates for group cohesiveness (X_1) comes from populations that have a normal distribution. From the calculation data for the preparation of the regression equation model between productivity and group cohesiveness obtained, regression constants $a = 56,028$ and regression coefficients $b = 0,539$, thus the relationship of the simple regression equation model is $\hat{Y} = 56,028 + 0,539 X_1$. Before the regression equation model is analyzed further and used in drawing conclusions, first test the significance and linearity of the regression equation. The results of the significance and linearity test calculations are arranged in the following ANOVA table.

Table 1. ANOVA to Test the Significance and Linearity of Regression Equations

$$\hat{Y} = 56,028 + 0,539 X_1$$

Source of Variants	DF	NS	AS	F _{count}	F _{table}	
					$\alpha = 0,05$	$\alpha = 0,01$
Total	198	9360				
Regression a	1	3393425,46				
Regression b/a	1	2994,31	2994,31	51,85	3,89	6,77
Residue	196	11319,23	57,75			
Tuna						
Suitable	28	1958,85	69,959	1,256	1,54	1,84
Error	168	9360,38	55,717			

Description:

- ** : Very significant regression ($51,85 > 6,77$ on $\alpha = 0,01$)
- ns : Regression is linier ($1,256 < 1,54$ on $\alpha = 0,05$)
- df : Degree of freedom
- NS : Number of Squares

The regression equation is $\hat{Y} = 56,028 + 0,539 X_1$, for the significance test obtained F_{count} 51.85 greater than F_{table} (0.01; 1: 196) 6.77 at $\alpha = 0.01$. Because $F_{count} > F_{table}$, the regression equation is stated to be very significant. For the linearity test obtained F_{count} of 1.256 smaller than F_{table} (0.05; 28: 168) of 1.54 at $\alpha = 0.05$. Because of $F_{count} < F_{table}$, the distribution of estimated points forms an acceptable linear line. The discussion of analysis and testing of research hypotheses is described as follows: from the results of testing the first hypothesis, it can be concluded that there is a direct effect of group cohesiveness on productivity with a correlation coefficient of 0.457 and a path coefficient of 0.255. This gives the meaning of group cohesiveness positive influence on productivity. The results of this study are in line with the opinions of Slocum and Hellriegel, who revealed performance and productivity can be influenced by group coherence[27]. Group cohesiveness and productivity are often associated,

especially for teams that have high-performance goals. The relevant theory and research also support the notion that the stronger the bonds and cohesiveness of the group, the higher the labor output would be. Based on the description above it is clear that group cohesiveness has a positive direct effect on productivity.

4 Conclusion

Based on the results of the research data and analysis that has been discussed, with all data analysis requirements including linearity test and regression significance fulfilled, it can be concluded that there is a direct positive effect of group cohesiveness on productivity. Based on the results of the study, Novelty deduced that the most influential way to increase teacher productivity of state high school in the city of Bekasi is creating a sense of cohesion over a long period of time. This is consistent with Chuck's opinion, that group cohesiveness affects job satisfaction and productivity[28]. The implications of these results will be directed at efforts to increase group cohesiveness, with principals creating an atmosphere in which each school member, especially teachers, respect each other's competencies, agree on common goals and work on assignments interdependently to maximise productivity.

References

- [1] Influence of Leadership Style on Teacher's Job Productivity in Public Secondary Schools in Taraba State, Nigeria, vol. 6, no. 10, page. 200–204, (2015).
- [2] M. Karabina, : The impact of leadership style to the teachers' job satisfaction, page. 80–94, (2016).
- [3] K. A. Chehrazi dan R. Shafizadeh.: The Relationship of Empowerment and Job Satisfaction with Productivity of Employees of Education System in Ahwaz, *Int. J. Learn. Dev.*, vol. 6, no. 1, page. 11–24, (2016).
- [4] A. M. Usop.: Work Performance and Job Satisfaction among Teachers, vol. 3, no. 5, page. 245–252, 2013.
- [5] G. pagekos dan D. Bousinakis.: The effect of stress and satisfaction on productivity, *Int. J. Product. Perform. Manag.*, vol. 59, no. 5, page. 415–431, 2010.
- [6] A. State, R. Sr, A. S. Obineli, dan D. Ph.: Teachers' Perception of the Factors Affecting Job Satisfaction in Ekwusigo Local Government of," vol. 7, no. 31, page. 225–237, 2013.
- [7] A. A. Bhat, "Job Satisfaction among High School Teachers," vol. 6, no. 1, 2018.
- [8] S. Khurram, K. Alwi, M. Bin Rauf, dan K. Haider.: Teachers ' Job Satisfaction and the Role of Principles for Effective Educational System in Secondary Schools of Karachi , Pakistan, vol. 3, no. 2, page. 1–5, 2015.
- [9] R. I. Umaru dan D. A. Ombugus.: Determinants of Job Satisfaction of Colleges of Education Lecturers : A Study of Nasarawa State College of Education , Akwanga, vol. 2, no. 1, page. 8–13, 2017.
- [10] M. R. O K dan I. N.: Influence Of Motivation On Teachers Performance In A Local Government Area In Nigeria, *IOSR J. Humanit. Soc. Sci.*, vol. 22, no. 5, page. 22–28, 2017.
- [11] R. Bekasi.: Kota Bekasi Kekurangan Guru Produktif .
- [12] Kompas.com.: PGRI: Banyak Guru Yang Malas Kembangkan Diri .
- [13] Kompas.com.: Lemahnya Kemampuan Guru Menulis Karya Ilmiah .
- [14] A. J. Barat.: Sebagian Guru Di Bekasi Mengajar Tidak Sesuai Kompetensi.
- [15] Kabar24.com.: Buruknya Kualitas Pendidikan Karena Guru Berhenti Untuk Belajar .
- [16] M. Zainal Munshid Bin Harun dan R. Bin Mahmood.: The Relationship between Group Cohesiveness and Performance: An Empirical Study of Cooperatives Movement in Malaysia, *Int. J. Coop. Stud.*, vol. 1, no. 1, page. 15–20, 2012.

- [17] H. R. Abid.: The impact of servant leadership on organizational citizenship behaviors with the mediating role of trust and moderating role of group cohesiveness A Study of public Sector of Pakistan, vol. 5, no. 3, page. 234–242, 2015.
- [18] R. C. Luis R. Gomez-Mejia, David B. Balkin, *Managing Human Resources*. 2012.
- [19] R. and Coulter.: *Management*, Eleventh E. England: Pearson Education Inc., 2012.
- [20] J. R. J. Schermerhorn, J. G. Hunt, R. N. Osborn, dan M. Uhl-Blen.: *Organizational Behavior*, page. 678, 2010.
- [21] G. R. J. Jennifer M. George.: *Understanding and Managing Organizational Behavior*. New Jersey: Prentice pagel, 2012.
- [22] F. C. Lunenburg dan M. R. Lunenburg.: *Developing High Performance Teams : Long-Standing Principles That Work*, vol. 3, no. 1, page. 1–17, 2015.
- [23] S. P. Robbins dan T. A. Judge.: *Organizational Behavior*, page. 739, 2017.
- [24] Fred Lutans, *Organizational Behavior*. New York: McGraw-Hill Companies, Inc, 2011.
- [25] P. Estabrooks dan A. V Carron.: *Team Cohesion and Individual Productivity : The Influence of the Norm for Productivity and the Identifiability of The Influence of the Norm for*, no. April, 2015.
- [26] J.P. P. Utami.: *The Datasets Analysis Of The Effect Of Group Cohesiveness On Teacher Productivity Of State High School, 05-Jan-2019. [Online]. Available: osf.io/q9sxu*, 2019.
- [27] D. Hellriegel dan J. W. Slocum.: *[BOOK] Organizational Behavior*. 2011.
- [28] C. William, *Management*. New York: South-Western Cengage Learning, 2009.