IMPROVEMENT OF TEACHER WORK PRODUCTIVITY THROUGH STRENGTHENING COMMITMENT TO PROFESSIONALISM AND SUPERVISION OF SCHOOL PRINCIPALS USING CORRELATIONAL STATISTICAL ANALYSIS AND SITOREM METHODS

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Abstract. Teacher work productivity can affect the progress of the quality of learning in schools. From the initial survey, it is seen that the work productivity of teachers, especially private junior high school teachers, has not been as expected, meaning "das sein" has not been like "das sollen". Therefore, the teacher's work productivity is interesting to be studied. The research aims to find an effort to increase teacher work productivity by examining the relationship between other variables with teacher work productivity. The other variables are commitment to the profession and supervision of the principal. This research was conducted using the correlational statistical method to find out whether commitment to the profession and supervision of the principal has a positive relationship with teacher work productivity. Based on these results, an analysis was then performed using the Sitorem Method to establish recommendations and find a priority order for improvement of the indicators of the research variables needed. The study was conducted on private junior high school teachers in Klapanunggal District, Bogor Regency with a population of 134 teachers, with a proportional random sample of 100 teachers. The results showed that there was a positive relationship between commitment to the profession with teacher work productivity with a correlation coefficient of 0.512, there was a positive relationship between the supervision of principals with teacher work productivity with a correlation coefficient of 0.464, and there was a positive relationship between commitment to the profession and supervision of principals as together with teacher work productivity with a correlation coefficient of 0.676. This shows that teacher work productivity can be increased through strengthening commitment to the profession and supervision of the principal. The results of Sitorem's analysis show that strengthening commitment to the profession and supervision of school principals can be done by improving indicators that are still weak and maintaining good indicators. Indicators that are still weak and require improvement in the order of priority handling are as follows: 1. Professional development efforts, 2. Services to students, 3. Guidelines for student success, 4. Responsibility, 5. Love of the profession, 6. Provision of feedback from results supervision, 7. follow up supervision, 8. Continuity of supervision, 9. Provision of assistance and guidance, 10. Interaction in supervision, 11. Speed of completing work, 12. Personal development, 13. Positive contribution to the environment, 14. Targets to be achieved, and 15. Relationships with fellow teachers. Whereas the 3 indicators that are in good condition and remain to be maintained are: 1. Obedience to the rules, 2. Quality of work, and 3. Compliance with work.

Keywords: commitment to the profession; supervision of school principals; teacher work productivity; sitorem analysis.

I. INTRODUCTION

Teacher work productivity can affect the progress of the quality of learning in his school and can increase knowledge related to factors that influence the increase in teacher work productivity, both internal and external factors. Internal factors are mental attitude in the form of responsibility, motivation, commitment, emotions, work ethics and aesthetics, skills, self-actualization, talent, health level, and work discipline. External factors are the principal's leadership, principal's supervision, management, welfare, career development, education, values, technology, work environment response, facilities and infrastructure.

Based on a preliminary survey by distributing questionnaires to 30 private junior secondary school teachers in Klapanunggal District on 25-27 March 2019, data was obtained that there were 64% of teachers whose work productivity was still low in terms of the targets achieved, there were 60% of teachers whose work productivity was

still low in terms of the quality of work results, there are 52% of teachers whose work productivity is still low in terms of positive contributions to the environment, there are 55% of teachers whose work productivity is still low in terms of work compliance, there are 65% of teachers whose work productivity is still low in terms of speed of completion employment, there are 58% of teachers whose work productivity is still low in terms of relationships with fellow teachers, there are 60% of teachers whose work productivity is still low in terms of self-development.

Teacher work productivity can be influenced by several factors, such as the supervision of the principal as a coach to improve the learning process, organizational culture, commitment to the profession, teacher work discipline, work innovation, and pedagogical competence. Observing these factors, it is necessary to conduct research on the source of the problem, namely how these factors relate to teacher work productivity, specifically between commitment to the





profession and supervision of the principal with teacher work productivity.

Based on the above background, this study aims to find ways to improve teacher productivity through research into the strength of the relationship between commitment to the profession and supervision of the principal and teacher work productivity.

Edy Sutrisno [1] states that productivity is a measure of productive efficiency, which is a comparison between output and input. Input is often limited by labor and output is measured in physical unity, form, and value.

Robbins and Judge [2] write that Productivity is the transforming input into output at the lowest cost. That is, productivity is the input that is transformed into output with the lowest cost. Also revealed are the factors that affect productivity, namely the level of goal achievement (met the demand), the amount of output generated, teamwork, human resources, organizational factors, and costs used.

According to Dedi [3] worker productivity is the effect of the overall increase in expertise and morale, innovation, internal processes, and customer satisfaction on results. It was also stated that the factors that showed indications of productivity were the increase in results achieved, customer satisfaction, quality of results, expertise used, employee morale, employee innovation in their work, and internal processes.

Timpe [4] explains the characteristics of productive people are intelligent, able to learn quickly, competently professionally, and always deepen their field of work knowledge, creative innovative, understanding the job, learning smart, using logic, organizing work efficiently, always looking for improvement and know when to stop to perfect, have a satisfying record of achievement, always improve themselves, and are considered valuable by supervisors.

Based on the above theoretical study, it can be synthesized that teacher work productivity is a balance between input and output as the work done by the teacher which can be measured based on indicators of work compliance, speed of completing work, relationships with fellow teachers, self-development, targets to be achieved, work quality, positive contribution to the environment.

According to Newstorm [5] Commitment is the degree to which employess bonds with the organization and exhibit acts of organizational citizenship. Commitment is defined as the degree of employee engagement with the organization and this involvement is demonstrated by carrying out the activities carried out for the organization.

Spector in Devi Setiawati & Anita Zulkaida [6] wrote that in general, work commitment involves an individual's attachment to his work. Professional commitment based on an understanding of behavior, attitudes, and professional orientation in carrying out their duties, is a reflection of the norms, rules and codes of ethics of the profession. The level of desire to maintain a professional attitude can vary from one job to another depending on the perception of each individual. That is why in professional associations it is emphasized that there is the highest professional

commitment that is realized by having quality performance as a guarantee of success in the implementation of the work at hand.

Porter in Frad et al [7] states that someone who has a professional commitment in this theory should have goals and values according to his career, take seriously every effort to improve his career, and maintain a continuous relationship at work. Commitment means the promise to do something seriously. This promise does not need to be written or said in front of certain people or parties with an interest in the implementation of the promise, but is said in the heart, fixed in the mind, and proven through deeds. Teachers who are committed to their profession promise themselves that they will carry out educational functions and tasks by seriously conducting successful educational actions. The promise is focused on the realization of the learning process for students.

According to Prayitno [8] professional commitment is the level of individual loyalty to his profession as perceived by the individual. Trisnaningsih [9] said that professional commitment is basically a perception of core loyalty, determination and expectations, guided by a system of values or norms that will direct the person to act or work according to certain procedures in an effort to carry out their duties with high levels of success.

Aranya, Kushnir, and Valency in Lee, Carswel and Smith [10] define professional commitment as a love that is formed by an individual in his profession, including something that is trusted, something that is accepted, the goals and values of a profession.

Based on the theoretical description above, it can be concluded that commitment to the profession is the attachment held by the teacher to values, the goals of his profession which are indicated by his loyalty to the profession, his readiness to work, confidence and hard work, the satisfaction in working and having high expectations of success the work stated in the scores obtained through instruments compiled based on indicators of obedience to the rules, responsibilities, love of the profession, professional development efforts, services to students, and expectations of student success.

According to Mashudi [11] supervision is a systematic and ongoing process in the collection, analysis, and use of information to control management and decision making. This is done with a view to ensuring whether any matters from a program that is being run can run effectively, efficiently, in accordance with the steps or plans that have been prepared previously.

According to Tatang [12] in its implementation the principal as a supervisor must be guided by the principles of economical, practical, functional, relevant, scientific, democratic, self-introspection, deliberation, continuous, constructive, and cooperative.

Risnawati [13] defines the supervision of education as an activity that helps in developing a better learning situation, by providing guidance and direction to teachers and other officers to improve the quality of their work in the field of teaching and all its aspects. With factors that have an





indication of supervision, among others, provide guidance, provide assistance, provide direction in work activities, improve employee quality.

Sujana et al [14] suggested that academic supervision or academic supervision is a supervisory function that involves aspects of the implementation of the tasks of coaching, monitoring, assessing and training professional teachers. It was also revealed that the factors that influence supervision are coaching in the task, monitoring work processes, evaluating work results, providing training, and following up on the results achieved.

According to Glickman et al [15] supervision or supervision is a term that shows a shared vision of how teaching and learning should be developed and developed jointly by official supervisors appointed by teachers and other members of the school community. Also stated are the factors that indicate supervision is supervising, checking, giving directions, evaluating.

Referring to the above theoretical study, it can be synthesized that the supervision of the principal is a pattern of leadership guidance in encouraging, facilitating and assisting teachers aimed at increasing teacher competence in conducting learning activities so that the creation of quality teaching and learning processes and producing quality output with indicators of continuity supervision, giving feedback from the results of supervision, interaction in supervision, 4). Providing assistance and guidance, and following up on supervision.

II. RESEARCH METHODS

As described above, this study aims to find ways to improve teacher work productivity through research on the strength of the relationship between work productivity as a dependent variable and commitment to the profession and the supervision of school principals as independent variables. The research method used is a survey method with a correlational statistical approach to test statistical hypotheses and Sitorem's method to establish recommendations and priorities for handling improved research indicators.

Research constellation which is a constellation of relationships between variables studied is as follows:

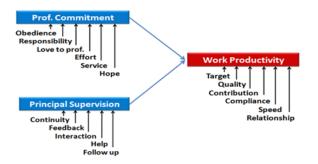


Figure 1. Constellation of relationships between variables and indicators studied

The study was conducted on 134 private junior high school teachers in Klapanunggal District, Bogor Regency.

The research sample of 100 teachers was calculated using the Slovin formula taken from Sugiyono [16].

Data collection in this study used a research instrument in the form of a questionnaire distributed to teachers as research respondents. The research instrument items are derived from the research indicators that the situation will be explored. Before being distributed to respondents, the research instrument was first tested to determine its validity and reliability [16]. Validity test is done by using the Pearson Product Moment technique, while for the reliability test calculations are used using the Cronbach Alpha formula.

After the data is collected, data analysis is then performed using linearity tests, simple correlation analysis, multiple correlation analysis, coefficient of determination analysis, partial correlation analysis, and statistical hypothesis testing.

In the final stage, an analysis of indicators was carried out using the Sitorem Method of Hardhienata [17] to determine the order of priority for the improvement of indicators as recommendations to related parties from this study. In determining the order of priority for handling indicators, Sitorem uses three criteria, namely (1) the strength of the relationship between variables obtained from the hypothesis test, (2) the order of priority handling of indicators from the assessment results, and (3) the value of indicators obtained from data calculations obtained from research respondents' answers.

III. RESULTS AND DISCUSSION

The relationship between commitment to the profession and teacher work productivity

The results of data processing through the statistical hypothesis test showed that there was a very significant positive relationship between commitment to the profession with teacher work productivity, with a correlation coefficient of 0.512 and a coefficient of determination of 0.262. This means that the higher the commitment to the profession the higher the productivity of teacher work productivity. The implication is that if teacher work productivity is to be improved, strengthening the commitment of the teacher to the profession is needed.

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Expert assessment related to the priority indicators of commitment variables to the profession by considering the factors of cost, benefit, importance, and urgency produce the following sequence: 1. Professional development efforts 18.5%, 2. Services to students 17.6%, 3. Expectations on





student success 16.7%, 4. Obedience to the rules 15.7%, 5. Responsibility 15.7%, and 6. Love of the profession 15.7%.

While the results of the calculation of the indicators of data processing obtained from research respondents are as follows: 2.96 professional development efforts, services to students 3.71, expectations of student success 3.79, observance of the rules 4.13, responsibility 3.82, and love of the profession 3.82.

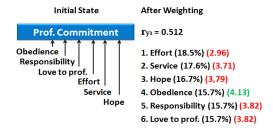


Figure 2. The results of the weighting of indicators and the value of indicators of commitment to the profession

The relationship between principal supervision with teacher work productivity

The results of data processing through the statistical hypothesis test showed that there was a very significant positive relationship between the supervision of school principals with teacher work productivity, with a correlation coefficient of 0.464 and a coefficient of determination of 0.215. This means that the higher the supervision of school principals, the higher the productivity of teacher work productivity. The implication is that if teacher work productivity is to be improved, strengthening the supervision of the principal is needed.

The assessment of expertise related to the priority indicators of the principal's supervision variables by considering the factors of cost, benefit, importance, and urgency produces the following sequence: 1. Provision of feedback from the results of supervision 21.3%, 2. Follow-up supervision of 21.3%, 3. Continuity of supervision 20.2%, 4. Providing assistance and guidance 20.2%, 5. Interaction in supervision 16.9%.

While the results of the calculation of indicators from data processing obtained from research respondents are as follows: Provision of feedback from the results of supervision 3.73, Follow-up supervision 3.59, Continuation supervision 3.92, Provision of assistance and guidance 3.66, Interaction in supervision 3.59.

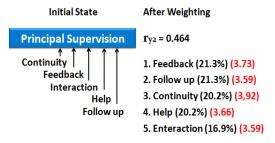


Figure 3. The results of weighting the indicators and the values of the principal supervision indicators

The relationship between commitment to the profession and supervision of the principal with teacher work productivity

The results of processing the data through the statistical hypothesis test showed that there was a very significant positive relationship between commitment to the profession and supervision of the principal together with teacher work productivity, with a correlation coefficient of 0.676 and a coefficient of determination of 0.457. This means that the higher the commitment to the profession and supervision of the school principal together the higher the teacher's work productivity. The implication is that if teacher work productivity is to be increased, it is necessary to strengthen the commitment to the profession and supervision of the principal together.

Expert assessment related to the priority indicators of the teacher's work productivity variables by considering the factors of cost, benefit, importance, and urgency produce the following sequence: 1. Speed of completing work 15.4%, 2. Self-development 15.4%, 3. Quality of work results 14.6%, 4. Positive contribution to the environment 15.6%, 5. Targets to be achieved 14.6%, 6. Compliance works 13.8%, and 7. Relationships with fellow teachers 11.4%.

While the calculation results of teacher work productivity indicators from data processing obtained from research respondents are as follows: Speed to complete work 3.87, Self-development 3.56, Quality of work results 4.04, Positive contribution to the environment 3.85, Targets to be achieved 3.81, Work compliance 4.05, and Relationships with fellow teachers 3.86.

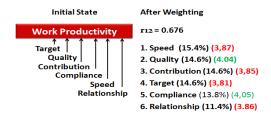


Figure 4. Results of weighting indicators and indicators of teacher work productivity

4. Sitorem Analysis Results

Based on the results of the statistical hypothesis test, determination of indicator priorities, and calculation of the indicator values described above, an analysis is then performed using the Sitorem method to establish recommendations. Recommendations contain suggestions for improving indicators that are arranged based on priority handling and indicators that remain to be maintained because these indicators are in good condition. The results of Sitorem's analysis are shown in Figure 5.

From Figure 5 above it can be seen that from Sitorem's analysis there are 14 indicators that must be strengthened (indicator values < 4.0) in order of priority: 1. Effort, 2. Service, 3. Hope, 4. Responsibility, 5. Love to profession, 6. Feedback, 7. Follow up, 8. Continuity, 9. Help,





10. Interaction, 11. Speed, 12. Contribution, 13. Target, and 14. Relationship. Whereas indicators which are in good condition (indicator value> 4.0) and remain to be maintained are 1. Obidience, 2. Quality, and 3. Compliance.

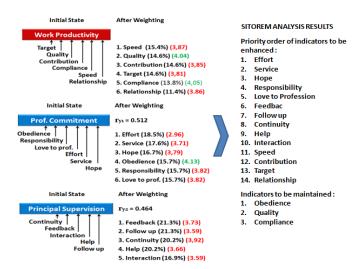


Figure 5. The results of the analysis of the indicators determining which indicators are improved and which are maintained

With the results of Sitorem's analysis it becomes clear and this is a research finding that there are 14 indicators that must be improved and 4 indicators that are sufficiently maintained. With the improvement of these indicators, commitment to the profession and supervision of school principals is strong and will ultimately lead to increased teacher work productivity.

IV. CONCLUSION

From the results of the discussion above it can be concluded that there is a positive relationship between commitment to the profession with teacher work productivity with a correlation coefficient of 0.512 and there is a positive relationship between the supervision of school principals with teacher work productivity with a correlation coefficient of 0.464 and there is a positive relationship between commitment to the profession and supervision of school principals together with teacher work productivity with a correlation coefficient of 0.676. This indicates that teacher work productivity can be increased through strengthening commitment to the profession and supervision of the principal.

Strengthening the professional commitment and supervision of school principals can be strengthened by improving indicators that are still weak with the following priority order of improvement: 1. Effort, 2. Service, 3. Hope, 4. Responsibility, 5. Love to profession, 6. Feedback, 7. Follow up, 8. Continuity, 9. Help, 10. Interaction, 11. Speed, 12. Contribution, 13. Target, and 14. Relationship. Whereas

indicators which are in good condition and remain to be maintained are 1. Obidience, 2. Quality, and 3. Compliance.

To obtain a more complete picture related to other variables related to teacher work productivity, in addition to the variable commitment to the profession and supervision of school principals, further research is recommended to use exploratory sequential analysis methods, which are firstly conducted qualitative research to find other variables related to teacher work productivity, which is then tested with quantitative research to prove the findings of the qualitative research.

REFERENCES

- [1]. Edy Sutrisno. 2016. *Manajemen Sumber Daya Manusia*. Jakarta: Prenadamedia Group.
- [2]. Robbins, Stephen P. and Timothy A. Judge. 2013. Organizational Behavior.
- [3]. Dedi Rianto Rahadi. 2010. *Manajemen Kinerja Sumber Daya Manusia*. Malang : Tunggal Mandiri Publishing.
- [4]. Timpe, A. Dale (edt.), 1991, Seri Manajemen Sumber Daya Manusia: memimpin manusia, 1, Jakarta: Gramedia
- [5]. Newstrom, John W., 2002. *Organizational Behavior: Human Behavior at Work*, USA: McGraw-Hill-Irwin
- [6]. Spector, Paul E. 2007. *Industrial and Organizational Psychology Research and Practice*. Canada: John Wiley & Sons, Inc.
- [7]. Fard, Hoeini & Maryam, Darabi, Maede Salimi, Mehranggiz Ramezanpour. The Study Between Organizational Commitment & Professional Commitment. Journal of Basic and Applied Scientific Research. Vol. 2. No 7: 6537 – 6541.
- [8]. Prayitno. 2009. *Dasar Teori dan Praktis Pendidikan*. Jakarta: PT Grasindo.
- [9]. Trisnaningsih, Sri. 2007. Independensi Auditor Dan Komitmen Organisasi Sebagai Mediasi Pengaruh Pemahaman Good Governance, Gaya Kepemimpinan Dan Budaya Organisasi Terhadap Kinerja Auditor. Unhas Makassar, 26-28 Juli 2007. Universitas Pembangunan Nasional "Veteran", Jawa Timur.
- [10]. Lee, K, Carswell, J & Allen, N. 2000. A Meta Analytic Review of Occupational Commitment. Relation With Person and Work Realted Variables. Journal of Apllied Psychology. Volume 85 (5).
- [11] Mashudi, Pengaruh Insentif, Kepemimpinan dan Budaya Organisasi terhadap Semangat Kerja Karyawan pada PT. Sung Hyun Indonesia di Pasuruan, Jurnal Bisnis, Manajemen dan Perbankan, Vol. 4 No.1, 2018.





- [12] Tatang, S. 2016. *Supervisi Pendidikan*. Bandung: Pustaka Setia.
- [13] Risnawati. 2014. *Administrasi dan Supervisi Pendidikan*. Yogyakarta: Aswaja Pressindo.
- [14] Nana Sujana, dkk. 2011. Buku Kerja Pengawas Sekolah. Jakarta: Pusat Pengembangan Tenaga Kependidikan, Badan PSDM dab PMP Kementerian Pendidikan Nasional.
- [15] Glickman, Carl D., Stephen P. Gordon, and Jovita M. Ross-Gordon. 2010. Supervision and Instructional Leadership. Boston: Pearson Education. Harlow, Essex, UK: Pearson Education Ltd.
- [16] Sugiyono, 2016, Metode penelitian Kuantitatif dan Kualitatif dan R&D, Yogyakarta: Alfabeta.
- [17] Hardhienata, S. 2017, The Development Of Scientific Identification Theory To Conduct Operation Research In Education Management, IOP Conference Series: Materials Science and Engineering, 166 012007, Volume 166.



