Model of organizational abilities among secondary school teachers

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ABSTRACT

This study confirms the correlation model constructed among organizational abilities variables of secondary school teachers. The organizational abilities variables are: organizational commitment, and professional commitment, job satisfaction, and job performance. The samples are secondary school teachers selected using purposive sampling techniques. Data were collected through a rating scale questionnaire (1-5) and analyzed using Lisrel 8.0 program. The results show that professional commitment has a significant effect on organizational commitment and job satisfaction with values of 2.72 and 2.60. Other findings that organizational commitment and job satisfaction have an effect on job performance with values of 2.36 and 2.02. Empirically, the results concluded that the correlation among the variables theoretically fulfilled the fit criteria.

1. INTRODUCTION

The role of teachers is strategic as one of the pioneers in improving education quality. Teachers are required to be active in increasing education progress in surrounding community; therefore, a teacher should have a good organizational commitment to improve their performance both in learning and society [1]. Organizational commitment is loyalty and individual’s identification in organization. Highly committed teachers tend to persist in carrying out their work. Generally, organizational commitment is a condition of an employee supporting a particular organization and its objectives, and maintaining membership for the organization's sustainability [2]. However, highly committed organizational teachers must understand the factors influencing organizational capability namely: job satisfaction, job performance, organizational and professional commitment. This research is an empirical approach to confirm the theoretical relationship among organizational capability factors.

Job satisfaction is related to a person's attitude towards the work environment, while attitude orientation influences the person's desire to ignore their duties [3]. Psychological conditions that are depressed and developing affect a person's depressive levels in certain situations and out of habit. Depressive levels in works environment are related to job satisfaction and individual works quality [4]. Bogler [5] studied the effect of organizational and professional commitment on job satisfaction, as well as the conflicting effects of professional and organizational commitment on job satisfaction. The results show that job satisfaction is statistically different and significantly in multiple interactions of three variables. The theoretical relationship model among job satisfaction, job performance, organizational, and professional commitment is shown in Figure 1.
Teacher performance is the result of job process assessment while on duty. The teacher's obligations in learning include: 1) planning the learning process; 2) implementing quality learning; 3) assess and evaluate learning outcomes; 4) organizing improvement and enrichment of learning; 5) professional development of standard requirements. Each person in an organization will be required to complete the tasks assigned as well as possible. The individual performance behavior can be traced through specific factors such as: individual abilities, efforts carried out, and task difficulty levels [6]. Individual abilities and efforts carried out are internal causes, while task difficulty levels are external factors that affect the organization. A professional's commitment is identified as ability to complete various tasks [7, 8]. Generally professional performance supports a high competence level for the job, while professional commitment is also a work motivation [9].

Poznanski [10] describes job satisfaction as a condition of positive behavior on a job. Job satisfaction Evidence is divided into several groups such as leadership, psychological needs, respect for effort, values and management ideology, as well as task design factors, and workload. Saari [11] define job satisfaction as a set of feelings to assess the level of pleasure in work. Robbins and Judge [12] supports Davis's [13] opinion that job satisfaction is a positive feeling about people's work that is the result of job evaluation. For teachers, job satisfaction creates a feeling of pleasure in carrying out teaching and learning activities and additional tasks. Sabri [14] found that organizational culture had a significant effect on teacher job satisfaction.

Several definitions for understanding commitment include: 1) a belief and acceptance of the goals and organizational values, 2) a desire to use genuine effort to advance the organization or profession, and 3) an encouragement to maintain membership in the organization or profession [15, 16]. Commitment in this case refers to individual commitment to the organization (organizational commitment) and individual commitment to the profession (professional commitment). The concept of organizational and professional commitment shows the relationship of internal conflict dealing with the profession and job satisfaction. Organizational and professional commitment can be described as the intensity of an individual identification and the level of involvement in an organization or profession [17-19].

Aranya [20] studied the impact of professional commitment that work requires sacrifice, and the impact of organizational commitment on job satisfaction. In addition, it was also concluded that high professional commitment plays an important role for high organizational commitment, and the impact of job satisfaction on high professional commitments will support organizational commitment. Someone who is committed to his organization will have a strong identification with the organization, have membership values, support the goals and value system, make it possible to remain in the organization, and finally be prepared to work hard for the organization.

2. RESEARCH METHOD
2.1. Cases and Instrument

The sample consisted of 30 teachers who were civil servants without distinguishing between men and women. The number of subjects was determined using purposive sampling method based on Hook and Regal [21]. Sample criteria are a minimum of teaching experience for one semester and a maximum of 45 years of age. These criteria are used as a basis for the consideration that the teacher is sufficient to: make adjustments to the situation and conditions of his institution, provide an assessment of organizational commitment, professional commitment, and job satisfaction felt at the institution at work. While the age criteria are used for reasons that people with these conditions are usually still looking for self-identity and
feel looking for self-satisfaction. In addition, the sample also considers the position, educational background, and recent education.

Data collection using a Likert scale questionnaire instrument scores 1-5. The questionnaire contained four variables to detect the relationship between organizational and professional commitment, job satisfaction, and job performance as shown in Table 1 [22]. Table 1 informs that the organizational commitment consists of 6 indicators, and 4 indicators for each professional commitment, job performance, and job satisfaction.

| No | Organizational abilities indicators | Score |
|----|--------------------------------------|-------|
| X1 | The teacher as a profession in the development of personal values | 1     |
| X2 | Teachers as the best profession | 2     |
| X3 | Developing self-ability simultaneously | 3     |
| X4 | Pursuing the field of science as a teacher | 4     |
| X5 | Support professional organizations | 5     |
| X6 | Enthusiasm at work | 1     |
| X7 | Institutions are the best place for self-actualization | 2     |
| X8 | The institution values are in accordance with the personality | 3     |
| X9 | Trying to make the institution still exist | 4     |
| X10 | Work with full dedication | 5     |
| X11 | The leader's policy is practiced | 1     |
| X12 | A reward for the best work results | 2     |
| X13 | The availability of capacity development facilities for new information | 3     |
| X14 | Job gives motivates to be more creative | 4     |
| X15 | Try better work results | 5     |
| X16 | Maintaining good relations with colleagues | 1     |
| X17 | Improve the quality of work | 2     |
| X18 | Evaluation as an up-grade process of self towards work | 3     |

Note: 1= Strongly Disagree, 2= Disagree, 3= Undecided, 4=Agree, 5= Strongly Agree

2.2. Data analysis

Data analysis was performed to confirm the theoretical relationship between organizational and professional commitment, job performance, and job satisfaction. The analysis technique uses the Structural Equation Modeling (SEM) model with the Lisrel 8.0 program to obtain fit model indicators. SEM analysis is able to combine measurement models with structural models simultaneously and efficiently than other techniques [23, 24]. The prerequisite for SEM analysis is that the data must be reliable and valid. Reliability is a measure of internal consistency of the indicators of the constructed variables. Reliability testing can be determined from the construct reliability or variance extracted approach. Construct reliability is an internal consistency coefficient to obtain the factor-loading value of each indicator (λ) and the error index of each indicator (δ). Construct reliability equation as follows:

$$CR = \frac{\left(\sum_{i=1}^{I} \lambda_i^2\right)^2}{\left(\sum_{i=1}^{I} \lambda_i^2\right)^2 + \left(\sum_{i=1}^{I} \delta_i^2\right)}$$

Other reliability can be determined by the average variance extracted (AVE) equation. AVE output displays the amount of indicator extracted variance by the construct variable developed. High variance extracted values indicate that the indicators are well represented construct variables that are developed. The recommended AVE value is a minimum of 0.50. The AVE value is useful for measuring the amount of construct variance compared to the variance caused by measurement errors. The AVE formula is as follows:

$$AVE = \frac{\sum \lambda_i^2}{\sum \lambda_i^2 + \sum \text{var}(\varepsilon_i)}$$

Where $\lambda_i$ is loading indicator components and $\text{var}(\varepsilon_i) = 1 - \lambda_i^2$. The next analysis is to estimate the full model to identify the suitability of the model and the causality relationships of the constructs of the models being tested. The analysis is related to the level of significance and goodness of fit. If the Chi-square significance level is $p \geq 0.05$, the model meets the fit criteria, while Goodness of Fit is used as a reference for acceptance or rejection of the construct of the model as well as testing the feasibility with several criteria for suitability index and cut off value.
3. RESULTS AND DISCUSSION

Basically, SEM is a confirmatory technique used to test causal relationships between several variables. A variable with theoretical calculations can be assumed to produce changes in other variables. Theoretical studies are used to develop models as a basis for predicting constructs and correlations between variables. The theoretical framework that has been constructed is transformed into a path diagram. This diagram displays the profile of the causality relationships of the constructed variables. In this study there is an exogenous construct (Professional Commitment) and three endogenous constructs (Organizational Commitment, Job Satisfaction, and Job Performance). The theoretical model is presented in Figure 2.

The construct model of the variables shown in Figure 2 was developed through theoretical studies [25]. Professional commitment is considered to affect other variables in one direction and is called an exogenous construct. Other variables are called endogenous constructs because they affect other variables except the exogenous construct variable.

![Figure 2. Theoretical model constructions](image)

3.1. Fitting model

To obtain fit criteria, the model construct is confirmed by SEM analysis. The results of confirmation using the SEM equation are shown in Figure 2. The confirmatory analysis output in Figure 3 generally satisfies the theoretical fit criteria for the model construct. The loading-factor value of exogenous and endogenous variables meets the reliability criteria. The output is as shown in Table 2. Table 2 shows that organizational commitment consists of 6 indicators, organizational commitment, job performance, and job satisfaction each 4 indicators. Each exogenous and endogenous variable has a loading factor value that meets the reliable criteria. This is evidenced by the loading factor value > 0.50 for each indicator of the latent variable, therefore the model is fit. In addition, it is clarified that the model's reliability value is close to maximum because the reliability value is in the range of 0-1. The validity test results with loading factors are also relevant and meet the value of t-test > t-critical. The reliability values of the models developed are shown in Table 3.

The loading factor explains the level of indicator relationship with latent variables. Generally, high loading factor values indicate a better relationship between variables; however, values below 0.30 are not interpreted. High loading factor indicators have a greater contribution to explain the latent construct. Conversely, indicators with low loading factors have weak contributions to explain the latent construct. Most of the reference factor values of 0.50 or more are considered validation to explain latent constructs [26]. Several other references [27, 28] explain that the minimum factor loading value is 0.40. The determining factor for the reliability criteria is based on the average variance extracted (AVE) value. If all AVE values of the latent variable are more than 0.05, it means that all latent variables have very good reliability. The average variance extracted with a value > 0.5 is a determinant of convergent validity. However, if AVE < 0.5 is categorized as invalid.
The exogenous and endogenous variables in Table 4 show that each variable meets the convergent reliability requirements based on the AVE value. All AVE values > 0.05 where the professional commitment value is 0.75; organizational commitment is 0.65; job performance is 0.63; and Job Satisfaction is 0.76. A minimum AVE value of 0.5, therefore this value illustrates adequate convergent validity and one latent variable is able to explain more than half the variants of the indicators in the average value. Hypothesis testing of the theoretically constructed models is acceptable and there is an agreement between the models empirically. The results of the analysis in Figure 2 show that the model meets the criteria for goodness of fit based on the Chi-square value = 2319.90; RMSEA = 0.034; GFI = 0.91; AGFI = 0.88; CFI = 0.98 and NFI = 0.93. In the significance value of 5%, it can be seen that the t-test value of each indicator variable is > 1.96, therefore it is concluded that the theoretical model developed meets the criteria empirically.

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| Table 2. Output loading factors for each indicator |
|-----------------------------------------------|
| Indicators | Professional commitment | Organizational commitment | Job Performance | Job Satisfaction |
| 1           | 0.65                    | 0.85                      | 0.77            | 0.79            |
| 2           | 0.86                    | 0.63                      | 0.72            | 0.82            |
| 3           | 0.74                    | 0.73                      | 0.74            | 0.86            |
| 4           | 0.91                    | 0.69                      | 0.62            | 0.74            |
| 5           | 0.78                    |                           |                |                |
| 6           | 0.81                    |                           |                |                |

| Table 3. Reliability analysis output |
|-------------------------------------|
| Variables                          | Σ Loading factor (λ) | Index of err. (δ) | Reliability |
| Professional Commitment            | 4.75                 | 1.87               | 0.92        |
| Organizational Commitment          | 2.9                  | 1.87               | 0.82        |
| Job performance                    | 2.85                 | 1.98               | 0.80        |
| Job satisfaction                   | 3.21                 | 0.91               | 0.91        |

| Table 4. Reliability based on average variance extracted (AVE) values |
|---------------------------------------------------------------------|
| Variables                          | Component of loading factor (λ²) | Var (ε) | AVE      | Sqrt (AVE) |
| Professional Commitment            | 3.80                           | 1.25    | 0.75     | 0.86       |
| Organizational Commitment          | 2.12                           | 1.1     | 0.65     | 0.81       |
| Job performance                    | 2.04                           | 1.15    | 0.63     | 0.79       |
| Job satisfaction                   | 2.51                           | 0.79    | 0.76     | 0.87       |

3.2. Latent variables effect

The results of the theoretical model confirmation analysis also found the magnitude of each effect between latent variables. The relationship between each latent variable is found Figure 4. The profile of
relationships among latent variables in Figure 4 shows that teacher professional commitment has an influence on organizational commitment and is greater than job satisfaction. Professional commitment influences organizational commitment is 2.72, and 2.60 for job satisfaction. In addition, the job performance variable is influenced by two other variables namely organizational commitment with an effect of 2.36 and job satisfaction of 2.02. The effect of job satisfaction gives the smallest effect on teacher performance.

![Figure 4. Effect among latent variables](image)

Professional commitment is the level of individual loyalty to the perceived profession [29]. Professional commitment underlies behaviors, attitudes and orientations that can affect people's job satisfaction in carrying out their duties [30, 31]. Job satisfaction is work expectation [32]. Job satisfaction will arise if teacher work expectations are fulfilled [33, 34]. Job satisfaction in the profession will occur if the teacher has professional commitment According to Shukla [35] supported by Bashir [36] that professional commitment has a significant influence on job satisfaction Teachers' job satisfaction in carrying out professional duties is characterized by a general attitude to distinguish between the many rewards of reality and desires [37]. Job satisfaction is a positive attitude of teachers in dealing with a job. The level of satisfaction between individuals in school organizations is influenced by differences in the characters and culture of each individual. The large number of work aspects that are in accordance with individual desires will affect the high level of satisfaction in the organization.

Organizational commitment is an individual strength associated with the organization. Porter and Steers [38] suggest that organizational commitment is built when each individual develops three organizational attitudes namely: Identification, Involvement, and Loyalty. Identification is an understanding or appreciation of the goals of the organization. Involvement is the feeling of being involved in a pleasant job in an organization. Loyalty is a feeling that the organization is a place to work and live, hence there is loyalty to the organization. Someone who has joined an organization certainly brings wishes, needs, and past experiences that shape work expectations, and with the organization trying to achieve common goals. Therefore, organizational commitment has an influence on performance [39, 40].

4. CONCLUSION
The theoretical relationship model among organizational commitment, and professional commitment, job satisfaction, and job performance has been fit based on empirical tests. Professional commitment has a direct effect on job satisfaction and organizational commitment, while job performance is influenced by organizational commitment and job satisfaction without the opposite effect.

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REFERENCES
[1] Karniti and Tukijian, “Organizational commitment to the UPTD State Primary School teachers in Pekalongan Regency wiradesa (in Bahasa),” Jurnal Ekonomi Manajemen Akuntansi, 2013.
[2] Bulut, C., and Culha, O., “The effects of organizational training on organizational commitment,” International Journal of Training and Development, vol. 14, no. 4, pp. 309-322, 2010.
[3] Rasch, Ronald H. and Adrian Harrell, “The Impact of Individual Differences on MAS Personnel Satisfaction and Turnover Intentions,” Journal of Information System, 1989.
[4] Pan, A., Mirodita, R., and Jie, F., “Analysis of the effect of attitude toward works, organizational commitment, and job satisfaction, on employee’s job performance,” European Journal of Business and Social Sciences, vol. 1, no. 10, pp. 15-24, 2013.
[5] Bogler, R. and Somech, A., “Influence of teacher empowerment on teachers’ organizational commitment, professional commitment and organizational citizenship behavior in schools,” Teaching and teacher education, vol. 20, no. 3, pp. 277-289, 2004.
[6] Day, A. L. and Carroll, S. A., “Using an ability-based measure of emotional intelligence to predict individual performance, group performance, and group citizenship behaviours,” Personality and Individual differences, vol. 36, no. 6, pp. 1443-1458, 2004.
[7] Larkin, J. and Schweikart, J., “Success and their Internal Auditor,” Internal Author, Vol. 49, June 1992.
[8] Larkin, J. M., “Job satisfaction, organizational commitment, and turnover intention of online teachers in the K-12 setting,” Online Learning, vol. 20, no. 3, 2015.
[9] Kålbårs, Lawrence P. and Timothy J. Fogarty, “Professionalism and Its Consequences: A Study of internal Auditors,” Auditing A Journal of Practice and Theory, vol. 4, no.1, 1995.
[10] Poznanski, J. Peter and Dennis M. Bline, “Using structural equation modeling to investigate the causal ordering of job satisfaction and organizational commitment among staff accountant,” Behavior Research in Accounting, vol. 9, 1997.
[11] Saari, L. M. and Judge, T. A., “Employee attitudes and job satisfaction,” The University of Michigan, the Society of Human Resources Management, vol. 43, no. 4, pp. 395-407, 2004.
[12] Robbins-Judge, Organizational Behavior (13th Edition). New Jersey: Pearson Education Inc., 2009.
[13] Davis, J. and Wilson, S. M., “Principals’ efforts to empower teachers: Effects on teacher motivation and job satisfaction and stress,” The clearing house, vol. 73, no. 6, pp. 349-353, 2000.
[14] Sabri, Pirzada Sami Ullah, et al., “Organizational Culture and Its Impact on the Job Satisfaction of the University Teachers of Lahore,” International Journal of Business and Social Science, vol. 2, no. 24, pp. 121-128, 2011.
[15] Aranya and K. Ferris, “A Re-Examination of Accountant Organizational Professional Conflict,” The Accounting Review, 1984.
[16] Schein, E. H., “Organizational socialization and the profession of management,” Organizational influence processes, vol. 36, no. 3, pp. 283-294, 2003.
[17] Altshuler, J. S. and Webb, J. R., “School social work: Increasing the legitimacy of the profession,” Children & Schools, vol. 31, no. 4, pp. 207-218, 2009.
[18] Somech, A. and Bogler, R., “Antecedents and consequences of teacher organizational and professional commitment,” Educational administration quarterly, vol. 38, no. 4, pp. 555-577, 2002.
[19] Singh, A. and Gupta, B., “Job involvement, organizational commitment, professional commitment, and team commitment,” Benchmarking: An International Journal, 2015.
[20] Aranya, N., Lachman, R., and Amernic, J., “Accountants’ job satisfaction: A path analysis,” Accounting, Organizations and Society, vol. 7, no. 3, pp. 201-215, 1992.
[21] Hook, E. B. and Regal, R. R., “Validity of methods for model selection, weighting for model uncertainty, and small sample adjustment in capture-recapture estimation,” American journal of epidemiology, vol. 145, no. 12, pp. 1138-1144, 1997.
[22] Mowday, R. T., Steers, R. M., and Porter, L. W., The measurement of organizational commitment: A progress report (No. 15). Graduate School of Management, University of Oregon, vol. 14, pp. 224-247, 1978.
[23] Hair, JF., Anderson, RE., Tatham, RL., and Black, WC., Multivariate Data Analysis, Fourth Edition. New Jersey, Prentice Hall, 1995.
[24] Hair, J. F., Ringle, C. M., and Sarstedt, M., “PLS-SEM: Indeed a silver bullet,” Journal of Marketing theory and Practice, vol. 19, no. 2, pp. 139-152, 2011.
[25] Somech, A. and Bogler, R., “Antecedents and consequences of teacher organizational and professional commitment,” Educational administration quarterly, vol. 38, no. 4, pp. 555-577, 2002.
[26] Ghosalz, Imam, and Fuad, Structural equation modeling: theories, concepts and applications with the Lisrel 9.10 program (in Bahasa), Semarang: Badan Penerbit Undip, 2014.
[27] Behera, B. K., Arora, M., and Sharma, D. K., “Scanning electron microscopic (SEM) studies on structural architecture of lignocellulosic materials of Calotropis procera during its processing for saccharification,” Bioresource technology, vol. 58, no. 3, pp. 241-245, 1996.
[28] Farrell, A. M., and Rudd, J. M., Factor analysis and discriminant validity: A brief review of some practical issues. Anzmac, 2009.
[29] Ferdinand, Augusty, Structural Equation Modeling in Management Research (in Bahasa). Badan Penerbit Universitas Diponegoro Semarang, 2000.
[30] Lee, K., Carswell, J. J., and Allen, N. J., “A meta-analytic review of occupational commitment: relations with person-and work-related variables,” Journal of applied psychology, vol. 85, no. 5, p. 799, 2000.
[31] Collie, R. J., Shapka, J. D., and Perry, N. E., “Predicting teacher commitment: The impact of school climate and social–emotional learning,” *Psychology in the Schools*, vol. 48, no. 10, pp. 1034-1048, 2011.

[32] Poulou, M. S., “An examination of the relationship among teachers' perceptions of social-emotional learning, teaching efficacy, teacher-student interactions, and students' behavioral difficulties,” *International Journal of School & Educational Psychology*, vol. 5, no. 2, pp. 126-136, 2017.

[33] Sak, R., “Gender differences in turkish early childhood teachers’ job satisfaction, job burnout and organizational cynicism,” *Early Childhood Education Journal*, vol. 46, no. 6, pp. 643-653, 2018.

[34] Sari, E., Koul, R., Rochanah, S., Arum, W. S. A., and Muda, I., “How Could Management of School Environment Improve Organizational Citizenship Behaviors for The Environment? (Case Study at Schools for Specifics Purposes),” *Journal of Social Studies Education Research*, vol. 10, no. 2, pp. 46-73, 2019.

[35] Margelytė-Pleskienė, A. and Vveinhardt, J., “The quintessence of organizational commitment and organizational cynicism,” *Organizacijų vadyba: sisteminiai tyrimai = Management of organizations: systematic research. Kaunas: Vytauto Didžiojo universitetas*, 2018.

[36] Shukla, S., “Teaching competency, professional commitment and job satisfaction-a study of primary school teachers,” *Journal of Research & Method in Education*, vol. 4, no. 3, pp. 44-64, 2014.

[37] Bashir, L., “Job satisfaction of teachers in relation to professional commitment,” *The International Journal of Indian Psychology*, vol. 4, no. 4, pp. 1-8, 2017.

[38] Caricati, L., et al., “Work climate, work values and professional commitment as predictors of job satisfaction in nurses,” *Journal of nursing management*, vol. 22, no. 8, pp. 984-994, 2014.

[39] Porter, L. W., Steers, R. M., Mowday, R. T., and Boulian, P. V., “Organizational commitment, job satisfaction, and turnover among psychiatric technicians,” *Journal of applied psychology*, vol. 59, no. 5, p. 603, 1974.

[40] Tolentino, R. C., “Organizational commitment and job performance of the academic and administrative personnel,” *International journal of Information technology and Business Management*, vol. 15, no. 1, pp. 51-59, 2013.