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Teachers' Involvement Model in Managing Class at Primary Schools

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The teachers' involvement became the problem are needed to solve immediately in Indonesia because their involvement is still not yet maximal. The Teacher involvement in classroom learning is an essential factor in increasing education's success. This study finds a new structural model that describes what factors can affect the effectiveness or teachers' involvement in classroom management. These factors will determine the effectiveness of teacher involvement in classroom management in Yogyakarta Province primary schools, which will be the basis to develop policies dealing with effective classroom management. This study was conducted in a quantitative correlational approach. The sample in this study was partly primary school teachers in Yogyakarta Province who were taken in clusters. Data was collected through expert-validated and empirically validated questionnaires. Data analysis with SEM (Structural Equation Modelling) approach was used to determine whether the indicators obtained in the field were valid and exogenous variables were significant to endogenous variables. The results show a significant effect of the Principal's Role, self-efficacy, and colleague variables on teacher involvement in classroom management, t-values of 1.99, 2.30, and 2.43, respectively. The environment has no significant effect on teacher involvement in classroom management. Environment significantly affects self-efficacy with a t-value of 2.63. Self-efficacy significantly affects colleagues with a t-value of 2.90. Principal's Role significantly effects on environment variable with t-value of 2.38.

Keywords: teacher involvement, classroom management, primary school

INTRODUCTION

Teacher plays important aspect in education management at primary schools. students' success in their class activities is determined by the active participation of the teacher. The center of every activity in the classroom was the teacher because the teacher manages all activities from the first of students' attendance to back home (Trevethan,

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2017). Students will gain valuable experience, characters, or traits that can be recorded easily during the teaching and learning process because the best teachers will transfer knowledge and educate them maximally (Holzberger & Prestele, 2021). Teachers are the best mentors in providing a fun learning experience so that students are interested and motivated to actively participate in learning process in class (Gröschner et al., 2018). The experince gained by teacher in learning activities is a provision for a teacher to be actively involved in managing education in general and in particular how to manage the class that the teacher teaches over a certain period of time.

Teacher involvement in class management is an important factor in achieving success of education. Class effectivenes really depends on how involved the teachers is in managing the class (Franklin & Harrington, 2019). Even a class with bad character will be good if the teacher is able to manage the character of the students (Sun, 2015). The best or effective learning practices are in the hands of a teacher because with the hard work of a teacher, eduactional success becomes a necessity (Aglazor, 2017). Teacehrs who are able to manage their classes well can direclty feel the result of the effectiveness of learning process; on the contrary when teachers are not able to manage their classessw well, they get the form of poor class performance displayed by students during the learning process (Putri et al., 2019). Teachers are required to master all aspects that determine the success of education because they will be actively involved in all aspects of classroom management. So that teachers involvement in class management is the most significant part to achieve maximal quality of education.

Teacher's ability to manage classroom in the spotlight because it is the main factor in managing the effective class and produce quality learning. From several observations done in five schools in Yogyakarta city, it is still seen that teachers are difficult in managing classes. It is seen form several students who are uninterested in learning carried out by teacher. Students have low motivation in participating the learning, they are sleepy, unfocused and not enthusiastic in participating learning activities. There are many students who are late for school and when the break time is over, there are still students who do not join the class on time for unclear reasons. When the teacher gives assignnments, there are many students who do not handle them and even just wait the others to copy them without any efforts to do by themselves. When given homework, students do not complete on the grounds of not understanding, falling asleep, and other reasons raised by students. This problem often arises in the management process and the same problem continue to occur in the learning process. Therefore, research on the model of teacher involvement in class managemen is important to be a solution in effective education management.

Teacher involvement is the definition of the extent to which a teacher is actively involved in educational activities to create a maximum education. It is the teacher participation in finding learning concepts that can be implemented in learning in order to improve classroom learning quality (Valdes et al., 2021). It describes the extent to which teachers can activate students during the teaching and learning process son the students will actively be involved (Loizou et al., 2019). Teacher involvement refers to a definition where a teacher is able to control student learning both directly and indirectly

by involving parents as partners in learning activities (Zhou et al., 2020). Teacher involvement is a picture of a teacher who always facilitates students in learning activities for student development (Gaviria-Loaiza et al., 2017). Teacher involvement is a part of the teacehr's efforts through various strategies to improve students' abilities or skills applied through learning activities (ÖZCAN, 2020). Refering to those definitions, it can be concluded that teacher involvement is a teacher activity that us directly and indirectly to improve students' abilities or skills consisting of: controling students' learning, motivating students to learn, improving students' learning interest, facilitating learning in class, activating students in learning activites, improving learning quality through any kinds of strategies, and involving parents and stakeholders in learning.

Principal plays important role in providing education in education unit. The principal in his authority can be an evaluator in learning process carried out by the teachers in the classroom (Neumerski et al., 2018). Principal is as the instructor in providing direction to teachers to take best actions in learning process (Thessin, 2019). Principal motivates teacher to contribute maximally in increasing learning quality (Bektaş et al., 2020). Principals who motivate, support, and sustain teacher's professional learning have significant effect on student learning and school improvement (S. Liu & Hallinger, 2018). Absed on those descriptions, it can be summarized that the role of principal in improving learning is as an educator, supporter, administrator, supervisor, leader, innovator, or motivator.

Teacher self-efficacy can improve teacher skill in doing an action (Ismail & Wahid, 2018). Teacher's confidence in his ability will increase his efforts to achieve academic achievement in order to improve self-quality (Ismail et al., 2020; Ismail & Wahid, 2018). Strong belief followed by hard work makes it easier fro teachers to adapt to learning activities so that educational goals are achieved (Lastariwati et al., 2021). Teacher self-eficacy increases work motivation in improving teacher teaching skills (Nugroho et al., 2020; Teo et al., 2021). Teacher self-eficacy creates best learning practices because teachers belives thay can do their best in improving classroom learning quality (Salina Mustakim et al., 2021). Strong belief in teacher's ability will eliminate the teacher's fear of any challenge (Schunk & DiBenedetto, 2020). It can be underlined that self-eficacy is a belief of rising the power of a teacher to take an action.

Colleagues are a determing factor fro teacher's success in carrying out their duties as educator. Colleagues are friends who are willing to provide encouragement or motivation to take the best actions in teaching and educating students in the classroom (Wentzel, 2014). Collaeague is someone who makes a strong teacher in carrying out educational functions in the education unit (Dempsey et al., 2021). Colleagues are friends who will provide advice in developing teacher professionalism so that they have skills in learning activities (Shagrir, 2017). Colleagues are friends who care, advise, motivate and evaluate friends for development of teacher professionalism.

The work environment is a factor that affects teacher involvement in managing class. The teacher's work environment is a condition in which a person carries out learning activities (Grant, 2003). Work environment plays important role in improving teacher and student interest in participating learning action (Kärnä & Julin, 2015). Conducive

environment improves teacher performance and learning outcomes (Kleij & Fesken, 2015). The work environment is ateacher's workplace that provides comfort for teachers to carry out learning activities (Rahayu et al., 2020). The work environment is a factor that provides internal experience for a person in increasing work productivity (Pitalolka & Sofia, 2014). Based on those definitions it can be summarized that work environment includes coloring, cleanliness, lighting, ventilation, security, and conducive.

METHOD

Research Design

The research entitled the teacher involvement model in managing classes at primary schools in Yogyakarta city is a quantitative study with a correlational approach. This study found a new model that fits the data in the field based on theories that have a direct and indirect effects on teacher involvement at primary schools in Yogyakarta Province. Factors that become the model are factors identified as having an affect on teacher involvement in managing classroom. The factors are used as the determinants of teacher involvement in managing class are principal's role, self-evicacy, colleagues, and environment.

Population and Sample

The population of the study was 1760 teachers of primary schools in Yogyakarta Province, while the samples are some of them who were taken randomly using random cluster sampling. Clusters are used as a sampling technique because the area of Yogyakarta province is very large, so representative samples are taken from each cluster.

Collection Data Technique

Data were collected through survey techniques. The instrument was a questionnaire that was developed and validated in terms of content and constructs. In content, we asked three experts to validate the instrument and gave scores. Aiken's Formula is used to analyze the score of experts' assessment. In construct, we gave 150 teachers to fill out instruments and then we analyzed with Confirmatory Factor Analysis (CFA). we got information about valid and invalid indicators from the analysis. Construct reliability is acquired through CFA analysis. In the last step, we gave a valid and reliable instrument to respondents to get information about teachers' involvement in managing classes at primary schools in Yogyakarta City

Data Analysis Technique

There four steps of analysis in this project that is; data normality used one-sample Kolmogorov-Smirnov, linierity of variable used ANOVA, multicolinierity used Product Moment Correlation, and structural equation modelling (SEM). SEM is used to see whether the model developed based on theoretical concept is statistically fit model that can describe what factors have a significant effect on teacher involvement in managing classes at primary schools at Yogakarta.

Research Procedure

The research procedure in this study was started by collecting problems about teachers' involvement in managing a classroom and finding every variable that can affect it. The theories exploration of variables that affected the teachers' involvement in managing class has been done maximally so we got theories to support designing the model. From some theories, we found the indicators to develop instruments in the form of questionnaires. In the next step, we validate the questionnaire in content and construct. In content, we used three validators form measurement, evaluation, and education expert. In construct, we used 150 teachers to validate instruments by filling out questionnaires and analyzing with Confirmatory Factor Analysis. From CFA, we got the reliability index with Cronbach Alpa and Construct Reliability Formula. The valid and reliable instrument is used to get real data or information about teachers' involvement in managing the classroom.

FINDINGS

The assumption test is the main requirement in testing parametiruc statistical hypothesis so that the decisions obtained from the results of the analysis can be justified. Structural equation model analysis in this study uses the normality assumption test with Kolmogorov-Smrinov, the ANOVA linearity test, and the multicollinearity test using correlation. Table 1, 2 and 3 explain the result of analysis.

Table 1
Data normality test used one-sample kolmogorov-smirnov test

One-Sample Kolmogorov-Smirnov Test

		Pricipal	Environment	Self-Efficacy	Colleagues	Involvement
N		230	230	230	230	230
Normal Parameters[a]	Mean	39.2913	27.3261	14.7174	21.4391	54.3130
	Std. Deviation	7.72437	5.34755	3.52572	4.37472	9.82054
Most Extreme Differences	Absolute	.052	.054	.077	.077	.058
	Positive	.052	.042	.077	.049	.058
	Negative	-.043	-.054	-.063	-.077	-.050
Kolmogorov-Smirnov Z		.788	.818	1.164	1.169	.882
Asymp. Sig. (2-tailed)		.564	.514	.133	.130	.418

Table 1 shows the significant value on the variables of leadership, environment, teacher self-eficacy, colleagues, and involvement is greater than 0.05, so all data from the 5 variables measured are normally distributed. Table 2 describes the linearity test result from 4 independent variables to dependent variables as follows.

Table 2
The linearity of the relationship between independent variable and independent variable

		Sum of Squares	Mean Square	F	Sig.
Involvement * Principal's Role	(Combined)	3926.981	115.499	1.24	0.184
	Linearity	854.545	854.545	9.177	0.003
	Deviation from Linearity	3072.436	93.104	1	0.475
Involvement * Environment	(Combined)	4006.454	154.094	1.73	0.019
	Linearity	1095.584	1095.584	12.302	0.001
	Deviation from Linearity	2910.87	116.435	1.307	0.159
Involvement * Self_Efficacy	(Combined)	2433.798	143.165	1.544	0.082
	Linearity	1542.344	1542.344	16.639	0.000
	Deviation from Linearity	891.454	55.716	0.601	0.881
Involvement * Collegues	(Combined)	3948.43	207.812	2.406	0.001
	Linearity	1515.728	1515.728	17.55	0.000
	Deviation from Linearity	2432.702	135.15	1.565	0.071

Table 2 shows the results of the linearity test of the leadership role variable (Principal's Role) to the involvement variable where there is a linear realtionshio between the leadership variable and the involvement variable where the Deviation from Linearity value is 0.475 which is greater that the value of 0.05. The results of linearity analysis show that there is linear relationship between environment and involvement variables because the deviation from linearity value is greater than 0.05. Result of environment variable linearity test to the involvement variable gain deviation value from linearity is 0.159. These indicate that there is a linear relationship between environment variable and involvement variable because the Deviation from Linearity value is greater than 0.05. There is a linear relationship between the self-efficacy variable and the involvement variable, where the Deviation from Linearity value of 0.881 is greater than 0.05. The variables of colleagues and the involvement variable also show a linear relationship where the Deviation from Linearity value is also greater than 0.05 (0.071>0.05). Table 3 describes the result of the multicollinearity.

Tabel 3
Result of multicollinearity test

	Leader	Environment	Self-Efficacy	Collegues	Involvement
Principal's Role	1	.165*	0,084	0,088	.197**
Environment	.165*	1	.279**	.165*	.223**
Self-Efficacy	0,084	.279**	1	.244**	.264**
Collegues	0,088	.165*	.244**	1	.262**
Involvement	.197**	.223**	.264**	.262**	1

Table 3 explains correlation between leadership, environment, self-efficacy, and colleague variables to the involvement dependent variable. Results show that the highest correlation matrix in Table 3 is the self-efficacy variable and the environment variable of 0.279, while the lowest correlation is the leader and self-efficacy variables. These results show that the correlation matrix in Table 3 is in the low and sufficient category. These results indicate that there is no perfect relationship between each variable in Table 3. The multicollinearity test can be met. Further is interpreting hypothesis test.

Hypothesis Test

After the normality, linearity dan multicollinearity tests are met, the next step is to check the fit model that was built and check the validity of the variables forming and check the significant paths. Picture 1, table 4, 5, and 6 describe result of structural equation modeling from each variable.

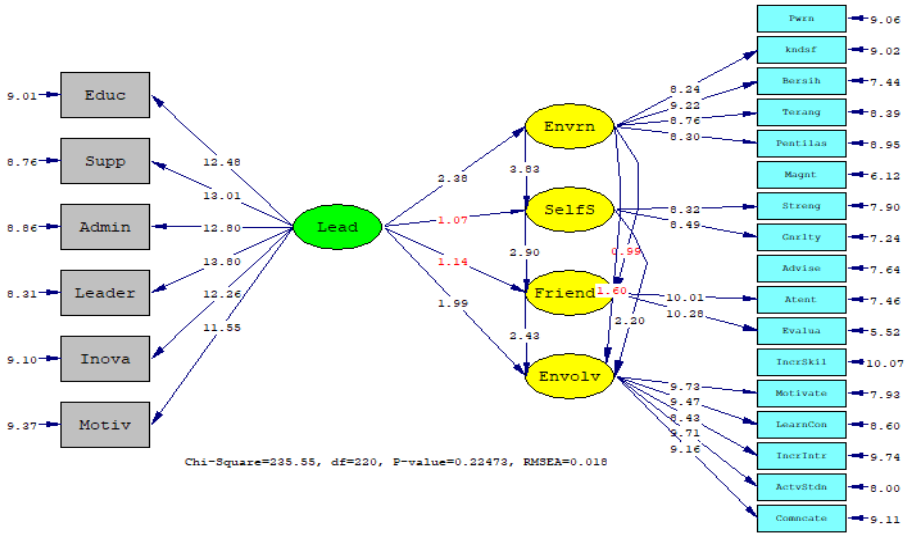

Figure 1
Structural equation modeling

Figure 1 describes the fit of the model, the construct validity of supporting indicators of the variables and significance of the paths of 5 variables. Table 4, 5 and 6 describe those three components.

Table 4
Fit model of structural model

Goodness of fit index	Criteria	Achieved Value	Conclusion
Chi square	< 2df	255.,55 (df=220)	Good
Significancy (p-value)	> 0,05	0,22743	Good
RSMEA	< 0,08	0,018	Good
Goodness of fit Index (GFI)	> 0,90	0,91	Good
Normed Fit Index (NFI)	> 0,90	0,94	Good
Comparative Fit Index (CFI)	> 0,90	0,99	Good
Incremental Fit Index (IFI)	> 0,90	0,99	Good
Non-Normed Fit Index (NNFI)	> 0,90	0,99	Good
Relative Fit Index (RFI)	> 0,90	0,93	Good

Table 4 explains the result of the fit of structural equation model from the analysis result. The results of the analysis show that all standard fit models have been met and the measurement made have been fit with the data obtained in the field. Then, construct validity is described in Table 5.

Table 5
Construct validity of five variables

Variable	Indicators	Loading	Criteria
Principal's Role	Educate	0.74	Valid
	Support	0.76	Valid
	Administrators	0.75	Valid
	Leadership	0.79	Valid
	Innovation	0.73	Valid
	Motivation	0.90	Valid
Environment	Coloring	0.66	Valid
	Conducive	0.66	Valid
	Cleaning	0.77	Valid
	Lighting	0.72	Valid
	Ventilation	0.67	Valid
Self-Efficacy	Magnitute	0.76	Valid
	Strenghten	0.68	Valid
	Generality	0.72	Valid
Colleugues	Advise	0.74	Valid
	Attention	0.75	Valid
	Evaluation	0.62	Valid
Involvement	Increase Skill	0.60	Valid
	Motivate Students	0.64	Valid
	Learning Control	0.61	Valid
	Increase learning interest	0.68	Valid
	Activate Students	0.64	Valid
	Communicate with parents	0.77	Valid

Tabel 5 shows all indicators which support the leadership variable in the valid category with a loading factor value greater than 0.3. Environment variables also have valid indicators. Self-efficacy variable obtains valid indicators. Colleagues variable also gains valid indicator within the loading factor value greater than 0.3. Involvement variable gains valid indicators with loading factor greater than 0.3. The result of this analysis concluded that all indicators forming the variables are valid indicators. Furthermore, Table 8 illustrates the results of the structural equation modeling analysis of exogenous to endogenous variables.

Table 6
Summary of structural equation modeling analysis (SEM)

Variable	Loading > 1.96 (T-Value)	Criteria
Principal's Role* Envolvement	1.99	Significant
Environtment*Envolvement	1.60	Not Significant
Self-Efficacy*Envolvment	2.30	Significant
Colleague*Envolvement	2.43	Significant
Enviroment*Self-Efficacy	2.63	Significant
Enviroment*Colleague	0.99	Not Significant
Self-Efficacy*Colleague	2.90	Significant
Principal's Role*Enviroment	2.38	Significant
Principal's Role*Self-Efficacy	1.07	Not Significant
Principal's Role*Colleague	1.14	Not Significant

Table 6 describes the summary of SEM results for exogenous to endogenous variables. The analysis results show that there is a significant effect of the principal's role variable on the teacher's teaching involvement variable in primary schools at Yogyakarta. There is a significant effect of the teacher's self-efficacy variable on teaching engagement with a significant t-value of 2.30. There is a significant effect of the colleague variable on teacher learning involvement with a t-value of 2.43. Environmnet does not have significant effect on the teacher's involvement in Yogyakarta. The dominant variable which most effect teacher involvement is colleagues. The analysis result also describes the effect of exogenous variables on other exogenous variables. The environmental variable effects the self-efficacy variable with a t-value of 2.63. Self-efficacy effects collegues with t-value of 2.90. Principal's role effects teacher work environment with t-value of 2.38. Work environment does not affect colleagues. Principal's role does not affect self-evicacy and Principal's role does not affect colleagues. Of the 10 hypothesized pathways, there are 6 significant and 4 insignificant paths.

DISCUSSION

Result of the analysis shows that Principal's role effects the teacher involvement in teaching. These results indicate that principal is able to maximize their leadership to improve teacher performance so that they can be actively be involved in teaching activities at schools (Shen et al., 2021). Positive instructions from leaders in schools can increase teacher activities in improving their performance in learning acts (Alajmi, 2022). Formally and informally principal leadership can increase teacher involvement in teaching students (Y. Liu, 2021). Schools which are centered on leadership of principal can affect the professional performance of teachers in teaching (Shen et al., 2020, 2021; Talebizadeh et al., 2021). School support through principal leadership can directly increase teacher involvement in making their role effective in classroom (Solberg et al., 2022). The power of the principal leadership instruction will increase teacher's confidence to be actively involved in learning activities (Al-mahdy et al., 2018). Leadership that is carried out optimally in schools can influence innovative teacher work behavior so that it directly produces maximum learning outcomes (Sudibjo & Prameswari, 2021).

Teacher self-efficacy is able to affect teacher involvement in classroom management. Self confidence can positively effect teacher's ability to manage classes through superior class management techniques (Love et al., 2020). Teacher-self efficacy is positively related to teacher responsibility in teaching and has a positive impact on student success in learning (Lauermann & Berger, 2020). Teacher self-efficacy is closely related to teacher motivation to be involved in managing leanring so as to increase teacher job satisfaction (Granziera & Perera, 2019). Increased work motivation through self-efficacy can indirectly increase teacher involvement in elarning or managing the class optimally (Moreira-fontán et al., 2019)**.** Self-efficacy describes the goodness of teacher character increases teacher's involvement in maximizing classroom learning (Perera et al., 2018). The high self-evicacy is influenced by work environment od teacher because teachers are motivated to do their work optimally (Almessabi, 2021). Work environment which is professionally set gives maximum experience for teachers so that teacher's

belief in managing classroom maximally (Ma et al., 2022). A good environment and adequate facilities will increase teacher self-efficacy to maximize classroom management abilities in schools (Cerit, 2013). High teacher self-confidence allows teachers to teach under any conditions because teacher would be fully responsible for maximizing learning in the classroom (Pressley & Ha, 2021).

CONCLUSION

The analysis results showed that three significant variables on the teachers' involvement, that is, the principal's role, self-efficacy, and colleagues, have a significant effect on the variable teachers' involvement in classroom management; t-values are 1.99, 2.30, and 2.43, respectively. This result showed that three significant variables are needed to consider in managing classes at primary schools. The principal's role, self-efficacy, and colleagues must be improved to increase school quality through the teachers' involvement in managing class activities. Three other paths showed that the environment affected teachers' efficacy, colleagues, and the principal's role affected the environment. The education stakeholders should improve these paths. The principal's role, teachers' efficacy, environment, colleagues, and teachers' involvement are the best variables to improve class management quality.

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