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The Relationship between Personal Mastery and Teachers' Competencies at Schools in Indonesia

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Abstract

The purpose of the present research is to study the relationships between indicators of personal mastery and indicators of teachers' competencies at Junior Secondary State Bone district in Indonesia. The respondents of the research consist of all the Junior Secondary State teachers of the Bone district including 200 teachers (80 males 120 females). The obtained data was analyzed by Structural Equation Modeling (SEM). The results have indicated that there exists a significant correlation between personal mastery and teachers' competencies at the 0.05 significance level. Further, a significant positive correlation was observed between the indicators of personal mastery (personal vision, creative tension, commitment, trust, and consciousness) and indicators of teachers' competencies (pedagogic, professional, personality, and social).

Keywords: *Personal Mastery and Teachers' Competencies*

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Introduction

One of the most important elements in building teachers' competencies is through personal mastery. Studies of both personal mastery and teachers' competencies have been discussed by the investigators rather than various states. Their studies can be acquired in the literature discussing the case about the importance of personal mastery in building teachers' competencies in school. Marquardt (2001) argues that personal mastery on any expert organization can improve individuals' capability; improve organizational performance (Senge, 2002); improve confidence in work (Merchant & Van der Stede, 2007); create a memorable design (Elena, 2006), improve the ability to think in an open and positive thinking (Buckman, 2004); able to solve problems effectively (Wheelen & Hunger, 2002); make clear decisions and better work (Edmondson, 2002), improve the performance of teachers' teaching process (Glickman et al., 1995), and enhance the learning phase and the development of potential students (Lamson & Bell, 1997).

Senge (2002) suggests that the formation of personal mastery is characterized by a strong disciplines of a person as follows, namely: a) Having a clear personal vision. The humans life has a purpose (vision). Unfortunately, most of us are confused by the purpose of life. Personal vision is a statement about the purpose of life is expressed in the products and services offered, needs to be addressed, the values obtained as well as the aspirations and ideals of the future (Nawawi, 2000; Alwi, 2006). Achieve personal vision will never be separated from the hobby or something that we do with pleasure (Drucker, 2000), b) Maintaining the creative tension. Creative tension is an effective power or force to achieve one's personal vision (Senge, 2002). There are two ways to run a creative tension, namely: pull reality toward the vision of this future personal and engaging personal vision toward reality. Mastery over the creative tension can increase the a person's capacity to promote its performance as creative tension someone to come forward, c) Having a commitment to an occupation. Commitment means of someone acceptance strong towards goals and values of the organization are trying to work and have a powerful passion to stay afloat in the organization (Dantes, 2007; Daryanto, 2011; Lokman & Mohd. Anuar, 2011). It does cover ways to awaken the purpose or meet the needs of organizations which in essence prioritize the interests the organization rather than personal interests, d) Having a high self beliefs. Self beliefs is internally controlled, one will be the strength of feeling in itself, awareness of the capabilities and accountable for the results set (Senge, 2002; Uno, 2009; Marty, 2009), and e) Having a consciousness of self -positioning. Self-consciousness as a capacity that allows humans are able to observe distinguished itself than other people and the world that allows the human capacity to put oneself in the present, the past and the future (Jakson, 2000; Senge, 2002; Danim 2005).

Based on the description above, showed that personal mastery can delivered a person to work more professional. Hutapea and Thoha (2008), the view that developing personal mastery aims to be able to work with a remarkable performance. Therefore, the success of an organization is highly dependent on individuals' personal mastery who work in an organization. Personal mastery is the method of understanding and continuing in oneself. Personal mastery plays an important part in enhancing the growth and development professional of a person. However, a person can be measured by means of professional competence being possessed (Sergiovanni, 2002; Mulyasa, 2008; Matry, 2008; Syafaruddin 2010). As a teacher, s/he should possess a competency as a learning agent. The competency should be owned by the teacher as a learning agent as proposed by Depdiknas (2008) & Uno (2009) involves of pedagogical competency namely the teacher must have the mastery of pedagogy, professional competency means the teacher must have extensive knowledge of the subjects in this field, the personality competency of teacher should have a strong personality so that it can be a source of aspiration for the subject , and social competency means the teacher must be able to interact socially.

The general objectives of this research were to:

Studying the correlation between personal mastery and teachers' competencies at Junior Secondary State Bone district in Indonesia.

Main Hypothesis

There exist a significant correlation between indicators of personal mastery and indicators of teachers' competencies at Junior Secondary State Bone district in Indonesia.

Research Method

This study use instrument developed by researcher to measure the personal mastery and teachers' competencies. The pilot study is used to ensure the validity and reliability of the instrument (Sekaran, 2003; Azizi *et al.*, 2006; Mohd Majid, 2000; Sidek, 2002; Sugiyono, 2006).

This study is preceded by pilot study to ensure the validity and reliability of the instrument by distributing questionnaire to 40 teachers'. The value of coefficient correlation is determined more than 0.321 for each items. The Cronbach's Alpha value of each items of the instrument is reliable.

Table 1. The Cronbach's Alpha value of reliability based on the Personal Mastery and Teachers' Competencies

Dimension	Alpha Value
Personal mastery	0.675
Teachers' Competencies	0.792

The respondent of this study is 200 teachers who teach Junior Secondary State in Bone area. The present research is a correlation between personal mastery and teachers' competencies for analysing data using the Structural Equation Modeling (SEM) by means of Amos 18.0 program. Besides this application of Confirmatory Factor Analysis (CFA) in Structural Equation Modeling (SEM) for to test regarding the validity and reliability of the instrument was used. In constructs validity, four measurements have been used, i.e Convergent Validity, Average Variance Extracted (AVE), Construct Reliability, and Discriminant Validity (Dimitrov, 2003; Hair et al, 2006; Ferdinand, 2006; Ghazali, 2008; Arbuckle, 2010; Santoso, 2011).

Findings:

Convergent Validity intended to see how big indicators Converge or shares in a single construct. An indicators is said to converge if it has a factor loading value is high and significant. In addition, it has a standardized factor loading estimate greater-than 0.5.

Table 2. Regression and Standardized Regression Weights Personal Mastery

Items	Indicators	Estimate	P	Label
X1-1	<--- Personal Vision_(X1)	0.853	***	Valid
X1-2	<--- Personal Vision_(X1)	0.878	***	Valid
X1-3	<--- Personal Vision_(X1)	0.511	***	Valid
X1-4	<--- Personal Vision_(X1)	0.581	***	Valid
X1-5	<--- Personal Vision_(X1)	0.519	***	Valid
X1-6	<--- Personal Vision_(X1)	0.471	***	Valid
X2-1	<--- Creative Tension_(X2)	0.678	***	Valid
X2-2	<--- Creative Tension_(X2)	0.736	***	Valid
X2-3	<--- Creative Tension_(X2)	0.689	***	Valid
X2-4	<--- Creative Tension_(X2)	0.754	***	Valid
X2-5	<--- Creative Tension_(X2)	0.736	***	Valid
X3-1	<--- Commitment_(X3)	0.630	***	Valid
X3-2	<--- Commitment_(X3)	0.751	***	Valid
X3-3	<--- Commitment_(X3)	0.754	***	Valid
X3-4	<--- Commitment_(X3)	0.643	***	Valid
X3-5	<--- Commitment_(X3)	0.656	***	Valid
X4-1	<--- Trust_(X4)	0.505	***	Valid
X4-2	<--- Trust_(X4)	0.709	***	Valid
X4-3	<--- Trust_(X4)	0.506	***	Valid
X4-4	<--- Trust_(X4)	0.798	***	Valid
X4-5	<--- Trust_(X4)	0.780	***	Valid
X5-1	<--- Consciousness_(X5)	0.497	***	Valid
X5-2	<--- Consciousness_(X5)	0.604	***	Valid
X5-3	<--- Consciousness_(X5)	0.678	***	Valid
X5-4	<--- Consciousness_(X5)	0.777	***	Valid
X5-5	<--- Consciousness_(X5)	0.756	***	Valid

Table 3. Regression and Standardized Regression Weights Teachers' Competencies

Items		Indicators	Estimate	P	Label
Y1-1	<---	Pedagogic_(Y1)	0.693	***	Valid
Y1-2	<---	Pedagogic_(Y1)	0.632	***	Valid
Y1-3	<---	Pedagogic_(Y1)	0.612	***	Valid
Y1-4	<---	Pedagogic_(Y1)	0.654	***	Valid
Y1-5	<---	Pedagogic_(Y1)	0.699	***	Valid
Y1-6	<---	Pedagogic_(Y1)	0.805	***	Valid
Y1-7	<---	Pedagogic_(Y1)	0.759	***	Valid
Y2-1	<---	Profession_(Y2)	0.510	***	Valid
Y2-2	<---	Profession_(Y2)	0.699	***	Valid
Y2-3	<---	Profession_(Y2)	0.821	***	Valid
Y2-4	<---	Profession_(Y2)	0.759	***	Valid
Y2-5	<---	Profession_(Y2)	0.772	***	Valid
Y3-1	<---	Personality_(Y3)	0.689	***	Valid
Y3-2	<---	Personality_(Y3)	0.627	***	Valid
Y3-3	<---	Personality_(Y3)	0.564	***	Valid
Y3-4	<---	Personality_(Y3)	0.557	***	Valid
Y3-5	<---	Personality_(Y3)	0.676	***	Valid
Y3-6	<---	Personality_(Y3)	0.585	***	Valid
Y4-1	<---	Social_(Y4)	0.565	***	Valid
Y4-2	<---	Social_(Y4)	0.646	***	Valid
Y4-3	<---	Social_(Y4)	0.793	***	Valid
Y4-4	<---	Social_(Y4)	0.665	***	Valid
Y4-5	<---	Social_(Y4)	0.798	***	Valid
Y4-6	<---	Social_(Y4)	0.657	***	Valid

Table 2 and 3 show that the 50 items has a P value significant and factor loading estimate greater-than 0.5. Thereby, overall items is valid.

The construct validity is determined by the Average Variance Extracted (AVE). AVE values got hold of the formula:

$$AVE = \frac{\text{Sum of Standardized Loading Square}}{\text{Sum of Standardized Loading Square} + \text{Measurement Error}}$$

$$\text{Measurement error} = 1 - (\text{Standardized Loading})^2$$

Construct Reliability (CR) is intended to determine the consistency of construct validity indicator.

$$CR = \frac{\text{Square of Total Standardized Loading Kuadrat}}{\text{Square of Total Standardized Loading Kuadrat} + \text{Measurement Error}}$$

Discriminant Validity (DV) test shows how much variance is in the indicators that are able to explain variance in the construct. Discriminant Validity (DV) value obtained from the root of AVE value as:

$$DV = \sqrt{AVE}$$

For the values of Average Variance Extracted (AVE), Construct Reliability (CR), and Discriminant Validity (DV) from of personal mastery and teachers' competencies shown through the Table 4 and 5.

Table 4. Average Variance Extracted (AVE), CR and DV for Personal Mastery

No.	Indicators	AVE	CR	DV
1.	Personal Vision	0.531	0.792	0.727
2.	Creative Tension	0.517	0.782	0.719
3.	Commitment	0.475	0.775	0.689
4.	Trust	0.462	0.770	0.680
5.	Consciousness	0.453	0.768	0.673

Table 5. Average Variance Extracted (AVE), CR and DV for Teachers Competencies

No.	Indicators	AVE	CR	DV
1.	Pedagogic Competency	0.485	0.829	0.696
2.	Professional Competency	0.519	0.781	0.720
3.	Personality Competency	0.483	0.787	0.694
4.	Social Competency	0.479	0.805	0.692

Table 4 and 5 show the values AVE, CR and DV included as high levels. Furthermore, the hypothesis testing implemented by using full model SEM as shown in figure 1 below.

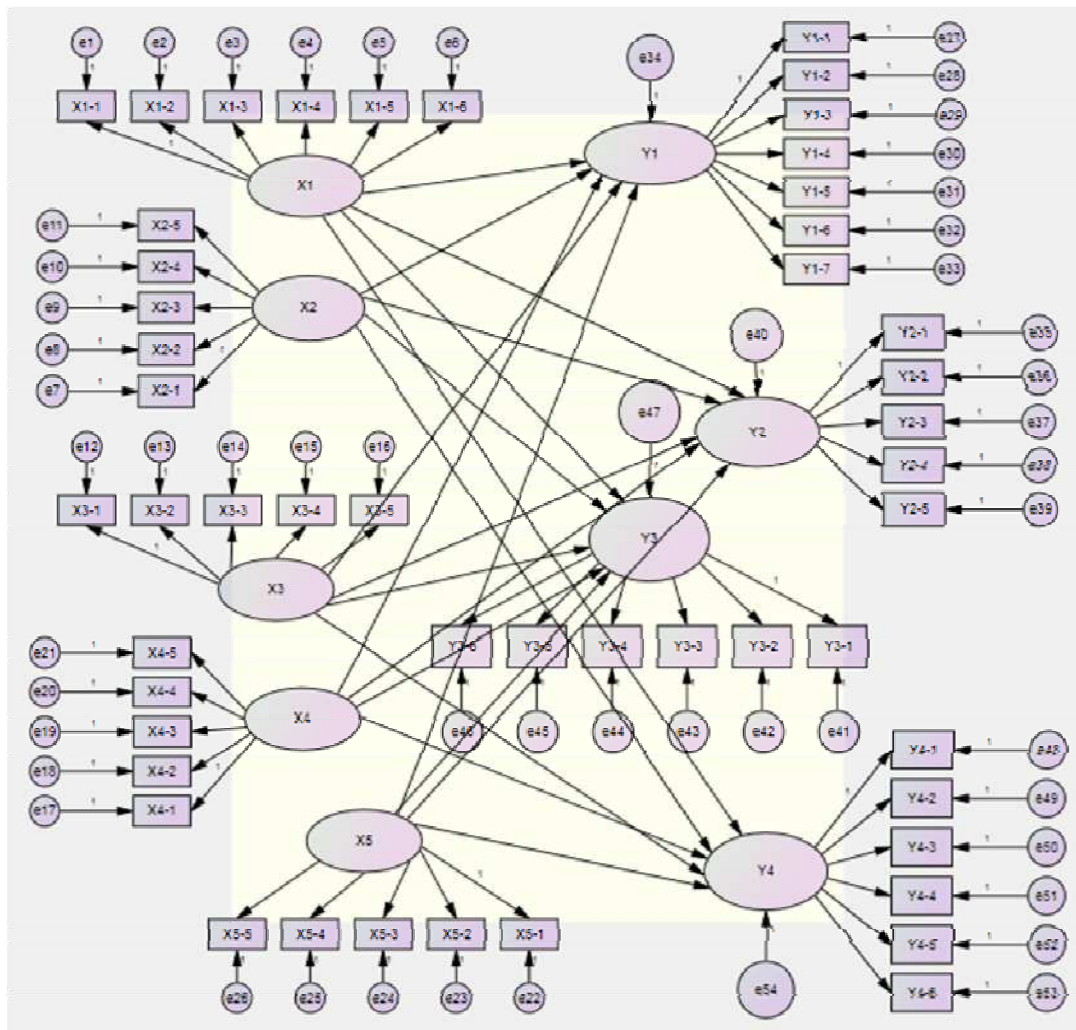


Figure 1. Full Model of Personal Mastery dan Teachers' Competencies

Figure 1 full model SEM an above be able to simple as shown in Figure 2.

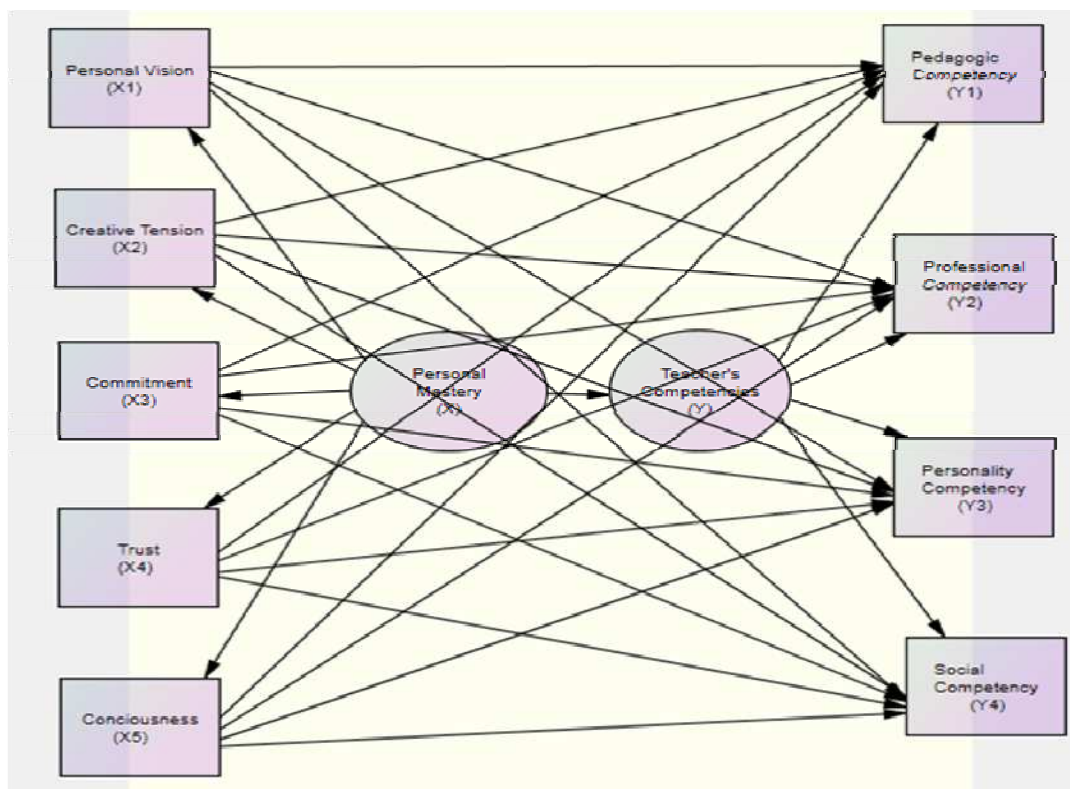


Figure 2. Simple Full Model SEM

Testing to conformity full model SEM this determined by using Degree of freedom (Df), Chi-Square, Probability (P), CMIN/DF, Goodness of Fit Index (GFI), Adjusted Goodness of Fit Index (AGFI), Root Mean Residual (RMR), Incremental Fit Indexes (IFI) or Baseline Comparisons that are Normed Fit Index (NFI), Comparative Fit Index (CFI), Tucker Lewis Index (TLI), Parsimony Fit Index (PFI) that are Parsimony Ratio (PRATIO), Parsimony Normed Fit Index (PNFI), Parsimony Comparative Fit Index (PCFI), Root Mean Square Error of Approximation (RMSEA) and Hoelter based on criterion which has been specified. For the values of shown Table 6.

Table 6. Index Goodness of Fit Model

Goodness of Fit Index	Cut of Value	Result	Evaluation Model
Degree of Freedom (Df)	Positive	1155	Fit
Chi Square	Expected is small	2543.004	Marginal
Probability (P)	≤ 0.05	0.000	Significant
CMIN/DF	≤ 2.00	2.202	Marginal
GFI	Approached 1	0.672	Fit
AGFI	Approached 1	0.638	Fit
PMR	Approached 0	0.170	Fit
IFI	Approached 1	0.736	Fit
NFI	Approached 1	0.603	Fit
CFI	Approached 1	0.732	Fit
TLI	Approached 1	0.716	Fit
PRATIO	Between 0 and 1	0.943	Fit
PNFI	Between 0 and 1	0.569	Fit
PCFI	Between 0 and 1	0.690	Fit
RMSEA	≤ 0.08	0.078	Fit
HOELTER	≥ 200	97	Marginal

Testing to conformity full model SEM Table 6 shows that the Structural Equation Modeling is goodly model (model fit). Furthermore, for showed significant and the relationship between of Personal Mastery and Teachers Competencies based-on Regression Weights (RW) has a $P < 0.05$ and Standardized Direct Effects (SDE) as show Table 7.

Table 7. The relationship between Personal Mastery and Teachers' Competencies based-on Regression Weights (RW) and Standardized Direct Effects (SDE)

Indicators Personal Mastery (X) and Teachers' Competencies (Y)			Results	
			P (RW)	Estimate (SDE)
Y1	<---	X1	0.038	0.253
Y2	<---	X1	0.012	0.264
Y3	<---	X1	0.040	0.242
Y4	<---	X1	0.023	0.257
Y1	<---	X2	0.029	0.381
Y2	<---	X2	0.031	0.207
Y3	<---	X2	0.033	0.251
Y4	<---	X2	0.003	0.274
Y1	<---	X3	0.039	0.249
Y2	<---	X3	0.002	0.380
Y3	<---	X3	0.050	0.276
Y4	<---	X3	0.042	0.337
Y1	<---	X4	0.000	0.446
Y2	<---	X4	0.044	0.342
Y3	<---	X4	0.046	0.313
Y4	<---	X4	0.000	0.419
Y1	<---	X5	0.000	0.746
Y2	<---	X5	0.001	0.580
Y3	<---	X5	0.000	0.616
Y4	<---	X5	0.016	0.488

Notes: P<0.05; SDE (Standardized Direct Effects); RW (Regression Weights)

Regression Weights in table 7 shows that the indicators has a P value significant due to smaller-than the value 0.05 ($P < 0.05$). Further, Standardized Direct Effects shows that the between indicators of Personal Mastery {Personal Vision (X1), Creative Tension (X2), Commitment (X3), Trust (X4) and Consciousness (X5)} and indicators of Teachers' Competencies {Pedagogic Competency (Y1), Professional Competency (Y2), Personality Competency (Y3), and Social Competency (Y4)} is positively correlated.

The degree of relation between each indicators of personal mastery with indicators of teachers competencies is obtained as follow:

- Relation between personal vision is with pedagogic competency ($p = 0.038$, $\beta = 0.253$).
- Relation between personal vision is with professional competency ($p = 0.012$, $\beta = 0.264$).
- Relation between personal vision is with personality competency ($p = 0.040$, $\beta = 0.242$).
- Relation between personal vision is with social competency ($p = 0.023$, $\beta = 0.257$).
- Relation between creative tension is with pedagogic competency ($p = 0.029$, $\beta = 0.381$).
- Relation between creative tension is with professional competency ($p = 0.031$, $\beta = 0.207$).
- Relation between creative tension is with personality competency ($p = 0.033$, $\beta = 0.251$).
- Relation between creative tension is with social competency ($p = 0.003$, $\beta = 0.274$).
- Relation between commitment is with pedagogic competency ($p = 0.039$, $\beta = 0.249$).
- Relation between commitment is with professional competency ($p = 0.002$, $\beta = 0.380$).
- Relation between commitment is with personality competency ($p = 0.050$, $\beta = 0.276$).
- Relation between commitment is with social competency ($p = 0.042$, $\beta = 0.337$).
- Relation between trust is with pedagogic competency ($p = 0.000$, $\beta = 0.446$).
- Relation between trust is with professional competency ($p = 0.044$, $\beta = 0.342$).
- Relation between trust is with personality competency ($p = 0.046$, $\beta = 0.313$).
- Relation between trust is with social competency ($p = 0.000$, $\beta = 0.419$).
- Relation between consciousness is with pedagogic competency ($p = 0.000$, $\beta = 0.746$).
- Relation between consciousness is with professional competency ($p = 0.001$, $\beta = 0.580$).
- Relation between consciousness is with personality competency ($p = 0.000$, $\beta = 0.616$).
- Relation between consciousness is with social competency ($p = 0.016$, $\beta = 0.488$).

Discussion and Conclusion

Using Structural Equation Modeling (SEM), the results of the present research showed that there is significant and positive relationship between indicators personal mastery and indicators teachers competencies at Junior Secondary (SMP) State Bone district in Indonesia. These results are consistent with the findings of the mentioned research studies. Considering the results of Glickman et al. (1995); Marquardt (2001); Edmondson (2002); Wheelen & Hunger (2002); Buckman (2004); Elena, 2006); Merchant & Van der Stede (2007) who reported that personal mastery be able to increased competencies.

The results of this research proved a significant correlation between indicators of personal mastery (personal vision, creative tension, commitment, trust and consciousness) and indicators of teachers competencies (pedagogic, professional, personality, and social). It demonstrates that with confidence 95% of teachers competencies in that schools will increase cases if the personal mastery of it to be improved, teacher:

- 1- Having a clear personal vision
- 2- Able to maintaining creative tension with good
- 3- Having a commitment against a job
- 4- Having by higher confidence
- 5- Having consciousness about itself position

The results of the research hypothesis can be concluded that to improve the teachers' competencies (pedagogic competency, professional competency, personality competency and social competency) than the depends on personal mastery (personal vision, creative tension, commitment, trust and consciousness).

Given the obtained results the authorities of the Indonesia especially Bone district should take the necessary action to promote the teachers' competencies can be developed through personal mastery.

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