RESEARCH ARTICLE

THE EFFECT OF RECRUITMENT AND SELECTION PROCESS ON THE PERFORMANCE OF PERSONAL TUTOR AT NON-FORMAL EDUCATION AT SURABAYA, INDONESIA

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ABSTRACT

The aim of this study is to examine the effect of recruitment and selection process on job performance in education industry. While many previous studies concerned on research in formal education organization, this research more focus on the relationship between recruitment and selection process on job performance in non-formal education agency. This study used reflective measurement indicators with four indicators for employee performance, three indicators for recruitment and six indicators for selection. The samples of this study are tutors who are currently working at My L's Course Agency in Surabaya Indonesia. This study employed variance based Structural Equation Model (SEM) using Partial Least Square software to examine these relationships. In addition, the bootstrap technique with 5000 samples is used to estimate t-value and p-value to avoid type II error problem in testing hypothesis due to small sample size problem. The research result shows that impact of recruitment and selection on tutor's performance are statistically significant at 1%. This empirical evidence confirms the hypothesis that recruitment and selection process has an impact on job performance. This finding implies that human resource manager should aware the recruitment and selection process to improve the job performance in the recruiting process. However, the average score value of all indicators are only weakly suggesting considerable further research in improving teacher quality through recruitment and selection process.

Keywords: *recruitment; selection; job performance*

INTRODUCTION

The workforce recruitment and selection process is one of important issues in human resource management and organization. Its related with the process in identifying and attracting the potential candidates that will be offered to perform the job in the organization (Breaugh and Starke, 2000). This process can be viewed as central point to the success of organization and a key function of human resource management (Ntiomah et al. 2014). Effective selection procedures are essential in obtaining a workforce that will becomes a

source of competitive advantage for organization Kelkay (2018).

In the early worked, Vroom (1964) proposed the hypothesis that recruitment practices affect applicant' expectation on receiving job offers. While, Randall (1987) argued that recruitment and selection is effectively lead the organization to assess and select higher qualified workforce who meet the job specification requirement and therefore it will lead higher performance. Effective procedures in recruitment and selection will lead both candidate and management to assess the degree to which candidate has relevant qualification that meets and fits the job specification (Bohlander and Snell, 2010, Ntiamoah et al. 2014).

Recruitment and selection process also relevant in improving job performance in education organization. Comprehensive study was released by Jacob et al. (2016) that found relationship between teaching hiring and teaching performance. Other studies also provide empirical evidence of the relationship between recruitment-selection and job performance (Jacob, 2016, Kepha et al., 2012, Olaleye, 2013, and Wambua and Genga, 2018). However, some studies find that mean score of the variable indicators are relatively weak. The score is lower than expected (Jacob et al., 2016, and Kelkay, 2018). In addition, Jacob (2016) found that application scores of many teacher candidates who were not hired had exceeding the average score of those teacher were hired.

While previous studies concern on research in formal education organization, only few researches concern on non-formal education organization. History of non-formal education institution in Indonesia began on 1977 since Education and Culture Ministry released Act No. 0151/U/1977 that regulated

the principles for implementing non-formal education program. Primagama is the most influence tutor agency in Indonesia which established since 1982. The role of tutor agencies in Indonesia is important due to some standard curriculum requirements in formal education may not met by pupils. Especially for meet the standard of national examination, and pupils who want to continue their study into higher level of education. Programme for International Student Assessment (PISA), in 2015, released report of study comparing education quality based on 30 countries of Organization for Economic Co-operation and Development (OECD). The report indicated that average quality education in Indonesia relatively weak, the score is below average. Economic Census in 2016 by Central Bureau of Statistic Indonesia reported that there are 1.818 tutor agencies in Indonesia. One of the agency tutors is My L's Course Agency at Surabaya. This agency contributes in improving quality education in Indonesia through personal tutor in non-formal education process.

Research objective. The aim of this study is to examine the effect of recruitment and selection process on job performance in non-formal education agency. Contribution of this research is important for human capital management in make a decision hiring tutor strategy. Effective teacher/tutor selection can be a relatively low cost way to improve the teacher/tutor performance (Jacob, 2016).

The paper proceeds as follows. Section 2 provides literature review regarding theories and empirical evidences in recruitment-selection, job performance, and hypothesis development. Section 3 presents research method including data and sample and technique analysis. Section 4 reports and discusses research results and findings. Major

conclusion and implication of the research results will be provided in Section 5.

MATERIAL AND METHODS

MATERIAL

Economic literature in education management pay more attention on the labor supply teacher than to labor demand. They are mainly focus on retention rate, compensation and incentive scheme, and student performance, while only small literature in economics [1]on labor demand for teaching applicant backgrounds and the effectiveness of teaching recruitment and selection (Black et al., 2014; Jacob et al., 2016; and Papay and Kraft, 2016).

Desler (2015, p101) suggested that recruitment and selection are important parts of human resource policies and practices which are necessary to put in place so as to produce the required employee skills and behaviors to achieve organizational strategic goals. In education organization, teacher have important role to maintain survival of an organization. Stronge and Hindman (2006) defined teacher *recruitment* as the process of providing an adequate number of quality applicants. Whereas teacher *selection* is the process of choosing only high-quality employees from among the assembled applicants. Teachers recruitment and selection is one of the most important responsibility of organization leader due to their contribution to the organization. Hence leaders should pay attention in the process of teacher recruitment and selection (Herrmann, 2018; Kelkay 2018; and Stronge and Hindman 2006).

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[1] The term tutor in this paper is applied for non-formal education as well as teacher for formal education

Recent comprehensive study in teacher applicant hiring and teacher performance have been done by Jacob et al. (2016). They examined relationship between teaching hiring and performance at Washington DC Public Schools. They used 7,442 applicants as research samples. The main variables are applicant characteristics, hiring outcomes, and teacher performance. Their study used several techniques in analyzing the data including ordinary least square, probability linear model, and factor analysis. They provide empirical evidence that applicant characteristics strongly predict teacher effectiveness. There is positive relationship between predicted and actual performance. However, they found that average score measurement of those variables are relatively weak associated with the teacher applicant being hired.

Previous study by Kepha et al. (2012) focused on the effect of recruitment-selection on employee's performance at research institutes in Kenya. They distributed 256 questionnaires to respondents, while 184 questionnaires were completely answered and returned. The response rate is 71.9%. Their study use factor analysis and ordinary least square. They provided empirical evidence that recruitment-selection have positive influence on employee's performance.

Other studies in the relationship between recruitment, selection, and performance in education organization based on descriptive statistics and qualitative data analysis. Wambua and Genga (2018) studied recruitment-selection and teacher's performance at Kenya. They used 346 participants in their study. Their finding supported that recruitment and selection process have positive impact on teacher's performance. While Kelkay (2018) examined recruitment and selection of teacher

in private primary school in Ethiopia. The sample size is 97 teachers. He found that the observed mean is lower than expected mean. This result is parallel to the study reported by Jacob et al. (2016).

There are many empirical evidences on the relationship between recruitment-selection and job performance in formal education, however only few studies have been founded in non-formal education. Erawati (2008) studied relationship between recruitment-selection and performance of freelance tutor at Tutor Agency Bintang Pelajar in Bogor, Indonesia. She used 57 freelance tutors as research samples. While Spearman rank correlation was used to examine the hypothesis. She found significant correlation between recruitment-selection and job performance of freelance tutor.

Hypothesis. This study proposes hypothesis that recruitment and selection lead job performance. The hypothesis will be examined in the non-formal education institution. Previous studies showed that recruitment, selection and job performance are latent variables. Its need to identify indicators that reflect the characteristic of the unobserved variable. The reflective indicators for each unobserved variable are presented in the next section.

METHODS

Data. Data of this research were collected by direct survey for the convenience method. The questionnaire was distributed to the tutor who apply tutor vacation and work at Tutor Agency My L's Course at Surabaya. There are 50 tutors who applied and work at this agency. This study used population data due to small number of observations. The survey method was used to collect data from tutors, which is relevant to measure reflective indicators of recruitment and selection. While data collection for reflective indicators for tutor's performance will be completed by supervisor. This research also interviewed supervisor to get further information about practices of learning process in the non-formal education. There is difference learning approach between formal and non-formal education due to different natural characteristics such as learning outcomes, class size, length of sessions, meeting duration, and code of conduct, and among others.

Indicator and variable measurement. There are three unobserved or latent variables that be reflected by some indicators for each latent variable. The operational definition and measurement of those variables are as follows:

a. **Recruitment**. This study identified three reflective indicators for recruitment, which include: (i) clarity of recruitment guidance (Kepha et al., 2012); (ii) information of vacant position (Kelkay, 2018; Kepha et al., 2012; Wambua and Genga, 2018); and (iii) transparency of recruitment procedure (Kelkay, 2018; Kepha et al., 2012; Wambua and Genga, 2018). Each indicator for recruitment is revealed as follows:
   - X1.1. Recruitment process was based on Course Agency's recruitment guidance clearly
   - X1.2. Applicant could get information of vacant position easily
   - X1.3. Recruitment procedure is transparent for candidates

b. **Selection**. There are six reflective indicators which are useful to construct selection variable that cover: (i) academic background (Erawati, 2008; Goldhaber et al. 2014; Jacob, 2016; Kelkay, 2018); (ii) recommendation letters (Goldhaber et al. 2014; Jacob et al., 2016) ; (iii) work experience (Jacob et al., 2016; Erawati, 2008; Kelkay, 2018); (iv) physical health (Erawati, 2008); (v) written assessment

(Jacob et al., 2016); and (vi) interview assessment (Jacob et al., 2016; Kelkay, 2018; Rynes, 1988; Wambua and Genga, 2018). Each indicator for selection is stated as follow:

- X2.1. Selection process and job placement are fit with candidate's educational background
- X2.2. Course Agency acknowledged job reference letter during the selection process in detail
- X2.3. Course Agency considered applicant's relevant work experience
- X2.4. Course Agency preferred applicant who is physically health and fit to perform the work assignment.
- X2.5. Course Agency used evaluation standard for written assessment
- X2.6. Interview assessment evaluation was combined to yield a final assessment score

c. **Tutor's performance**. Tutor's performance is endogenous latent variable. This study used 4 reflective indicators that be detailed as follows: (i) target achievement (Jacob et al., 2016; Kepha et al., 2012); (ii) competencies (Erawati, 2008); (iii) absenteeism (Jacob et al., 2016; Kepha et al., 2012); and (iv) progress on teaching professionalism (Jacob et al., 2016). The job performance indicators were expressed in statements as follows:

- Y1.1. Tutor achieved his/her specified target satisfactorily
- Y1.2. Tutor has competency on knowledge and understanding of the course subject
- Y1.3. The rate of tutor's absenteeism is relatively low
- Y1.4. Tutor has showed progress on teaching professionalism

This paper used 5-point Likert scale to measure each indicator of unobserved variables. The measurement needs respondents to rate the extent to which they strongly agree, agree, neutral, disagree, or strongly disagree with the statement of indicator.

Analysis technique. This study employed Structural Equation Modeling with Partial Least Square (SEM-PLS) technique to examine the hypothesis. Figure 1 shows the SEM-PLS model that be developed in this research. The bootstrap technique in estimating P-value was used to avoid the type II error due to small size of observation. This technique creates 5000 samples by randomly drawing cases with replacement from the original sample (Henseler et al., 2009; Kock and Hadaya, 2018; and Sander and Lee 2014).
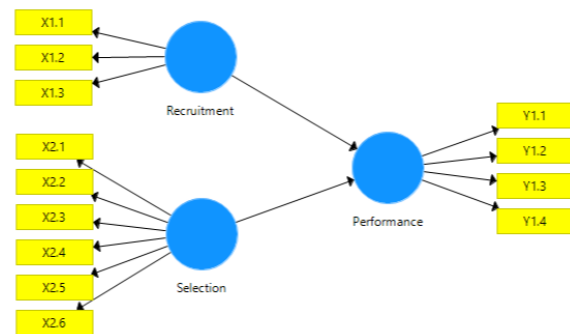

Figure 1. Structural Equation Model of relationship between recruitment-selection and performance

RESULT AND DISCUSSION

This section divides discussion into three sub-sections: reporting descriptive statistics, assessing reflective measurement model; and assessing structural equation model.

Descriptive Statistics

Table 1 presents descriptive statistics of indicator that reflected recruitment, selection, and tutor's performance. Respondents rate the extent to which they strongly agree, agree, neutral, disagree, or strongly disagree with the statement of indicator will be scored 5, 4, 3, or 1 respectively. It is surprise that no indicator

has average (mean) score value higher than 3 (neutral). All indicator has weakly average score value, almost indicator has average score value lower than 2. Only work experience has average score value of 2.12. While reference letter has the lowest average score value of 1.34. The opposite results is provided by Erawati (2008) who found average score value of those indicator is 3.0 or above, ranging on 3.46 to 4.46.

Table 1. Descriptive statistics of Indicators that reflected Recruitment, Selection, and Performance

Latent Variable	Indi-cator	Description	Minim-um	Maxim-um	Mean	Std. Deviation
Recruitment	X1.1	Clear recruitment guidance	1.00	5.00	1.66	0.94
	X1.2	Advertise vacancy	1.00	5.00	1.86	0.76
	X1.3	Procedure transparency	1.00	4.00	1.82	0.66
Selection	X2.1	Educational background	1.00	3.00	1.68	0.59
	X2.2	Reference letter	1.00	3.00	1.34	0.59
	X2.3	Work experience	1.00	5.00	2.12	0.69
	X2.4	Physically Health	1.00	4.00	1.70	0.89
	X2.5	Written assessment	1.00	5.00	1.64	0.85
	X2.6	Interview assessment	1.00	4.00	1.82	0.80
Performance	Y1.1	Specified target	1.00	5.00	1.78	0.84
	Y1.2	Competency and skill	1.00	4.00	1.90	0.79
	Y1.3	Absenteeism	1.00	5.00	1.82	0.92
	Y1.4	Progress on teaching professionalism	1.00	4.00	1.84	0.82

5 = strongly agree, 4= agree, 3 = neutral, 2 = disagree, and 1 = strongly disagree

The research findings, however, provide similar evidence to other previous studies. Jacob et al. (2016) found measurement of teaching recruitment, selection, and performance are only weakly. If at all, candidate who were hired had average application score lower than many candidates who were not hired. Kelkay (2018) also found low observed mean for recruitment and selection of 2.693. Almost indicators of recruitment and selection lower than 3.00 as expected value.

Assessing Reflective Measurement Model
This sub-section reports tests the PLS model including robustness of statistic, validity and reliability of reflective indicators. Table 2 shows criteria and description of the assessment of measurement model. There are at least four criteria to assess reflective measurement

model. Reliability test will be assessed by internal consistency and indicators reliabilities, while validity test will be assessed by convergent and discriminant validities. The table provides description of threshold for each criterion.

Table 2. Assessment for reflective measurement model

Criterion	Description
Indicator Reliability	Square of outer loading should be 0.70 or higher is preferred; and 0.4 or higher is acceptable (Henseler et al., 2009; Hulland, 1999; Wong, 2013).
Internal Consistency Reliability	Composite reliability should be 0.7 or higher; and 0.6 or higher is acceptable (Bagozzi and Yi, 1988; Henseler et al., 2009; Wong, 2013).
Convergent Validity	Average Variance Extracted (AVE) should be 0.5 or higher (Bagozzi and Yi, 1988; Henseler et al., 2009; Wong, 2013).
Discriminant Validity	Forner-Larcker criterion: The AVE of latent variable should be greater than the squared correlations among the latent variables (Forner and Larcker, 1981; Henseler et al., 2009).

Table 3 and Table 4 report the assessment for initial model of reflective measurement. While Figure 2 shows the PLS result for initial model. The initial result indicates that values of composite reliability are higher than 0.7. This result satisfies the minimum requirement of internal consistency reliability. However other statistic results provide values below the minimum requirement value of the other criteria; (i) three indicators --- X2.3., X2.5, and Y1.3. --- have outer loading square lower than 0.4; (ii) Selection and Performance variables have AVE lower than 0.5; (iii) Selection and Performance variables have AVE lower than square correlation of latent variables. Hence the statistic result for the initial model fail to meet the criteria for indicator reliability, convergent validity, and discriminant validity.

Table 3. PLS Evaluation for Initial Model

Indicator of Latent Variable	Indicator reliability				Internal Consistency Reliability		Convergent Validity	
	Outer Loading	Outer Loading Square	t-value	P-value	Composite Reliability	P-value	AVE	P-value
X1.1 <- Recruitment	0.938	0.879	7.935	0.000	0.924 (t-val=13.402)	0.000	0.803 (t-val=9.040)	0.000
X1.2 <- Recruitment	0.904	0.818	9.112	0.000				
X1.3 <- Recruitment	0.844	0.712	5.410	0.000				
X2.1 <- Selection	0.761	0.579	5.097	0.000	0.851 (t-val=6.787)	0.000	0.491 (t-val = 5.513)	0.000
X2.2 <- Selection	0.771	0.594	6.050	0.000				
X2.3 <- Selection	0.628	0.395	1.912	0.056				
X2.4 <- Selection	0.687	0.472	5.418	0.000				
X2.5 <- Selection	0.558	0.312	1.912	0.056				
X2.6 <- Selection	0.771	0.595	6.566	0.000				
Y1.1 <- Performance	0.800	0.640	5.083	0.000	0.771 (t-val=5.325)	0.000	0.464 (t-val =4.909)	0.000
Y1.2 <- Performance	0.730	0.533	5.288	0.000				
Y1.3 <- Performance	0.515	0.265	1.408	0.159				
Y1.4 <- Performance	0.646	0.418	3.823	0.000				

Table 4. Discriminant Validity for Initial Model

Latent Variables	Correlation (r)	r^2	t-value	P-Value
Recruitment-Performance	0.746	0.557	5.285	0.000
Selection-Performance	0.725	0.526	6.523	0.000
Selection-Recruitment	0.785	0.616	6.968	0.000

This study attempts to fix the problem. Firstly, the process eliminates indicator Y1.3., which has lowest outer loading. However, the statistic results have not satisfied the criterion. Secondly, the procedures for fixing problem are continued by eliminating the remain indicator, which has lowest outer loading until statistic result meet the criterion. Finally, the fourth time procedure provide statistic result, which has met the criterion standard. The final model eliminates three indicators Y1.3., X2.5, and X2.3. Analysis and discussion of the research result will be based on the final model, while other statistic results which are not meet the criterion do not presented in this paper due to limited pages.
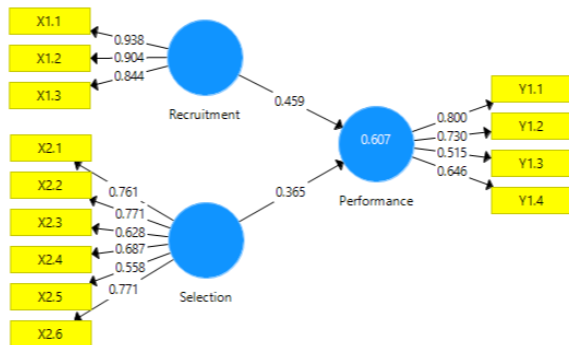

Figure 2. PLS Result for Initial Model of Recruitment-selection-performance

Table 5 and Table 6 report statistic result of PLS evaluation for final model. The statistic results indicate that all assessment criteria for reflective measurement model has been satisfied. Outer loading square value of each indicator meets the minimum requirement indicator reliability test that it should be higher than 0.40. It can be compared to the lowest outer loading square value of 0.445 by indicator Y1.4. Bootstrapping technique with 5000 samples is used to estimate t-value and p-value of outer loading. Based on this technique, Table 5 shows that estimated outer loading of each indicator is statistically significant at 1%.

For the internal consistency reliability test, the composite reliability value of each latent variable also satisfies the minimum requirement for this test that it must be higher than 0.70. Recruitment variable has the lowest value of composite reliability of 0.804. These statistic results indicate that the final model sufficiently meet the reliability criteria both indicator reliability and internal consistency reliability.

AVE value of each latent variable meet the minimum requirement for convergent validity. The AVE value should be 0.4 or higher. It can be compared to AVE value of Recruitment variable, which has the lowest AVE value of 0.579. In addition, this result also satisfies for Discriminant validity test that reveal AVE value should be higher than the squared correlation among the latent variables. Table 6 shows that the highest squared correlation is 0.554 by Selection and Recruitment. The squared correlation coefficient is lower than the lowest AVE value of 0.579 by Recruitment variable. It can be concluded that the final model meets the validity criteria both convergent validity and discriminant validity.

Table 5. PLS Evaluation for Final Model

Indicator of Latent Variable	Indicator reliability				Internal Consistency Reliability		Convergent Validity	
	Outer Loading	Outer Loading Square	t-value	P-value	Composite Reliability	P-value	AVE	P-value
X1.1 <- Recruitment	0.938	0.880	8.019	0.000	0.804 (t-val=8.851)	0.000	0.579 (t-val=6.434)	0.000
X1.2 <- Recruitment	0.904	0.817	10.961	0.000				
X1.3 <- Recruitment	0.844	0.712	5.507	0.000				
X2.1 <- Selection	0.776	0.602	6.245	0.000	0.924 (t-val=13.297)	0.000	0.803 (t-val = 9.159)	0.000
X2.2 <- Selection	0.868	0.753	9.186	0.000				
X2.4 <- Selection	0.762	0.581	6.247	0.000				
X2.6 <- Selection	0.762	0.581	8.030	0.000				
Y1.1 <- Performance	0.793	0.629	5.379	0.000	0.871 (t-val=12.753)	0.000	0.629 (t-val =8.714)	0.000
Y1.2 <- Performance	0.814	0.663	6.622	0.000				
Y1.4 <- Performance	0.667	0.445	3.949	0.000				

Table 6. Discriminant Validity for Final Model

Latent Variables	Correlation (r)	r^2	t-value	P-Value
Recruitment-Performance	0.708	0.501	5.949	0.000
Selection-Performance	0.698	0.487	7.405	0.000
Selection-Recruitment	0.744	0.554	8.613	0.000

Assessing Structural Equation Model

This research uses three criteria to evaluate SEM-PLS of final model of recruitment-selection and performance. First criterion focuses on estimate for path coefficient that assess significant effect of exogenous latent variable on endogenous latent variable. Second criterion concerns on coefficient determination, which measure how the model explains endogenous latent variable in the inner path model. Third criterion deals with the effect size f^2 that measure the effect of exogenous latent variable at structural level. Table 7 summarizes threshold requirement to assess structural equation model.

Table 7. Assessment for structural equation model

Criterion	Criteria
Estimates for path coefficient	Estimated value of path coefficients in the structural equation model, especially in estimating t-value and p-value based on bootstrapping procedure (Henseler et al., 2009)
Coefficient of determination (R^2)	R^2 value of 0.19, 0.33, 0.67 for endogenous latent variables are described as weak, moderate, and substantial, respectively (Chin, 1988; Henseler et al., 2009).
Effect size f^2	f^2 value of 0.02, 0.15, and 0.35 indicates predictor latent variable has a weak, moderate, and large effect on the structural level, respectively (Henseler et al., 2009)

Table 8 reports statistical results that relevant to evaluate structural equation model based on criteria in Table 7. Panel A shows that path coefficients for both recruitment-performance and selection-performance are statistically significant at 1%. While R^2 and adjusted R^2 is lower than 0.67, however it is higher than 0.33 and statistically significant.

Recruitment and selection have moderate power in describing job performance. The value of effect size f^2 of recruitment on performance is 0.185, while for selection is 0.150. The effects size f^2 of recruitment and selection on job performance at the structural level are relatively moderate. However, these effects are not statistically significant.

Table 8. PLS Result for Final Model of Recruitment-selection-performance[*)]

Statistic	Coefficient	t-value	p-value
Panel A: Estimated for path coefficient			
Recruitment --> Performance	0.424	2.703	0.007
Selection --> Performance	0.382	2.930	0.003
Panel B: Coefficient of determination			
R^2	0.567	4.453	0.000
Adjusted R^2	0.548	4.132	0.000
Panel C: Effect size f^2			
Recruitment --> Performance	0.185	1.032	0.302
Selection --> Performance	0.150	1.090	0.276

[*)] Bootstrapping technique with 5000 samples is used to estimated t-value and p-value

Final model of recruitment-selection and performance have satisfied assessment reflective measurement model and structural equation model. Although effects size f^2 are insignificant, the magnitude effects of f^2 at structural level are moderate (Heseler et al., 2009). Figure 3 presents SEM-PLS for final model of recruitment-selection and performance, while t-value and p-value for coefficient of parameter of indicators and latent exogenous variable are reported in Table 5 and 8, respectively. The statistic results show all outer loading of each indicator is statistically significant at 1%. The path coefficient of each exogenous latent variable is also statistically significant at 1%.
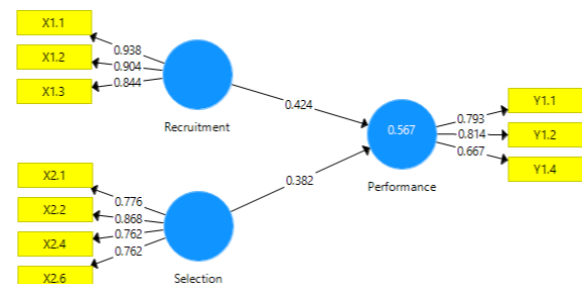
Figure 3. PLS Result for Final Model of Recruitment-selection-performance

This research results find that both recruitment and selection have positive impact on teacher performance. This finding support previous studies which also find positive relationship between recruitment and selection and performance. E.g. Jacob et al. (2016) identifies that selection processes strongly predict teacher effectiveness. Erawati (2008) provides empirical finding that there are strongly positive correlation between recruitment-selection and performance. In addition, Kepha et al. (2012) find that recruitment-selection has positive effect on job performance.

Furthermore, this research finds that relationship between Recruitment and Performance is stronger than Selection and Performance. This finding is based on magnitude comparison between the two relationship using three tools: (i) latent variable correlation, (ii) path coefficient, and (iii) effect size f^2, which indicate that Recruitment has higher scores than Selection (See Table 6 and Table 8).

Table 9 ranks contribution of indicators for each latent variable. Contribution ranking of indicator for each latent variable is based on outer loading in the table 5. Panel A reports contribution rank of each indicator for Recruitment. The clarity of recruitment guidance take the first rank, followed by advertise of vacant position and procedure transparency in the second and third rank order, respectively. Panel B shows contribution rank of each indicator for Selection. In the constructing process of this latent variable, two indicators have been excluded in the model due to unsatisfied assessment reflective

measurement model, i.e. written assessment and working experience. Reference letter is the highest contribution for Selection followed by academic background at the second rank, while interview assessment and physical health at the third and the fourth rank order. Panel C presents contribution rank of each indicator for Job Performance. One indicator --- absenteeism --- is excluded in the constructing process of this latent variable due to lower outer loading than minimum requirement of indicator reliability. In this latent variable, competency on knowledge and understanding is the highest rank followed by achieving specified target and progressing teaching professionalism at the second and third rank order respectively.

Table 9. Contribution Ranking of Indicators

Symbol	Indicator	Status	Outer Loading	Contribution Rank*)
Panel A: Recruitment				
X1.1.	Recruitment process was based on Course Agency's recruitment guidance clearly	Included	0.938	1
X1.2.	Applicant could get information of vacant position easily	Included	0.904	2
X1.3.	Recruitment procedure is transparent for candidates	Included	0.844	3
Panel B: Selection				
X2.1.	Selection process and job placement are fit with candidate's educational background	Included	0.776	2
X2.2.	Course Agency acknowledged job reference letter during the selection process in detail	Included	0.868	1
X2.3.	Course Agency considered applicant's relevant work experience	Excluded	Excluded	Excluded
X2.4.	Course Agency preferred applicant who is physically health and fit to perform the work assignment.	Included	0.762	4
X2.5.	Course Agency used evaluation standard for written assessment	Excluded	Excluded	Excluded
X2.6.	Interview assessment evaluation was combined to yield a final assessment score	Included	0.762	3
Panel C: Job Performance				
Y1.1.	Tutor achieved his/her specified target satisfactorily	Included	0.793	2
Y1.2.	Tutor has competency on knowledge and understanding of the course subject	Included	0.814	1
Y1.3.	The rate of tutor's absenteeism is relatively low	Excluded	Excluded	Excluded
Y1.4.	Tutor has showed progress on teaching professionalism	Included	0.667	3

*) The higher outer loading the higher rank and vice versa

It is interesting that three indicators ---i.e. written assessment, work experience, and absenteeism --- are less relevant in modeling relationship between recruitment-selection and

performance in non-formal education. There are some tentative arguments which need further investigation in the future research.

Why written assessment is less relevant to Selection variable? Commonly, written assessment based on short time assessment during 2-3 hours. It might be not capture properly the hidden candidate's talent. In addition, competencies in oral communication are more relevant in teaching education practices. Hence, interview assessment, and mockup in micro teaching might more powerful to assess the candidate's competencies in teaching skill. Ahmed et al. (1999) suggested that oral examination for assessment evaluation has some distinct advantages than traditional written test. Furthermore, Videnovic (2017) found that written exam alone is not sufficient to assess student' conceptual and knowledge and relational understanding, there is critical need to implement oral assessment to evaluate student competencies. Although those research conduct to evaluate student' competencies, the issue is also relevant to assess competencies of teacher candidate in recruitment process.

Why work experience is less relevant in this model? Digital technology and communication lead quantum change in culture and life style for newer generations. Traditional approach in teaching learning process becomes obsolete and working experience less effective to be adopted in learning communication with newer generation, especially for millennial generation (Djiwandono, 2017). Tutors should have capability to improve their competencies in adopting new communication technology to synchronize their ways in learning communication with students. Another possibility answer is almost candidates in the research samples are relative young and have few teaching experience. Hence it might less

relevant to measure this effect and contribution in constructing Selection variable.

Why absenteeism is less relevant in performing Job Performance variable? There are two possible explanation answers for this question. The class size is relative small with 2-5 students per session in the class. It quite easy to reschedule and replace the class session when tutor can't take the class on schedule. Hence there is trivial time frequencies for absenteeism. Another possible explanation is related to teaching disincentive scheme for absenteeism. Hence they will avoid the loss additional income by reducing absenteeism. This result parallel with Goldhaber et al. (2014) which provide empirical evidence that teacher absence behavior less relevant with selection tools.

CONCLUSION

Investigation of relationship between recruitment-selection and performance in non-formal education is still lack of empirical evidences. This paper attempts to fill the research gap through providing empirical evidence in the human resource literature and education management. The research results show that recruitment and selection have positive effect on tutor performance. The effect of recruitment on tutor's performance is stronger than Selection and tutor's performance. However, the average score value of all indicators are only weakly suggesting considerable further research in improving teacher quality through recruitment and selection process.

The research findings imply that clear recruitment guidance and advertise the job vacancy are important in developing recruitment strategy. While reference letter and education background of applicant are important in selection process. In addition, tutor agency in non-formal education is simple to measure the tutor's performance. The

agency should pay attention on tutor's competency on knowledge and understanding of the course subject and set the achievable specific target for each tutor based on contract agreement.

Three indicators --- work experience, written assessment, and tutor's absenteeism --- are less relevant in constructing latent variables. Further research focusing on selection and performance in non-formal education should pay attention to investigate work experience and written assessment in the selection process. Splitting sample with more specific characteristic e.g. relevancy previous experience with job description for current vacancy, different characteristic of students, class size, and work experience time. More information in written assessment might be explored e.g. length, type, topic, and weighted score of written test. Different treatment of written test might provide different response and result in selection process.

Tutor's absence is less relevant to measure tutor's performance raises question marks? Further research may explore more indicators to capture causes of absences. Goldhaber et al. (2014) paid attention on the relationship between selection and teacher absence. Their study found there is no relationship between the two. There are unobserved variables that might relevant to predict tutor absence behavior.

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