

THE INFLUENCE OF TRAINING DESIGN, INDIVIDUAL CHARACTERISTICS, AND WORK ENVIRONMENT ON TRAINING TRANSFER AND ITS IMPACT ON EMPLOYEE'S PERFORMANCE

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Abstract

The purpose of this research is: to know the influence of training design on training transfer, individual characteristics on transfer, work environment on training transfer, training transfer of employee's performance. The data analysis method used is Structural Equation Model (SEM) using Lisrel software. The SEM model is a model that combines a factor analysis approach, structural model, and path analysis simultaneously. The numbers of samples above 200 respondents in this study are eligible for data analysis using SEM. The findings in this study are 1) the first hypothesis testing suggests that the design of a good training does not influence the transfer of training on the employees of PT Total BangunPersadaTbk, 2) the second hypothesis testing shows it is found the influence of individual characteristics that have the ability, personality, self-efficacy, and motivation to learn that exists in trainees will improve the transfer of training on PT Total BangunPersadaTbk employees, 3) the third hypothesis testing reveals that support of work environment does not influence training transfer, 4) the fourth hypothesis, the result of this research shows that good training transfer does not improve employee's performance.

Keywords: Employee's Performance, Individual Characteristics, Training Design, Training Transfer, Work Environment

INTRODUCTION

Consumer or customer demands on high-quality product and international quality standards and competitive pricing make quality management control must be done by every company since quality becomes a key to success for service companies (Stevenson and Hojati, 2007). The construction service industry plays a major role in helping to smoothen the development of economic growth and to improve the welfare of society because it can produce the necessary infrastructure to support development (Rey, 2001). In order for contractors to survive and to compete with other competitors, both local and foreign contractors, reliable human resources are highly required (Huovinen, 2002).

Human resources (HR) becomes one of the important factors that influence the success of an organization or a company because it is the actor of the overall level of planning until the evaluation which is able to utilize other resources owned by the organization or company (Knowles et. al., 2014). Understanding the importance of human resources nowadays is one of the efforts that must be achieved by the company which is by empowering and improving the quality of human resources in the organization or company itself. By improving the quality of human resources, it is expected that employees can work effectively and professionally so that their performance achievement expected to be more satisfactory as determined by the company. One of the ways in human resource development within an organization is through training program (Collins and Clark, 2003).

Training is a systematic process to change the behavior, knowledge, and motivation of current employees to improve the suitability between employee characteristics and job requirements (Bledsoe, 2007). Training is believed to be an effective tool for improving or enhancing the quality and the capacity of human resources to improve productivity (Baldwin and Ford, 1988). Training is an attempt to reduce or to eliminate the gap between the employment outcome of the employee's ability and the desired work result of the organization.

However, human resources training and development programs are a quite expensive investment for the company. Therefore, training should provide optimal contribution to improve company performance (Dhar, 2015). However, it is very often to see an organization becomes disillusioned with training outcomes because the investments that have been spent on training programs have made no progress or changes to the organization. Not all training results are in accordance with the intended purpose. The investment spent on the training program will be useless if the training fails to produce contribution on the organization's goals.

The training program will be useless if the training is still routine, the activities to spend the budget and even to entertain the employees in the training which has an element of entertainment. Organizational training programs should be the bridges that link competency

gaps owned by employees and the competencies required by organizations (Klingner, 2015). Training programs should be a structured activity that should give plus value to the organization.

Training transfer is an important element in the effectiveness of training criteria that helps employees and organizations to improve their performance (Saks and Burke, 2012). Baldwin and Ford (1988) state that training transfer is a function of three factors: (1) trainee factor that includes skills or abilities, motivation and personality factor; (2) training design factor covers learning principles, training sequences and content as well as *training retention*; (3) work environment factor that includes peer support and employer support. There are three factors that influence the occurrence or the absence of training transfer which are: (1) switch climate that covers support from employers and colleagues work, technology support, opportunities for using various skills and its consequences to the use of learning abilities; (2) the environment learning that covers meaningfulness material and various opportunities practice and feedback, and (3) the readiness of the employees on the training that covers self-confidence and basic skill level (Curry et al., 2005).

The training design needs assessment of training participants, job requirement analysis, specific learning objectives, and so forth. For decades, the influence of the training design on the training transfer has been studied by many researchers because it is believed to be one of the most important influences on the training transfer (Phillips and Phillips, 2016). Baldwin and Ford (1988) illustrate three problems of instructional designs that affect training transfer: identical element, stimulus variability, and principles of general teaching.

In addition to the training design, individual characteristic is also believed to have an effect on training transfer. Veladaet al. (2007) states that there are several individual characteristics that affect the training transfer process. Individual characteristics include: self-efficacy, cognitive ability, motivation to transfer, motivation to learn and anxiety; the result shows that self-efficacy significantly positively influences training transfer.

Environment work is also a factor required for improving individual's performance. The work environment factor as managerial support, co-workers' encouragement, adequate resource, opportunity for applying studied skills, and technical support in transfer training are significant to have (Clarke, 2002). Behavior change after training will last short without activities for supporting transfer on work environment. Performance enhancement needs a supporting organization environment comprising of factors such as organization climate, employers support, and colleagues support and to be maintained in form of a useful knowledge, skills, and attitude as the measurement of performance enhancement (Griffin and Moorhead, 2011).

The effectiveness of the training needs to see its impact on performance. Performance is the result or the success level of a person as a whole over a certain period of time in conducting

the tasks as compared to possible possibilities, such as predetermined standards of work, targets or predetermined criteria (Ford, 2014). Performance can be called an achieved result because it is motivated by work and satisfied with the work they do. Each individual tends to be confronted with things that may not have been anticipated in the process of achieving the desired needs.

The research problems in this present study are: 1) Does the training participant factor significantly influences the training transfer?, 2) Does the work environment factor significantly influence the training transfer?, 3) Does the training design factor significantly influence the training transfer?, 4) Does the transfer training significantly influence performance?

Some objectives of this research are: 1) to know the influence of training design on training transfer; 2) to know the influence of individual characteristics on training transfer, 3) to know the influence of work environment on transfer of training, 4) to know the influence of training transfer on employee performance, 5) to provide recommendation to the organization in this case PT Total BangunPersadaTbk related to the problems of training transfer so that the training programs organized effectively improve the quality of human resources so that it improves the performance and productivity.

RESEARCH METHOD

This research is done by using quantitative approach method. According to Sugiono (2009), research with quantitative approach method is a study that uses the numbers in the data analysis. The data analysis method used is *Structural Equation Model (SEM)* with *Lisrel* software (O'Rourke and Hatcher, 2013). The SEM model is a model that combines a factor analysis approach, structural model, and path analysis simultaneously. The approach with analysis using this software has been widely used in various studies in the world; one of its main functions is to know the relationship of several variables at once, so a comprehensive illustration of a case either direct or indirect relationship with very high accuracy is obtained.

The variables in this study are divided into two variables, namely the dependent variable and the independent variable. The dependent variable is the variable whose existence is influenced by other variables. While independent variable is the variable that influences dependent variable. The first dependent variable of training transfer is the ability of trainees in applying the knowledge, skills, and behaviors they have learned in the training on their work. The indicators of training transfer include: (1) using new skills to improve performance; (2) training helps to improve performance; (3) combining the learned skills in daily work. The measuring tool used in this study is the adaptation of measuring instrument developed by Tesluk et al.(1995).

In accordance with the analysis tool that will be used namely *Structural Equation Model* (SEM), then the determination of the number of samples in this study will use *Maximum Likelihood Estimation* (MLE) technique with the sample size of 200 respondents in this study are eligible to be analyzed. Testing of models with *Lisrel* measurement can be done with three approaches, namely: (i) *strictly confirmatory*; (ii) *alternative model or competing model*; and (iii) *the generating model*. The *strictly confirmatory* approach needs the researcher to establish a model and to collect empirical data to test the existing model (Myung, 2003). Confirmatory analysis results based on empirical data can accept or reject the existing model. The *Alternative Model or Competing Model* approach requires the researcher to develop some alternative models and test them using the same data to obtain the best model. The *Generating Model* approach requires the researcher to create a tentative model and test it. If the model is not appropriate, the model must be modified and be tested again using the same data.

Data Collection Technique

The type of data used in this study is the primary data. The researcher will spread the questionnaire to get directly the data obtained and adapted to the measuring tool used in this case is *Lisrel* then the data must be collected ranging from 150 to 400 respondents who fill out the questionnaire, (Creswell and Clark, 2007). The questionnaire is a data collection technique in which the researcher spreads a number of questionnaires containing statements related to the research to a predetermined number of respondents in order to obtain results that can be processed into conclusions in this study. The scale used in this research questionnaire is *Likert* scale.

Sampling Technique

The sample is the part of the number and the characteristics possessed by that population. In accordance with the analysis tool that will be used, it is *Structural Equation Model* (SEM), then the determination of the number of samples in this study will use *Maximum Likelihood Estimation* (MLE) technique in which the effective sampling ranges from 150 to 400 samples. Therefore, the number of samples above 200 respondents in this study is eligible for data analysis using SEM.

Data Collection

In this present study, the data are obtained by using questionnaires. Questionnaire is a number of written questions that are used to obtain information from respondents in the form of reports about their personality or things that they know (Suharsimi, 2006). Questionnaire is designed in

such a way that all respondents are expected to answer all questions. It is distributed along with letters of application for questionnaires and explanations on matters related to the present research. The scale used in this study is the *Linkert* scale with the answer stratified in five categories ranging from the statement of strongly agree until the statement of strongly disagree.

Data Quality Test

Questions to measure the variables examined previously must first be tested for validity and reliability. If the measuring instrument is invalid or unreliable, good research results will not be obtained (Creswell and Clark, 2007).

Reliability Test

Reliability is the term used to indicate the extent to which a measurement result is relatively consistent and reliable, if the measurement is repeated two or more times. Reliability can also mean an index indicating the extent to which measurement tools can be trusted or not. This test is used to determine and to measure the level of consistency of measuring instruments. There are several methods used to test reliability such as re-test method, Spearman-Brown split formula, Rulon formula, Flanagan formula, Cronbach's Alpha, KR-20 formula method, KR-21, and Anova Hoyt method.

In this present study, the researcher employs the method of primary data collection instrument test with *Cronbach's Alpha* method. This method is very popular and commonly used on a *Likert-scale* test (*Scoring Scale*) and it is in line the questionnaire scale prepared by the researcher in the variable operational definition sub chapter. This test is done by calculating the coefficient of *alpha* (α) using the help of statistical computer program. Criteria accepted whether or not a data (reliable or not) if the value of *alpha* (α) is greater than the critical value of product moment, or the value of *r* table. If all the variables measured by the questionnaire provide an *alpha* (α) value greater than the *alpha* (α) value of the comparator, then the measuring tool is considered being reliable.

According to Hair *et al.* (2010), reliability test results are categorized as follows: (i) if *Cronbach's Alpha* (α) 0,0 – 0,20 is less reliable, (ii) if *Cronbach's Alpha* (α) > 0,20 – 0,40 is somewhat reliable, (iii) if *Cronbach's Alpha* (α) > 0,40 – 0,60 is quite reliable, (iv) *Cronbach's Alpha* (α) > 0,60 – 0,80 is reliable and (v) *Cronbach's Alpha* (α) > 0,80 – 1,00 is very reliable.

Cronbach's Alpha is a reliability coefficient that shows how well items in a set are positively correlated with each other. The closer the value of *Cronbach's Alpha* to a value of 1, the higher the reliability of internal consistency. The instrument used is considered reliable if the value of *Cronbach's Alpha* is at least 0,5 (Hair *et al.*, (2010).

Validity Test with Factor Analysis

Validity is the degree to which a test measures what should be measured (Creswell and Clark, 2007). A scale or measuring instrument can be considered having a high degree of validity if the instrument performs its measuring function or it gives a measurable result in accordance with the purpose of the measurement, whereas a test that has low validity will result in data irrelevant to the purpose of measurement.

The types of validity test are external validity if the data obtained in line with other information about the variables in question and internal validity when there is a suitability between the parts of the instrument and the instrument as a whole. Internal validity testing can be done in two ways by grouping statement items into several variables using factor analysis. Grain analysis is done by correlating statement items with the total number of statement items. Internal validity testing criterion with grain analysis is if the coefficient of item correlation towards total $\geq 0,3$ (Piperno et. al., 2004), if the coefficient of item correlation towards total $> r$ table with df $(0,05, n-2)$ and if sigma value of item correlation towards the total $\leq \alpha$.

According to (Cho and Trent, 2006), traditionally validity can be divided into four types, namely *content validity*, *criterion validity*, *construct validity*, and *convergent and discriminant validity*. Although in different ways, each type attempts to show whether a measure is related to a concept.

Factor analysis can reveal the disguised characteristics possessed by each observation unit of a large number as well as each set of variables. These disguised characteristics are the magnitude of the influence of each factor in a new dimension called a factor. Factor is formed by reducing the overall complexity of the data by utilizing the inter-correlation of the variables. Consequently, there will be factors that are fewer than the initial number of variables. The first factor is a combination that involves a large number of sample variables and so on until to the smallest number of sample variants.

Factor analysis measures the theoretical and the contrast dimensions that exist in a measuring instrument as well as groups the statement items into a certain dimension of theory or factor. In addition, this analysis can also explain the contribution of grain measuring instrument to the theoretical dimension through loading (*loading factor*).

Barlett test of sphericity is performed to test whether there is a correlation between the variables. *Kaiser Mesyer Olkin (KMO)* is used to measure the adequacy of sampling. *Measure Sampling Adequacy (MSA)* is used to take into account the adequacy of using factor analysis. Small KMO values show that factor analysis cannot be used because the correlation between variable pairs cannot be explained by other variables. If the KMO value is below the KMO value, then factor analysis cannot be used or accepted. While the accepted value of KMO is a value

above 0,5 that is 0,6 to 0,9. The value of KMO at 0,9 shows a very satisfactory value, while the KMO value is below 0,5 then factor analysis is not acceptable. The detail of statistical notations used in reading the results of factor analysis is listed in the table below:

Table 1. Function of Statistical Notation in Factor Analysis

Statistical Notation	Functions and Parameters
<i>Kaiser-Mayer-Olkin (KMO)</i>	This statistical notation is used to look at the feasibility of factor analysis that has been used and prepare data for further testing. If the KMO value is greater than 0,5 ($KMO > 0.5$) then the data is eligible for further processing.
<i>Barlett's Test of Sphericity</i>	This parameter has a function to see whether there is a relationship between the variables which are being tested. The significance value of this parameter must be near zero (0) in order for the data to be processed further.
<i>Component Matrix</i>	This matrix contains the value of <i>factor loading</i> that is the value that indicates the relationship between research variables and the contribution to the relationship matrix that has been formed. The considered value is greater than 0,5 ($> 0,5$).
<i>Communalities</i>	This parameter reveals the ability of an attribute able to clarify the factors in the extract. The value is considered good that is above 0,5 (> 0.5). However, the comparison to <i>factor loading</i> value that exist in <i>component matrix</i> still needs to be done.
<i>Anti-image Matrices</i>	This matrix is useful for the variable that interferes in the study, the variable that has a low level and contribution to other variables. Its value is considered good if $> 0,5$.

RESULTS AND DISCUSSION

Construct Reliability Test Result

According to Hair et al. (2013), a good reliability requirement is to have *construct reliability* $> 0,70$ and *variance extracted* $> 0,50$. From CR and VE processing above, it can be seen that the value of *construct reliability* (CR) of all variables has fulfilled the reliability requirement well in the training design as much 0,89, individual characteristics as much 0,77, work environment as much 0,92, training transfer as much 0,88, and employee performance as much 0,87. In the *extracted variance*, not all variables have fulfilled reliability, i.e. the value of *variance extracted* by individual characteristic which is 0.42. As for other variables, the value of *extracted variance* fulfills reliability requirement with the VE value of the training design of 0,68; the work environment of 0,67; the training transfer of 0,71; and the employee's performance of 0,60.

Structural Test Analysis

The next step is to perform a structural test in which a structural test is to see the relationship between the *construct* variables. The value of R^2 functions to show how far the independent variable is able to explain its dependent variable. The results can be analyzed are first, the influence of training design, individual characteristics, and work environment on training transfer has R^2 of 0,75. It shows that 75% of the variance of training transfer can be explained by variables of training design, individual characteristics, and work environment, while the remaining 25% explained by other variables which are not found in this study. Second, the influence of training design, individual characteristics, and work environment on employee performance has R^2 of 0,0098. It shows that 0,98% variants of employee performance can be explained by the training design, individual characteristics, and work environment, while 99.02% explained by other variables which are not found in this study.

All Model Conformity Analysis

To see the overall fit of the model (*goodness of fit*), there are several criteria that can be used.

Test 1: *Chi Square*

The value of *Chi Square* is 253,15. The smaller the model, the fitter between model theory and sample data (Normed *Chi Square* - *Chi Square* value divided by the value of *Degree of Freedom*). It's value of <3 is *good fit*. Here, a Normed *Chi Square* value of 1,16 is obtained. It shows an adequate fit because value smaller than 3 is a *good fit*.

Test 2: *Root Mean Square Error of Approximation (RMSEA)*

- a. The RMSEA value is 0,02, then the fit is adequate (*close fit*) where the RMSEA value $<0,05$ is *close fit*. RMSEA $<0,08$ is *good fit*, RMSEA $<0,10$ is *marginal fit*, and RMSEA value $> 0,10$ is *poor fit*.
- b. *Confidence interval* is used to assess the achievement of RMSEA estimates. From the output, it can be seen 90% confidence interval (between 0.00: 0.038) is around the RMSEA.
- c. *P-value for test of good fit* (RMSEA < 0.05) = 1,00; the *p-value* for this study is $<0,05$

Test 3: *Expected Cross Validation Index (ECVI)*

- a. ECVI model (1,78) compared to ECVI saturated model (2,77) and ECVI independence model (14,88).

- b. ECVI model is slightly smaller than ECVI saturated model and the difference is much greater than ECVI independence model or in other words, ECVI saturated model approaches ECVI model of ECVI independence model, and 90% Confidence Interval is 1,67: 1,99, then a good fit is obtained (around ECVI model).

Test 4: Akaike Information Criterion (AIC) and Consistent Akaike Information Criterion (CAIC)

- a. AIC model (354,48) compared to AIC saturated model (552,00) and AIC independence model(2961,61).AIC model is slightly smaller than AIC saturated model and the difference is much greater than AIC independence model, therefore smaller value reveals good fit.
- b. CAIC model (599,49) is far from the value of CAIC saturated model (1738,34) and more than CAIC independence model (3060,37); thus smaller value indicates a good fit.

Test 5: Fit Index

- a. *Normed Fit Index* (NFI) is 0,91 (above 0,90) indicating *good fit*
- b. *The Comparative Fit Index* (CFI) is 0,99 (above 0,90) showing *good fit*
- c. *Non-Normed Fit Index* (NNFI) is 0,99 (above 0,90) revealing *good fit*
- d. *Incremental Fit Index* (IFI) is 0,99 (above 0,90) indicating *good fit*
- e. *Relative Fit Index* (RFI) is 0,90 (above 0,90) showing *good fit*
- f. *The Parsimony Normed Fit Index* (PNFI) is 0,79 (above 0,6) used for model comparison showing adequate fit.

Test 6: Critical N

The value of *Critical N* (CN) is 213,72 (> 200), then the model has represented the sample size or *good fit*.

Test 7: Goodness of Fit

- a. *Root Mean Square Residual* (RMR) is the average residual value resulting from the fitting between the variance-covariance matrixes of the model and the variance-covariance matrix of the sample data.
- b. Standardized RMR is 0,057 (below 0,05) indicating marginal fit.
- c. *Goodness of Fit Index* (GFI) is 0,90 (above 0,90) showing *good fit* and *Adjusted Goodness of Fit Index* (AGFI) is 0,88 (above 0,90) revealing marginal fit.

- d. *Parsimony Goodness of Fit Index* (PGFI) is 0,72 (above) used in the model comparison because it indicates an adequate fit.

From the analysis of group 1 to group 7, some tests show good fit such as Chi Square, ECVI, AIC, CAIC and *Fit Index*, *Critical N*, and *Goodness of Fit*. There is a result of *close fit* on RMSEA. From the above results, it can be concluded that the fit of the overall model (*goodness of fit*) is eligible. Furthermore, this research produces the path diagram as shown in Figure 1.

Figure 1. Path Diagram Standardized Solution

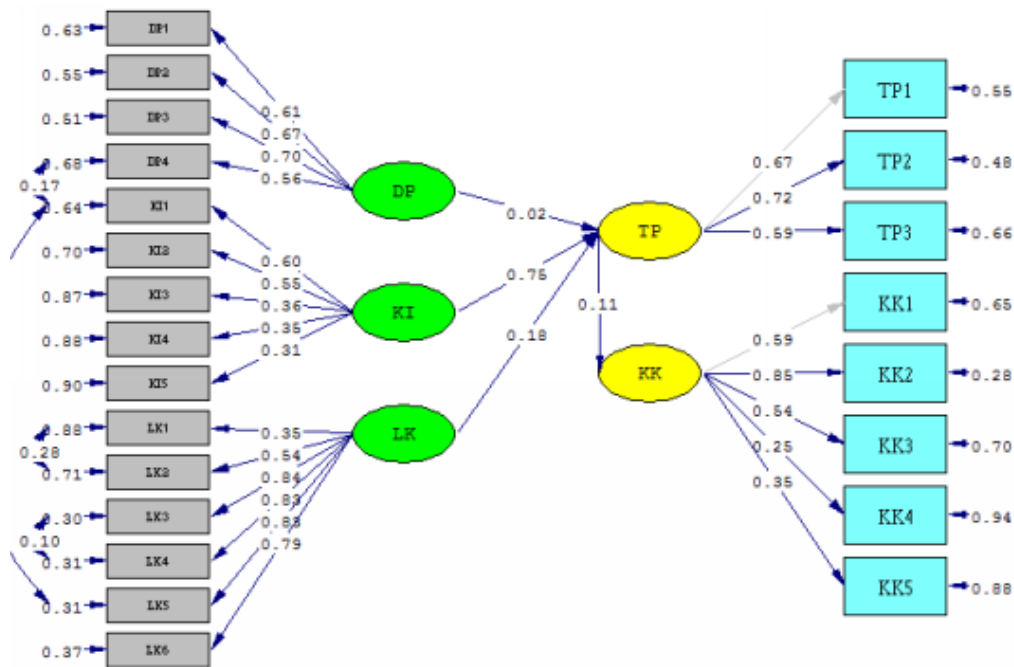
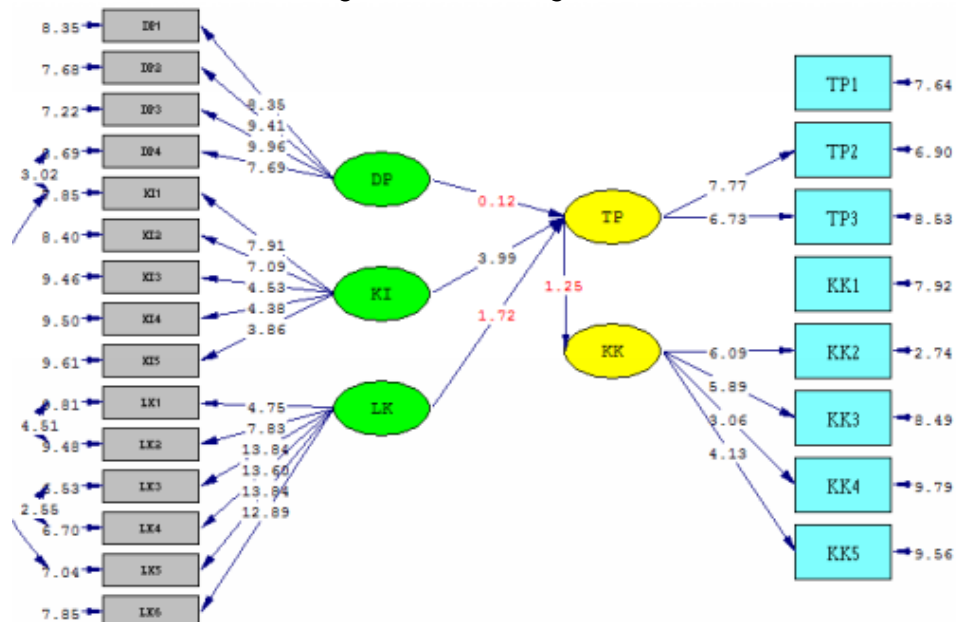


Figure 2. Path Diagram T-Value



Hypothesis Test

In this present study, there are four hypotheses. Hypothesis testing is done with a significance level of 5% resulting in t critical value. The hypothesis is accepted if the value of t is greater or equal to 1,96 and the hypothesis is rejected if the value of t is smaller or equal to 1,96. Based on the value of t, hypothesis is tested to see whether the proposed model is supported by the data attached in the table below:

Table 2. Hypothesis Testing Result of *t* Research Model

Hypothesis	Hypothesis Statement	t-Value ($t \geq 1,96$)	Note
H1	Good training design will influence training transfer of	0,12	The data do not support the hypothesis
H2	Characteristics of highly motivated individuals will increase training transfer	3.99	The data support the hypothesis
H3	Work environment support will improve training transfer	1,72	The data do not support the hypothesis
H4	Good training transfer will improve employee's performance	1,25	The data do not support the hypothesis

Source: *Lisrel 8.70* output

DISCUSSION

Analysis of Hypothesis 1 Testing Result (H_1)

Result of analysis does not support the hypothesis H_1 that is a good training design does not influence training transfer. The resulting value below the standard value t is smaller than the standard value, the value generated in this study amounted to 0,12 is smaller than the default value of 1,96. It shows that the training design in PT Total BangunPersadaTbk does not have significant effect on training transfer. It is seen in the *T-Value Path Diagram* (Figure 5.3) that the training design variables in this study are four operational covering DP1 of 8,35, DP2 of 9,41, DP3 of 9,96, and DP4 of 7,69.

In this research, training design operational that has the lowest value of DP 4 which states that the designed training has been in accordance with my work and applicable has a value of 7,69. It is because at the time of the training design process, a survey of training needs in accordance with the training need analysis is not conducted. In addition, the participants invited by the *Human Capital (HC)* Department are only based on the level or position of a

person and the training matrix that has been created by the HC department, not based on their activities. As in the supervisor level, the supervisor of the structure is clearly different from the activities of finishing supervisor. Finishing supervisor needs more carefulness than the structural supervisor; the difference in this activity that makes the trainees feel difficult when applying the training results that they have.

The second smallest value in this research is on the DP1 training design operational which is the example in the training given in real describes the condition of my job, its value is 8,35. It can be possible because the example given in the training is in the form of picture illustration. As an example of training work on the altitude, the instructor can only provide examples of illustrative pictures that tell how if someone fell from a height of a few meters, how much the falling speed, and what the impacts are. Another example is when the training of formwork demolition on the altitude, the instructor can only explain in the form of illustrations or pictures.

The third smallest value in this research is on the DP2 training design operational which is the activity and the training delivered by the instructor to help me how to apply learning in the workplace, the value of which is 9,41. It is possible because when training occurs, the illustration presented by the instructor is at the time of the normal situation, where under certain conditions what the instructor delivered is not in accordance with real conditions in the field, such as incompetent labor or construction workers, unfavorable weather or work area which is very difficult to reach and dangerous; thus what is delivered by the instructor has not helped how to apply the results of training into the work yet.

The value on the DP4 training design operational is arranged according to my work and easy to apply has a value of 9,96. It is possible to do because the training materials are technical, such as casting work, while the participants invited in the training are not only from the structural part but also from the interior finishing section, so that the training materials delivered by the instructor are not appropriate for the job and difficult to apply because it is not his job.

On the other hand, the training evaluation methods provided to training participants after training have not yet reflected an evaluation of the needs of trainees such as training materials in accordance with the field of work, training materials are easily applicable. The evaluation of the training provided is only limited to the assessment of the instructors and training facilities provided, such as the instructor delivers the material clearly and easy to be understood, the instructor uses the equipment well and so forth.

Analysis of Hypothesis 2 Testing Result (H₂)

On the result of hypothesis 2 testing (H₂), it is found that the analysis results support the hypothesis H₂ that there is an influence between Characteristics of individuals amounted to 3,99 on the training transfer. It shows that training transfer is influenced by individual characteristics. Characteristics of highly motivated individuals will improve the training transfer towards the employees of PT Total BangunPersada, Tbk.

It can be seen from the *T-Value Path Diagram* (Figure 2) that the individual characteristics in this study are 5 operational covering KI1 of 7,91, KI2 of 7,09, KI3 of 4,53, KI4 of 4,38 and KI5 of 3,86. It can be seen from these operational values that KI1 has the highest value of training transfer, where KI1 is the employee feels confident with the new skills they have learned in the training. It may mean that most employees feel confident that the new skills they get in training are applicable to the job.

Individual characteristics are one of the factors that can influence the training transfer process. Individual characteristics include: self-efficacy, cognitive ability, motivation to transfer, and motivation to learn. The phenomenon that occurs in PT Total BangunPersadaTbk that the motivation and self-efficacy of employees to follow the training and transfer the results of training into the work is still diverse; some employees follow the training because of the employer's command so that the expected results in transferring training results have not been maximized; some employees participate in training only because of the obligations required by *Human Capital* department so that they only come to abort obligations; and there are also trainees only to eliminate the saturation of daily routine in the project. In addition, there are also some employees who attend the training because of the need for knowledge related to their work. Nevertheless, the motivation and self-efficacy of PT Total BangunPersadaTbk employees can influence the success level in transferring training.

Analysis of Hypothesis 3 Testing Result (H₃)

Based on the results of testing on the third hypothesis (H₃), it is found that the analysis results do not support the hypothesis H₃ which is the support for the work environment does not influence the training transfer. The value generated under the standard value *t* is smaller than the standard value, the value generated in this study is 1,72 which is smaller than the default value of 1,96. It reveals that the work environment in PT Total BangunPersadaTbk does not have significant effect on training transfer. It is seen in the *T-Value Path Diagram* (Figure 2) that the work environment in this study has six operational consisting of LK1 which has a value of 4,75, LK2 of 7,83, LK3 of 13,84, LK4 of 13,60, LK5 of 13,84, and LK6 of 12,89.

In this research, work environment operational that has the lowest value is LK1 which states that my colleagues always discuss how to improve performance after training with value of 4,75. It is because at the time of the training, the participants invited to the training will be drawn from each project representative and the maximum number of participants invited in the same project is two. It is done to avoid emptiness in the project operation. Even if there is the same in one project, they will be separated by work area such as one participant is responsible for the work in tower one, and the other participants are responsible for the work of tower two or vice versa. The difference of these trainees makes the participants not have peers to discuss the training results in order to improve performance after the training.

The second smallest value in this research is in LK2 work environment operational of 7,83 that is coworkers always help to increase performance after training. Similar to LK1 operational, the difference of participants invited from each project representative in training makes the trainees feel that no peers who always help to improve performance after training. It is possible to do because each project has only one staff with a skill, such as mechanical and electrical expertise (ME), expertise in matter of finishing etc., so they do not have a peer who has same skill to discuss.

Furthermore, the third smallest value is in LK6 operational with a value of 12,89 which states that the employer conveys the objectives of the training and its application at work. It is possible to do because the one who invites the participants is *Human Capital* department based on the matrix of training they have already made, while the employer of the trainee is only limited to giving permission to attend the training. In addition, the party that knows the purposes and the objectives of the training is *Human Capital* department. The next is LK4 which has a value of 12,60 stating that the employer provides solutions to problems that arise in applying the training results. The cause of LK4 has a score of 12,60 is because the direct supervisors of the trainees do not understand the purposes and the objectives of the training so that when there is a difficulty in applying the results, the training does not provide a solution based on the training materials they have followed but only based on the experiences they have experienced during handling a project.

LK3 and LK5 have the same value of 13,84, where LK3 states that the employer always provides ways to apply the training results, while LK5 states that the employer always directs the goal in the training. It is because the evaluation of the training transfer has not been done so that the supervisors of the trainees do not give feedback to the employees who have attended the training. In addition, the employers' support in training should be a succession of training transfer motivation, since leaving their main job to conduct training that usually takes eight hours or a day can disrupt productivity and still assume that training is just a wasting activity. The

employers have not realized that every employee has the opportunity to get the training that has been set by the company without exception and made a same agenda that is as important as the progress of the job.

Analysis of Hypothesis 4 Testing Result (H_4)

Based on the results of testing on the fourth hypothesis (H_4), it is found that the analysis does not support the hypothesis of H_4 that is a good training transfer does not improve employee's performance. The value obtained from the results of this study amounted to 1,25 is smaller than the default value of 1,96. It shows that the training transfer does not influence the employees' performance of PT Total BangunPersadaTbk.

The results of this study explain that when an employee who has attended training and conducts training transfer at his workplace, the employee feels that he has not had the opportunity to demonstrate the skills he has acquired during the training due to lack of support from colleagues and their respective employer in applying training results. It is seen in the *T-Value Path Diagram* Table (Figure 2) in which the operational values of TP1 and KK1 have the same value, i.e 0,00. The TP1 demonstrates that it has used new skills to improve performance in daily work, while KK1 states that they are able to apply their skills in work. It is possible to do because when they want to apply the new skills they get in training obtains different things in the field in which the work method that the *engineering* team has created is not yet integrated with the methods or ways of work they have gained during the training.

The second smallest value in this study is on the TP3 training transfer operational of 6,73 and the value of KK4 in the employee's performance of 3,06. This TP3 demonstrates that it has combined the skills learned in daily work activities. This may be possible to conduct because the training materials provided are technical related materials such as ceiling work training materials, materials for the job of ironing, and those who do the work are subcontractors, while the employees of PT Total BangunPersadaTbk who act as the main contractor only supervises the work done by the subcontractor, so that what they have gained during the training to incorporate new skills in daily activities cannot be applied maximally because the subcontractors themselves have their own working methods. It is related to KK4 which states that they finish the job on time. It is because the schedule that has been made since the beginning is a schedule that is made based on normal condition, but in fact the field reveals otherwise, such as weather that is less support or human resources owned by subcontractors are not sufficient, so that the planned targets are not achieved. The example that often occurs in the field is such as the casting process that disrupts the weather due to rain, so

that the casting process must be stopped or postponed. Thing like this is sometimes a constraint so that those who have attended the training cannot get the job done on time.

Furthermore, the third smallest value is on the TP2 training transfer operational which has a value of 7,77 stating that the training I get help greatly improve my performance. This is possible to do because the employee performance appraisal is done once a year, while an employee will be rotated or be moved to another project before the end of the assessment. For instance, a project is planned to be completed within one year, while the structural work is planned for five months. The structural supervisor will work on the project for five months, then transferred to another project which is still being structured with different project leaders, it is this movement that breaks the performance appraisal period from one project to another because the assessment of the first project is not forwarded to the next project leader. It is related to KK5 employee performance operations with a value of 4,13, which states that they work well together in completing the work. As stated above that PT Total BangunPersadaTbk acts as the main contractor, while those who do the work are subcontractors who have been appointed according to the scope of their work and they must cooperate with each other. The cooperation in completing this work sometimes run into difficulty because every process of work done by different subcontractors, like work of ceiling installation with electrical installation work; as it is done by different subcontractors, sometimes they do not think about the other subcontractor's work; the important one is their work is completed or on the contrary, when the ceiling work is done but there are electrical installation work that must be repaired or be checked again so that the ceiling that has been installed must be dismantled and re-installed. These subcontractors' differences are part of their problems after completing the training to work well in finishing the work.

MANAGERIAL IMPLICATIONS

Human resources (HR) becomes one of the important factors that influences the success of an organization or a company because human resources is the actor from the overall level of planning until the evaluation which is able to utilize other resources owned by the organization or a company. Understanding the importance of human resources nowadays is one of the efforts that must be achieved by the company which is by empowering and improving the quality of human resources in the organization or company itself. By improving the quality of human resources, it is expected that employees can work effectively and professionally so that their performance achievement expected to be more satisfactory as determined by the company. One of the ways to improve the quality of human resources is by training programs. Training

needs analysis is to ensure employee competency gaps with expected competencies, so it is known what knowledge that must be updated or improved.

The findings of this study provide implications for the development of training programs to pay more attention on training design, so that training is designed based on the needs of the field and easy to apply. Another important factor is the instructor; the training instructor should be able to give a real example of the field in accordance with the work of the trainee. The instructor should also provide more practical examples during the training sessions by helping the trainees understand how this training is closely related to their work. Therefore, using real-life examples and day-to-day work can build trainees' sense of confidence and motivate them to transfer training into work. The conclusion is that the training design should be arranged according to the needs of the participants, should provide examples of the real conditions of the field, and should explain how to apply these learning outcomes into the work.

By referring to the individual characteristics of the training transfer process, the researcher suggests that trainees should be highly motivated to transfer the results of the training into the work because if the participants have the motivation to transfer, self-efficacy and cognitive ability to apply the learning outcomes into the work then the training transfer will run according to the purpose of the training. Conversely, if the trainee is present only because they meet the invitation from *Human Capital* department or because the employers ask or just to eliminate saturation in the work, then the transfer process will undoubtedly run according to training objectives. To that end, an instructor must be able to motivate the trainees that the training is related to their work and they are able to apply the learning outcomes into their work.

Work environment factor becomes an integral part of this research. The work environment is the feedback from colleagues and support from employers. In this study, the lack of peer support to the process of training transfer in the workplace is found. Co-workers' involvement becomes the closest person to utilize the knowledge possessed by employees who have attended the training by assisting the implementation and encouragement by appreciating the transfer process of the training and also providing input to the things that are not taught to the trainees because they only get from the experience and custom everyday even though the co-worker is not from the same department or different job.

In addition, supervisor's support factor in training transfer cannot be ignored because employers support greatly influences training transfer. The employer can support participants or subordinates after training by providing literature to solve problems faced by participants in terms of applying the skills learned at work. Besides, the employer may discuss different methods of applying the learned skill to the workplace and set goals to encourage the employees who have attended the training using the skills he or she has gained in the training.

The employer should also provide support and control in the implementation by employees who have attended the training and give freedom to work without reducing the rules that have been set.

To improve the process of training transfer on employees' performance, PT Total BangunPersadaTbk can do this by holding refresh training consistently with the same material but combining the development of science and technology in accordance with the development of the era, whether it is once a year or every other year, because sometimes ability and memory of trainees are limited. This training is expected to be able to refresh and add the horizons of employees' thinking. The results of this study expect that employees' performance can be improved with transfer motivation where strong support from training design, strong support from employee himself, and support from work environment that includes support from colleagues and employers can have an effect on training transfer.

The next is employee's performance; the researcher gives the results evaluation record to the related supervisor to assess the members or subordinates who have attended the training, the extent of the ability to apply the skills in the workplace, the results of work perceived with good quality, complete the job on time and able to work well in finishing the job. These records are: (1) able to apply the skills in the work, the employer assesses the implementation of skills in work whether it is achieved or not to further encourage them to continue growing; (2) with the skills they possess, they can portray themselves as reliable human resources, the employer provides motivation and support to employees who have been trained that they are capable of applying skills and they are the chosen ones so that their motivation and confidence are lifted; (3) the employer feels that I am giving good results of work, the employer gives an assessment of the quality of work of his / her subordinates by giving them a picture of the quality of their work before training and after training; (4) completion of work is always on time, the employer assesses by adding activity in daily employee duties to the timelines of regular work done has increased; (5) cooperate well in completing the job, the employer must know the jobs that require cooperation where the results given by them are joint roles and for the common good.

CONCLUSION

This study examines the influence of training design, individual characteristics, and working environment on training transfer and its impact on employee's performance. This research uses *Structural Equation Model (SEM)* analysis.

The results concluded from this research can be interpreted that:

- a. The first hypothesis is that the good training design does not influence the training transfer on the employees of PT Total BangunPersadaTbk. Weak training design occurs because of to the lack of a comprehensive needs assessment for each trainee as well as insufficient time to see the training content. The findings of this study show that the training design does not have influence on training transfer, in which it is in contrast to the results of the researches that have been done where the training design significantly influences the training transfer.
- b. The second hypothesis finds that the influence of individual characteristics that have the ability, personality, self-efficacy, and motivation to learn that exist in the trainees themselves will increase the training transfer on the employees of PT Total BangunPersadaTbk.
- c. In the third hypothesis, it is found that the support of the working environment does not have influence on training transfer. The intended supports of the work environment such as managerial support, co-workers' encouragement, adequate resources, opportunity for applying skills which have been studied, and technical support in training transfer do not influence the transfer of training in PT Total BangunPersadaTbk.
- d. The fourth hypothesis; the results of this present study show that a good training transfer does not improve employee's performance. The intended transfer of training is the ability of trainees to apply the training results (knowledge, skills, and behaviors) effectively and sustainably at work.

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