## 266-284 cahyaningrum.pdf



#### Available at:

http://ojs.unik-kediri.ac.id/iudex.php/ekonika



# Factors of Training Design and Training Facilities on Training Effectiveness at the Surakarta Vocational and Productivity Training Center

#### Anisya Cahyaningrum<sup>1</sup>; Jati Waskito<sup>2</sup>; Edy Purwo Saputro<sup>3</sup>; Kussudyarsono<sup>4</sup>

<sup>1</sup>Master Student Management, MuhammadiyahUniversity of Surakarta, Indonesia

<sup>1</sup>anisya.cahyaningrum@gmail.com, <sup>2</sup>jw271@ums.ac.id, <sup>3</sup>eps135@ums.ac.id, kus165@ums.ac.id

#### Article History:

 Received
 : 01 - 06 - 2023

 Revised
 : 05 - 08 - 2023

 Accepted
 : 28 - 08 - 2023

Keywords:

Context/ content/ training materials; training methods; trainer competency; training facilities; training effectiveness

#### ABSTRACT

The study goals is to understand how facilities, research, and design influences training effectiveness at The Surakarta Vocational and Productivity Training Center. A sort of research as many as 96 respondents took part in this quantitative training at The Surakarta Vocational and Productivity Training Center. Primary data with measurement scales likert and data analysis using SPSS version 26 make up the research data sources. Dependent variables include the effectiveness of the training, whereas independent variables include the context, substance, and methodology of the training, as well as the competency of the trainers and the training facilities. According to the study's findings, (a) context, content, and material training are positively and significantly related to training effectiveness; (b) The method of training is The competency trainer is similarly positively and significantly connected to training effectiveness; (c) Training effectiveness is related to training effectiveness; (d)The training facilities are important to training efficacy and have a beneficial influence.

#### INTRODUCTION

Training is the most important part of improving superior and competitive Human Resources. Research training is very interesting in further scrutiny. This study combines 2 (two) studies, namely Alias et.al (2019) and Hajjar and Alkhanaizi (2018). Research results from several interesting training researches include the context/content/training materials, training methods, trainer competencies, and training facilities. Previous research is Devi and Shaik (2013), Noor et.al (2014), Lin et.al (2015), and Chukwu (2016). Meanwhilethe outcomes of additional research undertaken by Kurniatun and Setiabudi (2019), Mohamad et.al (2020), Mohammmad and Anto (2020), Adnan and Khalid (2021), Ha et.al (2021), Lan (2021), Kajwang (2022), Kraai and Mashau (2022), Mohamad et. al (2021), Rasangi and Malalage (2021), Abdullah et.al (2022), Shahin and Soomro (2022), Budiastuti et.al (2023) and Zaidi et.al (2023).

<sup>&</sup>lt;sup>2,3</sup> MuhammadiyahUniversity of Surakarta, Indonesia

Devi & Shaik (2013) found an effective determination of training needs, appropriate training design, successful performance of trainers and trainees, and training effectiveness, all of which have a favorable link can increase the effectiveness of training and development programs. Noor et al. (2014) found the influence (Training content, Training delivery, Trainer Competence, and Opportunity) of training design aspects in determining the goals of small entrepreneurs. Training design factors can transfer knowledge and skills to trainees in their business.

Lin et al. (2015) found that factors including participants, trainers, training materials and organization can influence the effectiveness of the training. Meanwhile, other factors such as training programs, work environment, and technology do not affect. Chukwu (2016) found training attributes (facilitator disposition, reality, group work, relationships, participation, image and promotion) as drivers of training effectiveness.

Kurniatun & Setiabudi (2020) found that graduates can They can contribute to their work and use their learning in a variety of ways. Mohamad et al. (2020) found shows learning motivation does play a significant mediating role in the relationship between management support for training programs and learning motivation do their job.

Competency and employee training as support to improve performance, provide advice and recommendations in dealing with the challenges faced by Bahraini hospital employees (Mohammad & Anto, 2020). Adnan & Khalid (2021) examined the relationship between e-training, motivation and job performance as a control measure. The results of this study have implications for organizations in finding ways to increase the effectiveness of implementing e-training.

Ha et al. (2021) found the unfulfilled needs of students in pedagogical training programs at training institutes in Vietnam. Therefore, it is necessary to improve teaching plans, contents, curricula to maximize the practice of professional skills, develop soft skills, and support interactions between lecturers and students. Lan (2021) examines the factors influencing the effectiveness of training programs for school managers in Vietnam. The results of the study found that there were contextual factors, namely the training environment and the motivation of the trainees had a positive impact on the training program for school managers.

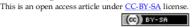


Kajwang (2022) found conceptual and geographic gaps related to the insurance sector training outcomes needs assessment in Kenya. Where, the results of an empirical review reveal the primary function of training needs assessment on training outcomes to guarantee training programs are implemented successfully, meet employee needs, and enhance the performance of the insurance sector in Kenya. Kraai & Mashau (2020) examines the effect the impact of training content, learning, and training transfer on the efficacy of training in Gauteng's nonprofit businesses. The goal of the study was to determine the effectiveness of National Development Agency (NDA) training, which examined the relationship between learning and training design elements (training content).

Mohamad et al. (2021) examines the relationship between manager support and application of training as motivational learning by mediators. To achieve organizational plans and goals, practitioners need to understand in the face of global economic competitiveness and economic uncertainty. Rasangi & Malalage (2021) examines training and its impact on operational-level performance of clothing company employees in Sri Lanka. This study investigates how training requirements analysis affects, training design, training implementation, performance evaluation on the performance of clothing company employees in Sri Lanka.

Abdullah et al. (2022) researched the development of an effective online-based training questionnaire for higher education training providers. (Shahin & Soomro (2022) examines training transfer and job performance by analyzing the development sector in Pakistan. The results showed a positive relationship between the variables. Budiastuti et al. (2023) examined the measurements that affect training effectiveness in a study on wastewater treatment training at the Bandung State Polytechnic. The findings show that the training participants have a positive relationship with the training materials, training atmosphere, training facilities, training plans and schedules, and presentation mode. Zaidi et al. (2023) examined the relationship between training and training programs with training effectiveness. The research results show that training and training programs can increase the effectiveness of training.

Based on the research considerations of training design factors and training facilities on training effectiveness, the researchers were interested in conducting research at the Surakarta Vocational and Productivity Training Center (BPVP). BPVP



Surakarta is under the Ministry of Manpower as a government organization. Their duties include offering vocational training, increasing productivity, providing competency certification, and developing networks in their fields (Trustnews, 2006). Thus, researchers conducted research related to "Factors of Training Design and Training Facilities on Training Effectiveness at the Surakarta Vocational and Productivity Training Center".

#### LITERATURE REVIEW

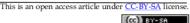
#### Training

Training is a series of activities needed to acquire and apply knowledge, abilities and skills appropriate to a particular job in an organization (Hajjar & Alkhanaizi, 2018). Training is designed to provide the ability to apply learning in the workplace (Devi & Shaik, 2013). In addition, training can improve the ability, knowledge and expertise of the workforce (Mohammad & Anto, 2020). Acording to Lan (2021), training will provide skills so as to increase ability and provide benefits. Training (training) is carried out for a certain period of time or shorter because it is designed so that the participants enable the achievement of the training objectives (Adnan & Khalid, 2021). Kajwang (2022) states training as a teaching process by developing oneself with skills to improve abilities. The main determinants of training transfer are the work environment, the characteristics of the trainees, and the design of the training (Kraai & Mashau, 2020). Training can be provided with coaching, mentoring, collaboration, and participation (Rasangi & Malalage, 2021).

#### The Training of Evaluation

Training evaluation is needed to determine the effectiveness of each training program (Devi & Shaik, 2013). Hajjar & Alkhanaizi (2018) states that training evaluation is an assessment of a series of processes to determine the value of a training program. In addition, training evaluation as a systematic process of collecting data to determine the effectiveness of training by identifying training activities with organizational strategy (Kurniatun & Setiabudi, 2020). The most crucial phase of the training cycle is training evaluation.

Training evaluation has objectives regarding effectiveness, control and intervention. In addition, the benefits of training evaluation are improving the quality of training activities, improving the quality of training activities, increasing the





interaction skills of trainers regarding input and output, more integration of training between the training offered and development in the workplace, and better collaboration between trainers and management (Kurniatun & Setiabudi, 2020).

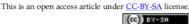
Rasangi & Malalag (2021), training evaluation is a systematic approach to data and information collected to ensure the suitability and effectiveness of training programs. The evaluation process has benefits for improving performance and as a method to help analyze training programs that are initiative and efficient regarding the goals, vision and goals of the organization. The training period helps participants avoid demographic-related human resource obsolescence and accelerate workforce initiative and innovation skills. In addition, Abdullah et al. (2022) states that there are five levels of training evaluation model learning evaluation, namely input and process, acquisition, application, organizational rewards, and social results. The development of this evaluation model is an adaptation of Kirkpatrick's model.

#### The Training of Design

The training design takes effective and quality training materials and Devi & Shaik's training schedule into account (2013). According to Alias et al. (2019), training design, namely the extent to which training has been designed and delivered to provide the ability to transfer to achieve goals. The selection of the right training method is influenced by several factors. According to Noor et al. (2014), The influence of training design factors consists of training content, training delivery, trainer competency, opportunity to use, and goal setting. Whereas, Rasangi & Malalage (2021), Several factors influence training design such as instructional techniques and learning principles, self-management and prevention strategies and goal setting so that organizations can design training programs tailored to the factors that increase training effectiveness. Alias et al. (2019) stated several factors that influenced the design of the training, namely the context/content of the training, training methods, and the competence of the trainers. In addition, several factors affect the effectiveness of training related to training design, namely training content, training environment, training facilities, training schedule, and presentation style.

#### The Training of Effectiveness

According to Hajjar & Alkhanaizi (2018), Effectiveness is the extent to which something is successful from the desired results and success. Training effectiveness is based on determining the need for effective training, training design, training



performance, and the performance of the trainees (Devi & Shaik, 2013). The effectiveness of the training can be seen from the extent to which success such as the design of the training, the characteristics of the trainees, a satisfactory environment, the achievement of training objectives and the achievement of training transfers.

Training effectiveness is defined as the achievement of training objectives capable of producing knowledge and skills. Training effectiveness is determined through reaction, engagement, practical application (Budiastuti et al., 2023). (Hajjar & Alkhanaizi (2018) mentions the most famous model for measuring the effectiveness of training programs developed by Donal Kirkpatrick. Krikpatrick's evaluation model discusses four steps for measuring effectiveness namely reaction, learning, behavior, and results. According to Lin et al. (2015), the factors that influence the effectiveness of the training are participants, trainers, training materials, organization/company, training programs, work environment, and technology.

Ha et al. (2021) stating that the trainer's skills will provide maximum results both from training plans to interactions. The many factors that affect the effectiveness of training are needed to help design improvement management programs and mechanisms, policies, and the work environment (Lan, 2021). One way to increase competence and skills is by implementing training transfers. The training transfer model consists of input, output, and transfer conditions of Shahin & Soomro (2022). Zaidi et al.(2023) said that the effectiveness of the training will be seen from the overall training that can provide benefits and benefits for organizations and individuals.

#### Hypothesis of Development

#### The Context/ Content/ Training Materials on Training Effectiveness

Literature review indicates that the context or content of the training has a significant effect on the effectiveness of the training (Noor et al. (2014), Lin et al. (2015), Hajjar & Alkhanaizi (2018), Alias et al. (2019), Kurniatun & Setiabudi (2020), (Rasangi & Malalage (2021), Abdullah et al. (2022), Kajwang (2022), Kraai & Mashau (2020), and (Budiastuti et al. (2023)).

Alias et al. (2019) said that the context/content/training materials were outcomes that had been agreed upon and included in the training program for the continuity of learning. Hajjar & Alkhanaizi (2018) expressed the importance of



ensuring the training content is understandable and applicable to trainees. Lin et al. (2015) stated that the training material had an effect on the reactions of the trainees thereby affecting the effectiveness of the training. The training content must also be understandable, applicable, and consistent with the training course material Kraai & Mashau (2020). The context/content/material is delivered sequentially so that competency is achieved in training effectiveness Budiastuti et al. (2023). As for this explanation, the hypothesis is as follows:

 $H_1$ : The context/content/material of the Training has a significant effect on the Effectiveness of the Training

#### The Training Methods on Training of Effectiveness

Several literature reviews state that training methods have a significant effect on training effectiveness (Devi & Shaik (2013), Noor et al. (2014), Lin et al. (2015), Alias et al. (2019), Hajjar & Alkhanaizi (2018), Adnan & Khalid (2021), Ha et al. (2021), Abdullah et al. (2022), Budiastuti et al. (2023), and Zaidi et al. (2023).

The training method consists of techniques and materials used by trainers to contribute to the success of the training program by considering several things, namely the objectives of the training program, availability of resources, organizational culture, time and budget, characteristics and preferences of trainees, methods of participant motivation, and skills. (Alias et al., 2019). In line with according to Devi & Shaik (2013) states the trainer should choose the right method based on the goals and style of the learner. Hajjar & Alkhanaizi (2018) revealed the importance of choosing training activities that can improve the teaching and learning process including instructors, computer-based training, web-based training, independent, interactive or multimedia training. The training method can be conveyed well to the participants, which can be seen from the motivation of the training participants. This motivation can be seen how active the participants are in communicating with the trainer or instructor. One of the successes of training effectiveness is influenced by the training method Ha et al. (2021). According to Budiastuti et al. (2023), training methods help trainees understand the material presented. In addition, the training method is a factor that makes the training effective Zaidi et al. (2023). As for this explanation, the hypothesis is as follows:

H<sub>2</sub> : Training Methods have a significant effect on Training Effectiveness

The Trainer Competence on Training of Effectiveness

Literature review indicates that the trainer's competence has a significant effect on the effectiveness of the training (Noor et al.(2014), Lin et al. (2015), Chukwu (2016), Hajjar & Alkhanaizi (2018), Alias et al.(2019), Kurniatun & Setiabudi (2020), Mohamad et al. (2020), Mohamad & Anto (2020), Adnan & Khalid (2021), Lan (2021), Mohamad et al. (2021), Shahin & Soomro (2022).

Competence is an analysis of both behavior, skills, knowledge, understanding and personal qualities that form performance competencies so that trainer skills are needed to realize the success of an effective training program (Alias et al., 2019). Menurut Hajjar & Alkhanaizi (2018), the trainer as a role model in the teaching and learning process so that it is necessary to set the tone, attitude, clothes worn, preferences, and interests of the participants. Some of the trainer's attributes as a driving force for training effectiveness (Chukwu, 2016). Lin et al. (2015) stating the competence of trainers in training affects the effectiveness of training. As for this explanation, the hypothesis is as follows:

H<sub>3</sub> : Trainer Competence has a significant effect on Training Effectiveness
 The Training Facilities on Training of Effectiveness

Literature review indicates that training facilities have a significant effect on training effectiveness (Hajjar & Alkhanaizi (2018), Mohamad et al. (2020), Adnan & Khalid (2021), Mohamad et al. (2021), and Budiastuti et al. (2023)).

Complete and adequate facilities will achieve the transfer of training. Training facilities and environment include training rooms equipped with audio/visual, computers, laboratories, and electronics tailored to the needs of each training program (Hajjar & Alkhanaizi, 2018). According to Mohamad et al. (2020), management support will affect the motivation to learn. One of them, management support related to complete and appropriate training facilities. Management support is needed to help strengthen participant learning and guidance both before, during and after training (Mohamad et al., 2021). Besides that, Budiastuti et al. (2023) shows a positive relationship between training facilities and training effectiveness. As for this explanation, the hypothesis is as follows:

H<sub>4</sub> : Training Facilities have a significant effect on Training Effectiveness

Based on the review of theory and hypotheses, it can be formulated the relationship between the variables conceptualized by the form of the research model as follows:

Research Framework

#### 

#### **METHODS**

Training facilities (X4)

This research method is a quantitative and descriptive design to determine the influence of training design factors and training facilities on the effectiveness of training at the Surakarta Vocational and Productivity Training Center. This study uses primary data from a questionnaire. The population is training participants at the Vocational and Productivity Training Center (BPVP) Surakarta.

The sample is part of the number and characteristics of the population (Sugiyono, 2017). A sample of 96 respondents used purposive sampling method. The criteria are (1) respondents are training participants at BPVP Surakarta; (2) respondents have attended training at BPVP Surakarta in 2023; and (3) presenting data related to research variables and filtering data against all data or outlier data. In addition, research using multivariate analysis methods on SPSS version 26 (Ghozali, 2021).

Indicator for each question with a Likert scale of 5 (five) points, starting from 1 (Strongly Disagree/ STS), 2 (Disagree/ TS), 3 (Doubtful/ RR), 4 (Agree/ S), and 5 (Strongly Agree/SS). The questions for each variable have the following question indicators.

Tabel 1. Question Indicator

No	Variable	Indicator			
1.	The Context/	(Alias et al., 2019)			
	Content/	The context/content/material of the training is related to the needs of the training			
	Training	participants.			
	Materials	2. The context/content/materials of the training are important to the needs of the trainees.			
		The context/ content/ training materials significantly increased the knowledge and understanding of the training participants.			
		(Hajjar & Alkhanaizi, 2018)			
		4. The context/content/training materials are presented in a logical sequence.			

This is an open access article under  $\underline{\text{CC-BY-SA}}$  license.



No	Variable	Indicator
		5. Extensive and practical training context/content/materials.
2.	The Training of	(Alias et al., 2019)
	Methods	The training is delivered systematically.
		Training is delivered effectively.
		The training is delivered in a hands-on approach.
		The training is delivered using appropriate examples.
		The training has been delivered using several types of teaching methods (discussion, face-to-face, individual, online and offline).
3.	The Trainer of	(Alias et al., 2019)
	Competency	Teachers teach according to competency units.
		Teachers use examples and apply them.
		The teacher gives the opportunity to ask questions.
		The teacher presents the material clearly.
		Teachers carry out innovative learning activities (not monotonous).
		Teachers meet teaching qualifications.
4.	The Training of	(Hajjar & Alkhanaizi, 2018)
	facilities	Complete and adequate training facilities.
		There are tools for training.
		Submission of material consists of good presentations with video, audio, and practical tools.
		(Budiastuti et al., 2023)
		4. Practical materials are available as needed.
		Practical instructions and work procedures are clear.
5.	The Training of Effectiveness	(Alias et al., 2019)
	Effectiveness	The trainees showed satisfactory performance on the training.
		Trainees can fulfill the objectives of each competency unit.
		The trainees learn as much as they can from this training.
		4. The trainees benefit from this training.
		<ol> <li>The training significantly adds to the knowledge of the trainees.</li> </ol>
		6. The trainees are committed to making use of the knowledge I have during the training.

## **RESULTS Characteristics of Respondents**

Table 2. Characteristics of Respondents

Variable	Descripsion	Number Amount of people	Percentage (%)
Gender	Man	71	74,0
	Women	25	26,0
Age	18 - 21 th	31	32,3
_	22 - 25 th	39	40,6
	26 - 29 th	9	9,4
	30 - 33 th	5	5,2
	34 - 37 th	1	1,0
	38 - 41 th	1	1,0
	42 - 45 th	1	1,0
	46 - 49 th	9	9,40
Education	Bachelor	39	40,6
	Diploma	8	8,3
	High		
	School/Equivalent	49	51,0

Source: Data Olah Primer (2023)

This is an open access article under CC-BY-SA license.



The results of respondents based on gender revealed that there were 96 people with 71 people (74.0%) man and 25 people (26.0%) women.

The results of respondents based on age were dominated by respondents aged 22 to 25 years as many as 39 people (40.6%), ages 18 to 21 years as many as 31 people (32.3%), ages 26 to 29 years as many as 9 people (9.4%)), ages 30 to 33 years as many as 5 people (5.2%), ages 34 to 37 years as many as 1 person (1.0%), ages 38 to 41 years as many as 1 person (1.00%), ages 42 to 45 years as many as 1 person (1.00%), ages 46 to 49 years as many as 9 people (9.40%).

The results of respondents based on education were dominated by high school/equivalent with 49 people (51.0%), Bachelors with 39 people (40.6%), and Diploma with 8 people (8.3%).

#### The Data Testing of Results The Validity of test

Table 3. V	Validity	Test	Resul	lts
------------	----------	------	-------	-----

Rotated Component Matrix <sup>a</sup>						
Component						
1	2	3	4	5		
.856						
.762						
.796						
.710						
.771						
				.750		
				.668		
				.642		
				.640		
		.685				
		.676				
		.793				
		.692				
		.648				
			.846			
			.722			
			.729			
			.747			
	.719					
	.833					
	.792					
	.635					
	1 .856 .762 .796 .710	Con     Con	Component Matrixa	Component Matrixa		

Source: Data Olah Primer (2023)

The results of the first Confirmatory Factor Analysis (CFA) analysis show two variable indicators that have not been grouped, namely the variable indicators of training methods 4, trainer competence 1, training facilities 5, training effectiveness 1, and training effectiveness 2. Therefore, these indicators are issued and generated the data is shown in table 3. Table 3 shows that the value of the loading factor (training context, training method, trainer competence, training facilities, and training

effectiveness) is > 0.5 and each variable classifies each component. Therefore, the results of testing validity with Confirmatory Factor Analysis (CFA) can be said to be valid and ready to be analyzed.

The Reliability of Test

Table 4. Reliability Test Results						
Variabel	Cronbach's Alpha	Cronbach's Alpha Based on Standardized <mark>Items</mark>	N of Items			
Training Context	0,892	0,894	5			
Training Methods	0,786	0,794	4			
Trainer Competency	0,831	0,835	5			
Training Facility	0,792	0,796	4			
Training Effectiveness	0,882	0,883	4			

Source: Data Olah Primer (2023)

The results show that the variables (training context, training methods, trainer competency, training facilities, and training effectiveness) give a Cronbach Alpha value > 0.7, so it can be said to be reliable.

#### The Classic assumption of test

#### **Multicollinearity Test**

Table 5. Multicollinearity Test Results

Variable	Tolerance	VIF	Information
Training Context	0,623	1,604	No multicollinearity
Training Methods	0,466	2,148	No multicollinearity
Trainer Competency	0,579	1,728	No multicollinearity
Training Facility	0,794	1,260	No multicollinearity

Source: Data Olah Primer (2023)

The results of the multicollinearity test show that the multicollinearity test results show that the tolerance value for each variable is greater than 0.1 while the Variance Inflation Factor (VIF) value is less than 10, so that the regression model in the study concluded that there is no multicollinearity problem.

#### The Autocorrelation of Test

Table 6. Autocorrelation Test Results

Runs Test			
	Unstandardized		
	Residual		
Test Value <sup>a</sup>	.18140		
Cases < Test Value	47		
Cases >= Test Value	48		
Total Cases	95		
Number of Runs	49		
Z	.104		
Asymp. Sig. (2-tailed)	.917		
a Median			

a. Median

Source: Data Olah Primer (2023)

Based on the table above, it is known that sig-2 tailed > 0.05 so that it can be said that there is no autocorrelation in Training Context, Training Methods, Trainer Competence, and Training Facilities because sig2-tailed > 5% for each variable.

This is an open access article under CC-BY-SA license.



#### **Heteroscedasticity Test**

Heteroscedasticity is a condition where the confounding variables do not have the same variance. In detecting whether there is a problem of heteroscedasticity by using the Glejser Test. If the significance > 0.05 it can be said that there is no heteroscedasticity. The results showed a significance value of > 5% so that it can be said that there is no heteroscedasticity.

**Table 7. Heteroscedasticity Test Results** 

Variable	Variable	Significance	Description
Dependent			
Training Effectiveness	Training Context	0,105	There is no
(AbsUt)	Training Methods	0,568	heteroscedasticity
	Trainer Competency	0,568	
	Training Facility	0,143	

Source: Data Olah Primer (2023)

#### Normality test

**Table 8. Normality Test Results** One-Sample Kolmogorov-Smirnov Test

	·		Unstandardized Residual
N			96
Normal Parametersa,b	Mean		.0000000
	Std. Deviation		1.66247499
Most Extreme Differences	Absolute		.133
	Positive		.056
	Negative		133
Test Statistic	_		.133
Asymp. Sig. (2-tailed)			.000c
Monte Carlo Sig. (2-tailed)	Sig.		.060d
	99% Confidence	Lower Bound	.054
	Interval	Upper Bound	.067

a. Test distribution is Normal.

Source: Data Olah Primer (2023)

The Kolmogorov-Smirnov Test statistical value is 0.133 and is not significant at 0.05 (because monte carlo p = 0.06 >than 0.05). The results of the normality test show that H<sub>0</sub> cannot be rejected, which means that the residuals are normally distributed, in other words, the residuals are normally distributed.

#### Hypothesis test

This study uses hypothesis testing with multiple regression analysis. The independent variables are context/content/training materials (X1), training methods (X2), trainer competence (X3), and training facilities (X4) while the dependent variable is training effectiveness (Y). The results of testing the multiple regression hypothesis are as follows:

b. Calculated from data.

c. Lilliefors Significance Correction.

d. Based on 10000 sampled tables with starting seed 1502173562.

Table 9. Multiple Linear Regression Test Results

Variable	Koefisien	Std.Error	t	sig/
			statistic	p-value
Constant	2,022	2,337	0,865	0,389
Training Context (IP)	0,217	0,096	2,261	0,026*
Training Method (MP)	0,344	0,120	2,856	0,005*
Trainer Competency (KP)	0,325	0,094	3,452	0,001*
Training Facility (FP)	0,187	0,087	2,150	0,034*
F statistik = 29,754	"	sig/ p-value =	R <sup>2</sup>	= 0,567
sig/p=value=0,000		0,000***	Adjusted I	R <sup>2</sup> =0,548

Dependent Variable: Efektivitas Pelatihan

Source: Data Olah Primer (2023)

#### Multiple Linear Regression Test

The results of the multiple linear regression test in table 9 form the basis for constructing the regression model equation as follows:

$$EP = 2,337 + 0,096 IP + 0,120 MP + 0,094 KP + 0,087 FP$$

The explanation of the regression model is as follows:

- a. The constant coefficient (a) of 2.337 indicates that the context/content/training materials, training methods, trainer competencies, and training facilities are not developed in determining the effectiveness of training, the value of training effectiveness is equal to 2,337.
- b. The IP coefficient (b1) of 0.096 indicates that the higher the level of context/content/training material provided, the higher the level of training effectiveness.
- c. The MP coefficient (b2) of 0.120 indicates that the higher the level of training methods provided, the higher the level of training effectiveness.
- d. The KP coefficient (b3) of 0.094 indicates that the higher the level of competence of the trainers provided, the higher the level of effectiveness of the training.
- e. The FP coefficient (b4) of 0.087 indicates that the higher the level of training facilities provided, the higher the level of training effectiveness.

#### The R<sup>2</sup> Test or Coefficient of Determination

The results of the multiple linear regression test obtained an R<sup>2</sup> of 0.567 which indicates that the context/content/training materials (IP), Training Methods (MP), Trainer Competence (KP), and Training Facilities (FP) can explain Training

<sup>\*)</sup> signifikan pada α < 0,05

Effectiveness (EP) of 56, 70% while the remaining 43.30% is explained by other factors not included in this regression model.

#### The F of Test

F test to determine the effect between the independent variables and the dependent variable simultaneously or simultaneously. The results of the F statistical test analysis on the results of multiple linear regression tests showed the calculated F value of 29.754 with a significance value of 0.000 (sig <0.05). This shows that the context/content/training materials, training methods, trainer competencies, and training facilities have a joint effect on training effectiveness.

#### The T of Test

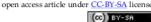
The T of test is to test the significance of the effect of the independent variables individually on the dependent variable. The results of the t statistical test are (a) the context/content/training material variable on training effectiveness has a significance value of 0.026 (sig <0.05). The results of the hypothesis stated that the context/content/training materials had an effect on training effectiveness, (b) training methods had a significance value of 0.005 (sig <0.05). The results of the hypothesis stated that training methods had an effect on training effectiveness, (c) trainer competence on training effectiveness had a significance value of 0.001 (sig < 0.05). The results of the hypothesis stated that the competence of trainers had an effect on training effectiveness, (d) training facilities on training effectiveness had a significance value of 0.034 (sig < 0.05). The results of the hypothesis stated that training facilities had an effect on training effectiveness.

#### Discussion

#### The Context/Content/Training Material has a significant effect on Training **Effectiveness**

The results of the hypothesis test show that the context/content/training material has a significant effect on the effectiveness of the training. A positive influence shows that the context/content/material is well made and accurate in the continuity of learning will increase the understanding of the trainees. So that the context/content/training material influences the effectiveness of the training or preferably (Alias et al., 2019).

According to Hajjar & Alkhanaizi (2018), (Lin et al. (2015), Kraai & Mashau (2020), and Budiastuti et al. (2023), Context/content/material that is easy to



understand and clearly presented will have an impact on training participants so that training effectiveness is achieved.

The results of this study are supported and strengthened by Noor et al. (2014), Lin et al. (2015), Hajjar & Alkhanaizi (2018), Alias et al. (2019), Kurniatun & Setiabudi (2020), Rasangi & Malalage (2021), Abdullah et al. (2022), Kajwang (2022), Kraai & Mashau (2020),and Budiastuti et al. (2023) which stated that the context/content/training material had a significant and positive effect on the effectiveness of the training.

#### The Training Methods have a significant effect on Training Effectiveness

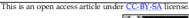
The results of the hypothesis test show that the training method has an effect on the effectiveness of the training. A positive influence shows that a well-planned training method will have an influence on the effectiveness of the training. This is in line with Devi & Shaik (2013), Alias et al. (2019), Hajjar & Alkhanaizi (2018), Ha et al. (2021), Budiastuti et al. (2023), and Zaidi et al. (2023), training methods that are well conveyed to the trainees in terms of language style, attitude, and communication so that the training will help the understanding of the trainees in creating training effectiveness.

The results of this study are supported and strengthened by Devi & Shaik (2013), Noor et al. (2014), Lin et al. (2015), Alias et al. (2019), Hajjar & Alkhanaizi (2018), Adnan & Khalid (2021), Ha et al. (2021), Abdullah et al. (2022), Budiastuti et al. (2023), and Zaidi et al. (2023) which states that the training method has a significant and positive effect on the effectiveness of the training.

#### **Trainer Competence influences Training Effectiveness**

The results of the hypothesis test show that the trainer's competence influences the effectiveness of the training. The influence of the successful transfer of training between the competence of the trainer to the positive training participants will have an influence on the effectiveness of the training. This is in line with Lin et al. (2015), Chukwu (2016), Hajjar & Alkhanaizi (2018), and Alias et al. (2019), the competence of the trainers in terms of behavior skills, knowledge, and motivation by transferring training to trainees in order to acquire new knowledge and skills.

The results of this study are supported and strengthened by Noor et al. (2014), Lin et al. (2015), Chukwu (2016), Hajjar & Alkhanaizi (2018), Alias et al. (2019),





Kurniatun & Setiabudi (2020), Mohamad et al. (2020), Mohammad & Anto (2020), Adnan & Khalid (2021), Lan (2021), Mohamad et al. (2021), and Shahin & Soomro (2022) which states that the competence of trainers has a significant and positive effect on training effectiveness.

#### The Training Facilities have an effect on Training Effectiveness

The results of the hypothesis test show that training facilities have an effect on training effectiveness. The positive influence of training facilities will influence the effectiveness of training. This is in line with Hajjar & Alkhanaizi (2018), Mohamad et al. (2020), Mohamad et al. (2021), and Budiastuti et al. (2023), Complete and adequate training facilities help achieve the transfer of training so as to provide new skills for trainees to learn.

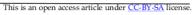
The results of this study are supported and strengthened by Hajjar & Alkhanaizi (2018), Mohamad et al. (2020), Adnan & Khalid (2021), Mohamad et al. (2021), and Budiastuti et al. (2023) which states that training facilities have a significant and positive effect on training effectiveness.

#### CONCLUSION AND SUGGESTION

The results of the study related to training design factors and training facilities on training effectiveness at the Surakarta Vocational and Productivity Training Center, it can be concluded that the independent variables (context/content/training materials, training methods, trainer competence, and training facilities) have a significant and positive effect on the dependent variable (training effectiveness). As for suggestions for further research, namely adding other variables, the entire training program, and samples between agencies or training institutions for research. The author's suggestion to the Surakarta Vocational and Productivity Training Center (BPVP) is that the context/content/material of the training should be reviewed or follow a developing trend; feedback from the training participant questionnaires can be an evaluation of future training related to discussions, face-to-face and individual, it is better for the teacher to innovate in teaching activities, it is better for the teacher to innovate in teaching activities, it is better if the delivery of material is delivered with complete presentations both video, audio, and tools practical, and the training should be evaluated in terms of the results of the training and provide training opportunities for training participants who are deemed insufficient.

#### **BIBLIOGRAPHY**

- Abdullah, N., Malik, A. M. A., Shaadan, N., & Lokman, A. M. (2022). Developing an Effective Online Based Training Questionnaire for Higher Education Training Provider. *Asian Journal of University Education*, 18(4), 1010–1023. https://doi.org/10.24191/ajue.v18i4.20010
- Adnan, N. A., & Khalid, S. A. (2021). The Relationship Between E Training, Motivation And Job Performance During Movement Control Order. *Academic Series of Universiti Teknologi MARA Kedah ISSN*, 17(II), ISSN: 1985-5079.
- Alias, S. A., Ong, M. H. A., Rahim, M. H. A., & Hassan, A. R. A. (2019). The Role of Training Design Factors in Influencing Training Effectiveness among Public Service Employees. *International Journal of Academic Research in Business and Social Sciences*, 9(5), 898–913. https://doi.org/10.6007/IJARBSS/v9-i5/6016
- Budiastuti, H., Trirahayu, D. A., Paramitha, T., Soeswanto, B., Kusumawati, E., Indarti, R., Widyanti, E. M., & Pullammanappallil, P. (2023). Parameters Affecting Training Effectiveness: A Study of Wastewater Treatment Training in Politeknik Negeri Bandung. *Education Quarterly Reviews*, 6(1). https://doi.org/10.31014/aior.1993.06.01.696
- Chukwu, G. M. (2016). Trainer attributes as drivers of training effectiveness. *Industrial and Commercial Training*, 48(7), 367–373. https://doi.org/10.1108/ICT-02-2016-0013
- Devi, R. V., & Shaik, N. (2013). Measurement of Training & Development Effectiveness- An Empirical Study. *Asia Pacific Journal of Marketing & Management Review*, 2(9), 12–18.
- Ghozali, I. (2021). *Aplikasi Analisis Multivariate Dengan Program IBM SPSS* 26. Semarang: Badan Penerbit Universitas Diponegoro.
- Ha, H. T. L., Pham, A. T. K., Nguyen, H. T., & Duong, H. T. T. (2021). Training Pedagogical Skills: Evaluation of Lecturers and Teacher Training Students at Educational Universities in Vietnam. *Eurasia Journal of Mathematics, Science and Technology Education*, 17(12). https://doi.org/10.29333/ejmste/11418
- Hajjar, S. T. El, & Alkhanaizi, M. S. (2018). Exploring the Factors That Affect Employee Training Effectiveness: A Case Study in Bahrain. *SAGE Open, 8*(2). https://doi.org/10.1177/2158244018783033
- Kajwang, B. (2022). Role of training needs assessment on the training outcomes in insurance sector in Kenya. *Bussecon Review of Social Sciences* (2687-2285), 4(1), 37–44. https://doi.org/10.36096/brss.v4i1.346
- Kraai, N., & Mashau, P. (2020). The influence of training content, learning and training transfer on training effectiveness: A case study of board members of non-profit organizations in gauteng. *Entrepreneurship and Sustainability Issues*, 8(2), 947–959. https://doi.org/10.9770/jesi.2020.8.2(57)
- Kurniatun, T. C., & Setiabudi, T. A. (2020). Post Training Evaluation; Effectiveness of Road Infrastructure Training in Indonesia. 400(Icream 2019), 272–275. https://doi.org/10.2991/assehr.k.200130.182





- Lan, H. V. T. (2021). Factors Which Affect The Effectiveness Of The Training Program For School Managers In Vietnam-Palarch's. *Journal Of Archaeology Of Egypt/Egyptology*, 18(4), 1912–1926.
- Lin, A., Nadarajah, G. A., Sharif, M. Y., Bhuiyan, A. B., & Islam, M. A. (2015). The Factors That Affect the Effectiveness of Training: A Study at Silterra Malaysia Sdn. Bhd., A Semiconductor Company in Malaysia. *International Journal of Management Studies*, 46(33), 33–46. https://doi.org/10.32890/ijms.22.2015.10458
- Mohamad, N. I., Ismail, A., & Mohamad Nor, A. (2021). Relationship between Managers' Support and Training Application with Motivation to Learn as Mediator. *Etikonomi*, 20(1), 119–136. https://doi.org/10.15408/etk.v20i1.15231
- Mohamad, N. I., Ismail, A., & Nor, A. M. (2020). Relationship between Managers' Support and Training Application with Motivation to Learn as Mediator. 16(3), 431–446.
- Mohammad, H. S. J., & Anto, M. (2020). An Empirical Study on the Relationship of Effectiveness of Training on Employee Performance among Private Hospitals and Clinics in the Kingdom of Bahrain. *IKSP Journal of Innovative Writings*, 1(1), 8–18. http://iksp.org/journals/index.php/ijiw/
- Noor, N. M., Raja Mustapha, R. M., & Tajudin, A. (2014). The Role of Design Factors in Influencing Training Transfer among Small Businesswomen. *International Journal of Management Excellence*, 3(2), 432–435. https://doi.org/10.17722/ijme.v3i2.206
- Rasangi, D. H. W., & Malalage, G. S. (2021). Training and Its Impact on the Performance of Operational Level Employees in Selected Apparel Companies. *Kelaniya Journal of Human Resource Management*, 16(2), 56. https://doi.org/10.4038/kjhrm.v16i2.94
- Shahin, S., & Soomro, K. A. (2022). Transfer of Training and Job Performance: Analysis of Development Sector in Pakistan. *Journal of Entrepreneurship, Management, and Innovation*, 4(1), 27–57. https://doi.org/10.52633/jemi.v4i1.148
- Sugiyono. (2017). Metode Bisnis Penelitian. Bandung: Alfabeta.
- Trustnews. (2006). *BLK Surakarta Siap Hadapi Tantangan Industri 4.0*. Trustnews. https://www.trustnews.id/read/2006/
- Zaidi, D. S., Adenan, H., Said, B., Mahera, S., Amin, A., & Parid, D. M. (2023). Correlation Beetween Trainees and training programs With Training Effectiveness. *Journal of Business Innovation*, 7(2022), 43–49.



## 266-284 cahyaningrum.pdf

**ORIGINALITY REPORT** 

18% SIMILARITY INDEX

MATCH ALL SOURCES (ONLY SELECTED SOURCE PRINTED)

### **★**openaccessojs.com

Internet

2%

EXCLUDE QUOTES ON EXCLUDE BIBLIOGRAPHY ON

EXCLUDE SOURCES

OFF

EXCLUDE MATCHES

OFF