

# The Impact of Trainee Characteristics on the Training Effectiveness with the Mediation Role of Training Transfer

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## Abstract

The purpose of this research study was to look at the favourable effects of Trainee characteristics and Training Transfer on Training effectiveness Oil and Gas group companies in Abu Dhabi, UAE. Trainee characteristics, such as a professional and effective programme, needs assessments throughout the company, training alignment with company objectives, measurable goals, modern and relevant learning content, creative ideas for training initiatives, and reinforcement of what employees learn, are critical for making training practical and developing a core competitive advantage. In the paper, the hypotheses were tested from 980 trainees based on the database provided by the institute responsible for the training of Process Operators and technicians. The data for the analysis has been collected from the UAE Oil and Gas Companies Abu Dhabi, UAE. The result of this study is Trainee characteristics and Transfer of Training had positive influence on Training effectiveness. A competitive advantage can be gained by transferring training and applying what has been learned to work processes. Learner characteristics are connected to learning outcomes in transfers, suggesting it the more effective the training curriculum, the far more inclined trainees are to go on to the next level of training. Learning will become much more extensively embedded into an organization's existing critical operations, resulting in the biggest transition advantages. The study contributed in training program's impact on the overall work performance of the trainees and perceive that much contribution training has made in the organization growth and fulfilment of goals. Instead, the paper offers a mediator– transfer of training– which sets a boundary condition for the effectiveness of training

**Keywords:** Training, effectiveness, trainee characteristics, transfer of training

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## Introduction

Training and development are seen by the organization as an instrument to gain a competitive advantage, and businesses are inclined to invest in training their workforce. The extent to which transfer of training from learner to his actual job remains a question for researchers and practitioners in several studies (Beer, Finnstrom, & Schrader, 2016; Brinkerhoff & Montesino 1995; Bal, Chiaburu & Jensen 2010; Ford et al. 2011; Grossman & Salas 2011). The requirement for businesses and people to learn new information and skills is crucial in a continuously changing competitive environment (Kraiger, 2014).

Corporations spend considerable amounts of money towards learning since this allows companies better improve employees needed knowledge and expertise. A percentage of their time and resources in training efforts. Training has evolved throughout the last century and development has undergone a full transformation from which it no longer merely plays a role in increasing individual talents, but it is also acknowledged as a valuable tool for team improvement as well as organisational efficacy (Turab & Kasimir, 2015). The mediating role of transfer of training in the effectiveness of training has also been mentioned in the literature (Bhatti et al., 2014; Paulsen and Kauffeld, 2016). Given the complexities and intricacies of employee motivation, motivation to transfer training to the workplace was influenced by a variety of factors. However, at the same time, it does not consider the specifics of existing trainee characteristics in Oil and Gas group companies operating in Abu Dhabi, UAE, focusing on UAE national development. The transfer of training at the individual level is regarded as contentious - providing a primary motivation for conducting this research. In light of previous theories and meta-analysis research work in the field of training transfer and training efficacy, an imperial study is proposed to bridge the literature and knowledge gaps concerning a specific industry in context with UAE nationals, which comprises the following examination, -To study the sub-factors involved in the Trainee Characteristics in transfer of training in Oil and Gas group companies in Abu Dhabi, UAE.

## Theoretical Development and Hypotheses

### Trainee Characteristics and Transfer of Training

Firms must rely on their own self-created employee need assessment and implement training programmes in their own style. Coordination between the training provider and organisation improves training efficiency through three primary factors such as the nature of the relationship between training and trainee. O'Rear (2004), on the other hand, stated that these collaborations or partnerships between training providers and trainees are expected to benefit the organisation. The inclusion of a commitment, as per Paek and Hawley (2006), indicates that the learner is currently engaged in the agreed-upon training objectives. Consequently, as per Mohanty and Mukhopadhyay (2016), leads to another idea that more concentration is required. It is recommended that both parties sign a contract so that there are no questions about the training program's content, expectations, or trainee needs.

H1<sub>a</sub>: Trainee characteristic is significantly related to the effectiveness of training for UAE Nationals in Oil and Gas Group of Companies Abu Dhabi, UAE.

H2<sub>a</sub>: Transfer of training is significantly related to the effectiveness of training for UAE Nationals in Oil and Gas Group of Companies Abu Dhabi, UAE

*Self-efficacy* - Self-efficacy refers to an individual's belief in his ability to exert control over his characteristics or behaviour (Mohanty & Mukhopadhyay, 2016). Self-efficacy is primarily concerned with an individual's view of himself and self-worth. Still, his own notion that he is the only one who can alter himself is the most compelling element. However, Muthoni and Miiro (2017) found that self-efficacy is so important that many people make critical decisions based on their belief in self-efficacy. Singh (2021) also agreed that self-efficacy could significantly affect the person's actions in applying the knowledge and skills learned during the training. However, Eliyana and Ma'arif (2019) noted that increasing confidence is essential to better performance for the company and optimize chances of more growth.

*Self-motivation* - Riley (2016) explained motivation as a very influential force, and it can make people do lots of things, which is a critical element of success in training. In contrast, those employees who have a higher level of emotional activeness and motivation are more likely to perform better in the transfer of training (Reizer, Brender-illan, & Sheaffer, 2019). Rofcanin, Kiefer, and Strauss (2017) explored that if we notice the relationship between a manager and his subordinates, it seems that those managers who are more supportive can increase employee motivation. The Isolation Technique is an attempt to separate the critical factor of training impact from other significant consequences (Subramanian & Kumar, 2017).

*Training Needs Analysis* - According to Khalil and Elkhider (2016), analysing important training needs at the organisational, team, and individual levels is critical to the success of any training programme. Similarly, Kucherov and Manokhina (2017) agree that training programmes must be well-prepared with adequate analysis after assessing trainee needs. According to

Ritzman and Kahle-Piasecki (2016), the training objectives, instructional techniques, and outcomes must all be reviewed prior to training implementation.

*Need Assessment* - The assessment of employee needs is mandatory to improve his job performance. According to Chaubey, Kapoor, and Negi (2017), the employee needs to be well aware of his weaknesses or areas where he needs betterment. It helps the employee to cover the distance from where they stand right now to where they want to see themselves.

*Training Needs Identification* - Identifying the learner's needs and expectations is the key to fulfilling any training program's goals and satisfying the trainees and their organization. According to Brown (2002), instructors who try to assess the trainee's learning needs are expected to apply a more positive approach and produce well-trained employees. Training should be taken as an organized way of training employees and help them to enhance their skills, knowledge, creativity, and overall performance at the workplace.

## Research Methodology and Design

### Conceptual Model of the study

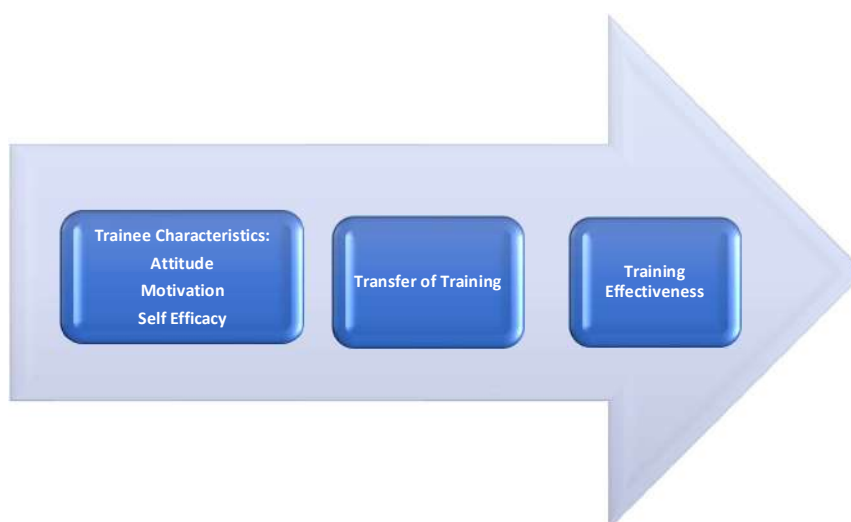


Figure 1: Conceptual Framework

### The Study Context

The study is cross-sectional, with data collected from several types of training programmes, such as the Youth Development Program, Leadership Training Program, and Job Training. The primary data was collected from the sample that reflects the population of trainees undergoing training programs in Oil and Gas group companies. SPSS version 24 was used for the analysis. The results were statistically examined using (Pearson Correlation / Correlation and Multiple Regression). Based on the database provided by the institute responsible for the training of Process Operators and technicians, the sample size is 980 trainees in UAE Oil and Gas Companies Abu Dhabi, UAE.

### Sampling and Data Collection

The researcher used a representative sample of the trainee population which has been obtained by probability sampling / random sampling (Stratified Sampling) for the current study (Babbie, 2013). A list of participants from all of the specified

delicate training skills programmes for the research purpose was obtained with permission from the involved company's archival database, and a random sample was chosen. The information was gathered through personal visits to the organisation. The goal of the research was communicated to respondents via a formal letter sent by the organization's learning and development department. Ethical concerns were preserved using Bryman's (2008) approach, and respondents filled out the questionnaire voluntarily. During data collection, the necessity of free permission was highlighted, and all respondent names were kept anonymous to guarantee privacy. The sample size was determined using criteria (Hair's et al., 2010). Primary data collection was achieved by using a self-administrative seven-point Likert scale (i.e., Strongly Disagree, Disagree, Somewhat Disagree, Neither Agree nor Disagree,

## Results

This research supports the recommendation based on data collected and analyzed in chapter four about the employee perception of determinants of “training effectiveness” in the case of UAE Nationals in Oil and Gas Group of Companies Abu Dhabi, UAE. According to the researcher's view, all the respondents should confirm that the organizations should focus on studied factors to understand the factors that can contribute to UAE Nationals' effectiveness in the Oil and Gas Group of Companies Abu Dhabi, UAE. The various discussions related to factors and their importance discussed in chapter two acknowledge that those factors present a holistic view of training effectiveness. Descriptive analyses to describe participants, frequencies analysis to identify the percentage of survey statements. The factor analysis is done to identify dimensions of the effectiveness of training.

### Measurement Evaluation

Reliability refers to a measurement that provides consistent results with similar accurate values (Blumberg, Cooper, & Shindler, 2005). Cronbach's alpha is a well-known metric for internal consistency. It is a simple test for a scale's dependability. As a result, it is related to the interdependence of the items in the test. Cronbach's alpha estimates how information gathering is immovably related; as a result, it is not considered a quantitative test. As a result, it is a consistency coefficient (Tavakol & Dennik, 2011). As a result, the following reliability estimates (coefficient alpha) for the said variables were as following:

Table 1: Reliability Statistics - Cronbach Alpha

Measurement Item	Items	Cronbach Alpha	Reliability Result	Inter-Item Correlation
Trainee characteristics	0.820	Good	.813-.941	.732-.918
Transfer of training	0.706	Good	.715-.821	.823-.852
Training effectiveness	0.792	Good	.802-.937	.910-.932

Table 1 summarises the findings, which include the construct, Cronbach's alpha value for each construct, inter-item correlation, and item to total correlation. All internal consistency reliabilities for measurement items were greater than 0.80 and satisfactory, according to Cronbach's alphas. The item-to-total correlation (the correlation of the item to the summated scale) and the inter-item correlation (the correlation among items) are two additional measures to determine internal consistency in addition to Cronbach's Alpha (Hair, Sarstedt, Hopkins, & Kuppelwieser, 2014).

Table 2: Inter-Item Correlation Matrix

	Trainee	Transfer of training	Training effectiveness
Trainee characteristics	1.000	.813	.844
Transfer of training	.800	1.000	.902
Training effectiveness	.841	.936	1.000

Table 2 reveals that all of the key constructs have an inter-item correlation of greater than 0.70, indicating that the instrument is dependable. It further displays the aggregated results, which include the concept, inter-item correlation, and item to total correlation. Because the inter-item correlation values of the indicators in each construct (Trainee characteristics, Transfer of training, Training effectiveness) were high, this showed that the instrument had convergent validity.

### Relationship of Variables and Hypotheses Testing

The following is the research hypothesis where the researcher intends to check the relationship between dependent and independent variables using Pearson correlation. In this, the dependent variable is the effectiveness of training; the independent variables are trainee characteristics and transfer of training from one trainer to another.

Table 3: Correlation Between Dependent and Independent Variable

Dependent Variable (Effectiveness of training)	Result
Independent Variable(s)	R
Trainee characteristics	( $r=.72$ , $p<.05$ )
Transfer of training	( $r=.90$ , $p<.05$ )

The test results are significant at the 0.05 level. The Pearson correlation test results suggest that there is a substantial positive correlation ( $r=.90$ ,  $p.05$ ) between "Transfer of Training" and "Effectiveness of Training" for UAE Nationals in the Oil and Gas Group of Companies in Abu Dhabi, UAE. The results also demonstrate a substantial positive connection ( $r=.72$ ,  $p.05$ ) between "Trainee characteristics" and "Effectiveness of training" for UAE Nationals in the Oil and Gas Group of Companies in Abu Dhabi, UAE.

Regression analysis was performed on all of the independent factors in the conceptual model to determine their impacts on the dependent variable of this study, "Effectiveness of training" The regression analysis findings are provided in the tables below.

Table 4: Model Summary for the Overall Regression Analysis

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate
1	.816 <sup>a</sup>	.705	.699	.523

a. Predictors: (Constant), Trainee characteristics, Transfer of training

The model summary is shown in the table above, and it demonstrates that this model is a good predictor of training efficacy, with  $R = 0.816$  at  $p 0.01$ . This means that there is a strong positive significant connection between the model variables and the dependent variable efficacy of training for UAE Nationals in the Oil and Gas Group of Companies in Abu Dhabi, UAE. R square indicates that the independent factors or predictors can explain 70.5 percent of the variance in training for UAE Nationals in the Oil and Gas Group of Companies Abu Dhabi, UAE. The regression model predicts employee turnover considerably ( $r = 0.816$ ,  $F [4, 236] = 55.153$ ,  $p 0.01$ ), according to the ANOVA results. This regression model is capable of accurately estimating the effectiveness of training.

Table 5: ANOVA Output for the Overall Regression Analysis

Model	Sum of Squares	df	Mean Square	F	Sig.
1 Regression	88.923	4	7.410	55.153	.000 <sup>b</sup>
Residual	16.447	236	1.371		
Total	105.37	240			

a. Dependent Variable: Effectiveness of training

b. Predictors: (Constant), Trainee characteristics, Transfer of training

The following table provides the Beta coefficients values and their level of significance. These values will help understand the extent of all the factors explaining the effect of the independent variable on the dependent variable, "Effectiveness of training," in our case. The significance of variables is discussed here. Trainee characteristics ( $\beta=.228$ ,  $p<0.01$ ) which is followed by transfer of training ( $\beta=.202$ ,  $p<0.01$ ).

Table 6: Coefficients for the Overall Regression Analysis

Model		Unstandardized Coefficients		Standardized	T	Sig.
		B	Std. Error	Coefficients		
1	(Constant)	0.687	0.728		0.852	0.001
	Trainee characteristics	0.691	0.1	0.628	0.871	0.002
	Transfer of training	0.641	0.308	0.602	1.495	0.004

a. Dependent Variable: Effectiveness of training

The one-way ANOVA test was conducted to investigate the significant difference between the perception of different age groups and education level groups towards the factors affecting training effectiveness for UAE Nationals in Oil and Gas Group of Companies Abu Dhabi, UAE. Finally, the researcher applied the multiple regression test to examine the relationship between trainee characteristics, transfer of training, and training effectiveness.

A statistical test Pearson correlation was performed to check the inter-relationship between variables “Trainee characteristics, Transfer of training and Effectiveness of training.” The results of the test are significant at 0.05 level. The result of the Pearson correlation test shows that there is an ( $r=.90, p<.05$ ) strong positive correlation between “Transfer of Training” and “Effectiveness of training” for UAE Nationals in Oil and Gas Group of Companies Abu Dhabi, UAE. The result also shows that there is a great positive correlation ( $r = .87, p < .05$ ) very strong positive correlation between and ( $r = .72, p < .05$ ) strong positive correlation between “Trainee characteristics” and “Effectiveness of training” for UAE Nationals in Oil and Gas Group of Companies Abu Dhabi, UAE.

The output of one-way ANOVA analysis shows that there is no statistically significant difference among different age groups on the basis of trainee characteristics ( $F(3,237) = 4.102, p = .108$ ), and transfer of training ( $F(3,237) = .878, p = .312$ ) for UAE Nationals in Oil and Gas Group of Companies Abu Dhabi, UAE. By using the multiple regression test results, it was found that the independent variables or predictors can explain ( $r=.705$ ) 70.5 percent of the variance leading to the effectiveness of training for UAE Nationals in Oil and Gas Group of Companies Abu Dhabi, UAE. Beta coefficient values and their level of significance will help understand the extent of all the factors explaining the effect of the independent variable on the dependent variable that is “Effectiveness of training” in our case. Trainee characteristics ( $\beta=.628, p<0.01$ ) which is followed by transfer of training ( $\beta=.602, p<0.01$ ).

## Discussion

To investigate the relationship between Trainee Characteristics and Training Effectiveness for UAE Nationals in Oil and Gas Group Companies Abu Dhabi, UAE show that trainee characteristics are positively and significantly linked to the effectiveness of training for UAE nationals (Aziz & Ahmad, 2011).

## Theoretical Implications

The findings of the current study have been added to the growing body of knowledge in the domain of training effectiveness via some specific parameters. The study also discovered the effect of Trainee characteristics and training transfer on training efficacy. To achieve the goal, it emphasized the need of developing procedures, sponsoring training programmes in all sectors, and enlisting exceptionally qualified people. The study's findings will help to understand a real-life scenario for UAE nationals working for the Oil and Gas Group of Companies in the UAE.

## Practical Implications

The most promising techniques appear to choose more proactive groups, boost student morale, and encourage more significant supervisor and peer assistance in the workplace. Transfers, learner characteristics is linked to learning outcomes, demonstrating that the more successful the training curriculum, the more willing trainees are to move the training. The greatest transition benefits will emerge as learning is more deeply integrated into an organization's already vital activities.

## Conclusion

The purpose of this research study was to look at the favorable effects of Trainee characteristics and Training Transfer on Training effectiveness. Statistical analysis backs up the entire relationship. Different trainee characteristics, such as a professional and effective programme, needs assessments throughout the company, training alignment with company objectives, measurable goals, modern and relevant learning content, creative ideas for training initiatives, and reinforcement of what employees learn, are critical for making training practical and developing a core competitive advantage. Transferring training and applying what is taught to work processes offers a competitive advantage.

## Limitations and Recommendations of the Study

The current study focused on trainee characteristics, training transfer, and training efficacy in UAE Nationals employed by the Oil and Gas Group of Companies in Abu Dhabi, UAE. To begin, data should be acquired from other sectors and enterprises outside of the UAE in order to generalise the findings of this study, as the conclusions of this study must be compared to data collected from organisations in other sectors or areas. Finally, various boundary conditions should be studied to acquire a better understanding of the relationship between trainee characteristics, training transfer, and training efficacy in order to gain a full understanding of the training program's link.

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