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The influence of individual characteristics in transfer of technical training in Vietnamese enterprises

Thi Lan Anh Pham^a and Quoc Hoi Le^{a*}

^aCentral Economic Commission of the Communist Party, Vietnam

^bNational Economics University, Vietnam

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ABSTRACT

This study investigates the relationships between individual characteristics (including outcome expectation; perceived relevance of training; trainee ability) and transfer of technical training (TTT) in Vietnamese enterprises. Quantitative method was employed to examine how individual characteristics influence TTT. A self-completion questionnaire was administered to 185 employees in seven Vietnamese enterprises. All these employees received training from their enterprise. The results show that three predicted individual factors significantly influenced on TTT. Based on the findings, this study suggest that in order to motivate trainee's efforts to transfer, organisational changes should be conducted to offer bonus as well as perceived relevance of training succeeding training activities.

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1. Introduction

The modern business environment is a highly competitive and global workplace for many organizations (Werner & DeSimone, 2018). Business managers are conducting new and advanced strategies to face with the turbulent environment and ensure success for their enterprises. A general subject of the most popular plans is a focus on human capital or knowledge and skills of employees as a key strategic resource for achieving and maintaining a competitive advantage. As business environment moves in the area of the global marketplace, the demand to maintain a highly effective and skilled workforce becomes an important element for developing market share (Noe, 2013). Training is the key to learn and develop human capital. Employee training is crucial for business organizations to improve both knowledge and skills for their employees. Therefore, organizations need to recognize that their training investments produce dividends in terms of improved organizational performance such as increased productivity and profit, improved safety statistics and reduced errors (Salas & Cannon-Bowers, 2001).

* Corresponding author
 E-mail address: hoilq@neu.edu.vn (Q.H. Le)

Much of the debate about the training - organizational performance linkage has been focused around the concept of transfer of technical training (TTT) (Dirani, 2012; Massenberg et al, 2017). According to Baldwin & Ford (1988), transfer of training is defined as the application of knowledge and skills trained from training context to the job and its maintenance during a certain period of time. There have been a number of causes, but mainly because of the regularly cited failure of training programs in both education and business has not focused on how training is applied to the workplace (Cheng & Ho, 2001). Therefore, it is necessary for research to find responses about transfer of training. It is argued that transitional economies rely heavily on human labor to maximize their effectiveness and meet their organizational goals (King-Kauanui et al., 2006), so HR training becomes utilitarian in the organization strategy to keep up with economic and technological changes. HR training and development programs have to be linked to the strategic business development goals of the enterprise. Labor needs to be reviewed as a source to be trained and developed for the purpose of enhancing the productivity of enterprises (Zidan, 2001). It seems that human resource development (HRD) did not receive intensive concern from Vietnamese enterprise's managers in the past because they based their government allocations of labor to fulfill their staffing needs. Vietnamese Enterprises view training as an expense which would influence their profit levels, so financial investment in training and development was limited and only 62% of the respondents have a little budget for training (Nguyen, 2011). The result of this is a mismatch of skill with enterprise demand. In fact, about 25-40% of Vietnam's 168,000 public servants, meet some "standard requirements" (Ngo, 2008). According to the CLS Project Manager, the majority of Vietnamese laborers have not been trained. The levels of soft skills, foreign language proficiency, teamwork skills, information technology skills and creativity are still limited. In addition, many Vietnamese workers, although trained, but still not meet the requirements of business owners and take time to train again (Shone et al., 2018). As a result, The World Bank's survey indicated that, Vietnam's human resources quality reached only 3.79 points on a scale of 10, ranking 11th out of 12 countries surveyed in Asia. the quality of human resources in Vietnam is now only 3.39 out of 10 while some countries in the region such as Korea is 6.91, India is 5.76, Malaysia is 5.59 and Thailand is 4.94 (HL, 2017). Data of The General Statistics Office of Viet Nam reported that over 47% of Vietnamese employees have no skills (Shone et al., 2018). Most of them come from agricultural or rural areas with working habits of the small farm model such as arbitrary time, lack of skills, promoting individual initiative and sharing experience (Report of Ministry of Education and Training, 2007). Therefore, training and transfer of training have become utilitarian in the enterprise strategy to keep up with technological and economic changes. The most effective avenue for enhancing performance and staying competitive in Enterprises is developing the skills of employees (Nguyen & Bryant, 2004). The skill development process, through vocational training, is by description, a gradual progression which concerns a wide range of national institutions (both state and privately owned) and obtains payments over the long term. Nevertheless, the skilled labor needs of industry and enterprises are primarily immediate. They may not be able to 'wait' for the final result of skill development policies occurring in the future. Therefore, it is more important that skill training mechanisms are set in place and the impetus to skills upgrading and the effective transfer of trained skills to the workplace may come from enterprises' training policies. These activities should continue to be aided through targeted support as individual characteristics including both trainee's ability and dedicated motivation. Therefore the aim of this study is on the evaluation of individual characteristic factors of training transfer effectiveness on human resource practices in Vietnamese enterprises. An in depth analysis of the possible individual factors influencing the achievement of training transfer will provide assistance for this study.

2. Literature Review

A considerable amount of literature has been published on TOT. These studies provide several theories and conceptual frameworks that have been used to predict the factors that influence TOT. For example, Baldwin and Ford (1988) carried out a widespread review of the literature, identifying key trainee characteristic influences on the processes of pre-training, during-training and post-training. Since this time, significant interest has been generated in this area. Three years later, Ree and Earles (1991)

expanded the theoretical model of TOT to include an emphasis on transfer motivation, which is predicted to be a key component to connect learning with individual performance change. Furthermore, a study by Holton et al. (2000) addressed three theories of human behaviour that may impact on transfer motivation, expectancy theory, equity theory and goal-setting theory. Expectancy theory is defined as “a momentary belief concerning the likelihood that a particular act will precede a particular outcome” (Yamhill & McLean, 2001: 197). According to this theory, certain behaviours will lead to desired performance goals or incentive awards. An individual’s effort will result in the achievement of desirable results. Numerous particular studies have, however, supplied additional documents on the connections between learner ability and motivation factors with TOT. Devos et al. (2007) noted that trainees with high confidence levels were more motivated to use their training. Employees who had effective career planning and high job involvement would prefer to learn and transfer. Employee performance is a function of motivation, ability of employee and opportunity to perform (Boxall & Purcell, 2011). In addition, motivation to transfer and trainee ability have been found to be positively associated with TOT. These factors may be job function, job position, performance outcomes expectations, learner’s locus of control, self-efficacy, organizational commitment, training attributes, confidence and openness to change. It is clear that the trainee not only lies at the centre of the TOT process, but also his/her role in affecting the TOT has received a large amount of research attention. Particularly, there is an increasing concern relating to motivational factors and their influence on transferring training and skills to the job. The assessment of the role of individual-related factors should be a vital component in developing TOT (Dirani, 2012).

Motivation to TOT was defined as “the employee’s effort to apply knowledge and skills learned in training context to a real work situation” (Chiaburu et al., 2010). Previous studies have indicated that motivational factors associated with personal desire and the abilities of an employee to learn and transfer are elements that bring about the trainee’s effort to effectively transfer. Accordingly, in the TOT literature, there are several aspects that relate to the motivation to transfer, such as the perceived relevance of training and performance outcome expectancies. These aspects were examined because it is likely that individuals with inadequate motivation are poor in mastering trained skills and subsequent transfer performance. For example, a study by Chiaburu et al. (2010) was conducted to test three motivational factors associated with transfer by conducting a questionnaire survey with 111 participants in an organization in the Mid-Atlantic region of the United States. Their findings indicated that individuals with higher motivation to transfer were more likely to training cognitions that may effectively transfer the training into performance improvement than employees with lower motivational factors.

2.1 Performance outcomes expectancies

Holton’s definition indicated that outcome expectancies are “the expectation that the changes in job performance will lead to valued outcomes” (Holton et al., 2000: 345). The perception of an obvious match between training-based increased performance and rewards suggests high outcome expectancies and this situation will imply a strong motivation to TOT. This means that, if trainees notice a “connection” between improved performance (resulting from applying their trained skills and knowledge) and rewards (e.g. wage increases, promotions, bonuses, status rewards), this may influence transfer effectiveness (Velada et al., 2007). Rewards may contribute to effective performance when links between rewards and good performance are made (Wen & Lin, 2014). Trainees have a strong belief that the provision of organizational outcomes may be controlled to facilitate the application of trained skills to the workplace. When employees believe they may benefit from training, these employees will be willing to effectively learn and transfer trained skills to their job. Thus, organizations should clearly link performance with rewards and highlight the value of training. Additionally, Gegenfurtner et al. (2009) proposed numerous main elements for motivating employees to attend training courses and engage in TOT in the workplace, such as doing the job in a better way, improving professional competence and being useful in solving problems on the job. These scholars identified that

the elements, which are associated with motivational factors, may be employed to explain the perceived relevance of training when making decisions about TOT. The outcomes obtained from training, including a wage increase, a bonus, or a promotion for accomplishing tasks in a more efficient way using the learned skills are mostly related to individual motivation to attend a training program at the workplace (Le & Chu, 2016).

2.2 Perceived relevance of training

It is argued that the perceived importance of training impacts not only the motivation to learn but also the motivation to apply the newly acquired skills (Massenberg et al., 2015). According to McLean and McLean (2001), training realization is defined as the fulfilment of the trainee's desires through the training gained. In a study relating to a positive training environment, Devos et al. (2007) noted that if a trainee believes new skills may not be used in the performance of his/her job, there is no incentive for them to effectively learn those skills. An employee who perceives his/her training is useful for the actual job performance will devote more time and effort for training and the application of the new skills than an employee who considers the training to be invalid for improving new skills (Cheng & Ho, 2001). Particularly, individuals who perceived training as gaining a way to acquire job skills were more motivated to learn and obtained a higher level of immediate skill transfer. A study by Wen and Lin (2014) examined the effectiveness of training associated with employees' attitudes toward the motivation to learn and transfer. The study surveyed 316 employees from broad industries in Taiwan. The findings indicated there was a relationship between the trainee's approach to career planning and job involvement. For example, if the trainee assumed there was a value in the training for their career development, then the probability of behavioural adjustments would be higher than for others who did not engage in the same level of career planning. According to Awais et al. (2013), when an individual believes that the knowledge and skills learned in the training context will result in a high likelihood of a salary increase, a promotion, or elevated feelings of satisfaction and self-worth and the motivation related to training and transfer will also increase. As there is a relationship between the individual's level and a related positive benefit, there may be an increased demand for training to improve performance.

2.3 Trainee ability

If motivation is essential for the development of skill levels, it may be debated that an individual's ability to make an effort is an important antecedent for obtaining higher levels of cognition and understanding (Tracey et al., 2001). Ability is viewed as being a supporting aspect for training. Support for the impact of individual ability on the training area has long existed in the literature (Grossman & Salas, 2011). If effective training is to occur, the trainee must have the cognitive ability to learn. Cognitive ability is considered to be one of the best elements of an employee's potential related to training, transfer and performance (Holton et al., 2007). Trainees with a higher cognitive ability to retain the learned knowledge, combined with higher levels of confidence, will easily understand complex content and successfully perform the skills acquired through training (Grossman & Salas, 2011). The aspect of cognitive ability is illustrated by a study by Bates and Holton (2004) that examined job-related workplace literacy skills of 1,079 employees in a state-level transportation department in the southern United States. The purpose of this study was to test whether employee job-related workplace literacy skill level influences the employee's ability to transfer. The findings indicated that employees with low literacy levels had higher expectations of the training received, but they were less able to effectively transfer the new knowledge and skills because of their low literacy ability. Bates and Holton (2004) concluded that cognitive ability of an employee in relation to their job has a direct influence on the training process and their ability to transfer trained skills to the job. Furthermore, psychomotor and cognitive ability may reveal a capacity to understand the content of the training courses. Thus, if employees have a narrow cognitive capability to learn, their understanding of the contents taught in the training context is also limited. When ability of an employee matches the

requirements of training with job tasks, effective training and transfer may occur (Burke & Hutchins, 2007). Velada et al. (2007) suggested that three dimensions related to training effectiveness should be investigated to describe trainees' cognitive ability, these being understanding the contents learned, identifying appropriate work situations and identifying ways to improve with practice. In addition, two main elements of training effectiveness were also mentioned in relation to cognitive ability, being able to remember the learned key topics and being able to use the new skills (Gegenfurtner et al., 2009). Similar to cognitive ability, training retention has an impact on trainee performance due to its effect on intentional resource capacity (Chiaburu et al., 2010). The results of training retention are directly related to the generalization and preservation of training content on the job. Employees with a higher cognitive ability can be better equipped with knowledge and retain information learned during the training process. In a meta-analytic review of the transfer literature, the findings of Blume et al. (2010) showed that there is a very strong relationship between training retention that employees retain the content after training and the transfer of closed-skills training. Another important aspect of transfer is the maintenance and application of training to a real work situation (Blume et al., 2010). Employees who learn and retain the skills and knowledge offered the training programs have a greater opportunity to be able to effectively transfer training to the job (Grossman & Salas, 2011). In addition to skill improvement, these trainees also have more information and knowledge to understand where and how their trained skills can be used to improve performance (Wen & Lin, 2014). The knowledge gained from training has a positive effect on transfer of training. Therefore, the ability of the trainees to retain the knowledge they have acquired in their training and to identify appropriate situations to apply their new skills on their job is an essential element of transfer of training. The trainee's ability is also represented through performance self-efficacy. Self-efficacy is defined as "an individual's general belief that he is able to change his performance when he wants to" (Holton et al., 2000: 346). Self-efficacy not only may have directive impact on choice of activities, but also through expectations of final success, it may influence coping efforts once they are initiated. Expectations of efficacy determine how much effort individuals need to expend and how long they need to persist in the face of difficulties and aversive experiences.

The influence of self-efficacy on TOT has been broadly studied recently (Gegenfurtner et al., 2009; Velada et al., 2007). These studies applied social learning concepts to examine the effect of an individual's belief in their ability to use trained skills on the job. Trainees with a high level of self-efficacy will apply substantial effort to pass targets at difficult levels and master new behavioral commands and levels of higher performance. In contrast, trainees with low self-efficacy will reduce their effort to meet challenging situations (Grossman & Salas, 2011). For example, based on a meta-analytic review of the relevant literature, Colquitt et al. (2000) found performance self-efficacy to be an important predictor of both training outcomes and learning motivation. Some other researchers followed their review and also confirmed a positive relationship between performance self-efficacy and TOT, either directly or indirectly, through trainee motivation. A study by Chiaburu and Marinova (2005) found that performance self-efficacy is positively related to pre-training motivation, which, in turn, significantly predicts TOT. Research by Velada et al. (2007) proposed that performance self-efficacy partly contributes to TOT through its effect on motivation. Chiaburu et al. (2008) found similar assumptions after studying the importance of performance self-efficacy in transfer effectiveness. Hence, it seems that the level of self-efficacy has significant implications on the facilitation of transfer of training. Moreover, research has indicated that the combination of self-efficacy and expectancy theory may impact on the motivation to learn and TOT (Gegenfurtner et al., 2009). This means that it is important for employees to believe that they may learn and master the training material and expect that there will be several benefits from the learning which can be applied to their job. In summary, the extant literature on TOT suggests that trainees must have confidence in their ability to apply competencies and persevere with challenging tasks. When individuals feel confident in their ability to apply their newly acquired skills, the outcomes of transfer of training are more effective than with those with low perceived self-efficacy.

According to Velada et al. (2007) and Lim and Morris (2006), some attributes of new skill application are also examined to describe trainees' performance self-efficacy influencing TOT. These attributes are being able to apply new skills, being confident to use new skills, using new skills in complex work situations, overcoming obstacles to use the new skills and doing well in activities with lots of information remembered. Although the literature on transfer of training has increased and has confirmed the importance of three individual factors (including performance outcome expectations, perceived relevance of training and the trainee's ability) as a key concept to be examined, as these have a direct impact on the effectiveness of transfer of training (Baldwin & Ford, 1988; Holton et al., 2000). However, this finding has been established for employees trained in the workplace in developed countries. Most of the cited transfer of training research has used samples from developed countries. There are very few studies using samples from developing countries, especially at the organizational level of analysis. Collected data in empirical studies has only been focused from one organization. Thus, the findings in these studies may not be generalized to other organizations. Therefore, this study will try to narrow these gaps in the literature. This means that the study also seeks to examine the relationships amongst these concepts and TTT at the organizational level in developing nations as Vietnam; i.e., how do the factors influence TTT and what changes should be made to improve this activity by investigating the following hypotheses:

- H1. Outcome expectation has a positive and significant effect on TTT in Vietnamese Enterprises.
- H2. Perceived relevance of training has a positive and significant effect on TTT in Vietnamese Enterprises.
- H3. Trainee ability has a positive and significant effect on TTT in Vietnamese Enterprises.

3. Methodology

Neuman (2011) suggested that quantitative studies are regularly assumed to be suitable for investigating relationships between several independent variables and a dependent variable in the context of social study and the quantitative approach is the most appropriate to see the large picture on a particular social topic. It is recommended as a useful way for better understanding what a selected number of participants think about a provided theme. Thus, this study employed a quantitative approach to examine the influence of individual factors (obtained from studies in developed countries) on TTT in Vietnamese Enterprises. This study employed a quantitative method by using a self-administered questionnaire survey technique collecting data to examine the influence of individual factors on TTT. Quantitative studies are regularly assumed to be suitable for investigating relationships between several independent variables and a dependent variable in the context of social study (Neuman 2011). It is recommended as a useful way for better understanding what a selected number of participants think about a provided theme. It is also suggested that in order to identify the basic characteristics of the key constructs, a questionnaire should be developed through the scale development procedures. As argued by Neuman (2011), Likert-type scales are often employed as a study tool if a researcher wants a deeper understanding as to how people practice or experience something. Applying Likert scales may help scholars in the conceptualization of a specific study idea. Moreover, Likert-type scales are often used to ask individuals to indicate whether they agree or disagree with a statement. Thus, this technique requires a minimum of two choices, "disagree" and "agree". Nevertheless, according to Neuman (2011), if only two categories are used, this forces differences into only two choices and may lead to a crude measure. Thus, a five-point Likert-type style was used to measure each concept associated with the conceptual framework. The respondents were asked to make a choice in relation to each structured question ranging from 1 "strongly disagree" to 5 "strongly agree" that best defines their beliefs regarding the training they have received. In order to ensure that the key research issues proposed in the Study are suitably addressed, a self-administered questionnaire was designed. Implications for the measurement of influences of individual characteristics have been adapted from the previous literature on TTT on the job. A total of twenty-one items derived from the literature review were used to test to explore the participants' level of agreement on each dimension associated with the target participants'

TTT and three items used for the dimensions of TTT were adapted from Chiaburu et al. (2010) and Velada et al. (2007). After conducting the pilot survey with a sample size of 30 employees who were trained at a Vietnamese Construction Corporation, no problem was found with the wording or the clarity of the questions that may result in participant misunderstandings. In addition, the reliability and validity of the survey questionnaire were tested and were considered appropriate. Thus, the main survey was conducted with a sample size of 185 respondents drawn from seven Vietnamese larger manufacturing Enterprises. These enterprises employ more than 500 employees and have been operating for more than 15 years. All respondents who had been technical trained on the job were approached through a Questionnaire-based survey at their enterprises. The Statistical Package for the Social Sciences (SPSS - version 21) was used to analyse the data including four phases: reliability testing, descriptive statistics, exploratory factor analysis and multiple regression analysis.

4. Results

4.1 *The normality of the data*

According to several scholars, in multivariate analysis, the most important assumption is normality which refers to the form of the distribution of the data for individual variables as well as its correspondence to a normal distribution (Burns, 2000; Hair et al., 2010). In order to measure the normality of the data, one technique is to test the value of the skewness of items of the survey questionnaire (Hair et al., 2010). Muthén and Kaplan (1985) recommended that the skewness statistics should range between -1.50 and +1.50 for a normal distribution. After checking the sample distribution using statistical techniques of mean, standard deviation and the skewness using SPSS, the skewness values of the items ranged from -1.388 to +0.348. This means that the skewness scores were diminutive on each item, indicating that the distribution of the data was normal (the skewness falls between +/- 1.5). As a result, this data is suitable for additional statistical analyses, including exploratory factor analysis with principal axis extraction and a rotation of the Promax method and multiple regression analysis (Hair et al., 2010).

4.2 *Reliability analysis*

Employee responses to items in the questionnaire were checked for reliability using Cronbach's alpha which measures the internal consistency of responses and the correlation between one particular scale with other scales that aim to measure the same phenomenon (Hair et al., 2010). In the present study, the researchers conducted reliability analyses on all 21 items of individual characteristics and 3 items of TTT. The alpha for these scales was high, with 0.893 (items of individual characteristics) and 0.753 (items of TTT), which indicates that the scales were highly reliable. The researcher examined each of the items in turn to classify whether the Cronbach's alpha for the scales as a whole would be improved by the deletion of an item. Thus all 24 items were maintained in the overall analysis.

4.3 *Employee evaluation of the statements relating to individual characteristics*

To provide a better understanding of the extent of employee behavioural intentions and their perception of each individual characteristic, the mean values of the 21 statements relating particularly to individual characteristics were calculated (see Table 1). In our study, for 21 items in the individual characteristics dimension, the mean values fluctuate from 3.39 to 4.42. In particular, item 3 had the highest average rating (4.42). For this item, 172 employees (93%) strongly agreed/agreed that "I am looking forward to using the new training on the job", while 12 employees (6.5%) were undecided (see Fig. 2). However, the item that had the lowest average rating was Item 10. One hundred and three employees (55.7%) strongly agreed or agreed that "I have received a promotion for accomplishing tasks in a more efficient way". In addition, the standard deviations for this dimension are in the interval of 0.514 and 1.114. This means that employees have quite different perceptions about this element.

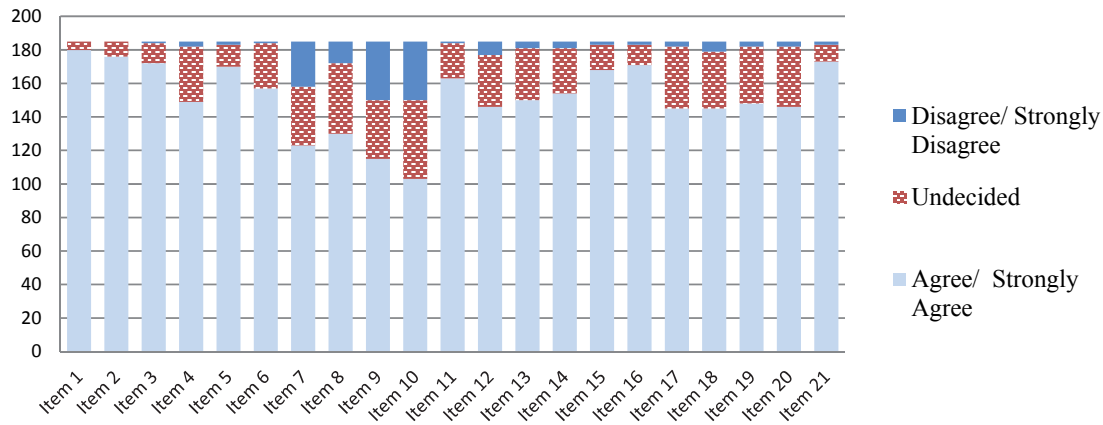


Fig. 1. Agreement level of respondents to individual characteristic items

4.4 Multivariate analysis

Prior to using multiple regression analysis, exploratory factor analysis (EFA) is frequently used to calculate the complex interrelations amongst factors (Hair et al., 2010). This approach gives a foundation for subsequent statistical analysis. The purpose of conducting EFA is to measure the validity of each construct in relation to the convergent series. The absolute value of the factor loadings was reported at ≥ 0.45 as being significant (Hair et al., 2010). This may provide enhanced information that is associated with the structure of the research data.

4.5 Exploratory Factor Analysis

The first stage in principal axis extraction analysis with Promax rotation is to conduct the KMO Measure of Sampling Adequacy and Bartlett's test of sphericity. The acceptability of the factor is confirmed when the KMO score ≥ 0.6 and $\text{sig.} \leq 0.05$ (Hair et al., 2010). The results from Table 1 demonstrate that the data matrix is appropriate to perform factor analysis. The KMO measure of sampling adequacy was .839 which falls in the range of very good and Bartlett's test of sphericity had a value of 1683.845 ($p < 0.001$). Additionally, all factor loadings are greater than 0.45. Thus, it can be confidently said that the sample size is suitable for factor analysis. After considering the factor loading results of the 21 items in relation to individual characteristics, three factors were extracted to explain 52.34% of the total variance. Moreover, Cronbach's alpha of the extracted items was from 0.72 to 0.89 which surpasses the suggested level of 0.60 (Hair et al., 2010). This shows that there is a high degree of interior consistency. Thus, the reliability statistics of the study instrument have been proven and three identified factors were extracted: Factor 1, *Trainee ability* (11 items); Factor 2, *Outcome expectation* (5 items); Factor 3, *Perceived relevance of training* (the last 5 items) (see Table 1). From this finding, an improved understanding of the individual characteristics associated with TTT is gained.

Factor 4, *Effective transfer of training*, explained 67.02% of the total variance. While the loading value of item 1 was very high (> 0.8), the other two items did not have high loading values (< 0.07). This factor consists of three variables which are associated with the effectiveness of applying newly acquired skills on the job (see Table 2).

Table 1
Individual Characteristics Factor Analysis

KMO and Bartlett's Test						
I	KMO Measure of Sampling Adequacy					.839
	Approx. Chi-Square					1683.845
	Bartlett's Test of Sphericity					.000
II	Dimensions of individual characteristics	Mean	SD	Factor Loading		
				F1	F2	F3
1	Able to apply new skills			.682		
2	Identifying appropriate situations to use skills	3.9	.61	.678		
3	Understanding training contents	3.9	.71	.620		
4	overcome obstacles to use new skills	3.9	.61	.619		
5	Confident to use new skills	3.9	.66	.616		
6	Remember the key topics	4.0	.59	.582		
7	Able to use new skills	4.0	.55	.578		
8	Doing well in complex activities	3.9	.66	.573		
9	Accomplish the job better	4.1	.55	.570		
10	Improve with practice and frequency of use.	3.8	.54	.559		
11	Used the new skills in complex work situations	3.8	.66	.557		
12	Received a bonus	3.4	1.11		.879	
13	Received a wage increase	3.6	1.01		.751	
14	Received a promotion	3.3	1.01		.746	
15	Be praised for using the trained skills	3.7	.83		.703	
16	Committed to apply what learned	4.1	.74		.518	
17	Looking forward to use the new skills	4.4	.63			.723
18	Improved the professional competence	4.3	.57			.563
19	Being useful in solving problems	4.2	.62			.485
20	Opportunities to use the skills	4.1	.66			.456
21	Doing the current job better	4.3	.51			.453
	Initial Eigenvalues			6.796	2.534	1.661
III	% of Variance Explained (Total = 52.342)			33.02%	11.61%	8.18%
	Cronbach's Alpha			.883	.857	.715

Extraction Method: Principal Axis Factoring.

Rotation Method: Promax with Kaiser Normalization. N = 185

Table 2
Factor Analysis of Training Transfer Effectiveness

KMO and Bartlett's Test				
I	KMO Measure of Sampling Adequacy			.680
	Approx. Chi-Square			132.954
	Bartlett's Test of Sphericity			.000
II	Dimensions of training transfer effectiveness	Factor loading		
		F10		
1	Performance has improved			.807
2	Able to work faster			.694
3	Effectively incorporated new skills			.635
	Cronbach's Alpha			.753
III	Initial Eigenvalues			2.011
	% of Variance Explained (Total = 67.024)			67.02%

Extraction Method: Principal Axis Factoring.

Rotation Method: Promax with Kaiser Normalization. N = 185

4.6 Multiple regression analysis: Testing the research hypotheses

Furthermore, a series of multiple regression analyses were conducted to provide a greater understanding of the study objectives. Linear regression analysis is a technique used to identify the relationship between independent variables and a dependent variable. In this case, multiple regression analysis has been employed to calculate and explain the linear relation between predictor variables, such as Trainee ability, Outcome expectation and Perceived relevance of training. An investigation of the coefficient of determination (R^2) was computed to identify both the significance and strength of the correlations amongst the independent factors and the dependent factor. A t-test analysis was used to investigate a significant linear relationship amongst the independent variables and the dependent variable in the linear regression model. The value of a regression coefficient was significantly different from zero and the acceptability of the factor is confirmed sig. ≤ 0.05 (Hair et al., 2010). If the variance inflation factor (VIF) is lower than 10 which is calculated as the inverse of tolerance value, there is no multicollinearity (Hair et al., 2010). Thus, with VIF values of < 1.1 for all individual variables, multicollinearity was not a problem in relation to the multiple regression analysis (see Table 3). In addition, the value of 0.299 for Adjusted R-Square indicates that 29.9% of the variance of the dependent variable may be explained by the three proposed factors. The significance value of the F-test is less than 0.01, which shows that it is meaningful from a statistical perspective. All of the potential explanatory variables were significantly related to the dependent variable ($p < 0.001$). While the trainee ability variable had a high beta coefficient ($\beta = 0.4$, $t = 6.44$), the beta standardized coefficients of the other two factors, outcome expectation ($t = 4.55$) and perceived relevance of training ($t = 3.44$) were lower than 0.3. These results indicate that individual characteristic factors had a positive and significant impact on TTT ($F = 27.193$, $R^2 = 0.311$), with trainee ability having the largest influence on TTT, followed by outcome expectation and perceived relevance of training. As a result, these findings suggest that hypotheses H1, H2 and H3 were supported by the data.

Table 3

Linear Regression: The Influence of Individual Characteristics on TTT

Model Summary				
R Square (R2)	.311			
Adjusted R Square (Adjusted R2)	.299			
F	27.193			
Sig.	< .001			
Independent variables	Beta	T-value	Sig.	VIF
Trainee ability	.400	6.444	< .001	1.010
Outcome expectation	.281	4.546	< .001	1.002
Perceived relevance of training	.213	3.442	.001	1.008

Dependent Variable: effective transfer of training

5. Discussion

Based on past studies in this area (Baldwin & Ford, 1988; Dirani, 2012; Velada et al., 2007), a structural model was established. From this model, it was hypothesized that there are positive and significant relationships between trainee ability; outcome expectation; perceived relevance of training and the effectiveness of TTT. Overall, the findings from the quantitative data analysis indicate that all three individual variables (trainee ability; outcome expectation; perceived relevance of training) play important roles in predicting the effectiveness of TTT in the workplace. The standardised betas in the linear regression analysis of individual factors indicate that trainee ability ($\beta = .400$) had the strongest impact on the effectiveness of TTT followed by outcome expectation ($\beta = .281$) and perceived relevance of training ($\beta = .213$). These findings shed light on the interaction between motivational factors and trainee ability and how this may impact the effectiveness of TTT. The results suggest that employees are more likely to think about how their training will be used in the workplace when they feel motivated,

confident and interested in obtaining knowledge and skills which may lead to improved TTT. It should be noted that trainee ability is the most significant factor impacting on TTT in Enterprises. This finding is not entirely surprising, as employees with high levels of self-efficacy and cognitive ability have been found to be more likely to complete more difficult and complex tasks (Simosi, 2012). The findings from this research also reinforce the empirically-based findings of previous research by Velada et al. (2007), who indicated that when employees are confident in their abilities to transfer training or when they maintain learning content, it is possible to confirm that they have engaged in TTT in the workplace. Trainee ability had a very strong relationship with the transfer of closed-skills training. In addition, when there is adequate motivation, employees are willing to improve new skills and subsequent transfer performance. Many employees believe that if they perform well, their managers will acknowledge them, thus they are willing to attend training programmes to improve their skill levels. When the perceived levels of outcome expectation and relevance of training are at a high level, this will encourage trainees to improve their TTT to the job. This conclusion also supports the study results of Cheng & Ho (2001), who found that there are positive relationships between outcome expectation, perceived relevance of training and TTT. The findings from this study indicate that TTT may be promoted if the employees have a clear indication of the expected results from the training. Thus, this study offers further evidence of the role of motivational characteristics relating to levels of transfer effectiveness in the context of training. It is clear that very little of the past research has examined the role of individual characteristics (Tracey et al., 2001) in the context of TTT. These studies have grouped several individual factors together as a combined assessment of individual support. Relating to the view of Cheng and Ho (2001) that numerous individual support forms can have significant relationships with TTT, this study extends previous research by examining whether the three forms of individual characteristics impact TTT. As a result, the study reveals that there are significant relationships between trainee ability, outcome expectation, perceived relevance of training and the effectiveness of TTT. From these findings, it may be suggested that when employees are motivated and have a belief in their capabilities, these are important elements that encourage them to improve TTT in the workplace. These results also indicated that trainee ability is a stronger influence on TTT than the two motivational variables. This suggests that if the motivation to learn and transfer is adequate, employees who have more ability are more likely to improve TTT (Dao & Nguyen, 2016).

6. Conclusion and implications

Based on the findings of the quantitative analysis in this study, it may be argued that in order to maximize returns on investment in training, organizational changes need to focus on all three individual characteristics of TTT. Due to the link between individual characteristics and TTT, the determinants of employee motivation to learn and transfer are important in developing organizational training programmes. It is critical that employees perceive training as being relevant to their jobs. Organizational effort is required to not only ensure that skills training programs are designed to meet specific requirements, but also that trainees perceive the training as relevant. This means that the benefits of training should be emphasized to employees to increase the perceived value of training courses. Employees should be seen as capable of making their own decisions about attending training programs. When employees are motivated to participate in training, they are more likely to make a greater effort to transfer this training to the workplace and use their newly acquired skills on the job. Thus, it is important to understand that the presentation and marketing of training courses by the enterprise must be considered as essential tasks of the HR department arranging the training programmes. Outcome expectation (wages, promotions and bonuses) is a significant factor influencing TTT. Therefore, enterprises may increase employee perceptions of training usefulness by ensuring that the relevance of training is clearly connected to opportunities for increasing salary, bonuses and their work position. Finally, enterprises must promote TTT by carefully considering the individual ability of an employee when recruiting. In particular, enterprises may benefit from aligning their selection practices with the aims of their training courses. As trainee ability is found to be a significant factor related to TTT in this current study, enterprises can enhance the effectiveness of TTT by selecting

employees who are motivated to receive additional training. Enterprises need to develop an integrated HR policy with a focus on recruitment, training, incentive systems, career development and establishing a clear link between training, performance and rewards. This will create an environment that will encourage the participation of employees in TTT. The study was conducted on a small sample size of 185 employees on seven enterprises organizations which would limit the generalization of the findings. However, it does provide some empirical knowledge of training transfer practices in a developing economy that is Vietnam. It also explored the relationship of three key individual factors and the effectiveness of TTT. Furthermore, from the findings of the study, it is evident that enterprises need to increase their effort to improve the quality of TTT at the work place. Enterprises should develop HRD policies that include selection, training, salary system and career development to create a clear link between training, performance and rewards to increase the effectiveness of TTT of their employees.

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