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Original article

**Factors for Improving the Effectiveness
of Professional Training of Employees
in Modern Conditions**

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Abstract

Introduction. Human resources are likened to the backbone of any organization ensuring its sustainable development and competition. Investment in the workforce through training programs brings back the best fruitful achievements. This study investigated six basic factors affecting the training effectiveness in Vietnam, which is considered as burdensome matters to any organization in terms of having a skilled workforce to meet the current working situation.

Materials and Methods. The study employed a mixed-methods approach involving a sample of 370 with $e = \pm 5\%$ over the population of 10,000 civil servants in Hanoi City. The quantitative data from the 5-Likert scale questionnaire among 370 respondents were addressed by IBM SPSS v.25. The semi-structured interviews relative to the same factors in the questionnaire were conducted with another 79 respondents to verify the validity of the research using NVivo v.12 for data treatment.

Results. The results of the study revealed the dissatisfaction of employees with the training programs of professional development. The authors recommend to create a competent system of motivation to improve the effectiveness of training and development of employees. The leaders should conduct needs analysis seriously to comprehend the real expectations of employees so that they could satisfy what lack of expertise skills and knowledge employees want to be updated. Besides, the incentive schemes and job promotion feasibilities are availed to any employee who is successfully performed well at work after the training courses.

Discussion and Conclusion. The conclusions made by the authors contribute to the development of innovative training technologies in the system of professional development of the company staff. The results of the study will help HR professionals in the development of effective training programs that meet the expectations of employees.

Keywords: advanced training, professional training effectiveness, workplace, workforce, incentive schemes

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Оригинальная статья

Факторы повышения эффективности профессиональной подготовки работников в современных условиях

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Аннотация

Введение. Человеческий ресурс считается основным фактором любой организации для поддержания устойчивого развития и конкуренции. Инвестиции в образование персонала через программы обучения являются эффективной системой развития предприятия. Цель статьи – проанализировать основные факторы, влияющие на эффективность обучения сотрудников во Вьетнаме, представить рекомендации по совершенствованию систем мотивации труда в организации.

Материалы и методы. Для изучения проблемы было проведено анкетирование, в котором приняли участие 370 государственных служащих г. Ханой. Количественные данные анкеты по шкале Лайкерта были обработаны с помощью приложения IBM SPSS v.25. С целью проверки достоверности исследования проведены полуструктурированные интервью с 79 респондентами. Для качественной обработки данных использовалась программа NVivo v.12.

Результаты исследования. По итогам исследования выявлена неудовлетворенность сотрудников учебными программами повышения квалификации. Авторами рекомендовано создать грамотную систему мотивации для повышения результативности обучения и развития сотрудников. Руководителям организаций предложено провести анализ потребностей для выявления реальных ожиданий сотрудников, чтобы определить, какие навыки и знания они хотели бы обновить.

Обсуждение и заключение. Сделанные авторами выводы вносят вклад в развитие инновационных технологий обучения в системе повышения квалификации персонала компании. Результаты исследования помогут специалистам отдела кадров в разработке эффективных программ обучения, соответствующим ожиданиям сотрудников.

Ключевые слова: повышение квалификации, эффективность профессиональной подготовки, рабочее место, рабочая сила, системы мотивации

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Introduction

Human resources play an important role in the sustainable development of any organization. Nowadays, mass production can be carried out with modern machines controlled by people. Techno-revolutions, typically named Industry 4.0 with the convergent evolution of artificial intelligence, require upskilling workforce to keep pace with scientific advancements. The necessity of learning and development within an organization is to

empower its employees' growth and develop their knowledge skills and capabilities to do better at their positions. Practically, learning and development encompass any professional development a business, for example, to avail its employees which is considered to be a core activity of human resources management, and is sometimes referred to as professional training. Consequently, the practicality of the employee training program (TP) is demonstrated by the productivity of one

company's workforce to meet the demand of the work requirements¹ [1; 2]. Thus, the principal purpose of training is to equip employees with state-of-the-art knowledge and skills; thus, organizations usually conduct the TPs in two occasions; the onset of new employees after the recruitment, and well-established employees participating in an on-the-job TPs. Newly recruited employees are trained to practical professional knowledge and corporate cultures during the apprentice period for their final decision on their commitment to the organization or not after the completion of the training course² [3; 4]. For well-established employees, retraining programs are essential to improve their productivity and profitability³ [5].

Currently, onsite and offsite training methods are commonly carried out. Offsite training model gathers participants from different locations geographically close to one another in a venue away from the offices, which provides a better focus on the training sessions but the costs to organize this program are expensive. Whereas, onsite training mode is carried out where people are geographically located closer to each other, possibly in-house employees. They can be trained face-to-face in groups or technology-enabled training approach which is widely implemented because of its cost-effectiveness and efficiency [6]. Many studies [5; 7; 8] investigate the effective outcomes employees achieve after the completion of the TPs via the denotation of practical benefits demonstrated by employees' work efficiency at the workplace.

This study was conducted in Vietnam, a fast-developing country as the melting pot for many multinational corporations settling their bases. The expenses on TPs are of great concerns for most organizations in regards with the cost-effectiveness. Consequently, instead of regarding TPs as corporate expenses, they are

viewed as good investment returns. Currently, almost organizations focus on employee test results to assess the training effectiveness (TE) without paying greatly attention to the factors influencing the success of the TPs. There have been many studies [9–11] discussing the TPs, these studies, nevertheless, mainly reflect the employers' perspectives towards the needs of TPs without investigating systematically the decisive factors contributing to the effectiveness of the TPs. This study investigated five main components, namely training content, training environment, facilities and materials, training plan schedule, and presentation style basing on employees' viewpoints at organizations in Vietnam. To achieve the aforementioned aim, the study investigated the following questions:

1. What are the trainees' viewpoints on the factors influencing the effectiveness of training programs?
2. What are the male and female respondents' differences among the factors of the training effectiveness?

The finding would benefit human resource practitioners to improve the effectiveness of the TPs. Moreover, organizations would consider applying technology-enabled training mode to upskill their workforce to meet the employees' expectations and business objectives.

Literature Review

Training Versus Coaching or Mentoring. Overall, training involves the process of transferring knowledge, teaching skills, encouraging attitudinal and behavioral changes from highly experienced trainers to poorly skilled trainees. Training is commonly conducted in structured and formal ways on new hires or fostered human resources. However, the reason why TP does not last long might be blamed for that training skills are usually not reinforced

¹ Jeebinyo J. Communication Factors Affecting Training Effectiveness of Business Organizations: Doctoral Dissertation. The Graduate School of Communication Arts and Management Innovation. National Institute of Development Administration. 2020. Available at: <http://gscm.nida.ac.th/uploads/files/1600312381.pdf> (accessed 28.10.2022).

² Aziz S.F.A. Measuring Training Effectiveness: Evidence from Malaysia. In: Handbook on the Economic, Finance and Management Outlooks. Proceedings Book of ICEFMO. Malaysia; 2013, p. 275–294. Available at: <http://www.conscientiabeam.com/ebooks/ICEFMO-275-294.pdf> (accessed 28.10.2022).

³ Mohamed A.A. Perceived Factors Influencing the Effectiveness of Training at the Public Service Commission: Master's Theses. University of Nairobi; 2016. Available at: <http://erepository.uonbi.ac.ke/handle/11295/100377> (accessed 28.10.2022); Luong H.N.L. Factors Influence Training Effectiveness in Micro and Small Enterprises: Bachelor's thesis. Turku University of Applied Sciences; 2015. Available at: <http://www.theseus.fi/handle/10024/96615> (accessed 28.10.2022).



in their practices. Training is typically characterized with formality, well-defined objectives in a specific subject area, and relative brief as compared with coaching or mentoring. Many studies [12; 13] have highlighted the crucial role of trainers in a TP because they possess extensive experience and specialized knowledge covering objectives of a TP. TPs, however, are possibly incompetent to strengthen new neural or improve individuals' knowledge and skills without on-the-job working practices.

Training is commonly confused with coaching or mentoring in that training develops employee skills but practically has different roles when considering closely its nature. Compared with training, coaching refers to the ability to transfer from one's own experience and knowledge to another by means of techniques and developmental, sophisticated skills. There is a remarkable formality in the coaching relationship in that a coach is closely associated to help a coachee to master the targeted skills, and the coaching quality is heavily influenced by the coachees. In addition, coaching requires time for coachees to undergo a common process, and practice hard to form new habits under strict supervision. Therefore, the core of coaching is different from both training and mentoring in that coaching involves providing coachees some opportunities to examine their intentions to change themselves in their single objectives. Coaching entails the process of facilitating another individual to master one topic of their choice via given questions and self-doing. Accordingly, coachees elicit their own conclusions and then move to next steps.

A mentor is an experienced person willingly giving advice to a less experienced person. A mentor somehow shares some characteristics same as a coach or a trainer. Unlike training and coaching, a mentoring relationship arises gradually from a friendship or a professional association when the mentor recognizes to have valuable insight and experience to share under the circumstance that the individual being mentored sees the needs to learn from the mentor. Therefore, mentoring features

a long-term relationship established by two people basing on trust, respect, and a desire to gain wisdom. Mentors often propose solutions to any problem in the form of advice or the accompaniment of collaborative work with the mentee.

Training Effectiveness. Training effectiveness indicates the process of training and follow-up leading to improved job performance, which positively contributes to key organizational results. In simple words, TE refers to the degree to which the training objectives are achieved and benefited a company and trainees via the assessment of using the combination of satisfaction, individual, and organizational performance. Hence, it is worth mentioning that Kirkpatrick and Kirkpatrick⁴ introduce the four levels of training evaluation featuring an emphasis on the importance of making training relevant to employees' performance. In their theory, four stages of TE entail sequentially Reaction, Learning, Behavior, and Results. At the reaction stage, trainees are encouraged to recognize the valuable cores of the TPs. The level 2 measures the extent to which participants could do differently as a result of being trained, and evaluate how confident and motivated they have gained after the TPs. The third level – behavior – concerns how people change their behaviour after attending the TPs. In order for change to occur, it is necessary to promote the participants' desire to change, know what and how to do, and work in a right climate. The fourth or final stage – results – signifies the outcomes that demonstrate a good return on investment. Consequently, the final results characterize “an increased production, improved quality, decreased costs, reduced frequency and/or severity of accidents, increased sales, reduced turnover, and higher profits”⁵. TE concerns the attainment of the prospective results set by human resources as training plays a crucial part of human resources activities [14]. Due to the failure of keeping the right track of training purposes from the original plan, it might lead to the ineffective training and adding pressure on both the organization in terms of incurred cost and loss

⁴ Kirkpatrick J.D., Kirkpatrick W.K. Kirkpatrick's Four Levels of Training Evaluation. Association for Talent Development. 1st ed. 2016. Available at: <https://www.kirkpatrickpartners.com/product/Kirkpatrick's-Four-Levels-of-Training-Evaluation> (accessed 28.10.2022).

⁵ Ibid. P. 25.

of reputation, and on trainees in regard to the bad experience and failure feeling [15]. Besides, Sitzmann and Weinhardt [14] confirm that the motivation of trainees considered as a key element for improving the effectiveness of training outcomes.

Factors Affecting Training Effectiveness. Many studies [1; 2; 7] have shown deeply concerns about factors affecting the TE of a TP, and these factors discuss the existence of measurable changes in individual comprehension of focal trained matters, and their actual skill performance at workplace. The features of training include a formal and systematic assessment of premilitary training necessity, the use of appropriate training array to transfer its content, and a proper evaluation of the program criteria and strategies. Typically, Zhao et al. [16] assume that factors affecting TE are greatly affected by (1) internal factors including training preparation, and training implementation, and (2) external factors encompassing training assessment, work environment, and individual characteristics. According to them, this training aspect is unconcerned about variables at the individual level (e.g., attitudes, abilities, and motivation), and at the work environment level (e.g., social networks, job characteristics, and organizational systems). Similarly, Rezaee & Hamidian [8] investigate two factors, namely motivation and job satisfaction on the effectiveness of on-the-job training in the Iranian oil industry. They opine that these factors have a positive impact on TE. Their study, however, does not specify the need analysis of employees, and the evaluation of their training efficiency at work. They simply implemented a contrastive analysis of motivation and job satisfaction with effectiveness of on-the-job training courses. Besides, their study is inclined to synthesize and generalize the secondary sources, which might devalue the validity and concurrence of the research issues. Fatima and Siddiqui [7] examine three factors affecting transfer on-the-job training at workplaces in Pakistan, particularly motivation to learn, perceived organizational support, and training design. The results state that employees see a must to equip

themselves with new and updated knowledge, although their organizations do not willingly promote and support them. Hence, the study simply compares internal and external factors in the choice of participating a training course, and fails to mention the primary process to conduct a train course such as need analysis, assessment, and evaluation of employees' efficiency after the TP.

Other researchers⁶ [17; 18] have concentrated on some key factors. For example, Luong claims that employees should take a test to measure the effectiveness of the training⁷. Yet, this study does not deal with the factors influencing the TPs such as contents, need analysis, or assessment of the follow-up training course efficiency. Previously, Sanjeevkumar & Yanan conduct a mixed theoretical and empirical research on employees' personal characteristics [17]. Their study shares some similarities to the current study in that it does not look into the employees' personal characteristics. Hajjar and Alkhanaizi cooperate with instructional designers and training managers in designing the TPs for employees [18]. Their study also does not clarify what features of TPs would be effective in maximizing the efficiency of the training courses.

Materials and Methods

Research Design. The study was basically established to find out from an explanatory research design in which the researchers carefully conducted a mixed-methods approach to consolidate the validity of the research findings. Approximately 10,000 civil servants in Hanoi city in Vietnam constituted the study population; however, the researchers were, within the constraints of time and money, unable to collect information from all the population, so Cochran's⁸ formula was used to select a sample of 370 with $e = \pm 5\%$. For the ease and convenience, the questionnaire was fulfilled by the active Google form link, which was sent to the concerned organs, institutions, and organizations within a period of two weeks. For the semi-structured interviews, they were conducted over the phone with the participants following a permission of

⁶ Luong H.N.L. Factors Influence Training Effectiveness in Micro and Small Enterprises: Bachelor's thesis.

⁷ Ibid.

⁸ Cochran W.G. Sampling Techniques. 3rd ed. New York: John Wiley & Sons; 1977.



recording the interviews for the single purpose of transcribing the response for this study. Then, two sources of data were addressed by IBM SPSS v.25 application for the questionnaire, and NVivo application v.12 for the recording. Basing on the results, the researchers unanimously arrived at the conclusion.

Subjects of the Study. The respondents of the study worked for state organs, and local governmental bodies and institutions in Hanoi city. To choose the representative sample of the large population, Cochran's formula with $e = \pm 5\%$ was applied to get the right sample of 370 over the population of 10,000 civil servants.

$$n = \frac{z^2 (p \cdot q)}{e^2},$$

where: n – number of items in samples, z^2 – square of confidence interval in standard error units, p – estimated proportion of success, $q = (1-p)$ or estimated the proportion of failures, e^2 – square of maximum allowance for error between true proportion and sample proportion, or z_s squared.

The research included 153 male respondents equivalent to 56.7%, and 117 female participants equal to 43.3%. concerning their work experience. 22 staff accounting for 8.1% had under 5 years of work experience, 43 employees relevant to 15.9% spent under 10 years. Similarly, 59 respondents making up for 21.9% had been in office for under 15 years. Other 39 participants just like 14.4% were in service for under 20 years. Likewise, 50 staff same as 18.5% had under 25 working years. 31 employees or 11.5% announced that they worked at their current positions for under 30 years. Lastly, the small proportion of staff, particularly 26 people equal to 9.6% were in the job for over 30 years. In regard to the frequency of participating in retraining programs, the majority of employees confessed that they received TPs once a year. Then, 72 respondents corresponding to 26.7% participated in the training course once every 5 years. Surprisingly, 55 employees just as 20.4% took part in a training course once every 6 months. Besides, 22 participants similar to 8.1% obtained a TP more than twice every

5 years. It is noteworthy that only 3 people, or 1.1%, did not attend any professional development courses. When examining where the TPs were organized. Most participants ($n = 208$; same as 77.0%) revealed that they received off-site training programs; whereas, 62 respondents equal to 23.0% attended on-site training courses.

Besides, 79 respondents agreed to involve in the semi-structured interviews over the telephone in a period of one month with the permission to record the voice for the purpose of data analysis to meet the objectives of the study.

Research Instruments. The study exploited the researcher-made questionnaire basing on factual and behavioral criteria recommended by Dornyei and Taguchi⁹ on 6 aspects, namely (a) training preparation, (b) training plan schedule, (c) training contents, (d) work supports, (e) training environment, and (f) training assessment and effectiveness. 50 Likert scale statements were designed, particularly (1) strongly disagree, (2) disagree, (3) neutrally, (4) agree, and (5) strongly agree, then the questionnaire was sent to 3 experts on training and labor management for the content validation. After that, the questionnaire was fine-tuned with a group of 50 volunteer participants in a pilot study to validate the strengths and weaknesses. The results of the dry run for validity of the questionnaire were selected within the Alpha values ($\alpha = 0.84-0.90$, reliable; Cronbach, [19]). The final version including 31 Likert scale statements was again sent back to 3 experts to examine and validate the liability. Besides, the semi-structured interview entailed 6 respective dimensions as the questionnaire.

Research Procedures. Initially, the researchers contacted the leaders of the intended organizations to explain the purpose and to seek for their permission for their staff to serve as respondents. After gaining their allowance, the questionnaire was floated to the participants' emails to complete the Google form within a period of two weeks. The researchers' email explained the objectives and relevance of the study, assured the respondents of anonymity, and gave them the option of not participating in the study

⁹ Dornyei Z., Taguchi T. Questionnaires in Second Language Research: Construction, Administration and Processing. 2nd ed. New York: Routledge; 2010.

if they wanted. Simultaneously, a contact number was provided in case any respondent needed. The semi-structured interviews were conducted at the respondents' convenience over the phone for about 15 minutes. After two data sources were properly collected, the researchers implemented the data screening together. Then, the appropriate information was treated by IBM SPSS v.25 application for the questionnaire, and NVivo v.12 application for the interview recordings.

Data Analysis. The data was collected, tabulated, analyzed and interpreted using descriptive statistics. Particularly, frequency count and percentage were used to treat the profile of the respondents. Besides, descriptive statistics address 31 Likert-scale statement for the mean and standard deviations with the description of very low (1.0–1.80), low (1.81–2.60), moderate (2.61–3.40), high (3.41–4.20), and very high (4.21–5.0). To verify the different perspectives of the respondents in terms of six aspects of training, ANOVA was utilized to test the disparity. In addition, weighted mean was used to treat the extent of the participants' viewpoints. To ascertain the accountability of the qualitative data, NVivo v.12 application treated the frequency of occurrence of the respondents' acceptance or rejection in the semi-structured interviews.

Results

Table 1 reveals the perspectives of participants concerning the factors affecting TE. The result indicated that training preparation did not come to the expectation of the participants. In particular, most respondents thought that the training organizers failed to carry out the need analysis of the trainees ($M = 1.69$; $SD = .75\%$). Similarly, they refuted the relevant organization of the TP ($M = 2.06$; $SD = .61\%$). For other views, the participants opined moderately such as the matching needs of the department ($M = 2.90$; $SD = .74\%$), suitable content ($M = 2.81$; $SD = .54\%$), and well-established training objectives ($M = 3.11$; $SD = .64\%$). Generally, TP preparations play decisive roles in determining the success of the TP. The previous studies [7; 20; 21] emphasize strongly a must to prepare well before the initiation of a TP. Typically, Wenger et al. [15] highly acknowledge the role of the

need analysis, they assume that appropriate understanding of employees' training needs possibly results in the fruitful achievements which contributes to the productivity and sustainability of any organization. Obviously, it is very important to construct the content of the TP from what employees are longing for. This is somehow consistent with the finding in a study conducted by Lyonga, in which the researcher asserts that self-directed learning enhances efficiency and improves skills of learning [22]. In another research, Assi and Raju [4] state that employees are inclined to have no choice to get involved in the construction of the TP, but they are unwilling to take part in the training courses which they believe that these courses are not practical, effective, and wasteful.

On examining the training plan schedule, it is clearly gleaned from Table 1 that the respondents seem dissatisfied with this factor. For further details, most participants complained about not having a clear detailed schedule ($M = 2.09$; $SD = .55\%$), they criticized for badly informing the time allowance for training ($M = 1.87$; $SD = .87\%$), and they also protested to accept a well-communicated training schedules ($M = 1.88$; $SD = .74\%$). These aforementioned statements got low extents in this aspect. Besides, the two statements gained moderate extents, namely the emphasized expectation of training outcomes ($M = 3.14$; $SD = .63\%$), and well-defined goals and objectives presented in the booklet ($M = 2.89$; $SD = .66\%$). It is necessary to provide employees with the detailed information of the training plan so that employees are made known about the time frames, goals to be achieved after the ending programs, time, location, and cost of training organization. It is worth noting that the more detailed the plan, the clearer the employee TP, the easier it is to implement, and the higher the success rate. A detailed employee training plan may also help businesses implement, evaluate, and measure their trainees' performance. Besides, basing on the training methods like onsite or offsite training mode, employees have to arrange their temporary working positions to participate in the TPs. Hajjar and Alkhanaizi emphasize the importance of time schedule in organizing training courses [18]. They argue

that not all employees are ready to leave their current jobs for the participation of the training courses, although they realize the needs to be trained to undertake their positions better. Apparently, trainees need communicating the training schedules to respect them, and they are able to be active to prepare their moods, monetary budgets, and personal matters so that they feel comfortable to join and concentrate on the TPs. Overall, training plan schedules should be well-communicated to employees in order to ascertain the success of the training outcomes.

When considering the training contents, it is glimpsed from Table 1 that this factor generally did not receive positive assessments. Specially, the respondents expressed low extents for the following appraisals such as logical sequence of training contents ($M = 2.03$; $SD = .75\%$), well-organized contents ($M = 2.22$; $SD = .77\%$), relevant topic coverage ($M = 1.91$; $SD = .84\%$), and appropriate training materials ($M = 2.00$; $SD = .56\%$). For the other two statements, the respondents rated moderately, particularly extensive contents linked with practical exercises ($M = 2.71$; $SD = .66\%$), and appropriate pedagogical methods ($M = 2.83$;

$SD = .50\%$). Training contents play a focal role in meeting the expectations of the trainees. Due to the flaw in handling any skills involving the current positions, trainees try to update themselves with all means of training facilities such as the Internet resources, other co-workers, or their superiors for advice. When these solutions cannot satisfy their expectations, training courses would be the final channel they expect to get state-of-the-art information. It is vital to organize the training contents which come up to their wishes. The other studies have confirmed the decisive functions of efficient training contents [8; 11; 23]. Particularly, Quesada-Pallares contrasted the training contents between organizational training arrangements with the self-customized TPs [23]. The results disclose that the tailored training contents are more effective and satisfactory than that of organizational training courses. In all, this study investigating the TPs which were organized by businesses without intervention of employees contributing their expectations showed that employees were slanted to be dissatisfied with the training contents provided by their organizations.

Table 1. Respondents' views on influential training aspects

Content	N	Mean	Std. Deviation	Interpretation
1	2	3	4	5
Training preparation				
Training provided appropriately matched the needs of the department	270	2.90	.74	Moderate
Training had conducted a poll when constructing the program to provide the appropriate content based on the needs of the department	270	2.81	.54	Moderate
Selection of trainees was proper based on the needs of the department	270	1.69	.75	Low
Training goals were adequately established.	270	3.11	.64	Moderate
The organization of the training program was well-designed by the department representatives	270	2.06	.61	Low
Training plan schedule				
The training program has a clear, detailed schedule	270	2.09	.55	Low
The expected training outcomes are emphasized	270	3.14	.63	Moderate
The time allocated for the training was well-informed	270	1.87	.87	Low
The training program has well-defined goals and objectives laid out in the booklet	270	2.89	.66	Moderate
Training schedules were well communicated	270	1.88	.74	Low
Training contents				
Training contents are presented in a logical sequence	270	2.03	.75	Low
The training contents are well organized	270	2.22	.77	Low



End of table 1

1	2	3	4	5
Presenters covered extensive content with practical exercises	270	2.71	.66	Moderate
The topic covered is relevant to trainees	270	1.91	.84	Low
Training adopted appropriate pedagogical methods	270	2.83	.50	Moderate
Materials used in training were appropriate	270	2.00	.56	Low
Work supports				
Management encourages employees to join a training program	270	2.92	.93	Moderate
Training colleagues do workshare while the trainees are following the training programs	270	1.89	.63	Low
Managers motivate employees to use skills obtained after the training program	270	2.75	.64	Moderate
Organizational system (such as on-demand facilities) assists trainees after the training programs	270	2.73	.59	Moderate
Better work efficiency of employees after the training programs results in promotion or rewards	270	1.90	.72	Low
Training environment				
The training venue is easily accessible to transportation	270	2.97	.78	Moderate
Facilities are technologically equipped	270	3.22	.62	Moderate
The trainer communicates dynamically, fluently, and with passion	270	2.87	.69	Moderate
The trainer involves trainees in the training process	270	2.88	.52	Moderate
There is sufficient comfortable seating for all participants	270	2.85	.73	Moderate
Training assessment and effectiveness				
Trainees' rigorous, progressive evaluation of the program is implemented	270	2.76	.55	Moderate
Trainees' rigorous post-training evaluation of the trainees is conducted	270	3.00	.42	Moderate
Management evaluation of training program success is carried out	270	3.15	.79	Moderate
I acquired new skills and learning from the training program	270	3.29	.43	Moderate
I intended to use the skills/learning I acquired from the training program in my job	270	3.10	.83	Moderate

Source: Hereinafter in this article all tables were made by the authors.

Work supports connote what trainees receive any assistance from their organization while and after the TPs. As seen from Table 1, trainees basically found it discouraged to get supports from their co-workers. Specially, most respondents showed moderate extents when rating that they got modest encouragement from their managers to join a TP ($M = 2.92$; $SD = .93\%$), mediocre managerial encouragement to apply skills ($M = 2.75$; $SD = .64\%$), the average assistance of on-demand infrastructure ($M = 2.73$; $SD = .59\%$). Besides, they reckoned low levels in terms of colleagues' workshare during the TPs ($M = 1.89$; $SD = .63\%$), and more favorable conditions ($M = 1.90$; $SD = .72\%$). Motive work might spring from healthy work

environments. When employees often receive their managerial boards' encouragement and supports, they could do their best to overcome most challenges to change themselves better. TE becomes practical if it can be implemented in actual working practices. When allowing to converse what employees are trained into their current positions, employees can demonstrate the level they have gained from the TP. One obstacle trainees often confront at work is that what they are given during the training courses cannot apply with their temporary facilities in that theory and equipment might be better than their current facilities, which seem to be very contradictory. In practice, workshare is always problematic under high pressure of work. With a high demand of jobs, employees are



specialized for their own positions and tasks, which is sometimes not overtaken by other people. Therefore, trainees' focal participation during the TP is always troublesome as they have to be proactive to balance between their workload and the TP requirements. Likewise, trainees invest much of their efforts to do their works more efficiently with the hope that they can get some forms of return achievement, such as higher positions or being more well-paid. Rewards on time are able to activate and challenge employees to educate themselves through the TPs.

As clearly shown in Table 1, overall training environment recorded moderate degrees. In particular, the participants rated moderately easy access to training venue ($M = 2.97$; $SD = .78\%$), good technological equipment ($M = 3.22$; $SD = .62\%$), professional trainers ($M = 2.87$; $SD = .69\%$), trainers' interaction with trainees ($M = 2.88$; $SD = .52\%$), and sufficient comfortable seating ($M = 2.85$; $SD = .73\%$). External factors which are provided to be training venues can be very influential for the success of the TE. The facility condition of these venues contributes to the knowledge and skills trainees gain after the TPs. Under the circumstance that training environments do not come up to trainees' expectations, the learning outcomes are heavily affected by the inadequate investment of training facilities. Previous studies [2; 13; 24] have proved that modern facilities, together with professional, high-skilled trainers result in the effective and efficient training results. Concerning training assessment and effectiveness, it is glimpsed from Table 1 that the respondents produced moderate extents in this regard. More particularly, the participants showed moderate levels on trainees' rigorous, progressive evaluation ($M = 2.76$; $SD = .55\%$), trainees' rigorous post-training evaluation ($M = 3.00$; $SD = .42\%$), and management evaluation of TP ($M = 3.15$; $SD = .79\%$). Besides, the respondents mostly thought that they were unsure to apply trained skills to their current positions ($M = 3.10$; $SD = .83\%$), and they were also uncertain to confirm if they acquired new skills from the TPs ($M = 3.29$; $SD = .43\%$). The primary purpose of training is to update trainees with what they feel to be lacking of. It is clear from Table 1 that

participants show their disappointment when they take part in the TPs. As denoted from Table 1 that trainees have to overcome many obstacles to follow the TPs; however, they feel dissatisfied with the time and efforts they have saved for the training courses. Consequently, trainees are not willing to participate in a TP due to the fact that it results do not come up to their expectations. It can be said that preliminary selection process is vital to result in the success of the TE [4]. Regarding this aspect, longitudinal assessment or periodical evaluation during the TP is essential to dually reflect the TE of the program and the knowledge and skills trainees obtain from the TPs. Table 1 discloses that trainees are willing to be evaluated of their progress and achievement during the TPs. As aforementioned information, the management of the program is also important in that it facilitates the achievement of the TPs. Sitzmann and Weinhardt [14] state that inefficient training management leads to the disappointment and ineffectiveness of TP.

Overall, the results presented in Table 1 emphasize the crucial role on needs analysis before any training program. Basing on the findings from this survey, the organizers are able to formulate the training preparation related to the training program objectives to satisfy employees' expectations, and schedule the training plans so that participants have clear flowcharts of the training programs, which helps them reorganize their work. Similarly, training contents should be constructed to match employees' expectations, not stemmed from the organizers' preset programs as the aims of the training programs are to update what employees really need at their current positions. In other words, employees are those who decide the training program contents. Finally, work supports are also decisive to determine the effectiveness of the training programs because employees are capable of participating any training program intensively. They, in this regard, have to receive assistance from their superiors, along with other colleagues to take on their duties while they are absent from work during their training period; thus, they are attentive to get the most efficiency from the training programs.

Table 2 presents the outcomes to evaluate the hypothesis that there is no harmony among the genders in terms of training factors. The

results indicate that all significance levels (*p*-values) are higher than the confidence level ($\alpha = .05$), which refutes the hypothesis. In other words, there is no difference between male and female respondents' choices of the training factors, this finding denotes that there is no need to differentiate the genders when organizing the TPs, and the TE is not influenced by the male or female participants.

Table 3 generalizes the results from 79 semi-structured interviews with the participants who were not involved in the survey questionnaire in order to get the liable results. The recording transcripts were manipulated by using NVivo v.12 application for the purpose of accountability. As clearly seen in Table 3, the respondents did not feel satisfied with the training preparation ($n = 58$; same as 73%), compared with the results in Table 1, both sources of data shared the similarity; that is, the participants felt unsatisfied with the organizers' training preparation. In addition, most of them reckoned that training implementation was inadequate ($n = 53$; equal to 67.1%), this was somehow equivalent to the outcomes in the training plan schedule, which recorded low extents. In terms of evaluating the rigorous training assessment, most participants refuted the assessment in the TP ($n = 52$; equivalent

to 65.8%). In comparison with the findings in Table 1 concerning training assessment and effectiveness, the results from the semi-structured interviews were more negative than that in Table 1 because the training assessment and effectiveness got moderate extents while the majority of the people participating in the interviews were not contented with the training assessment. Regarding the concentration on individual characteristics, the bigger proportion of participants thought that they were not given attention to develop their acquired skills ($n = 48$; similar to 60.8%). Astonishingly, the results from the training environment in Table 1 reveal that the respondents got moderate degrees, conversely the findings in this aspect from Table 3 indicated negative outcomes, which is consistent with other studies [25–27]. Generally, the individual characteristics have to improve to meet the demands of the participants to improve the effectiveness of the TPs. On considering the supportive work environment, the large portion of respondents confessed that they did not receive much assistance from their colleagues or superiors ($n = 58$; just as 73.4%). Comparing with the data in Table 1, there is something consistent among two sources; that is, the respondents did not satisfy with the supports they got from their workplace.

Table 2. The correlation among genders with the primary training factors

Factors	Contrastion	Sum of Squares	df	Mean Square	F	Sig.
Training Preparation	Between Groups	15.64	1	15.64	1.26	.26
	Within Groups	3331.83	268	12.43		
	Total	3347.47	269			
Training plan schedule	Between Groups	13.10	1	13.10	1.03	.31
	Within Groups	3410.22	268	12.73		
	Total	3423.32	269			
Training Contents	Between Groups	24.21	1	24.21	1.32	.25
	Within Groups	4935.28	268	18.42		
	Total	4959.50	269			
Work Supports	Between Groups	23.53	1	23.53	1.82	.18
	Within Groups	3473.97	268	12.96		
	Total	3497.50	269			
Training Environment	Between Groups	10.73	1	10.73	.86	.36
	Within Groups	3360.68	268	12.54		
	Total	3371.41	269			
Training Assessment and Effectiveness	Between Groups	16.46	1	16.46	1.22	.27
	Within Groups	3606.80	268	13.46		
	Total	3623.26	269			



Thus, trainees have to manage their time to compromise their work, their personal lives, and short training courses. These challenges are possible to lead to the defective effectiveness of the training outcomes [2; 14; 24]. In the same vein, to reexamine the practicality of the TE, almost interviewees confirmed that they considered their training experiences as ineffective ($n = 62$; comparable to 78.5%), which was not the same as the results in the survey questionnaire yielding moderate extents. Similarly, the design, structure, and operation of the TPs must be taken into consideration. Trainees have to sacrifice many things such as time, money, or work-life balance to participate in a TP with an aim to change themselves better at work.

Discussion and Conclusion

TPs refer to the continuous process of improving employees' knowledge, competencies, and skills to enhance their productivity, job satisfaction, and work commitment, which can be achieved thanks to many learning programs upskilling them in their respective work positions. Therefore, training and retraining programs always necessitate the growth of each employee, along with the development of the organizations or businesses. This study was conducted in a fast-developing country where there has been considered as a melting pot for giant, multinational conglomerates to settle their businesses. However, this study only concentrated on those who worked in administrative offices to disclose the factors affecting the TE of the TPs. The results indicate that trainees do not feel highly satisfactory for

the training preparation in general. Typically, the selection of the participants for the TPs are not appropriate, which leads to the ineffectiveness of the TPs. Besides, the training plan schedule is not relevant for employees to balance between their work and the training courses, so many of them manage the suitability between their work and the TE. For training contents, this is the main purpose of the TPs; nevertheless, the participants do not feel contented with the training content because they find it ungratified to grab the knowledge and skills from the TPs. Another external factor which does not come to the respondents is work supports from their workplaces. They complain that they have not given proper assistance from their co-workers for workshare, their superiors for encouraging and monetary or incentive schemes for participating in the TPs. Consequently, they have to struggle to keep everything in order to follow the training courses intensively. When mentioning the external condition for providing an appropriate training venue, facilities and settings are not good enough to meet the requirements of the trainees. They express their moderate viewpoints on the training environment, which denotes that the respondents need to be equipped with better infrastructures to match the contents of the training courses. The fast development of the techno-sciences requires the workforce to train themselves to catch up with the challenges of their current position, so the training centers have to guarantee to bring the most modern and updated equipment to meet the demands of bridging between theory and practice.

Table 3. Summarized views of participants in the semi-structured interviews

Theme	N	Opinion	Frequency	Percent
Good Training Preparation	79	Yes	21	26.6
		No	58	73.4
Adequate Training Implementation	79	Yes	26	32.9
		No	53	67.1
Rigorous Training Assessment	79	Yes	27	34.2
		No	52	65.8
Focusing on Individual Characteristics	79	Yes	31	39.2
		No	48	60.8
Supportive Work Environment	79	Yes	21	26.6
		No	58	73.4
Practical Training Effectiveness	79	Yes	17	21.5
		No	62	78.5

The final factor relating to the training assessment and effectiveness refers to how the organizers apply the testing and assessment to measure the progress and the efficiency of the TPs. The respondents' perspectives reflect that they do not really think their experiences of training evaluation in the training courses are rigorous. Consequently, the information which is collected from the TPs is not adequate for trainees, stakeholders, and organizers to bring the most practical TE. Remarkably, the results which examine whether there is any difference between male and female participants in the choice of training factors indicate that all significance levels (p-values) are higher than the

confidence level ($\alpha = .05$), which confirms the fact that males and females do not have different stances on the selection of training factors. The findings from this research benefit the administrators and training centers in better organizing TPs to train and retrain their employees to maintain the sustainable development of their organizations. The study surely contributes to the construction of innovative learning development for any TP to bring back the best achievement for both businesses, organizations, and trainees. Besides, to improve TP efficiency and its cost-cutting practice, applying technology-enabled training mode might be the best solution to solve this matter.

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