



Araştırma Makalesi / Research Article

The Effect of in-Service Training Perception on Work Engagement Level and Intention to Leave *

Murat Akkaya¹, Ülkühan Bike Esen²

Abstract

In-service training equips employees with the essential knowledge, skills, and behaviors necessary to perform their duties accurately and effectively. Beyond its immediate functional advantages, such training serves as a strategic instrument for workforce planning by proactively addressing skill gaps, mitigating personnel shortages, and ensuring the retention of highly qualified professionals. Additionally, the structured implementation of in-service training programs contributes to occupational safety by minimizing or eliminating work-related hazards. Furthermore, in-service training has a significant impact on employees' attitudes and behaviors towards their work and the organization. However, this effect is closely related to how employees perceive in-service training. This study explores the relationship between healthcare workers' perceptions of in-service training and key dimensions of organizational behavior, specifically work engagement and intention to leave. The study utilized a quantitative research method, collecting data through a survey of 258 employees at a state hospital and analyzing it using structural equation modeling. Findings indicate that employees' positive perceptions of in-service training are significantly associated with enhanced work engagement. Furthermore, while no direct statistically significant relationship was observed between training perception and intention to leave, an indirect effect emerged: heightened work engagement mediated the relationship, leading to a reduced propensity to leave the organization.

Keywords: In-service Training, Work Engagement, Intention to Leave, Health Institutions.

Hizmet İçi Eğitim Algısının İşe Tutkunluk Düzeyi ve İşten Ayrılma Niyeti Üzerindeki Etkisi

Öz

Hizmet içi eğitim, çalışanlara görevlerini doğru ve etkili bir şekilde yerine getirmeleri için gerekli bilgi, beceri ve davranışları sağlamaktadır. Gelecekte ihtiyaç duyulacak niteliklerin personele bugünden kazandırılması, personel sıkıntısı çekilmesinin önüne geçilmesine, nitelikli personelin elde tutulmasına, iş kazası riskinin azaltılmasına veya ortadan kaldırılmasına yardımcı olmaktadır. Ayrıca, hizmet içi eğitim, çalışanların işlerine ve organizasyonlarına karşı tutum ve davranışlarını etkilemektedir. Ancak bu etki, çalışanların hizmet içi eğitimi nasıl algıladıkları ile yakından ilişkilidir. Bu çalışma da sağlık çalışanlarının hizmet içi eğitim algılarının örgütsel davranışları üzerindeki etkisini belirlemeyi amaçlamaktadır. Bu amaç doğrultusunda hizmet içi eğitim algısının işe tutkunluk ve işten ayrılma niyeti üzerindeki etkilerini incelemektedir. Çalışmada nicel araştırma yöntemi kullanılmış olup, bir devlet hastanesinde 258 çalışandan anket yoluyla veri toplanmış ve yapısal eşitlik modeli ile analiz edilmiştir. Sonuçlar, hizmet içi eğitim algısının işe tutkunluğu önemli ve pozitif yönde etkilediğini göstermektedir. Ayrıca, hizmet içi eğitim algısı ile işten ayrılma niyeti arasında doğrudan istatistiksel olarak anlamlı bir ilişki gözlemlenmesi de, dolaylı bir etki ortaya çıkmıştır: Artan işe tutkunluk, ilişkiye aracılık etmiş ve işten ayrılma eğiliminin azalmasına yol açmıştır.

Anahtar Kelimeler: Hizmet İçi Eğitim, İşe Tutkunluk, İşten Ayrılma Niyeti, Sağlık Kurumları.

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INTRODUCTION

In-service training plays a pivotal role in enhancing workforce efficiency and promoting organizational adaptability. Unlike tangible assets, such as machinery and equipment, that depreciate over time, human capital enhances organizational effectiveness through continuous learning and adaptation to technological advancements (Akhun, 1997). In this context, in-service training enables employees to systematically acquire the knowledge and skills necessary to perform specific tasks, including when, where, and how to execute them effectively (Bingöl, 2014). Empirical studies confirm that in-service training fulfills this function successfully (Msamba et al., 2023; Nicol et al., 2019).

Beyond its direct benefits, in-service training also yields several indirect positive outcomes. The literature suggests that such training contributes to increased job commitment (Azeem & Paracha, 2013; Johnson et al., 2018; Rahman et al., 2021), enhanced performance and productivity (Ugwu, 2019; Yimam, 2022), greater motivation and service-oriented behavior (Iqbal et al., 2019; Nasuridin et al., 2014), and a decrease in employees' intention to leave (Kesen, 2016; Memon, Salleh & Baharom, 2016a; Nguyen & Shao, 2019; Okşit & Kılıç, 2019). However, these positive outcomes are closely linked to employees' perceptions of the training itself. Employees are more likely to engage meaningfully in training programs when they perceive the training as beneficial, which in turn leads to more favorable outcomes (Vyas, 2015).

Work engagement is a psychological state that drives employees to demonstrate emotional and cognitive commitment to their organization, exert extra effort, and dedicate themselves to their roles—thereby improving motivation and performance (Dede et al., 2014; Kahn, 1990; Richman, 2006; Robinson et al., 2004; Wellins & Cencilman, 2005). In contrast, intention to leave reflects a negative organizational behavior, often triggered by dissatisfaction with working conditions and a desire to seek alternative employment (Hwang & Kuo, 2006; Seyfullahoğulları, 2018). Research by Martini et al. (2023) shows that perceived organizational investment in employee development enhances commitment and reduces employees' intention to leave.

In high-stakes sectors like healthcare, where mistakes can lead to far more severe consequences than in industrial settings, the importance of in-service training becomes even more pronounced. Recognizing this, the Ministry of Health in Türkiye continuously plans and implements in-service training programs for healthcare workers. However, the effectiveness of these programs is determined not only by the knowledge and skills imparted, but also by their ability to influence employees' organizational behaviors positively.

Low employee engagement remains a global concern—Aon Hewitt (2014) reports that four out of every ten employees lack engagement with their work. This disengagement significantly contributes to employees' intention to leave, which in turn imposes substantial financial and strategic costs on organizations. Therefore, identifying factors that can foster engagement and reduce intention to leave has become a strategic priority for employers. In this context, the present study aims to investigate whether healthcare workers' perceptions of in-service training influence their organizational behaviors, particularly in terms of work engagement and intention to leave. The central research question is: "To what extent do healthcare workers' perceptions of in-service training influence their engagement with work and their intention to leave the organization?" To answer this question, the concepts of in-service training, work engagement, and intention to leave were first defined, and a structural equation modeling (SEM) approach was employed to test the hypothesized relationships among them.

Although numerous studies have explored the effects of in-service training, the literature specifically examining the perceived value of such training in relation to work engagement and intention to leave remains limited (Memon et al., 2016). Moreover, the existing study in this domain was conducted among oil and gas professionals in Malaysia, thus limiting its generalizability across different cultural and professional contexts. By focusing on healthcare workers within the Turkish healthcare system, the current study addresses this important gap. It provides insights that may enhance the cross-sectoral and cross-cultural applicability of the findings.

1. LITERATURE REVIEW

1.1. Perception of In-Service Training

In-service training is an event that aims to increase the efficiency of the services produced by the employee. With this training, employees may acquire the knowledge and skills necessary to perform their duties and responsibilities efficiently. The need for training is also increasing due to the rapid change in technology, differentiation of expectations and needs, and excessive specialization (Kaptangil, 2012). Bingöl (2014) defines in-service training as "planned training activities aimed at increasing quality and efficiency in the production and service process, minimizing accidents and error risks that may occur in this process, reducing costs, adapting developments in service delivery and marketing, increasing profits and savings, and continuously increasing the behavior, knowledge and skills of the workforce throughout their working life". According to the most general and accepted definition, in-service training equips employees who work for wages with the essential skills, knowledge, and attitudes related to their job roles (Öztürk & Sancak, 2007). There are many definitions of in-service training in the literature. However, the common point that draws attention in all definitions is that in-service training is a training that aims to increase the behavior, knowledge, skills, experience, and qualifications of employees related to their jobs.

The efficacy of in-service training is contingent upon the initial expectations and objectives of participants, as well as the perceptions they develop post-training. The alignment between pre-training anticipations and post-training perceptions significantly influences the overall training satisfaction. The degree to which an individual's pre-established learning goals and expectations are fulfilled determines their evaluative judgment of the training's effectiveness, ultimately shaping their commitment, self-efficacy, and motivation in subsequent professional applications (Tannenbaum et al., 1991). Therefore, the perception of in-service training refers to the evaluation of trainees about the training. It plays a vital role in the functioning of this process. In-service training perception consists of six sub-dimensions: Interaction, climate, courtesy, relevance, reliability, and physical conditions. Interaction refers to both the active or passive participation of the participants in the training and the relationships between the trainer and the participants during the training. Climate refers to how the environment in which the training takes place is perceived by the participant and the interest shown to the participant during the training. Relevance refers to the level of benefit that the training provides to the participant. Courtesy refers to the trainers' behavior towards the participants, while physical conditions refer to the characteristics of the facility where the training takes place. Reliability refers to the knowledge and experience of the trainer and/or the people who prepared the training program (Clemenz, 2001). In addition, Trainees' perceptions of in-service training are shaped by the intrinsic and extrinsic outcomes they obtain. Intrinsic outcomes encompass skill development, workplace motivation, and personal growth, while extrinsic outcomes relate to financial incentives, promotions, and

career advancement (Tran Huy & Dinh, 2022). Finally, as Clemenz (2001) mentioned, "People only learn what they want to learn, therefore, trainees' perceptions are all-important."

1.2. Work Engagement

Work engagement is defined as the ability to give oneself completely to one's work so that one does not lose track of time and does not want to take a break from work. Work engagement has a strong relationship with individual characteristics such as self-sufficiency, self-esteem, and optimism, and is positively affected by factors such as feedback on performance, rewards, and social support in the organization (Turgut, 2011).

Work engagement is one of the most important tools for enhancing an organization's performance. Research shows that high levels of work engagement increase employees' organizational citizenship behaviors (Rich et al., 2010), performance (Costa et al., 2015; Gruman & Saks, 2011), and job satisfaction (Lu et al., 2016). Furthermore, employees who are enthusiastic about their work tend to be more successful in developing their own resources, which leads to increased work efficiency (Takawira et al., 2014). High work engagement among employees often results in fewer burnout symptoms or lower levels of burnout (Maslach & Leiter, 1997).

Work engagement consists of the dimensions of vigor, absorption, and dedication (Schaufeli et al., 2002). The high energy level of the employee during the task, being mentally resilient, showing more effort and desire, being patient and persevering in the face of difficulties, are explained by the vigor dimension of work engagement. A person who feels a strong vigor while working is motivated by his/her work, resists the difficulties he/she face, and does not stop doing his/her job. In the dimension of dedication, the degree of importance that the employee attaches to his/her job and his/her sense of belonging as a result of believing that his/her job has a meaning and working more enthusiastically is expressed. People who are dedicated to their work think that their work serves a meaningful purpose; it inspires them, so they approach their work with great enthusiasm and take pride in their work. The absorption dimension is related to the employee's full focus on their job and working happily without taking a break (Alarcon & Lyons, 2011; Boz, 2021; Çankır & Arıkan, 2019; Schaufeli & Bakker, 2004; Takawira et al., 2014; Turgut, 2011). Work engagement is not a short-lived or passing state; it is a continuous condition (Koyuncu et al., 2006). For this reason, work engagement is an indicator of an employee's sense of happiness, peace, and overall well-being (Poon, 2013). Employees who show work engagement have more positive feelings towards their jobs and become more productive, open to business opportunities, self-confident, and optimistic (Cropanzano & Wright, 2001).

In the literature, studies such as those by Rahman et al. (2021), Johnson et al. (2018), Memon et al. (2016a), and Azeem and Paracha (2013) conclude that in-service training positively affects work engagement behavior and highlights the close relationship between these two variables. The first hypothesis based on the literature is as follows:

H₁: Perception of in-service training has a significant and positive effect on the level of work engagement.

1.3. Intention to Leave

Intentions to leave are plans that arise when employees are dissatisfied with the work conditions, lack certainty, and typically result in job search behavior. It is influenced by factors such as age, wage, gender, satisfaction with management, tenure, organizational commitment, compensation, justice, experience, job market, and education (Sousa-Poza & Henneberger, 2002; Sökmen & Şimşek, 2016). These factors can be classified as external (unions, alternative jobs,

unemployment, etc.), organizational (salary, management style, burnout, training opportunities, reward, degree of autonomy, etc.) and personal (personality, marital status, family, ability, age, etc.) (Arı et al., 2010; Dede et al., 2014; Okşit & Kılıç, 2019; Seyrek & İnal, 2017). For example, while unfavorable working conditions increase employees' intention to leave, periods of economic crisis with high unemployment rates often decrease these intentions (Gürbüz & Bekmezci, 2012).

For organizations, intentions to leave by low-performing and inefficient employees can be an opportunity. In this respect, the negative side of intention to leave is valid for employees who adapt to the organizational culture, have organizational commitment, are productive and have high performance (Çalışkan & Bekmezci, 2019). Job satisfaction and organizational commitment (Alzayed & Murshid, 2017; Lambert et al., 2001), employee empowerment (Kim & Fernandez, 2015), job insecurity (Rosenblatt & Ruvio, 1996), organizational culture (MacIntosh & Doherty, 2010), working conditions (Ercan, 2016), leadership style (Akça, 2017; Bilginoğlu & Yozgat, 2022; Lagerlund et al., 2015), managers' perception of talent management competencies (Boz, 2016), workplace bullying (Al-Jawazneh & Smadi, 2017) are among the many variables that influence the intention to leave a job.

Workplace issues create uncertainty and erode employees' trust in their organization. Coupled with job stress, this results in dissatisfaction, reduced motivation, and weakened organizational commitment, ultimately increasing the likelihood that employees will want to leave. However, providing in-service training that boosts employees' motivation and skills can address these issues and help decrease their intention to leave. Studies have also revealed that in-service training hurts intention to leave (Kesen, 2016; Memon et. al., 2016a; Nguyen & Shao, 2019; Okşit & Kılıç, 2019). Therefore, the second hypothesis is as follows:

H₂: In-service training perception has a significant and negative effect on intention to leave.

Saks (2006) asserts that work engagement is influenced by the employee's attitudes, intentions, and behaviors. Studies in the literature also reveal that employees who show work engagement are more committed to their organizations and have lower tendencies to leave (Baklaieva, 2016; Bhatnagar, 2012; Boz, 2021; Çankır & Arıkan, 2019; Gökaslan, 2018; Halbesleben & Wheeler, 2008; Memon et al., 2016b; Mxenge et al., 2014; Rusyandi, 2015; Saraswati & Lie, 2021; Thirapatsakun et al., 2014; Wesley & Krishnan, 2013; Yalabik et al., 2013). The study's third hypothesis is as follows:

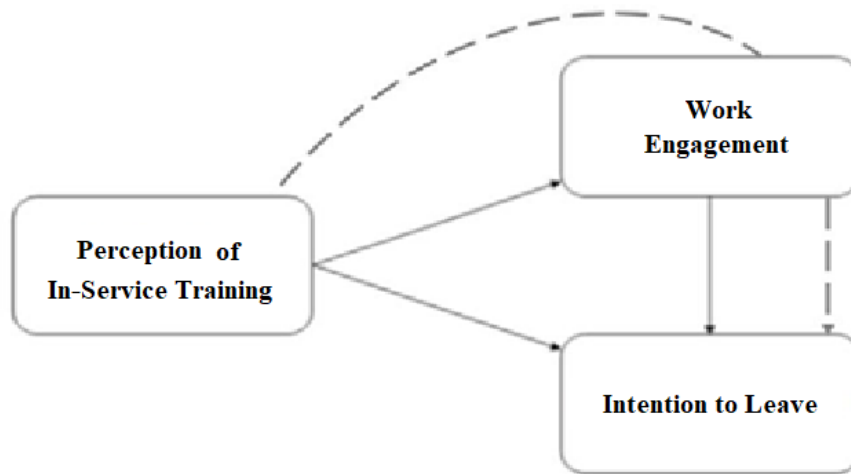
H₃: Work engagement level has a significant and negative effect on intention to leave.

The literature includes research indicating that work engagement mediates the impact of perceived investment in employee development (Shuck et al., 2014) and training satisfaction (Memon et al., 2016a) on employees' intention to leave. The mediation hypothesis based on these studies is as follows:

H₄: Work engagement mediates the relationship between in-service training perception and intention to leave.

The research model based on the hypotheses is shown in Figure 1.

Figure 1: Model of the Study



2. METHODOLOGY

2.1. Research Sample and Data Collection Tools

Data were collected face-to-face from healthcare personnel working in a public hospital through a questionnaire. The reasons for choosing this hospital are as follows: (1) The hospital management supported the research and provided the necessary permissions, (2) The hospital has regularly provided in-service training programs (Patient Safety, Nutrition Education, Infection Education, etc.) to all its staff in the last year, (3) It has healthcare professionals with different staff types. For the data collection process, first, permission was obtained from the University Ethics Committee, followed by written permission from the hospital management, and then the survey was conducted. The purpose of the survey was explained to the participants, and the application was carried out on a voluntary basis. It was aimed to collect the questionnaire to a total of 452 staff in the hospital using complete census sampling. However, the number of personnel who agreed to answer the questionnaire was 258. Therefore, the return rate of the questionnaire is 64%. To establish a sample with sufficient representational power, Yamane's (2001) sample size calculation formula was used:

$$n = N / (1 + N(e)^2)$$

In the formula, n represents the sample size, N denotes the population size, and e refers to the margin of error. At a 95% confidence level and a 5% margin of error, considering the 452 personnel at the hospital where the study was conducted, it was calculated that at least 208 participants were required. The study reached 258 participants; while this number is sufficient for statistical significance, it remains below the ideal range of 300-350 recommended for structural equation modeling (Kline, 2011). However, MacCallum et al. (1999) suggest that when the factor structure is strong and factor loadings are high, sample sizes between 100 and 200 may also be adequate. The questionnaire included 7 demographic questions and 42 items consisting of scales of variables. The variables of the study and the scales used are as follows:

Perception of in-service training (IT): A 30-item scale developed by Clemenz (2001) and translated into Turkish by Mahmutoğulları (2015) was used. The scale consists of six sub-dimensions: Interaction (I), climate (Cl), courtesy (Co), relevance (Rv), reliability (Rb) and physical conditions (P).

Work engagement (WE): A 9-item scale developed by Schaufeli and Bakker (2004) and analyzed for reliability and validity in Turkish by Özkalp and Meydan (2015), consisting of vigor (V), dedication (D) and assimilation (A) sub-dimensions was used.

Intention to leave (IL): The scale developed by Cammann et al. (1983) was used. The scale consists of three items and was adapted into Turkish by Gürbüz and Bekmezci (2012).

In the study, causal relationships between variables were examined. Data gathered from the questionnaire were input into SPSS 24 and AMOS 24 for analysis. The research model underwent testing through the Structural Equation Modeling method.

2.2. Analysis and Results

In the study, Structural Equation Modeling (SEM) was used to test the hypothesized relationships between the variables. SEM is used to determine the relationships between latent variables, which are inferred from the survey's items (observed variables). Frequently employed in determining the presence and intensity of these connections, SEM integrates regression and correlation methods. The choice of SEM stems from its capacity to reveal interactions among latent variables, which remain obscure with other methods, such as multiple regression, and its proficiency in evaluating more complex and challenging models (Yu, 2004).

The demographic characteristics of the participants are as follows (see Table 1). Gender distribution of the participants is balanced. The majority of the participants are married and in the 30-39 age range. Nurses/midwives constitute the majority with 33.7%. In terms of education level, associate's/bachelor's degrees ranked first with 77.1%, and secondary school ranked last with 0.8%. While 29.8% of the participants had 21 years or more of service.

Table 1: Demographic Characteristics of the Participants

Gender	Frequency	Percentage
Female	127	49.2
Male	131	50.8
Total	258	100.0
Marital Status	Frequency	Percentage
Married	189	73.3
Single	69	26.7
Total	258	100.0
Age Group	Frequency	Percentage
≤ 25	31	12.0
26-29	36	14.0
30-39	80	31.0
40-49	77	29.8
50 ≥	34	13.2
Total	258	100.0
Occupational Title	Frequency	Percentage
Doctor	39	15.1
Nurses/Midwives	87	33.7
Health Technician	46	17.8
Medical Secretary	19	7.4
Clerk	38	14.7
Other	29	11.2
Total	258	100.0
Education	Frequency	Percentage
Middle School	2	0.8
High School	25	9.7
Undergraduate/Bachelor's	199	77.1
Postgraduate	32	12.4
Total	258	100.0
Years of Service	Frequency	Percentage
≤1	13	5.0
1-5	47	18.2
6-10	58	22.5
11-15	35	13.6
16-20	28	10.9
21≥	77	29.8
Total	258	100.0
Years of Service at the Institution	Frequency	Percentage
≤1	31	12.0
1-5	87	33.7
6-10	41	15.9
11-15	48	18.6
16-20	17	6.6
21≥	34	13.2
Total	258	100.0

Data was collected through the questionnaires from 258 healthcare professionals. Thirteen of the collected questionnaires were excluded from the analysis due to incomplete and incorrect completion. Therefore, the analysis was conducted on 245 questionnaires. First, the skewness and kurtosis values were examined to determine the data distribution. It was observed that the values fell between -3 and +3, indicating a normal distribution (Shao, 2002). Then, the Kaiser-Meyer-Olkin (KMO) test and Bartlett's Sphericity (BS) test were performed. The KMO value was calculated as 0.848 ($KMO > 0.5$), and Bartlett's value was calculated as 0.00 ($p < 0.05$), and it was determined that the data set was suitable for factor analysis (Field, 2013).

After these calculations, Exploratory Factor Analysis (EFA) was started. Principal component analysis and varimax rotation methods were used in EFA. EFA results are presented in Table 2. The lower limit for factor loading was accepted as 0.5.

During the analysis, 14 items that loaded on more than one factor and did not load on any of the factors were necessarily removed from the analysis. As a result of the analysis, the physical conditions, climate, and interaction dimensions in the six-dimensional in-service training scale were merged into a single dimension (P, Cl, I), thereby reducing the scale to four dimensions. In the three-dimensional work engagement scale, the dimensions of vigor and dedication were combined into a single dimension (VD), resulting in a two-dimensional scale. This finding aligns with the results of Schaufeli et al. (2006), who reported that in some sectors, the vigor and dedication dimensions may exhibit high correlations and be combined into a single factor. Similar results have also been observed in Turkish adaptation studies (Özkalp & Meydan, 2015). The intention to leave scale, on the other hand, maintained its three-item and one-dimensional structure. Therefore, a total of 7 factors emerged as a result of EFA. The total variance explained was calculated as 70.026%. Reliability and validity analyses are also presented in Table 3.

Table 2: Exploratory Factor Analysis Results

	Component						Total Explained Variance	
	1	2	3	4	5	6	7	
IT_P_01	0.825							
IT_P_02	0.767							
IT_CI_03	0.701							
IT_I_03	0.682							
IT_I_04	0.648							17.055
IT_CI_01	0.636							
IT_P_03	0.621							
IT_CI_04	0.534							
IT_Co_01	0.526							
WE_V_02		0.841						
WE_D_01		0.837						
WE_V_03		0.828						
WE_D_02		0.824						32.919
WE_V_01		0.812						
WE_D_03		0.672						
IT_Rb_02			0.774					
IT_Rb_01			0.749					43.731
IT_Rb_03			0.683					
IL_03				0.834				
IL_02				0.824				51.931
IL_01				0.746				
IT_Rv_02					0.768			
IT_Rv_04					0.612			58.458
IT_Rv_03					0.600			
IT_Co_04						0.814		
IT_Co_03						0.574		64.428
WE_A_02							0.868	
WE_A_03							0.784	70.026

Table 3: Reliability and Validity Analyses I

Dimensions	Cr.'s Alpha	AVE	\sqrt{AVE}	CR	Correlations					
					PCII	VD	Rb	IL	Rv	Co
PCII	0.892	0.444	0.666	0.875						
VD	0.908	0.646	0.804	0.916	0.26					
Rb	0.846	0.542	0.736	0.779	0.77	0.27				
IL	0.853	0.643	0.802	0.843	-0.25	-0.52	-0.19			
Rv	0.800	0.441	0.664	0.700	0.70	0.24	0.75	-0.28		
Co	0.527	0.495	0.703	0.656	0.71	0.33	0.54	-0.26	0.63	
A	0.641	0.683	0.826	0.811	0.06	0.22	0.03	-0.20	0.06	0.15

PCII: Physical Conditions, Climate and Interaction; VD: Vigor and Dedication; Rb: Reliability; IL: Intention to Leave; Rv: Relevance; Co: Courtesy; A: Assimilation

For the reliability analysis, Cronbach's alpha and CR values were analyzed. A Cronbach's alpha value of 0.60 and a CR value above 0.70 were taken as a basis (Bagozzi & Yi, 2012; Field, 2013). The courtesy (Co) dimension was excluded from the analysis because it did not meet the reliability requirements. PCII, Rb, and Rv dimensions with high correlation levels (>0.70) were merged, and the new dimension was named IT since all of the dimensions were included under the In-Service Training variable. This phenomenon is also supported in the literature. Clemenz (2001) stated that these three dimensions exhibit high correlations with each other and, in some cases, may be combined into a single factor. Similarly, Mahmutogullari (2015), in his Turkish adaptation study, suggested that cultural differences might lead to the merging of these dimensions. Additionally, the unique structure of the healthcare sector may have contributed to the consolidation of these dimensions into one factor. Healthcare workers likely perceive the physical conditions of the training environment, the training climate, and the interaction during training as a holistic entity.

The new values are presented in Table 4.

Table 4: Reliability and Validity Analyses II

Dimensions	Cr.'s Alpha	AVE	\sqrt{AVE}	CR	Correlations		
					IT	VD	A
IT	0.922	0.463	0.681	0.927			
VD	0.908	0.646	0.804	0.916	0.28		
IL	0.853	0.643	0.802	0.843	-0.27	-0.52	
A	0.641	0.683	0.826	0.811	0.06	0.29	-0.25

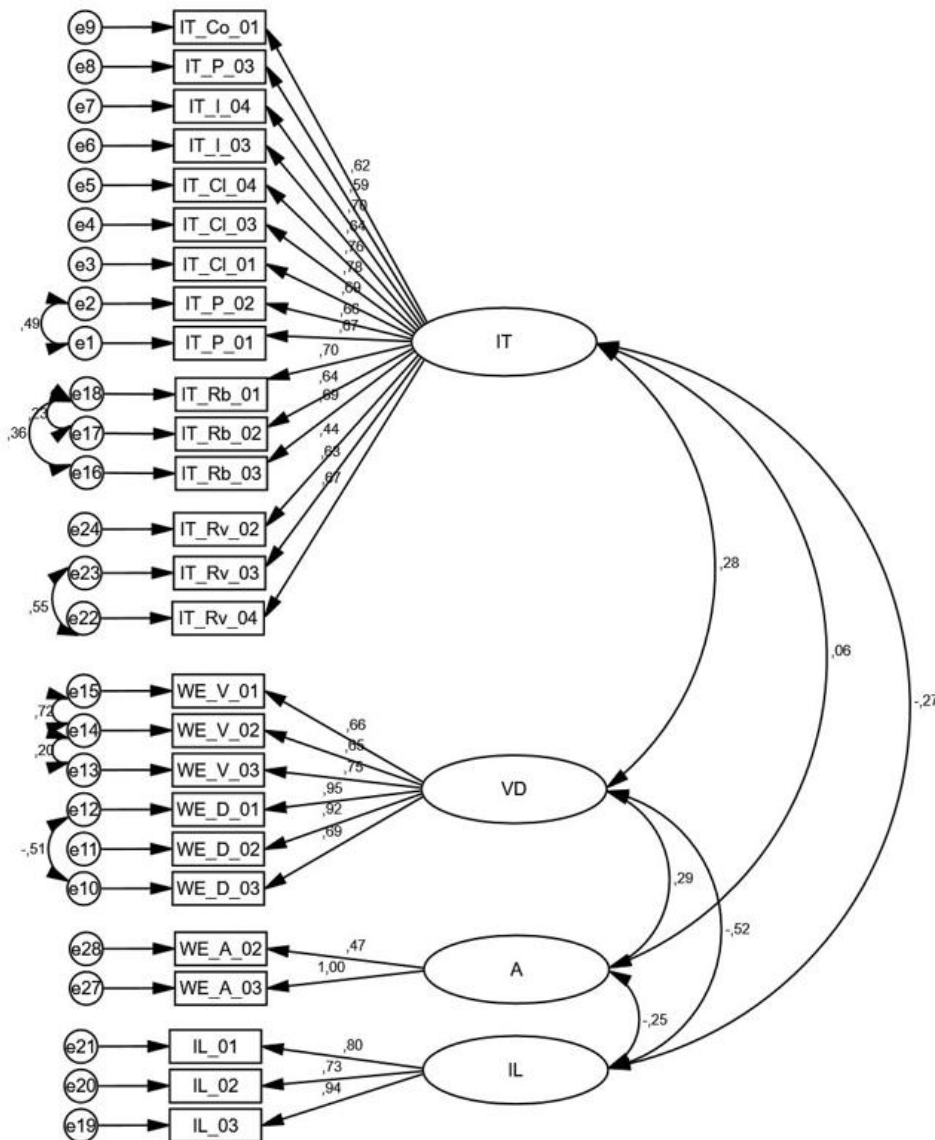
IT: Perception of In-service Training; VD: Vigor and Dedication; IL: Intention to Leave; A: Assimilation

In the validity analysis, it was checked whether the conditions of convergent validity and discriminant validity were met. AVE values higher than 0.50 (the small difference in the IT dimension was disregarded) and CR values higher than the AVE values indicate that the scales demonstrate convergent validity. Square root AVE values being higher than correlations are also indicative of discriminant validity (Hair et al., 2014).

Confirmatory factor analysis (CFA) was also conducted to test construct validity (Figure 2).

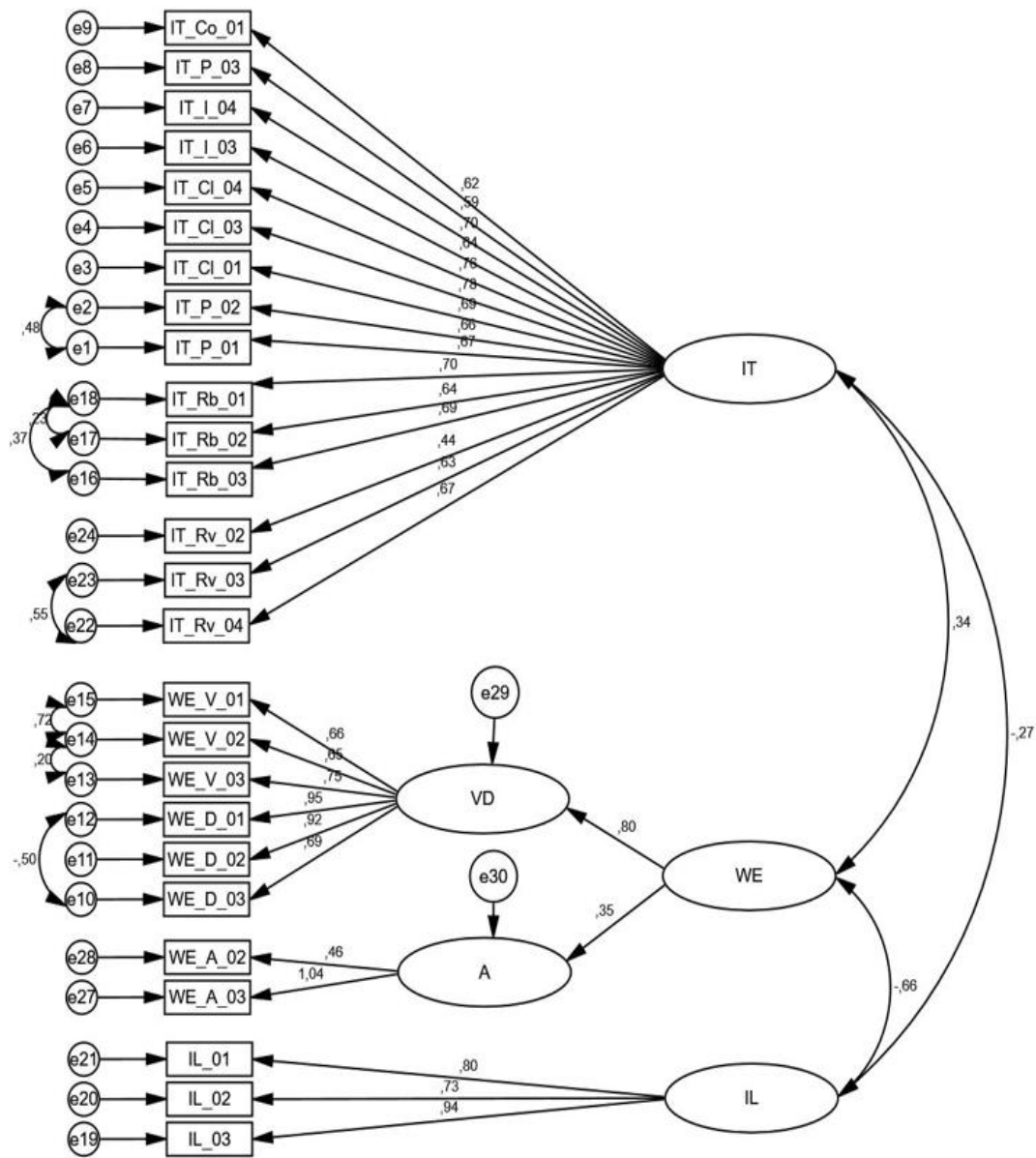
Since the work engagement scale exhibits a two-dimensional structure, a second-order CFA was also conducted (Figure 3). In Confirmatory Factor Analysis, the goodness of fit values of the model should be at least at an acceptable fit level (Bagozzi & Yi, 1988; Kline, 1998).

Figure 2: First Order CFA



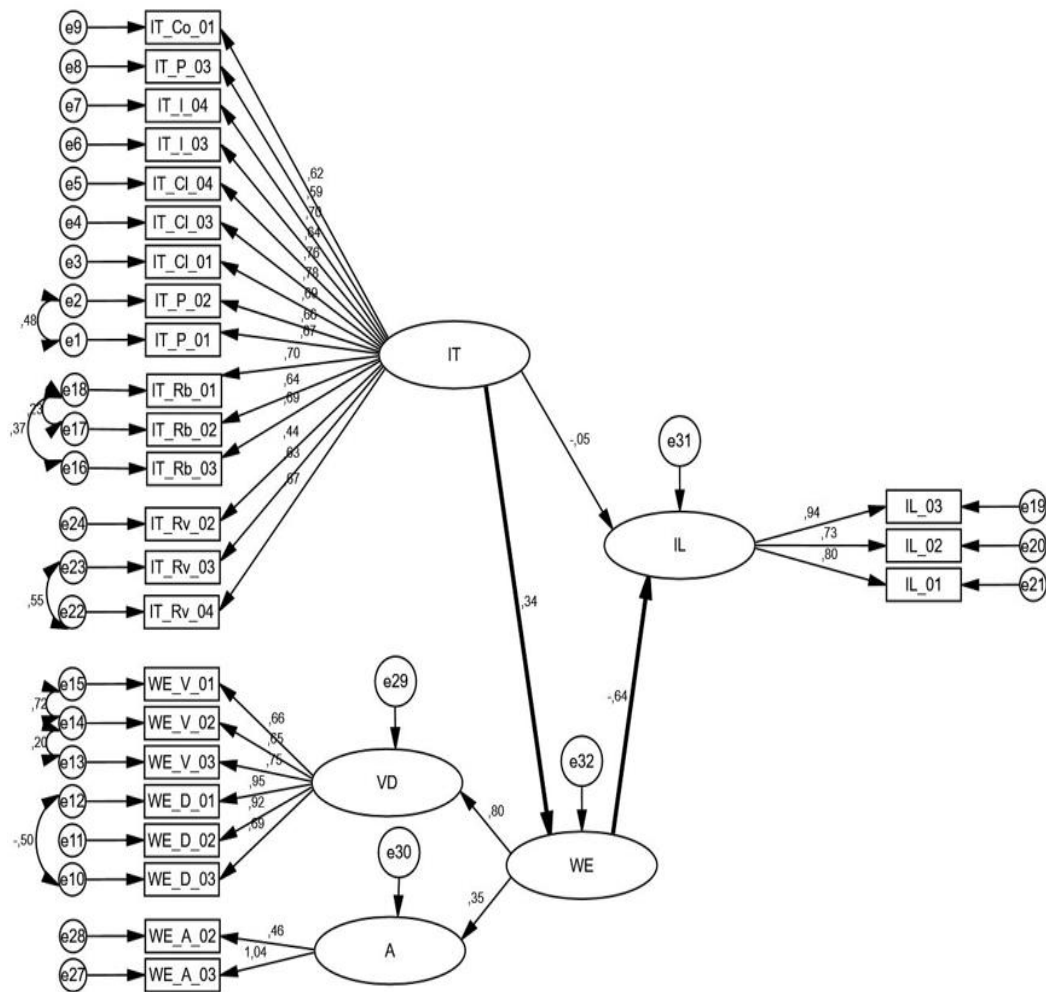
Goodness of fit values of the first-order CFA in Figure 2: $\chi^2/df=2.624$; TLI=0.863; CFI=0.880; RMSEA=0.082; SRMR=0.065; NFI=0.821 and GFI=0.814. The goodness of fit values of the second-order CFA in Figure 3 are as follows: $\chi^2/df=2.619$; TLI=0.864; CFI=0.880; RMSEA=0.081; SRMR=0.065; NFI=0.821 and GFI=0.813. In this study, the χ^2/df ratio was considered the primary validity criterion. According to the first- and second-order CFA goodness-of-fit results, construct validity was also ensured (Hu & Bentler, 1998).

Figure 3: Second order CFA



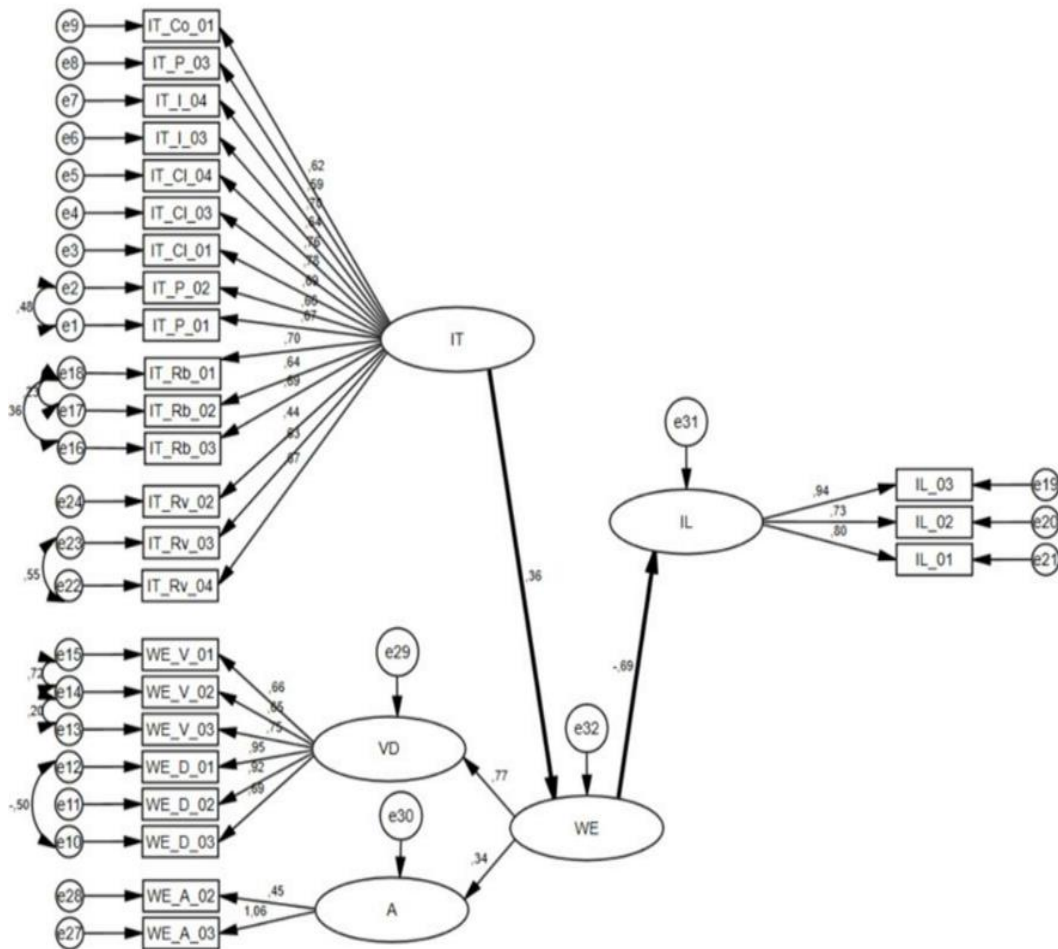
After CFA, Path Analysis, was conducted. The model established with path analysis was tested. The path analysis results are depicted in Figure 4. Upon examining the goodness of fit values, it was concluded that the model is acceptable ($\chi^2/df=2.619$; TLI=0.864; CFI=0.880; RMSEA=0.082; SRMR=0.065; NFI=0.821 and GFI=0.813) (Hu and Bentler, 1998).

Figure 4: Path Analysis



Lastly, the indirect (mediated) effect of in-service training on intention to leave was tested. The indirect effect of in-service training on intention to leave can be seen in Figure 5. Goodness of fit values of the mediated effect are also acceptable ($\chi^2/df=2.611$; TLI=0.864; CFI=0.880; RMSEA=0.081; SRMR=0.065; NFI=0.820 and GFI=0.813).

Figure 5: Indirect effect of IT on IL



Finally, the existence of unidirectional causal relationships between the variables was determined by looking at the significance values. Thus, the acceptance/rejection status of the hypotheses was determined. The results of the analysis are presented in Table 5.

Table 5: Hypothesis Tests

Effect	St.Reg. Coefficient	Significance	Conclusion
H ₁ Perception of In-Service Training (IT) -> Work Engagement (WE)	0.336	< 0.001	Accepted
H ₂ Perception of In-Service Training (IT) -> Intention to Leave (IL)	-0.052	0.549	Rejected
H ₃ Work Engagement (WE) -> Intention to Leave (IL)	-0.639	< 0.001	Accepted
H ₄ Perception of In-Service Training (IT) -> Work Engagement (WE) -> Intention to Leave (IL)	-0.248	< 0.001	Accepted

According to these results, it is understood that the perception of in-service training has a positive and significant ($p < 0.001$) effect on work engagement; therefore, Hypothesis H_1 is accepted. It is observed that in-service training negatively affects the intention to leave; however, this effect is not significant ($p=0.549$). Therefore, H_2 has been rejected. Since it is determined that work engagement has a negative and significant effect on intention to leave ($p<0.001$), hypothesis H_3 is also accepted. Finally, the perception of in-service training has a negative and significant ($p<0.001$) indirect effect on intention to leave, and hypothesis H_4 is accepted.

3. CONCLUSION

The findings of this study underline the pivotal role of in-service training perception in shaping employees' work engagement and their intention to leave. The results indicate a significant and positive association between in-service training perception and work engagement, suggesting that a stronger perception of training is associated with higher employee engagement. Prior research supports this relationship (Azeem & Paracha, 2013; Johnson et al., 2018; Rahman et al., 2021). However, in contrast to some previous studies (Kesen, 2016; Martini et al., 2023; Memon et al., 2016a; Nguyen & Shao, 2019; Okşit & Kılıç, 2019), this study finds no significant direct effect of in-service training perception on the intention to leave. Several factors may explain this divergence. First, the research was conducted in the public sector, where a majority of employees in Türkiye's public hospitals benefit from permanent employment status and job security. This stability may mitigate intention to leave, particularly during economic uncertainty (Gürbüz & Bekmezci, 2012). Second, the healthcare sector has distinctive attributes, including a strong professional commitment that often surpasses organizational commitment (Carnevale et al., 2019), potentially diminishing the direct impact of institutional factors like in-service training perception on intention to leave. Third, the mandatory nature of in-service training at the study site may have influenced results. Employees who perceive training as compulsory rather than developmental may exhibit reduced engagement with training initiatives, thereby weakening its effect on intention to leave. Finally, intention to leave is a multifaceted construct influenced by an array of factors, including job satisfaction, work environment, career advancement opportunities, salary expectations, and work-life balance. In countries like Türkiye, where high unemployment rates constrain alternative job opportunities, employees may exhibit lower intention to leave despite their perceptions of in-service training (Sökmen & Şimşek, 2016).

Although in-service training perception does not exert a direct effect on intention to leave, this study finds an indirect effect mediated through work engagement. Furthermore, a significant negative relationship exists between work engagement and intention to leave, reinforcing the notion that higher work engagement corresponds with lower intention to leave. This inverse relationship has been well-documented in the literature (Anand & Madhuvanthi, 2012; Baklaieva, 2016; Bhatnagar, 2012; Boz, 2021; Çankır & Arıkan, 2019; Gökaslan, 2018; Halbesleben & Wheeler, 2008; Koyuncu et al., 2006; Memon et al., 2016b; Saks, 2006; Takawira et al., 2014; Thirapatsakun et al., 2014; Wesley & Krishnan, 2013; Yalabik et al., 2013).

This study makes a significant contribution by examining not only the direct influence of in-service training perception but also its indirect impact through work engagement. By offering a more nuanced understanding of these interrelations, it extends the existing literature on organizational behavior. Previous studies have predominantly focused on assessing the effectiveness of in-service training, identifying training needs, and evaluating the effectiveness of in-service training (Doğan & Kızılboğa Özasan, 2024; Dönmez et al., 2023; Savcı et al., 2021; Tekir, 2021; Yüksel & Kösterelioğlu, 2023). Others have explored the links between in-service training

and organizational commitment (Çulha, 2008; Dombaycı & Gürkan, 2022; Sezgin & Ünlüöner, 2011; Şen & Aktuğ, 2017) or between in-service training and intention to leave (Okşit & Kılıç, 2019). However, few studies have simultaneously examined both constructs and their direct and indirect effects on healthcare professionals, a gap this study seeks to address. One key limitation of this study is its sample size. The findings are based on data from 258 respondents, a sample that may not sufficiently represent the broader population, thereby limiting the generalizability of the results. Future research should aim to expand the sample size to enhance the robustness of findings. Additionally, since this study focuses on healthcare sector employees, further investigations incorporating diverse sectors and additional variables would offer a more comprehensive understanding of the relationship between in-service training and organizational behavior.

AUTHOR STATEMENT

Statement of Research and Publication Ethics

This study has been prepared in accordance with scientific research and publication ethics.

Ethics Committee Approval

For this research, the Ethics Committee of the University of Çankırı Karatekin approval was obtained with the date of 01.03.2021 and the decision numbered 520.

Author Contributions

The authors contributed equally to the study.

Conflict of Interest

There is no conflict of interest for the authors or third parties arising from the study.

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