

# The Impact of Employee Training and Innovation on Turnover Intention: An Empirical Research

**Mustafa Kesen**

Department of Human Resource Management, Soke Faculty of Business Administration, Adnan Menderes University, Turkey, m\_kesen@hotmail.com

DOI: 10.6007/IJARBSS/v6-i1/1987 URL: <http://dx.doi.org/10.6007/IJARBSS/v6-i1/1987>

## **Abstract**

Companies pay special attention to employee turnover rates because losing qualified employees causes many financial and nonfinancial problems. Thus managers should find permanent solutions for disruptive turnovers. Literature gives strong cues for preventing high turnover rates. This study makes significant contributions to turnover literature by using empirical research results. The research has been carried out with 239 employees working in 36 different service firms operating in Turkey and it focuses on whether employee training and innovation can be used as instruments to decrease turnovers. While innovation and turnover scales were measured in one dimension, employee training scale was measured in two dimensions as extensive training and training in multiple functions. Results indicate that all variables are significantly correlated with each other. It is observed that innovation and training in multiple functions variables are having a significant power for decreasing turnover. Besides it is seen that the variable of innovation does not mediate the relationship between employee training and turnover.

**Keywords:** Employee training, Innovation, Turnover Intention, Turkish Case, Empirical Research

**JEL Code Classification:** M12, M53, O35

## **Introduction**

Employee turnover in organizations has long been a central focus among researchers (Lee and Mitchell 1994). It is mostly seen as an undesired situation by organizations and they try to find permanent solutions to this annoying problem. Human resource departments and organizational behavior experts in organizations focus on this negative organizational outcome and they struggle to decrease employee quits to the accepted levels.

In different studies, many researchers and scholars examined both the relationship between turnover intention-employee training and turnover intention-innovation (e.g. Bhatnagar 2012; Huselid 1995; Batt 1999 Elmacı and Yalçın 2012). But the effects of training and innovation together on turnover have remained as an area that needs improvement. Training improves the knowledge, skills, and abilities of employees. Through trained employees, organizations conduct their activities according to organizational standards and this in turn provides organizations to reach their special and general goals. Besides, training obviously makes significant contributions to the market value of employees. Innovation is acquisition of new

things from the old ones in short and it necessitates improving different and new ideas and implementations of these ideas. The training and development investments of an organization create a climate for constant learning that facilitates the exchange of knowledge and ideas among employees, thereby promoting the generation of new knowledge and innovation (Lau and Ngo 2004). The current study elaborates the impact of innovation and training on employee turnover and the mediating effect of innovations on the relationship between training and turnover intention.

### **Conceptual Framework**

In today's world, organizations see their human resources as the most significant value of their organizations. This significance pushes organizations not to lose their most valuable asset. For this reason, they struggle for decreasing turnover rates thus they will not be deprived of competent employees and they will get rid of costs of recruitment and selection processes. Turnover is defined as the "individual movement across the membership boundary of an organization" (Price 2001: 600). Quits, withdrawing, attrition, mobility or migration are the concepts that have the same meaning with turnover in the literature. Turnover is evaluated as a managerial problem that requires attention. People leave their institution if they are not happy with their jobs and job alternatives are available (Hom and Kinicki 2001).

Vandenberg and Nelson (1999) stated that turnover intention is motivated by the two parties; individual or organization. According to them, turnover is the dissatisfaction of : (1) the individual with some aspects of work environment including the job, co-workers, or organization, or (2) the organization with some aspects of individual, such as poor performance, or attendance.

There are many ways of preventing high turnover rates suggested in the literature. One of them is training employees. Training is providing employees doing a specific job or to rise up their skill, knowledge, and behavior. It is a process of sharing skill and knowledge to extend and develop capabilities of employees thus they can achieve better job performance.

Employee training can increase the motivation and commitment of employees to the tasks of their organization (Jackson and Schuler 1995). Employee training has a significant and positive effect on work outcomes (Dastmalchian and Blyton 1992), on workplace and industrial relations climate (Dastmalchian et al. 1991), on the quality of customer service and productivity (Castellanos and Martin 2011), and on firms' financial performance (Bassi et al. 2002; Castellanos and Martin 2011).

Training is divided into two categories in this study; extensive training and training in multiple functions. Extensive training expands employees' abilities and skills in current job and thus it broadens the horizon of the employees. Dessler (2006) refers to training as methods that are applied to provide the new recruits with the skills needed to perform their duties. Extensive training programs have been proven to be important ingredients of efficient performance (Terpstra and Rozell 1993). Through training not only individual performance increases but also organizational performance goes up higher positions. Cooke (2000) argued that training is the tool to develop knowledge and skills as means of increasing individual's performance. Singh

(2004) concluded that training is having positive effects on organization and employees' performance.

Training in multiple functions is to train individuals in order to increase their information, skill and knowledge in different areas. It provides employees to have different capabilities about different jobs. Employees may be provided with extensive training programs in multiple functions and training on job skills (Ahmad and Schroeder 2003). Quality of job is high and costs are low in organizations which trains employees in multiple functions (Olorunniwo and Udo 2002: 36). It provides a meaningful integrity between subunits, departments and jobs. Therefore organizations can reach their objectives within a short time and by less cost. Employees who improve their capabilities are expected to be happy and embed to their job.

A significant question here is that how training affects turnover intention of employees. Literature gives strong cues about this subject. Providing training shows employees that the management is concerned about their well being and career development. This display of attention can halt turnover among employees (Laser 1980). In addition, this builds loyalty to the employer and turnovers may reduce. Some researchers suggest that training may lead to an increase in turnover; however some authors declare that training is a tool which can be used for the employee retention (Colarelli and Montei 1996; Becker 1993). The efficient training programs resulted in improved production decrease employee turnover, and provide better job satisfaction of the employees (Harris 1990).

Training-oriented organizations are expected to give importance training in multiple functions and their members will be having better developed skills. This makes these employees more marketable than their counterparts. According to Khilji and Wang (2007) in a competitive environment, these employees from higher performing organizations, with a greater awareness, higher expectation of development oriented human resource management systems, and better developed skills, are more likely to hop jobs if they are not satisfied with human resource practices in their respective organizations.

This study supports the idea that employee training can affect turnover intentions in that it decreases dysfunctional turnovers. Because training brings many advantages to both individual and organization, this positive atmosphere is not expected to push employees quitting their job instead they will mostly be struggling for not to leave their job and organization. According to these notions, it is hypothesized that;

*H1: Employee training will be negatively related to turnover.*

Innovation is thought as a second factor that affects turnover intention in this study. The European Commission defines innovation as the reconstruction and expansion of a range of products and services and the related markets, the creation of new production, supply, and distribution methods, and the implementation of changes in management, the organization of labor, working conditions and the skills of the workforce.

Innovation creates dynamism and it can trigger a transformation process in the organization thus organization can experience productivity growth. It brings new perspectives beyond the traditional views and applications to the organization. Organizations having an innovative climate can motivate their members and support their creativity.

The relationship between turnover and innovation is not much studied area in the literature. Managers may think about that whether making some type innovation in the organization causes employees to quit job. This subject needs different empirical studies in different firms because while some employees can welcomes innovations others can resists changes. Literature review shows that there are different data about the relationship between turnover intention and innovations. The study of Elmacı and Yalçın (2012) put forward that there is no relationship between innovation power and total turnover of organizations. On the other hand, Ettlíe (1985) and Price (1977) suggest that turnover is directly and negatively related to innovation.

While turnover mostly brings disadvantages to organizations, it sometimes causes some advantages in terms of innovation. According to Guidice et.al. (2009) while turnover can be disruptive to the organization, it also provides additional learning and innovation opportunities as new members enter and change the social fabric and structure of the organization.

This study is built on the idea of negative relationship between innovation and turnover. The notion behind this claim is that innovation can create a positive work environment, improve employee abilities while they are adjusting new processes and thus employees can psychologically reset themselves by getting rid of monotony. Based on this idea, the generated hypothesis will be:

*H2: Innovation will be negatively associated with turnover.*

One of the main objectives of this study is testing the mediation effect of innovation. It is thought that innovation is an important mechanism in the relationship between employee training and turnover. On this basis, a third hypothesis can be generated:

*H3: Innovation should mediate the relationship between employee training and turnover.*

### **The Research Method and Model**

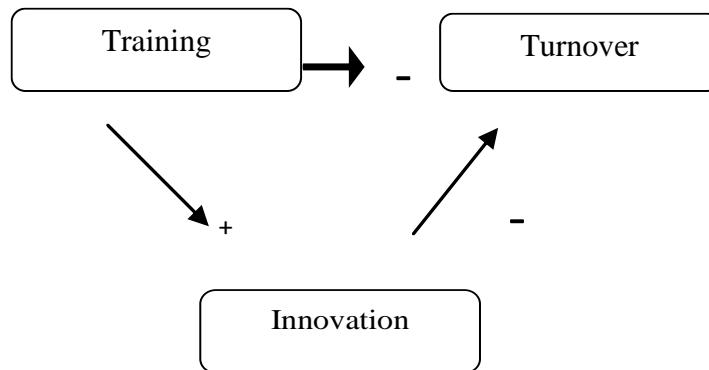
This study has been carried out with 36 different service firms including banking sector and other financial institutions which operate in Turkey. In order to investigate the relationship between variables, a survey has been conducted by using questionnaires. 314 questionnaires were given to service firms. Each questionnaire was filled by an individual and 257 of 314 questionnaires returned as filled. After collection of these questionnaires, it is observed that 239 of them were ready to analyze. The analysis and results of this study are based on these 239 person's ideas and perspectives.

In the research, 58 of the employees were between the ages of 20–25 years old while 120 were between the ages of 26–35. The remaining 55 employees were between the ages of 36–45 years old, and 6 were over 46 years old. 175 of the employees were male and 64 were female. 21 of employees had a high school education, 201 were university graduates and 17 employees had postgraduate qualifications. 171 employees had work experience of between 0–5 years, 48 had work experience of between 6–10 years, 14 had work experience of between 11–20 years and 6 had work experience of more than 20 years. 99 employees were officers, 73 employees were first line managers and 53 were middle line managers and 14 were top-level managers.

The constructs in this study are measured by using measurement scales adopted from prior studies. All constructs are measured using a five-point Likert scales with anchors strongly

disagree (1) and strongly agree (5). Items for measuring extensive training including 9 questions have been developed based on Rogg et al. (2001), the items of training in multiple functions including 4 questions have been adopted from Ahmad and Schroeder (2003). Items measuring innovation perception including 9 questions have been adopted from Pelham and Wilson (1996) and the items for turnover intention including 7 questions have been developed based on the studies of Cook et al. (1981) and Hom and Griffeth (1991). The research model is as shown in Figure 1.

Figure 1: Research Model



**Measure of Validation**

In this study, the traditional techniques of exploratory factor analysis, item-total correlations, and coefficient alpha have been used to assess the psychometric properties of the measurement scales. First, one exploratory factor analysis was conducted for four different dimensions by using a Varimax Rotation procedure. As shown in Table 1, each item has a factor loading well above 0.40, a common threshold for acceptance (Basilevsky 1994). As it was expected, a four-factor solution (extensive training, training in multiple functions, innovation and turnover) was extracted (using eigenvalue =1 as the cutoff point). All items were loaded with high coefficients onto their respective factors and with substantially lower coefficients onto other dimensions.

KMO and Bartlett's Test indicating the suitability of data for structure detection was conducted. The result of this test were ,864 in the ,00 significance level. Total variance explained for this factor analysis was 65,31 %. Reliability scores, the degree to which an assessment tool produces stable and consistent results, were measured for items. The results in terms of coefficient alpha are ,888 for extensive training, ,857 for training in multiple functions, ,946 for turnover intention and ,925 for innovation. As it is observed, reliability scores meet expectations.

**Table 1: Factor Analysis**

	1	2	3	4
Extensive training 1			,488	
Extensive training 2			,501	
Extensive training 3			,706	
Extensive training 4			,750	
Extensive training 5			,792	
Extensive training 6			,735	
Extensive training 7			,794	
Extensive training 8			,706	
Extensive training 9			,558	
Training in Multiple Functions1				,644
Training in Multiple Functions2				,852
Training in Multiple Functions3				,864
Training in Multiple Functions4				,703
Turnover1		,859		
Turnover2		,872		
Turnover3		,915		
Turnover4		,924		
Turnover5		,859		
Turnover6		,841		
Turnover7		,753		
Innovation1	,681			
Innovation2	,742			
Innovation3	,812			
Innovation4	,834			
Innovation5	,822			
Innovation6	,777			
Innovation7	,783			

Innovation8	,785
Innovation9	,684

Correlations, construct means and standard deviations are presented in Table 2. As shown in Table 2, there are significant correlations between variables. While there are significant positive correlations between extensive training-training in multiple functions, extensive training-innovation and training in multiple functions-innovation, there are significant negative correlations between extensive training-turnover, training in multiple functions-turnover and turnover-innovation.

**Analysis, Findings and Interpretation**

Three sequential regression models have been determined to test the relationships depicted in Figure 1. In the first model, as shown in the Table 3, turnover is posited as the dependent variable and demographic variables are posited as the independent variables. It is seen that all demographic variables except age have a significant impact on turnover. In the second model, both demographic variables and training are posited as the predictors of turnover. The results indicate that all demographic variables except age and training in multiple functions have important influences on turnover.

**Table 2. Means, Standard Deviations and Correlations**

	Mean	S.D.	Extensive Training	Training in Multiple Functions	Turnover	Innovation
Extensive Training	3,71	,797	1			
Training in Multiple Functions	3,86	,914	,467**	1		
Turnover	2,97	1,081	-,192**	-,237**	1	
Innovation	3,71	,784	,435**	,396**	-,163*	1

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

**Table 3. Results of sequential regression analyses.**

Independents	Dependent Variables					
	Turnover (Model 1)		Turnover (Model 2)		Turnover (Model 3)	
	Std.B.	t value	Std.B.	t value	Std.B.	t value
Age	,078	,926	,101	1,238	,103	1,260
Job Position	,258	3,508**	,225	3,125**	,220	2,998**
Work Experience	-,186	-2,260*	-,220	-2,748**	-,223	-2,763**
Gender	-,152	-2,438**	-,158	-2,618**	-,156	-2,574*
Educational Level	,176	2,644**	,178	2,759**	,178	2,755**
Extensive Training			-,095	-1,419	-,088	-1,253
Training in Multiple Func.			-,195	-2,927**	-,190	-2,766**
Innovation					-,023	-,337
	R <sup>2</sup> = ,145		R <sup>2</sup> = ,208		R <sup>2</sup> = ,208	
	F = 7,999		F = 8,662		F = 7,564	

N = 239 ; \*\*p < .01; \*p < .05

In the third model, turnover is posited as the dependent variable and the demographic variables, training and innovation variables are posited as the independent variables. It is observed that, as in model 2, all demographic variables except age and training in multiple functions are significantly affecting turnover but extensive training and innovation are not significantly related to turnover.

The demographic variables and training as a whole explain 20,8 % of total variance in turnover measurements. When innovation is added to the analysis, no change is observed in the total variance. Before evaluating the results of Table 4, these results give strong cues in that innovation is not a mediator.

Table 4 shows the results the effect of mediation according to regression analysis. According to this table, in Model 1, a significant and positive relationship is observed between training and



innovation ( $\beta=.483$ ;  $p<.01$ ). Model 2 shows that there is a statistically important and negative relationship between turnover and innovation ( $\beta=-.163$ ;  $p<.01$ ). Based on this result it can be said that the increase in innovations may be helpful in decreasing turnovers. Therefore hypothesis 2 is supported. Model 3 looks for the effect of training on turnover. Based on the results, training is significantly and negatively affecting turnovers ( $\beta=-.252$ ;  $p<.01$ ). In the light of this result hypothesis 1 is supported. Final model shows the relationship between turnover and both training and innovation variables. While training has a significant and negative impact on turnover ( $\beta=-.226$ ;  $p<.01$ ), innovation has no significant effect on turnover. So innovation has no mediation effect on the relationship between training and turnover. This result shows the rejection of hypothesis 3.

**Table 4. Results of regression analysis showing the effect of mediation.**

Independents	Dependent Variables							
	Innovation (Model 1)		Turnover (Model 2)		Turnover (Model 3)		Turnover (Model 4)	
	Std. B	t value	Std. B	t value	Std. B	t value	Std. B	t value
Training	,483	8,500**	-	-	-.252	4,004**	-.226	3,140**
Innovation	-	-	-.163	2,542**	-	-	-.054	-.749
	R <sup>2</sup> =.234		R <sup>2</sup> =.027		R <sup>2</sup> =.063		R <sup>2</sup> =.066	
	F=72,245		F=6,464		F=16,035		F=8,283	

N =239 ; \*\*p <.01

**Conclusion**

This study has explored the relationships among employee training, innovation and turnover. Therefore, this study has implications for a variety of practitioners including managers and human resources managers in general.

All variables appear to have significant correlations with each other in this study. Correlations among the indicators of training activities and the indicator of turnover are at acceptable level. Both extensive training and training in multiple functions have negative correlations with turnover. This result indicates that extensive training and training in multiple functions can be

used as a tool for decreasing high turnover rates. Similarly, there is a negative correlation between innovation and turnover. This result shows that employees see innovations as a catalyzer for achieving success in their job. A positive atmosphere comes with organizational change by innovation and these reforms lead to retention of employees in the organizations.

One of the findings of this study is that a negative and significant relationship exists between training and turnover. This relationship supports earlier research. As Harris (1990) stated, efficient training programs are expected to result in improved production and decrease in employee turnover. This finding has important implications for managers. In order to achieve success in retention of employees, they should utilize the positive impacts of training on turnovers. In this study training practices are evaluated from two perspectives; extensive training and training in multiple functions. Based on the regression analysis, while training in multiple functions has a significant role in decreasing turnovers, extensive training has no an important effect on turnover. By training in multiple functions, employees discern what they can do in different jobs. On the one hand they can develop their physical and mental abilities by training in multiple functions, on the other hand they can get rid of the monotony that results from doing the same job. Besides, employees can replace other's positions in the absence of their colleague and thus organization does not experience a chaos. All these positivity in an organization provided by training in multiple functions are supposed to decrease negativity resulting from turnovers.

Another finding is that innovations can help an organization to halt turnovers. Innovative environment in an organization may hinder monotony, hostile, suspicious and disparaging attitudes toward work situations and social interactions. Dynamism provided by innovations can reset employees' perceptions, old ideas and psychological environment in addition to reorganizing physical environment. As training in multiple functions do, innovations may keep away employees from monotony. Thus organizations can clear off the reasons that lead to turnover by providing innovative applications in the firm. On the other hand it is possible for innovations to cause increase in turnovers, if a negative innovation culture and resistance to change exists in organization. If managers cannot use innovations positive power in the organization, they may cause an increase in turnovers.

One of the main objectives of this study is to determine whether innovation is mediator in the relationship between turnover and training. It was thought that innovation is a mechanism or process on the relationship between training and turnover. However research finding doesn't support this claim. So it is concluded that innovation does not serve to clarify the nature of the relationship between the training and turnover.

### References

- Ahmad, S. & Schroeder, R.G. (2003). The Impact of Human Management Practices on Operational Performance: Recognizing Country and Industry Differences. *Journal of Operations Management*, 21, 19–43.
- Basilevsky, A. (1994). *Statistical Factor Analysis and Related Methods*. New York: Wiley.

- Bassi, L. J., Ludwig, J., McMurrer, D. P. & Van Buren, M. (2002). Profiting from learning: Firm-level effects of training investments and market implications. *Singapore Management Review*, 24(3), 61–76.
- Batt, R. (1999). Work Organization, Technology, and Performance in Customer Service and Sales. *Industrial and Labor Relations Review*, 52(4), 539–64.
- Becker, G. S. (1993). *Human capital: A theoretical and empirical analysis with special reference to education* (3rd ed.). Chicago, IL: University of Chicago Press.  
<http://dx.doi.org/10.7208/chicago/9780226041223.001.0001>
- Bhatnagar, J. (2012). Management of innovation: role of psychological empowerment, work engagement and turnover intention in the Indian context. *The International Journal of Human Resource Management*, 23(5), 928-951.
- Castellanos, R. M. M. & Martin, M. Y. S. (2011). Training as a source of competitive advantage: Performance impact and the role of firm strategy, the Spanish Case. *International Journal of Human Resource Management*, 22(3), 574–594.
- Colarelli, S. M. & Montei, M. S. (1996). Some contextual influences on training utilization. *The Journal of Applied Behavioral Science*, 32(3), 306-322.  
<http://dx.doi.org/10.1177/0021886396323005>
- Cook J.D., Hepwart S.J., Wall T.D. & War P.B. (1981). *The experience of work a compendium and Review of 249 Measures and Their Use*. London: Academic pres.
- Cooke, F. L. (2000). *Human Resource Strategy to improve Organizational Performance: A route for British firms*. Working Paper No 9 EWERC, Manchester School of Management.
- Dastmalchian, A. & Blyton, P. (1992). Organizational structure, HR practices and industrial relations. *Personnel Review*, 25, 58–68.
- Datmalchian, A., Blyton, P. & Adamson, R. (1991) *Climate of workplace relations*. London/New York: Routledge.
- Dessler, G. (2006). *A framework for human resource management*. Upper Saddle River. NJ: Pearson/Prentice Hall.
- Elmaci, O. & Yalçın, M. (2012). Measuring innovation power of businesses: A regional research in food and agricultural industry. *Journal of the Faculty of Economics/ İktisat Fakültesi Mecmuasi*, 62(2).
- Ettlie, J.E. (1985). The impact of interorganizational manpower flows on the innovation process. *Management Science*, 31(9), 1055-1071.
- Guidice, R. M., Heames, J. T. & Wang, S. (2009). The indirect relationship between organizational-level knowledge worker turnover and innovation: an integrated application of related literature. *The Learning Organization*, 16(2), 143-167.
- Harris, J. (1990). *Using Attitude Change to Measure Affective Response: An Investigation of Voluntary Turnover Behavior*. Unpublished Ph. D. Dissertation, Florida University.
- Hom, P. W. & Kinicki, A. D. (2001). Toward a greater understanding of the how dissatisfaction drives employee turnover. *Academy of Management Journal*, 44(5), 975–987.
- Hom, P. W. & Griffeth, R. W. (1991). Structural equations modeling test of a turnover theory: Cross-sectional and longitudinal analyses. *Journal of applied psychology*, 76(3), 350-366.

- Huselid, M. A. (1995) . The Impact of Human Resource Management Practices on Turnover, Productivity, and Corporate Financial Performance. *The Academy of Management Journal*, 38(3), 635–672.
- Jackson, S. E. & Schuler, R. S. (1995). Understanding human resource management in the context of organizations and their environments. *Strategic Human Resource Management*, 46, 237–264.
- Khilji, S. E. & Wang, X. (2007). New evidence in an old debate: Investigating the relationship between HR satisfaction and turnover. *International Business Review*, 16(3): 377-395.
- Laser, S. A. (1980). Dealing with the problem of employee turnover. *Human resource management*, 19(4), 17-21.
- Lau, C. M. & Ngo, H. Y. (2004). The HR system organizational culture and product innovation. *International Business Review*, 13, 685–703.
- Lee, T.W. & Mitchell, T.R. (1994). An alternative approach: The unfolding model of employee turnover. *Academy of Management Review*, 19, 51-89.
- Olorunniwo, F. & Udo, G. (2002). The impact of management and employees on cellular manufacturing implementation. *International Journal of Production Economics*, 76(1), 27-38.
- Pelham, A.M. & Wilson, D.T. (1996). A longitudinal study of the impact of the market structure, firm structure, strategy and market orientation, culture on dimension of small firm performance. *Journal of the academy of marketing Science*, 24, 27-43.
- Price, J.L. (1977). *The Study of Turnover*. Iowa State University Press, Ames, IA
- Price, J. I. (2001) . Reflections on the determinants of voluntary turnover. *International Journal of Manpower*, 22(7), 660-624. <http://dx.doi.org/10.1108/EUM0000000006233>
- Rogg, Kirk L., Schmidt, David B., Shull,Carla. & Schmitt Neal. (2001). Human Resource-Practices, Organizational Climate and Customer Satisfaction. *Journal of Management*, 27,431-449.
- Singh, K. (2004). Impact of HR practices on perceived firm performance in India. *Asia pacific Journal of Human Resources*, 42(3), 301-317
- Terpstra, D. & Rozell, E. (1993). The relationship of staffing practices to organizational level measures of performance. *Personnel Psychology*, 46, 27-48.
- Vandenberg, R.J. & Nelson, J.B. (1999). Disaggregating the motives underlying turnover intentions: When do intentions predict turnover behavior?. *Human relations*, 52(10), 1313-1336.