

THE IMPACT OF LEADERSHIP AND EMOTIONAL INTELLIGENCE ON EMPLOYEE TURNOVER INTENTION: THE MEDIATING ROLE OF EMPLOYEE ENGAGEMENT IN THE MANUFACTURING INDUSTRY OF PAKISTAN

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Abstract

High turnover ratio is a major issue for the manufacturing sector of Pakistan, which causes low productivity and financial losses. Although financial benefits are considered an important factor to retain employee but, in recent studies it has been proven that administrative and psychological factors can play a vital role in reducing turnover issues. The purpose of this research is to examine the impact of leadership and emotional intelligence (EI) on Employee Turnover Intention (ETI), direct and indirect, through the mediation of Employee Engagement (EE). The research design is quantitative using a deductive approach. Data was collected from 387 employees working in different manufacturing organizations of Pakistan through a survey method by distributing a questionnaire to respondents. The data analysis was done with the help of MS Excel and SPSS which include, Cronbach's alpha, mean, SD, regression, correlation, and bootstrap mediation analysis. The results show that leadership and EI have a positive impact on EE and have a negative impact on ETI. Furthermore, the mediation analysis proves that EE completely shifts the impact of leadership and EI on ETI. The results prove the social exchange theory and indicate that good leadership and an emotionally intelligent work environment can improve employee retention. This study will help HR professionals and manufacturing industry owners to make EE oriented strategies and improve leadership and EI to retain their top talent, and maximize productivity.

INTRODUCTION

Employee turnover is a very serious issue in Pakistan's manufacturing industry. This is due to a lack of skilled workforce, increasing competitiveness, and a demanding work environment. The high turnover ratio affects productivity, organizational image in market, and work efficiency. Employee retention is strategically

a top priority for manufacturing organizations, where a skilled workforce and teamwork are very important.

Leadership plays a vital role in shaping an individual's behavior. A good leadership motivate employees to work effectively and efficiently resultant employees withdrawing the decision of

switching organizations (Qalati et al., 2022). Similarly, EI is gaining attention as a managerial capability that helps leaders and employees to understand each other's behavior to manage workload and maintain a mutual relationship (Piccerillo et al., 2025).

EE has the specifications like energy, dedication, and social process. It is very important to construct organizational behavior that links leadership and EI with employees' performance. Devotion toward job can motivate an employee to stay long with the organization. Researches prove that engaged employees stay longer with the organization (Trenerry et al., 2021). There is very limited research has been conducted in Pakistan manufacturing sector to measure the combined effect of leadership and EI on employee retention. The study aims to fulfill this need.

Problem Statement: In Pakistan, manufacturing organizations' employee turnover ratio become a serious issue, which resultant increase hiring costs, reduced productivity, and low organizational performance. Although many studies have been conducted on this topic, most have examined all of these variables, including leadership, artificial intelligence, EE, and employer turnover individually, or most of the studies conducted in the service sector, besides it in Pakistan's manufacturing sector, the mediating role of EE yet not been explored, as results they fail to make a good retention strategy. Therefore this study will help to understand the importance of leadership and EI for improving employee retention, where EE acts as a mediator in this relationship.

Objective: The objective of the study is to examine the role of leadership and EI in engaging employees in their work and retaining employees. It will also check the mediating role of EE while examining the impact of leadership and EI on ETI.

Research Questions:

1. What is the impact of leadership on EE?
2. What is the impact of EI on EE?
3. What is the impact of EE on employee retention?
4. Does leadership have a direct impact on employee retention?

5. Does EI have a direct impact on employee retention?

6. Does EE mediate the relationship between leadership and employee retention?

7. Does EE mediate the relationship between EI and employee retention?

LITERATURE REVIEW

Pakistan's manufacturing industry plays a key role in the economy, especially in the textile, garments, leather, and workwear sectors. In these labor-intensive organizations, employee turnover is high, which affects productivity and sustainable growth. Normally this issue is related to job security and compensation, but latest research shows that leadership and EI have a huge impact on the employee's decision to stay with the organization (Bolt et al., 2022).

EE provides a structured framework to understand this relationship. Employees are more engaged when opportunities, psychological peace, and greater appreciation are provided (Sypniewska et al., 2023). Later on, engagement is called energy, attachment, and involvement in different activities (Buil et al., 2019). Many studies prove that EE decreases ETI (Otoo et al., 2024).

Leadership has a greater impact on EE and turnover. The leadership that can make positive change can increase employees' motivation and sense of purpose (Xiong et al., 2025). In the context of Pakistan, it has been approved that the quality of leadership directly and indirectly affects the turnover intention, and EE plays an important mediating role in this (Shah et al., 2017).

EI is a new but effective factor in organizational research. This is the ability where a person understands and organizes their own and others' emotions (Llamas et al., 2022). It has been proven that EI can increase employee performance and satisfaction (Shengyao et al., 2024). People with strong EI can manage pressure and relationships well (Tegegne et al., 2042). EI is very important in manufacturing organizations where deadlines, pressure, and hierarchy are more prevalent than in others.

Most of the research shows that normally, the impact of leadership and EI is direct, which can be better understood with the help of EE. According

to engagement theory, leadership and EI create psychological conditions in which employees are willing to engage with their job (Rehman et al., 2025). According to social exchange theory, when organizations and leaders treat all employees equally, employees will be more loyal and less

likely to turn over (Qamar et al., 2026). Recent researches

Framework: ETI depends on many factors. In this study, we have taken leadership, EI, and EE.

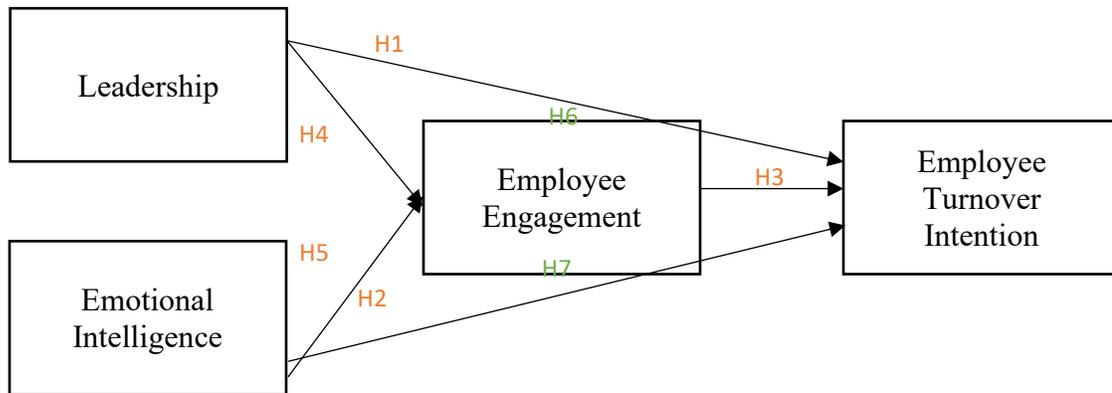


Figure 2.1

Figure 2.1 is a framework of research that is based on EE theory and social exchange theory. Leadership and EI take as independent variables (IV), EE as a mediating variable (MV), and ETI as a dependent variable (DV). The framework shows two types of relationship on is direct relationship, which is the direct effect of IVs on DV, and a direct MV on DV, and the other is an indirect effect of IVs on DV via MV.

H7: Employee Engagement mediates the relationship between Emotional Intelligence and Employee Turnover Intention.

RESEARCH METHODOLOGY

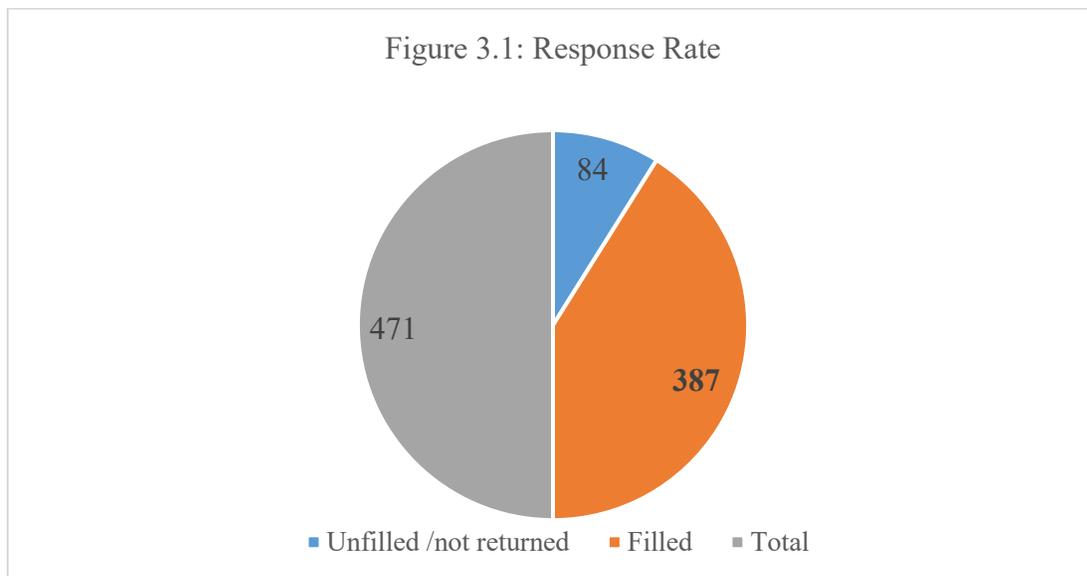
This study is based on the impact of leadership and EI on ETI, with the mediating effect of EE in the manufacturing industry of Pakistan. The research philosophy is positivism, where all variables are measured in numbers. It used a deductive approach and a quantitative research design. This is an explanatory and cross-sectional study. Data was collected through a cross-sectional survey method by distributing questionnaires to employees working in different manufacturing companies of Pakistan. The questionnaires were adopted to measure the perception related to leadership, emotional inelegance, EE, and ETI. The five-point Likert scale is used to answer the questions. The questions were adopted very carefully to get the most relevant results. The questions were adopted from the following resources:

- Hypotheses:**
- H1:** Leadership has a significant negative effect on Employee Turnover Intention.
 - H2:** Employee intelligence has a significant negative effect on Employee Turnover Intention.
 - H3:** Employee Engagement has a significant negative effect on Employee Turnover Intention.
 - H4:** Leadership has a significant and positive effect on Employee Engagement.
 - H5:** Employee intelligence has a significant and positive effect on Employee Engagement.
 - H6:** Employee Engagement mediates the relationship between leadership and Employee Turnover Intention.

Constructs	No. of Items	Reference
Questions Related to Leadership	8	(Nowack & Learning, 2008)
Questions Related to EI	8	(Lane et al., 2010)
Questions Related to EE	8	(Shuck et al., 2017)
Questions Related to ETI	3	(Mowday et al., 1979)

A five-point Likert were adopted where 1 = Strongly Disagree, 2 = Disagree, 3 = Neutral, 4 = Agree, and 5 = Strongly Agree. The population of the study comprises all manufacturing companies in Pakistan, and data were collected from various departments, including production and support. The sample size has been determined by a sample

size calculator using Cochran equation (Qamar et al., 2026). The chosen sample size was 471, and the same number of questionnaires were issued, from which 387 were filled out successfully out of 471. The successful response rate was 82.16%, which is good. The sufficient response rate is 70 % (Nully, 2008).



Cronbach's Alpha, Mean, SD, regression, correlation, and bootstrapping (5000) tests are used to analyze the collected data. The data was statistically analyzed by using SPSS and MS Excel.

DATA ANALYSIS

Demographics	Frequency	Percentage
Gender		
Female	146	37.72%
Male	241	62.28%
Age		
<25	70	18.09%
25-34	178	45.99%
35-44	104	26.87%
45+	35	9.04%
Education		
Bachelor	181	46.77%

Intermediate	133	34.37%
Master	68	17.57%
PhD	5	1.29%
Designation		
Lower Management	57	14.73%
Middle Management	120	31.01%
Sr. Management	11	2.84%
Staff	199	51.42%
Experience		
1 and below	4	1.03%
1 to below 3	19	4.91%
10 to Below 15	60	15.50%
15 and above	49	12.66%
3 to Below 5	68	17.57%
5 to Below 10	187	48.32%

Table 4.1 shows the demographics of the respondents. This table indicates that the received responses are very diverse in all aspects gender, age, education, different levels of education, and experience.

Construct	Items	Cronbach's α	M	SD
Leadership	8	0.91	3.02	0.94
EI	8	0.91	2.96	0.99
EE	8	0.91	2.95	0.93
ETI	3	0.77	3.01	1.04
N=387				

4.2 The table shows descriptive statistics of responses. Cronbach's α is applied to check the reliability of questions, apply mean to verify the average response rate, and the SD to ensure the consistency of responses. The value of Cronbach's

α for all four variables is between 0.77 and 0.91 this a strong indication that all items are reliable for further analysis. The SD around 1 shows a good consistency in responses for all items.

Variable	Leadership	EI	EE	ETI
Leadership	-			
EI	.52**	-		
EE	.56**	.53**	-	
ETI	-.42**	-.39**	-.58**	-

Note. **p < .01.

Table 4.3 shows that leadership and EI have a positive and significant impact on EE and a negative and significant impact on ETI. It has been determined that EE also has a significant negative

impact on ETI. The values of the correlation coefficients are within the range (-1 to +1), so there is no issue of multicollinearity.

Table 4.4: Regression IV-1 on MV				
Predictors	(DV) EE			
	Coeff (β)	SE	t	p
Constant	1.214	0.142	8.55	< .001
Leadership (IV)	0.41	0.05	8.50	< .001
R ² = .16				
F (1, 386) = 72.31, p < .001				

Table 4.4 shows the regression analysis between leadership and EE, which indicates that leadership has a positive and significant impact on EE. The value of $\beta = .41$ indicates that a one-unit increase

in leadership can increase EE by 0.41-unit, t value indicates the relationship is statistically significant. The value of R² shows that leadership individually can increase 16 % EE, which is sufficient.

Table 4.5: Regression IV-2 on MV				
Predictors	(DV) EE			
	Coeff (β)	SE	t	p
Constant	1.086	0.136	7.98	< .001
EI (IV)	0.44	0.04	11.00	< .001
R ² = .19				
F (1, 386) = 121.00, p < .001				

Table 4.5 shows the regression analysis between EI and EE, which indicates that EI has a positive and significant impact on EE. The value of $\beta = 0.44$ indicates that a one-unit increase in EI can

increase EE by 0.41-unit, t value indicates the relationship is statistically significant. The value of R² shows that EI individually can increase 19 % EE, which is sufficient.

Table 4.6: Regression IV-1 on DV				
Predictors	(DV) ETI			
	Coeff (β)	SE	t	p
Constant	4.321	0.198	21.82	< .001
Leadership (IV)	-0.29	0.05	-5.80	< .001
R ² = .18				
F (1, 386) = 85.10, p < .001				

Table 4.6 shows the regression analysis between Leadership and ETI, which indicates that leadership has a negative and significant impact on ETI. The value of $\beta = -0.29$ indicates that a one-

unit increase in leadership can decrease ETI by 0.29 units; the t-value indicates the relationship is statistically significant. The value of R² shows that leadership individually can change the decision of ETI by 19 %, which is sufficient.

Table 4.7: Regression IV-2 on DV				
Predictors	(DV) ETI			
	Coeff (β)	SE	t	p
Constant	4.274	0.203	21.05	< .001
EI (IV)	-0.25	0.05	-5.00	< .001
R ² = .15				
F (1, 386) = 69.40, p < .001				

Table 4.7 shows the regression analysis between EI and ETI, which indicates that EI has a negative and significant impact on ETI. The value of $\beta = -0.25$ indicates that a one-unit increase in EI can

decrease ETI by 0.25 units, t value indicates the relationship is statistically significant. The value of R^2 shows that EI individually can change the decision of ETI by 15 %, which is sufficient.

Table 4.8: Regression (Mediation Step 3)

Predictors	(DV) ETI			
	Coeff (β)	SE	t	p
Constant	4.067	0.206	19.74	< .001
Leadership	-0.14	0.04	-3.50	< .001
EI	-0.11	0.04	-2.75	.006
EE (MV)	-0.49	0.05	-9.80	< .001
	$R^2 = .48$			
	$F(3, 383) = 121.70, p < .001$			

Table 4.7 shows that a multiple linear regression has been applied, where Leadership, EI, and EE are predictors and ETI is the DV. The analysis shows that the impact of leadership and EI is still statistically significant, but comparatively low. One noticeable thing is the impact of EE, which is negative and significant. The value of $\beta = -0.49$ indicates that a one-unit increase in leadership can

decrease ETI by 0.49 units; the t-value indicates the relationship is strong and statistically significant. The important factor is the value of R^2 which indicates that when leadership, EI, and EE come together can change the decision of ETI by 48%. This is considered to be a good number, as compared to individual effect and model is statistically significant.

Table 4.9: Mediation Model 1: Leadership → EE → ETI

Path	Estimate
a (Leadership → EE)	0.5304
b (EE → ETI controlling Leadership)	-0.5565
c (Leadership → ETI total effect)	-0.3398
c' (Leadership → ETI controlling EE)	-0.0405 (ns)
Indirect effect (a × b)	-0.2952
Sobel test	$z = 8.54, p < .001$
Bootstrap 95% CI	[-0.3665, -0.2309]

Table 4.9 shows that the mediation analysis indicates a positive impact of leadership on EE, which means that good leadership can engage employees better. Moreover, the impact of EE on ETI is observed to be significant and negative, which can decrease the chances of ETI. The impact of leadership on ETI is meaningful, but

when EE is added to the model, the direct impact of leadership on ETI decreases, which indicates that employees with more engagement and good leadership can stay longer with the organization. The Sobel test and bootstrap show that the mediation of EE between leadership and ETI is very strong.

Path	Estimate
a (EI → EE)	0.4821
b (EE → ETI controlling EI)	-0.5565
c (EI → ETI total effect)	-0.2876
c' (EI → ETI controlling EE)	-0.0218 (ns)
Indirect effect (a × b)	-0.2681
Sobel test	z = 7.96, p < .001
Bootstrap 95% CI	[-0.3312, -0.2110]

Table 4.10 shows that the mediation analysis indicate positive impact of EI on EE, which means that people with strong EI are more motivated and engaged in their job. Moreover, the impact of EE on ETI is observed to be significant and negative, which can decrease the chances of ETI. The

impact of EI on ETI is meaningful, but when EE is added to the model, the direct impact of EI on ETI decreases. The Sobel test and bootstrap show that the mediation of EE between EI and ETI is very strong.

Hypothesis	Tests	Estimate	p	Decision
H1	Regression Leadership → EE	0.5304	< .001	Accepted
H2	Regression EI → EE	0.4821	< .001	Accepted
H3	Regression Leadership → ETI	-0.3398	< .001	Accepted
H4	Regression EI → ETI	-0.2876	< .001	Accepted
H5	Regression EE → ETI	-0.5565	< .001	Accepted
H6	Sobel & Bootstrap indirect effect (Leadership → EE → ETI)	-0.2952	< .001	Accepted
H7	Sobel & Bootstrap indirect effect (EI → EE → ETI)	-0.2681	< .001	Accepted

Summary: The study is based on the impact of leadership and EI on ETI with the mediation of EE in Pakistan’s manufacturing sector. A Questionnaire is adopted to collect the data from respondents. Test responses with Cronbach's alpha, mean, and SD to verify reliability and consistency in responses. The results are acceptable. To check significance of the relationship between variables, correlation analysis has been conducted, which shows that the relationship between variable is significant. Leadership, EI, and EE are negatively correlated

with ETI, but leadership and EI are positively correlated with EE. To check the impact of variables on ETI regression analysis conducted. The regression analysis of leadership with EE shows that leadership can individually change EE by 16%. On the other hand, EI poses 19 % change in EE. It has also been found in the regression analysis of leadership and ETI that leadership can make 18% change in ETI, while EI can make individually 15% change in ETI. One important thing was noticed in this analysis, when multiple regression between all IVs, MV, and DV was

conducted, it showed that it can make a change 48% in ETI, the impact was much higher than the individual. After that Sobel test and bootstrap are applied to check the mediation of EE between leadership and ETI, and between EI and ETI, so it has been found that when EE is added in the model, the direct impact of leadership and EI decreases, but the overall impact is significant, and EE successfully mediates the relationship.

Leadership & EE: The analysis shows that leadership has a positive and meaningful impact on EE. It indicates that when employees feel their leadership is supportive, cooperative, and fair, they are more engaged with their work emotionally and psychologically. A pure leader provides a clear vision to employees, which increases EE. This result is relevant to existing studies, which indicate leadership as an important factor of EE. The results are theoretically correct, where psychological security and delegating fair job responsibilities engage employees more because of good leadership.

EI & EE: This study proves that EI has a significant impact on EE. Employees with more EI can understand and manage their emotions and workload better than others, and they also maintain mutual understanding with other employees. This makes them fully engaged in their work. The results of this study are very common to existing studies, and the impact of EI on EE is more than leadership.

Leadership, EI & ETI: Leadership and EI have a significant and negative impact on ETI. The analysis shows that good leadership and an emotionally intelligent environment can motivate employees to serve longer. The results are very relevant to the literature of organizational behavior, where leadership and EI are important factors in retaining employees.

EE & ETI: The analysis shows that EE has a significantly stronger negative impact on ETI, meaning that more EE can decrease ETI. In a regression model, the stronger the impact, the more important it is. The results are relatively the

DISCUSSION

This section belongs to a detailed discussion of statistical data analysis based on hypotheses, research objectives, and theories. The main objective of the study is to examine the impact of leadership and EI on EE and ETI in Pakistan's manufacturing industry, where EE is used as a mediator.

same as the existing studies in which EE is an important predictor of ETI. Theoretical results prove the social exchange theory.

CONCLUSION

The impact of leadership and EI on ETI in Pakistan's manufacturing industry has been examined in this study, in which EE is taken as a mediator. The results show that leadership and EI increase EE and decrease ETI. Furthermore, the results of mediation prove that EE can indirectly shift the impact of leadership and EI on ETI. When EE enters the model, the direct impact of leadership and EI on ETI is meaningless. On the other hand, the indirect impact was strong and statistically significant. The results indicate that it is a main psychological source that highly affects employees to stay with the organization. This study provides strong evidence of social exchange theory, which says that when an organization provides good compensation, better opportunities, fair treatment, emotional support, and motivation to employees, they reciprocate it with emotional attachment, more engagement in work, and long-term commitment. Practically, the results are very important for the manufacturing sector of Pakistan, where a high turnover ratio is a big challenge. This study has brought the intentions to a point that only providing financial compensation or traditional policies are not enough to retain employees beside this, social and psychological factors like leadership, EI, and EE are also very important to retain employees in the long run. Collectively, the study concludes that by adopting EE as a key strategy and bringing intentions to the improvement of leadership and EI, organizations can reduce ETI and ultimately increase organizational performance.

RECOMMENDATIONS

1. Leadership development programs should be introduced by manufacturing organizations.
2. Conduct training for all employees, including management, staff, and worker to develop a sense of understanding of emotions.
3. Organizations should develop engagement strategies like different trainings, participation, reward distribution, and providing opportunities.
4. The HR department should regularly observe the EE activities and ETI to take preventive actions.

LIMITATIONS

1. This research uses cross sectional design, which is time-bound, and the relationship between variables and their results cannot completely predict DV.
2. Data collected through a self-reported questionnaire may be biased due to these results.
3. The research is based on Pakistan's manufacturing industry, so results cannot be generalized for all industries and regions.
4. A few variables have been taken into consideration in this research, and my variables are not included, such as reward system, workload, or organizational culture.
5. Due to use of a non-probability sampling technique sample size may not be enough to represent the complete population.

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