

Transformational Attributes, Emotional Intelligence And Perceived Benefits Of Training Are The Core Ingredients Of Managerial Organizational Commitment

Dr. Hina Zahoor^{1*}, Prof. Dr. Özgür Çengel², Prof. Dr. Uğur Yozgat³

ABSTRACT:

One of the main issue to extensive concept analysis from the perspective of healthcare sector is the domain's rapid-changing panorama. The concept of transformational leadership in terms of health managers is a new insight that has been highlighted in the study. In this current study, a sample of 261 individuals employed in managerial roles within the hospitals was included. Results show that there is a positive correlation between the sub variables of transformational leadership with organizational commitment and its dimensions. The results also indicate that the emotional Intelligence have a significant moderator effect on the association between the dimensions of transformational leadership and organizational commitment in the context of Pakistani health sector. Moreover, the results also indicate that the study also found that perceived benefits of training has a significant mediating role in the relationship between the dimensions of transformational leadership and organizational commitment. This shows that the training programs may produce more positive results when health managers understand the training benefits, which is likely to boost their commitment to the hospitals. Hence, it is suggested that hospitals should arrange training sessions timely to improve transformational leadership competencies of health managers. The research is the effective contribution to the contemporary literature on the role of transformational leadership in healthcare from the developing country prospect.

Keywords: Health care transformational leadership, Perceived benefits of training, affective commitment, normative commitment, continuance commitment, Emotional intelligence, Health managers

Introduction:

As the world population has been increasing steadily and advancements in health care contribute to improve life span, health care services across the globe are confronting intense pressure to meet the demands. In addition, mergers and acquisitions in healthcare are going on higher frequency causing more pressure to reduce overall expenses and challenging modalities of teamwork. Hence the health care units must be adapted and tailored and the health care leadership need to be innovative and dynamic to manage the organizational transformation at the level of vertically horizontally and diagonally. Leadership that promote an empathetic and empowering environment can facilitate conducive and supportive culture to the employees within the health organization with engaged stakeholders. This organizational culture ultimately leads to the productivity and success of health organization when these innovative measures are executed and implemented effectively and efficiently with motivated employees inspired by their leaders. Moreover, these leaders improve and strengthen cooperation between individuals and task forces, patients and health practitioners and also leads to reduce turnover rate of employees.

^{1*}İstanbul Gelişim Üniversitesi, İstanbul, Türkiye. Email: hinazahoor79@yahoo.com

²Rector, İstanbul Galata Üniversitesi, İstanbul, Türkiye E-mail: ozgur.cengel@galata.edu.tr

³ İstanbul Nişantaşı Üniversitesi, İstanbul, Türkiye E-mail: uguryozgat@gmail.com

Leadership plays vital part in amplifying the employees' level of commitment (Walumbwa & Lawler, 2003). However, the topic of leadership is broadly studied and discussed but hardly apprehended paradox, so far and the role of leader has received much interest in organizations. (Schwandt & Marquardt, 1999). These organizational leaders usually more productive and persuasive if they are emphatic and comprehend their own and also of others' emotions. They influence and motivate individuals towards the achievement of the mission and goal (Tingvoll et al.,2016). It is a long term endeavor that define objectives, establish strategies and strengthened organizational commitment and productivity (Arroliga AC et al.,2014). Research study has indicated that poor leadership is the major issue in health care systems (Weberg D, 2012) and the good leadership enhances commitment and job satisfaction of the subordinates and promotes teamwork and improves overall organizational performance of health units (Smith PC, et al.,2012), on the other hand, poor leadership can cause problems such as, high cost, lower teamwork efficiency, lower satisfaction level of employees and patients dissatisfaction (Mosadeghrad AM, et al., 2006; Mosadeghrad AM, et al.,2013).

Organizational commitment is a key driving force behind wellbeing of employee and performance of organization (Meyer & Herscovitch, 2001). Low Organizational commitment shows lack of identity and attachment to the work place and thus lead to decrease productivity and organizational services (Cohen, 2003). Moreover, the other factors such as retention and turnover rate are also associated with organizational commitment but for the development and sustainability of high quality team, organizational leaders should have intimate knowledge of other elements that influence the organizational commitment of the individuals and by better knowledge of when the individual's commitment builds and how does it increase, firms would be better able to predict the consequences of change and to deal it more efficiently (Meyer & Allen, 1997) and thus it leads to high level of organizational productivity and performance and wellbeing of workforce.

Attributes like emotional intelligence, perceived benefits of training is the significant facet to enhance organizational commitment. Emotions influence administrative action, interpersonal relationships, and also effectiveness of the work (Goleman 1995, 1998b). Emotional intelligence is therefore recommended as remedy for the managerial job issues. In regards to training, many studies have revealed that it promotes positive attitudes in employees at work place such as organizational commitment and reduces the outcome of negative attitude such as intention of turnover. (Kadiresanet al., 2015). Moreover, research studies also revealed that training is influenced by charismatic leader generally known as transformational leaders (Chaudhry &C Joshi ,2017) and this HR practice is the source of motivation for employees which makes them committed to the organization.

The purpose of the present research is to find the relation between the facets of transformational leaders and organizational Commitment of health care managerial workforce in the presence of other constructs like managerial emotional intelligence, Perceived benefits of training in regards to Pakistani health care system. The present study is in three folds. First, the study evaluates the association of health transformational leadership with organizational commitment. Second, the study examines the moderating role of managerial emotional intelligence in the link of transformational leadership features of health managers to their organizational commitment. Third, by using perceived training benefits as mediators, the study explores the association between health transformational leadership and Organizational Commitment. The current research proposes a mediation- moderated model to explore the association between transformational leadership and Organizational Commitment.

Theoretical Foundation

Social Cognitive Theory

Albert Bandura first coined the term Social Learning Theory (SLT) in the 1960s which later known as Social Cognitive Theory (SCT). The theory of SCT provides opportunities for social support based on expectations, self-efficacy and with the use of learning through observation and other reinforcements to bring behavior change. In social context leadership is a complex learning and behavioral related task and to persuade and motivate the followers they require social influence

processes skills (House & Aditya, 1997). Leaders provide supportive atmosphere for group performance and the collective goal achievement is the outcome of such combined and coordinated endeavor and the one's efficiency in the leadership position is the result of social mediation (Hackman & Walton, 1986). From the social cognitive view, the scholars have been trying to explain the leaders are usually got tied up in self-regulation in compound and continuing changing work setting. Moreover, research scholars delineated leadership as an individual who involved in self-regulation in a dynamic work environment and emphasized that the behaviour of leaders also play vital role to attain the organizational objectives and to achieve success by influencing on group tasks in the social context and their cognitive activities and individual resources play vital role in the leadership process (Redmond et al., 1993).

Theory of Transformational leadership

Transformational leadership (TL) is a leadership process that initiate a shift at individual level and in the systems of society. Researcher Burns (1978) defined his concept of transforming leader as the leadership in which leaders and their followers support each other and provide mutual aid to promote the culture of motivation and self-confidence at the workplace. Later on research scholar, Bernard M. Bass (1985), added in the work of Burns related to transforming and transactional leadership (1978) and described it in the context of psychology. He also coined the term "transformational" instead of "transforming". Transformational leaders encourage the followers to attain their goals and also nurture their self-growth. They also facilitate group development and organizational growth. Transformational leaders provoke the sense of awareness to major issues among followers rather only answering to personal self-interest. According to Bass (1985) these leaders boost the confidence and change the concerns gradually from existence to attainment, progress and improvement. They are also known as charismatic leaders who exert idealized influence, pay individual attention and exhibit cognitive stimulation and motivation.

According to Bass et al. (1992) these elements depict four basic constituents of transformational leadership:

1. Idealized Influence (Attributes and Behaviour)
2. Inspirational Motivation
3. Individualized Consideration
4. Intellectual Stimulation

Transformational leaders are proactive to minimize the chances of mistakes through their anticipation and evaluation but in case if they occur, these transformational leaders learn from these mistakes rather than simply criticizing the followers on their mistakes. Transformational leaders turn the threats into learning opportunities. In short, transformational leaders develop expectations with the employees regarding organizational objectives and then motivate them to achieve these goals and also inspire them in terms of communication.

Concept of Transformational leadership in the context of health managers:

One of the biggest challenge to extensive concept exploration, in the context of healthcare sector is the domain's fast-changing panorama. The change is such rapid that there are ongoing shifts in terms of significance and utilization of prevailing verbosity, as new concepts are developed to delineate new frames and methods. The notion of transformational leadership in terms of health managers is a new approach which has been highlighted in the present study. Transformational leader in the context of health manager is the one who exert distinctive management approach. This leader transforms the health units and serves as a role model, goes any further daily activities, sets objectives and targets, inspires and motivates health staff, also realizes the individual needs and personal requirements of the staff and encourages staff efforts to present innovative ideas for the solution of problems. Here in the following table 1 we describe the application of basic attributes of transformational leadership in the context of healthcare.

Table 1 Application of basic attributes of transformational leadership in the context of healthcare

Item	Attributes	Healthcare related examples
1	Idealized Influence	Transformational leadership is admitted as a prototype. The leader's vision is carry on with trust, commitment and focusing on attaining the goal. Healthcare staff working with Transformational leaders demonstrating idealized influence, honor and follow them. In the domain of healthcare, particular focus is positioned on long term basic tenets, such as compassion, esteem for autonomy, altruism, and constant development. For instance, decision to apply an electronic health record regardless of resistance, is justified to others on the basis of predicted betterment in the outcome of health service.
2	Individualized Consideration	Transformational leader acknowledges staffs' contributions and endeavors to attain the goals of health care organization. Leadership exhibiting individualized consideration realizes the individual needs and personal requirements of the staff and provide guidance to them in their career development. Transformational leader work as a trainer for the health care staff to support the culture of professional learning. For instance, in the health care organization TL appreciates the efforts of each individual to implement assistance system to diminish medication incidents via electronic prescribing.
3	Intellectual Stimulation	Transformational Leaders with intellectual stimulation promote the culture of challenge and thus encourages staff efforts to present innovative ideas for the solution of problems .TL always supports individual with creative solutions skills. For instance, in the healthcare organization TL challenges the staff to come up with the creative ideas of communication while providing medical aid to outpatients for the better results with less consumption of resources and time.
4	Inspirational Motivation	Transformational leadership shares his vision and the mission with the health care staff for the improvement in facilitation and provision of effective healthcare services. TL displaying inspirational motivation, inspire the staff on the basis of his skills to share his values. For instance, TL himself may fulfill pt care responsibilities in case of shortage of health workers as he expects the staff to practice the same concept.

Theory of Organizational commitment:

According to Cohen (2003) the term organisational commitment (OC) has become increasingly popular in scientific literature in organisational as well as industrial psychology. In early research studies of organisational commitment this notion was seen in the perspective of behaviour, and in terms of recognition, participation and engagement (Porter, et al., 1974). They considered behavioral perspective of employee related to attachment psychology or individual's affective commitment in the context of employee recognition and engagement with the workplace. Research scholars, Meyer and Allen (1991) were the first that introduced the concept of tridimensional organisational commitment. Initially Meyer and Allen (1984) explained the concept of bi-dimensional organisational commitment i.e continuance and affective commitment in their research. According to them, continuance organisational commitment is the degree of one's bond to the organization due to virtue of the costs that he feels is associated with quitting. Moreover, they also delineated the affective

commitment and defined it as the positive attitude of an individual to the workplace in terms of connection and engagement with the workplace. Later on they investigated more and added another kind of organisational commitment, termed as normative commitment and described it as one's moral duty to stay in the work place.

Theory of Emotional Intelligence:

Salovey and Mayer (1990) considered emotional intelligence as a competence and skill. They defined EI as linked to the appropriate assessment and expression of one's own and others' emotions, as well as the urge to be encouraged, make plans, and attain goals in life.

Daniel Goleman (1995) presented the theory of emotional intelligence. According to which Emotional intelligence depends upon self and social awareness, self and social management skills of leader. It is directly proportional to one another. He also asserted that EI is the foundation for both personal and corporate value. He emphasized that, particularly for leadership positions, EI should serve as the standard for promotion and succession planning.

Petrides' trait approach is related to emotional placement and self-revelation strategy that stresses one's self-awareness and concept (Petrides *et al.*, 2007). Many researchers emphasized to ponder Emotional intelligence it enhances one's loyalty (Bhalerao and Kumar, 2016). Studies also accentuated that EI boost the health of individuals both psychological and physical which leads to better performance (Bar-On and Parker, 2000) and it negatively correlates to stress (Hina et al., 2020). Hence many researchers asserted that EI is the chief element for the effective leadership and for better team performance (Melita Prati et al., 2003, Sadri, 2012).

Literature Review and the Development of Hypotheses:

Link between Transformational leadership and organizational commitment:

For the past several years, undoubtedly the theory of transformational leadership has produced the larger amount of theoretical research (Antonakis J et al., 2009). As compared to Transformational leadership, the responsive approach of transactional leadership is relied on transactions between a leader and employees. While in the other perspective, the dynamic transformational leadership motivate and inspire employees to transcend their needs by shared vision (Rinfret N, 2020). Transformational leadership provide a lever for spurring the organizational commitment of employees (Podsakoff PM et al., 2000; Pillai R, Williams EA et al., 2004). Many researches have evidences of significant association between transformational leadership and constructive organizational behaviour (Pillai R, Williams EA et al., 2004; Elovainio M et al., 2002). It is also observed that transformational leadership has also positive impact on the staff welfare and on their team-working and patient management, in the context of healthcare industry (Ahmed I, 2017). Since the wide extent of impacts of Transformational leadership, researchers have concentrated on identifying its determining factor (Leban W& Zulauf C, 2004; Zacharatos A, et al., 2000; Lejeune J et al., 2017). Research study emphasized that transformational leadership trust their followers and encourage them in the decision making which leads to boost organizational commitment. The study also highlighted that this positive correlation between the variables is useful in different organizational settings and structure (Liden, Wayne & Sparrowe 2000).

Perceived benefits of training, a mediator variable between the link of health transformational leadership and organizational commitment:

"The positive and favorable outcomes that employees believe they can gain from participating in training activities" (Yang et al., 2012) are referred to as perceived training benefits. The potential benefits of a company's training program are best understood in terms of the principle of reciprocity, as these benefits are intended to benefit both employees and the firm (Aguinis & Kraiger, 2009). Employees may be more motivated to participate in training sessions if they believe their involvement will benefit both them and their employer. The goal of training programs is to produce positive results (Dhar, 2015), which may include direct improvements in overall organizational performance or indirect productivity gains. Therefore, organizations pay more attention to the training activities in the

recent time as it plays great role in the individual bond to the organization. Researchers also agreed on the assertion that organization should invest more on training to improve employees' capabilities and to keep them up-to-date and also to enhance their performance (Ramendram et al., 2014). Moreover, Kadiresan et al., (2015) considered training as psychological contract in terms of organizational commitment. Research studies also suggested that success of training depends upon the perception of employees and the workforce considered it as an element of job stability (Scheible and Bastos, 2013; Yang et al., 2012).

Personal- related benefits of training(PrBT): The level to which individuals believe that engaging in and attending training programs will enhance their work performance, promote collaboration, and aid in personal growth (Noe, R.A. and S.L. Wilk, 1993). Perceived personal-related benefits refer to the repercussions, such as psychological, political, and social outcomes, that may have an impact on the workplace situation either directly or indirectly. This promotes personal growth, improves performance, and fosters networking within the company, all of which assist people become more committed to the organization. Positive training outcomes are likely to result from participants' perceptions that their engagement in training programs will benefit them and their workplace, and this perspective will also likely increase employees' eagerness to take advantage of future training opportunities. Furthermore, for training programs to be successful and for employees to participate more actively in upcoming training opportunities, individuals' perception that they will be capable to practice and use the learned abilities and skills in the workplace is crucial (Bulut & Culha, 2010).

Transformational leaders determine a general approach through which they provide a substantial basis which brought change in people and organizational perspectives. These charismatic leaders act as a role model and mentor who provide motivation and inspiration and also encourage followers to be creative make their own decisions (Bass, 1985). Research studies revealed that there is the association between transformational leadership and organizational learning. Such an approach of leadership urges the organizational leader to learn, and also provides support to overcome problems and hindrances during learning process within the organization. Hence, transformational leadership is deemed as a vital element to develop organizational learning

(Senge, 1990; Senge et al., 1994; García-Morales et al., 2012). According to several studies there is significant association between training and organizational learning (Ulrich et al., 1993; Nonaka and Takeuchi, 1995). Research scholars also pointed out that training ,one of the HR practices, is influenced by the Transformational leaders at different levels of hierarchy (Chaudhry &C Joshi ,2017) and these HR practices create opportunities and instill motivation to workforce which develop commitment to organization. In addition, training also makes an employee more committed to the organizational objectives (Huselid, 1995; Ichniowski et al., 1997; Conway & Monks, 2007; Dikkers et al., 2010). These training sessions are beneficial for the staff and prior research work have also confirmed the assertion that individuals who acknowledge the positive aspects of training are not only motivated to participate in training sessions but also more committed to the organization. Moreover, previous research studies have also provided evidence that there is a significant positive link between the perceived benefits of training and the dimensions of commitment, especially affective and continuance (Ahmad & Bakar, 2003; Yang et al., 2012; Alamri & Al-Duhaim, 2017; Silva and Dias, 2016).

Emotional intelligence, a moderator between the link of health transformational leadership and organizational commitment:

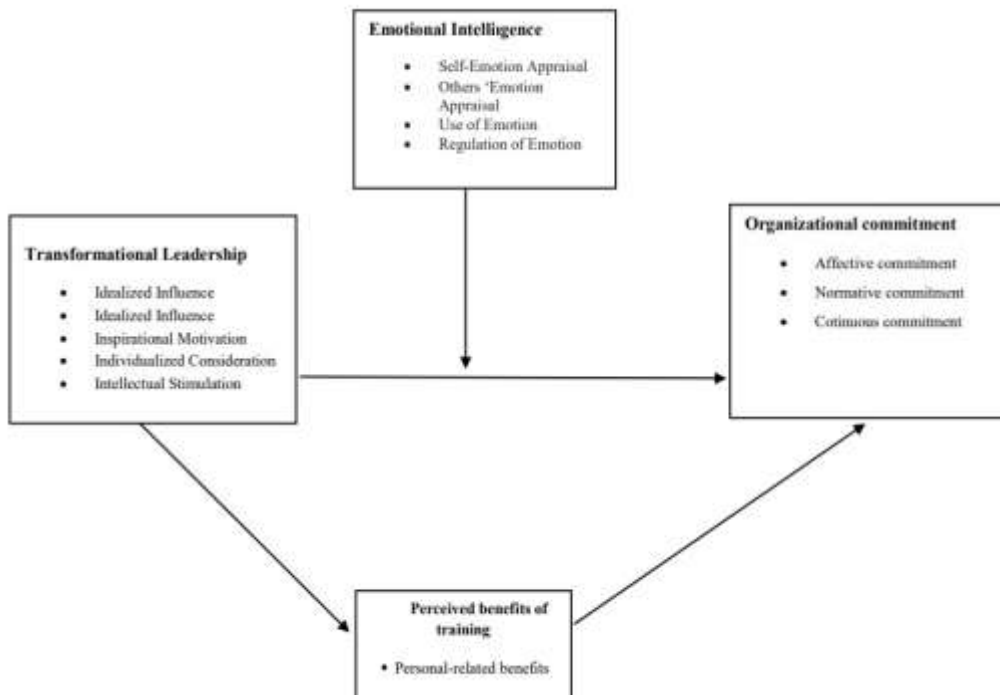
The notion of emotional intelligence and the features of transformational leadership are both ingrained in the ability to participate and ability to interact on the inter-personal and relational level. Such association has been investigated recently in a many research studies (Lindebaum & Cartwright, 2010; Barling J et al., 2000). According to the recent research work, emotional intelligence could manifest indication of transformational conduct (Barling J et al., 2000; Brown FW et al., 2006). Emotions also greatly linked with the employees 'commitment to their organization so the individuals who assess and manage their emotions successfully are more committed as compared to those who unable to do.

Taboli (2013) supported the assertion that that lesser degree of individual’s organizational commitment is the outcome of lack of control over emotions. Research study also revealed that organizational leaders who are good at managing their emotions inspired their followers which builds trust and boost the organizational commitment of their subordinates (Barling et al., 2000). Moreover, according to contemporary research conducted among various kinds of private sphere staff – specifically, top authority and business leaders provides clear inkling between Emotional intelligence, the utilization of transformational leader, and their association with several constructive behaviors at work place (Leban W and Zulauf , 2004; Stein SJ et al., 2009; Brown FW et al., 2006). Emotional intelligence could very much so responsible for the advent of leadership among ad hoc group (Côté S et al., 2010). In order to ratify the presence of this link in diverse cultures, it is suggested in various research studies that more research studies dealing with EI and TL relationship should be conducted (Vigoda-Gadot E and Meisler G, 2010; Orazi DC et al., 2013).

Hypotheses Formulation:

Hence on the basis of aforementioned discussion the subsequent hypotheses are formulated: H₁: Transformational leadership dimensions (IA, IB, IM,IS,IC) have significant impact on organizational commitment dimensions(AC,CC,NC) of health managers in Pakistani hospitals. H₂: Perceived benefits of training serves as a mediator between the link of health transformational leadership and organizational commitment dimensions of health managers in Pakistani hospitals. H₃: Emotional intelligence serves as a moderator between the relationship of transformational leadership and organizational commitment of health managers in Pakistani hospitals

Figure 1 conceptual model of the study



Research methodology

The population of the study is the health managers in hospitals of Karachi. Convenience technique for sampling is used to collect the data. The calculated sample size was 260. For the collection of data (300) google forms were shared with the managers of the departments of hospitals who accepted to participate in the research. where (273) were retrieved,12 invalid forms were excluded and then analysis was conducted on 261 valid forms for the present study.

Data collection of the present study was conducted through a well-structured questionnaire. MLQ

5X is used to measure transformational leadership conduct and its subscales (Bass & Avolio, 1996). Wong and Law Emotional Intelligence Scale (WLEIS) is used to measure aspects of emotional intelligence (Wong & Law, 2002). Perceived benefits of training is measured by Noe and Wilk (1993) scale. Organizational commitment is measured by OCQ (Meyer, Allen, & Smith, 1993).

Results:

Step by step regression analysis was conducted to analyze the hypotheses of the present study. EFA was used to purify the data before variables were got into the regression model. As a result of factor loadings ranging from 0.48 – 0.86, all the items were retained for further analyses.

Table 2. validity and reliability:

dimensions	Variables	Number of items	Cronbach's Alpha	coefficient of self-validity
Transformational leadership	Idealized Influence (Attributes)	4	0.88	0.94
	Idealized Influence (Behaviors)	4	0.90	0.95
	Inspirational Motivation	4	0.88	0.94
	Intellectual Stimulation	4	0.94	0.97
	Individualized Consideration	4	0.96	0.98
Perceived benefits of training Personal-related benefits of training		5	0.91	0.95
Organizational commitment	Affective Commitment	6	0.95	0.97
	Continuance Commitment	6	0.96	0.98
	Normative Commitment	6	0.90	0.95
Total questioner		59	0.98	0.99

The Cronbach's alpha value of the questionnaire variables ranged from 88% to 96%, while the coefficient of self-validity ranged from 94% to 98% as mentioned in Table 2. The Cronbach's alpha value was (98%) for the entire questionnaire, with a coefficient of self-validity (99%) and all were above the minimum acceptable (60%) in social and educational studies.

Table 3. KMO and Bartlett's Test:

KMO		0.929
Bartlett's	Approx. Chi-Square	13049.766
	Sig	0.000

Kaiser-Meyer-Olkin (KMO) and Bartlett's test of sphericity methods are used to ensure the adequacy of the sample siz. It is clear from the table that we obtained a value of KMO greater than 0.5, We also find that the value of the level of significance for the Bartlett's test is equal to zero, which is less than 0.05, and this indicates the sample size adequacy.

Table 4 Indicators of good fit of the model

CFI	IFI	NFI	SIG (χ^2)
0.761	0.764	0.679	0.000

Table 4 shows the indicators of good fit of the model. It comprises of Comparative fit index (CFI), incremental fit index (IFI), and the normed fit index (NFI), good matching index (χ^2). Results show that the sure model fits the data in the form of illness (SIG $\chi^2=0$) and All other factors loading are important, all of which are much higher than the recommended value of 0.60.

Table 5. The effect of independent variable (IA) on dependent variable (AC) with and without the mediating variable (PBT)

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	10.2642	7.2147	.000	4.6467	3.3093	.001	-	-	-
IA	.8890	10.8372	.000	.5541	6.7959	.000	-	-	-
PBT	-	-	-	.5564	8.7929	.000	.3349	.1575	.4981
R²	.3120			.4706			-		
F	117.4441			114.6817			-		
SIG	.000			.000			-		

From Table 5, we note that the exploratory and predictive ability of the first model to predict (AC) is (.3120) based on the value of R^2 , and It is also evident that the statistical value of F reached (117.4441) with a level of statistical significance less than $< (0.05)$, which shows the presence of statistically significant relationship between (IA) and (AC). As for the second model, which is the entry of PBT in the relationship between IA and AC, we observe an increase in the model's explanatory power, as it became $R^2 = .4706$. We also note a decrease in the direct effect of (IA) and the presence of a direct effect of (PBT) that is statistically significant. This indicates that there is a partial mediation of the variable (PBT) in the relationship between (IA) and (AC).

Table 6. The effect of independent variable (IB) on dependent variable (AC) with and without the mediating variable (PBT)

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	11.6575	9.1626	.0000	5.3197	4.0236	.0001	-	-	-
IB	.8354	11.0376	.0000	.5348	7.1888	.0000	-	-	-
PBT	-	-	-	.5545	8.9130	.0000	.3006	.0823	.1329
R²	.3199			.4800			-		
F	121.8276			119.0829			-		
SIG	.0000			.0000			-		

From Table 6, we note that the exploratory and predictive ability of the first model to predict (AC) is (.3199) based on the value of R^2 , and it is also evident that the statistical value F, reached (121.8276) with a level of statistical significance less than $< (0.05)$, which shows the presence of statistically significant relationship between (IB) and (AC). As for the second model, which is the entry of PBT in the relationship between IB and AC, we observe an increase in the model's explanatory power, as it became $R^2 = .4800$. We also note a decrease in the direct effect of (IB) and the presence of a direct effect of (PBT) that is statistically significant. This indicates that there is a partial mediation of the variable (PBT) in the relationship between (IB) and (AC).

Table 7. The effect of independent variable (IM) on dependent variable (AC) with and without the mediating variable (PBT)

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	9.6760	7.5926	.0000	5.6409	4.3323	.0000	-	-	-
IM	.9521	12.5789	.0000	.6081	7.1634	.0000	-	-	-
PBT	-	-	-	.4778	7.0454	.0000	.3440	.1761	.5277
R²	.3792			.4794			-		
F	158.2294			118.7906			-		
SIG	.0000			.0000			-		

From Table 7, we note that the exploratory and predictive ability of the first model to predict (AC) is (.3792) based on the value of R², and it is also evident that the statistical value F, reached (158.2294) with a level of statistical significance less than < (0.05), which shows the presence of statistically significant relationship between (IM) and (AC). As for the second model, which is the entry of PBT in the relationship between IM and AC, we observe an increase in the model's explanatory power, as it became R² = .4794. We also note a decrease in the direct effect of (IM) and the presence of a direct effect of (PBT) that is statistically significant. This indicates that there is a partial mediation of the variable (PBT) in the relationship between (IM) and (AC).

Table 8. The effect of independent variable (IS) on dependent variable (AC) with and without the mediating variable (PBT)

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	9.6924	7.8491	.0000	5.1957	4.0677	.0001	-	-	-
IS	.9448	12.9740	.0000	.6303	8.0072	.0000	-	-	-
PBT	-	-	-	.4781	7.4029	.0000	.3145	.1657	.4690
R²	.3939			.5001			-		
F	168.3239			129.0463			-		
SIG	.0000			.0000			-		

From Table 8, we note that the exploratory and predictive ability of the first model to predict (AC) is (.3939) based on the value of R², and it is also evident that the statistical value F, reached (168.3239) with a level of statistical significance less than < (0.05) which shows the presence of statistically significant relationship between (IS) and (AC). As for the second model, which is the entry of PBT in the relationship between IS and AC, we observe an increase in the model's explanatory power, we notice an increase in the explanatory power of the model, as it became R² = .5001. We also note a decrease in the direct effect of (IS) and the presence of a direct effect of (PBT) that is statistically significant. This indicates that there is a partial mediation of the variable (PBT) in the relationship between (IS) and (AC).

Table 9. The effect of independent variable (IC) on dependent variable (AC) with and without the mediating variable (PBT)

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	11.4259	10.4558	.0000	5.8646	4.8565	.0000	-	-	-
IC	.8408	13.0960	.0000	.5762	8.6404	.0000	-	-	-
PBT	-	-	-	.4894	7.9153	.0000	.2646	.1340	.3935
R²	.3984			.5159			-		
F	171.5051			137.4905			-		
SIG	.0000			.0000			-		

From Table 9, we note that the exploratory and predictive ability of the first model to predict (AC) is (.3984) based on the value of R^2 , and it is also evident that the statistical value F, reached (171.5051) with a level of statistical significance less than $< (0.05)$, which shows the presence of statistically significant relationship between (IC) and (AC). As for the second model, which is the entry of PBT in the relationship between IC and AC, we observe an increase in the model's explanatory power, we notice an increase in the explanatory power of the model, as it became $R^2 = .5159$. We also note a decrease in the direct effect of (IC) and the presence of a direct effect of (PBT) that is statistically significant. This indicates that there is a partial mediation of the variable (PBT) in the relationship between (IC) and (AC).

Table 10. The effect of independent variable (IA) on dependent variable (CC) with and without the mediating variable (PBT)

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	8.1778	6.2042	.000	4.6155	3.2952	.001	-	-	-
IA	.9836	12.9427	.000	.7713	9.4829	.000	-	-	-
PBT	-	-	-	.3528	5.5896	.000	.2123	.0808	.3397
R²	.3928			.4583			-		
F	167.5138			109.1588			-		
SIG	.000			.000			-		

From Table 10, we note that the exploratory and predictive ability of the first model to predict (CC) is (.3928) based on the value of R^2 , and it is also evident that the statistical value F, reached (167.5138) with a level of statistical significance less than $< (0.05)$, which shows the presence of statistically significant relationship between (IA) and (CC). As for the second model, which is the entry of PBT in the relationship between IA and CC, we observe an increase in the model's explanatory power, we notice an increase in the explanatory power of the model, as it became $R^2 = .4583$. We also note a decrease in the direct effect of (IA) and the presence of a direct effect of (PBT) that is statistically significant. This indicates that there is a partial mediation of the variable (PBT) in the relationship between (IA) and (CC).

Table 11. The effect of independent variable (IB) on dependent variable (CC) with and without the mediating variable (PBT)

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	10.7749	8.7792	.000	6.3718	4.6623	.000	-	-	-
IB	.8609	11.7904	.000	.6520	8.4787	.000	-	-	-
PBT	-	-	-	.3852	5.9906	.000	.2089	.0784	.3299
R²	.3493			.4287			-		
F	139.0126			96.8120			-		
SIG	.000			.000			-		

From Table 11, we note that the exploratory and predictive ability of the first model to predict (CC) is (.3493) based on the value of R, and it is also evident that the statistical value F, reached (139.0126) with a level of statistical significance less than $< (0.05)$, which shows the presence of statistically significant relationship between (IB) and (CC). As for the second model, which is the entry of PBT in the relationship between IB and CC, we observe an increase in the model's explanatory power, we notice an increase in the explanatory power of the model, as it became $R^2 = .4287$. We also note a decrease in the direct effect of (IB) and the presence of a direct effect of (PBT) that is statistically significant. This indicates that there is a partial mediation of the variable (PBT) in the relationship between (IB) and (CC).

Table 12. The effect of independent variable (IM) on dependent variable (CC) with and without the mediating variable (PBT)

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	10.6866	8.1301	.000	7.7147	5.4914	.000	-	-	-
IM	.8638	11.0651	.000	.6105	6.6651	.000	-	-	-
PBT	-	-	-	.3519	4.8091	.000	.2533	.0716	.4501
R²	.3210			.3768			-		
F	122.4362			78.0121			-		
SIG	.000			.000			-		

From Table 12, we note that the exploratory and predictive ability of the first model to predict (CC) is (.3210) based on the value of R^2 , and it is also evident that the statistical value F, reached (122.4362) with a level of statistical significance less than $< (0.05)$, which shows the presence of statistically significant relationship between (IM) and (CC). As for the second model, which is the entry of PBT in the relationship between IM and CC, we observe an increase in the model's explanatory power, we notice an increase in the explanatory power of the model, as it became $R^2 = .3768$. We also note a decrease in the direct effect of (IM) and the presence of a direct effect of (PBT) that is statistically significant. This indicates that there is a partial mediation of the variable (PBT) in the relationship between (IM) and (CC).

Table 13. The effect of independent variable (IS) on dependent variable (CC) with and without the mediating variable (PBT)

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	11.5178	8.7794	.000	7.8767	5.5621	.000	-	-	-
IS	.8085	10.4507	.000	.5539	6.3467	.000	-	-	-
PBT	-	-	-	.3871	5.4066	.000	.2547	.1002	.4040
R²	.2966			.3682			-		
F	109.2164			75.1759			-		
SIG	.000			.000			-		

From Table 13, we note that the exploratory and predictive ability of the first model to predict (CC) is (.2966) based on the value of R^2 , and it is also evident that the statistical value F, reached (109.2164) with a level of statistical significance less than $< (0.05)$, which shows the presence of statistically significant relationship between (IS) and (CC). As for the second model, which is the entry of PBT in the relationship between IS and CC, we observe an increase in the model's explanatory power we notice an increase in the explanatory power of the model, as it became $R^2 = .3682$. We also note a decrease in the direct effect of (IS) and the presence of a direct effect of (PBT) that is statistically significant. This indicates that there is a partial mediation of the variable (PBT) in the relationship between (IS) and (CC).

Table 14. The effect of independent variable (IC) on dependent variable (CC) with and without the mediating variable (PBT)

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	14.3248	11.8094	.000	9.2461	6.6423	.000	-	-	-
IC	.6407	8.9898	.000	.3990	5.1908	.000	-	-	-
PBT	-	-	-	.4469	6.2706	.000	.2417	.0987	.3913
R²	.2378			.3386			-		
F	80.8165			66.0471			-		
SIG	.000			.000			-		

From Table 14, we note that the exploratory and predictive ability of the first model to predict (CC) is (.2378) based on the value of R^2 , and it is also evident that the statistical value F, reached (80.8165) with a level of statistical significance less than $< (0.05)$, which shows the presence of statistically significant relationship between (IC) and (CC). As for the second model, which is the entry of PBT in the relationship between IC and CC, we observe an increase in the model's explanatory power, we notice an increase in the explanatory power of the model, as it became $R^2 = .3386$. We also note a decrease in the direct effect of (IC) and the presence of a direct effect of (PBT) that is statistically significant. This indicates that there is a partial mediation of the variable (PBT) in the relationship between (IC) and (CC).

Table 15. The effect of independent variable (IA) on dependent variable (NC) with and without the mediating variable (PBT)

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	10.6271	7.5769	.000	6.7626	4.5482	.000	-	-	-
IA	.8092	10.0059	.000	.5788	6.7039	.000	-	-	-
PBT	-	-	-	.3827	5.7122	.000	.2304	.1043	.3736
R²	.2788			.3598			-		
F	100.1188			72.4874			-		
SIG	.000			.000			-		

From Table 15, we note that the exploratory and predictive ability of the first model to predict (NC) is (.2788) based on the value of R^2 , and it is also evident that the statistical value F, reached (100.1188) with a level of statistical significance less than $< (0.05)$, which shows the presence of statistically significant relationship between (IA) and (NC). As for the second model, which is the entry of PBT in the relationship between IA and NC, we observe an increase in the model's explanatory power we notice an increase in the explanatory power of the model, as it became $R^2 = .3598$. We also note a decrease in the direct effect of (IA) and the presence of a direct effect of (PBT) that is statistically significant. This indicates that there is a partial mediation of the variable (PBT) in the relationship between (IA) and (NC).

Table 16. The effect of independent variable (IB) on dependent variable (NC) with and without the mediating variable (PBT)

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	12.3944	9.7235	.000	7.8529	5.5273	.000	-	-	-
IB	.7304	9.6319	.000	.5150	6.4419	.000	-	-	-
PBT	-	-	-	.3973	5.9435	.000	.2154	.0924	.3575
R²	.2637			.3524			-		
F	92.7734			70.1969			-		
SIG	.000			.000			-		

From Table 16, we note that the exploratory and predictive ability of the first model to predict (NC) is (.2637) based on the value of R^2 , and it is also evident that the statistical value F, reached (92.7734) with a level of statistical significance less than $< (0.05)$, which shows the presence of statistically significant relationship between (IB) and (NC). As for the second model, which is the entry of PBT in the relationship between IB and NC, we observe an increase in the model's explanatory power, we notice an increase in the explanatory power of the model, as it became $R^2 = .3524$. We also note a decrease in the direct effect of (IB) and the presence of a direct effect of (PBT) that is statistically significant. This indicates that there is a partial mediation of the variable (PBT) in the relationship between (IB) and (NC).

Table 17. The effect of independent variable (IM) on dependent variable (NC) with and without the mediating variable (PBT)

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	9.1234	7.4748	.000	7.0076	5.2752	.000	-	-	-
IM	.9247	12.7570	.000	.7444	8.5950	.000	-	-	-
PBT	-	-	-	.2505	3.6209	.000	.1804	.0556	.3222
R²	.3859			.4156			-		
F	162.7411			91.7307			-		
SIG	.000			.000			-		

From Table 17, we note that the exploratory and predictive ability of the first model to predict (NC) is (.3859) based on the value of R^2 , and it is also evident that the statistical value F, reached (162.7411) with a level of statistical significance less than $< (0.05)$, which shows the presence of statistically significant relationship between (IM) and (NC). As for the second model, which is the entry of PBT in the relationship between IM and NC, we observe an increase in the model's explanatory power we notice an increase in the explanatory power of the model, as it became $R^2 = .4156$. We also note a decrease in the direct effect of (IM) and the presence of a direct effect of (PBT) that is statistically significant. This indicates that there is a partial mediation of the variable (PBT) in the relationship between (IM) and (NC).

Table 18. The effect of independent variable (IS) on dependent variable (NC) with and without the mediating variable (PBT)

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	10.6633	8.5001	.000	7.6585	5.5754	.000	-	-	-
IS	.8268	11.1759	.000	.6166	7.2848	.000	-	-	-
PBT	-	-	-	.3195	4.6000	.000	.2102	.0857	.3474
R²	.3253			.3765			-		
F	124.9013			77.8919			-		
SIG	.000			.000			-		

From Table 18, we note that the exploratory and predictive ability of the first model to predict (NC) is (.3253) based on the value of R^2 , and it is also evident that the statistical value F, reached (124.9013) with a level of statistical significance less than $< (0.05)$, which shows the presence of statistically significant relationship between (IS) and (NC). As for the second model, which is the entry of PBT in the relationship between IS and NC, we observe an increase in the model's explanatory power, we notice an increase in the explanatory power of the model, as it became $R^2 = .3765$. We also note a decrease in the direct effect of (IS) and the presence of a direct effect of (PBT) that is statistically significant. This indicates that there is a partial mediation of the variable (PBT) in the relationship between (IS) and (NC).

Table 19. The effect of independent variable (IC) on dependent variable (NC) with and without the mediating variable (PBT)

	Model 1 (total effect)			Model 2 (direct effect)			Indirect effect		
	β	T	SIG	β	T	SIG	effect	LL 95% CI	UL 95% CI
Constant	14.0339	11.8480	.000	9.4519	6.8772	.000	-	-	-
IC	.6254	8.9861	.000	.4074	5.3670	.000	-	-	-
PBT	-	-	-	.4032	5.7300	.000	.2180	.1022	.3459
R²	.2377			.3237			-		
F	80.7508			61.7544			-		
SIG	.000			.000			-		

From Table 19, we note that the exploratory and predictive ability of the first model to predict (NC) is (.2377) based on the value of R², and it is also evident that the statistical value F, reached (80.7508) with a level of statistical significance less than < (0.05), which shows the presence of statistically significant relationship between (IC) and (NC). As for the second model, which is the entry of PBT in the relationship between IC and NC, we observe an increase in the model's explanatory power we notice an increase in the explanatory power of the model, as it became R² =.3237. We also note a decrease in the direct effect of (IC) and the presence of a direct effect of (PBT) that is statistically significant. This indicates that there is a partial mediation of the variable (PBT) in the relationship between (IC) and (NC).

Table 20. The effect of independent variable (IA) on dependent variables (AC, CC, NC) with the Moderator variable (EI)

	AC			CC			NC		
	β	T	SIG	β	T	SIG	β	T	SIG
Constant	25.8525	167.8981	.000	25.3317	158.5808	.000	24.941	137.7921	.000
IA	-.0735	-.8408	.4012	.2214	2.4416	.0153	.0833	.8106	.4183
EI	.2182	7.7939	.000	.1704	5.8649	.000	.0741	2.2505	.0253
INT-1	-.0223	-5.0660	.000	-.0180	-3.9413	.000	-.0290	-5.6209	.000
R²	.6441			.6062			.4696		
F	155.0387			131.8498			75.8426		
SIG	.000			.000			.000		
R²-CHNG (IA*EI)	.0355			.0238			.0652		
F (IA*EI)	25.6645			15.5336			31.5947		
SIG (IA*EI)	.000			.000			.000		

Table 20 shows the effect of the interaction between (IA) and (EI) on each of (AC), (CC), (NC) to assess if there is moderation or not. It is clear that the effect of the interaction was significant in the relationship between (IA) and (AC), where ($\beta = -.0223$, $p < 0.05$), and therefore (EI) adjusts this relationship as we note the value of ($R^2\text{-CHNG} = .0355$, $p < 0.05$), and this explains the change due to interaction which is significant. We also notice a decrease in the effect of (IA) in (AC) with the interaction between (IA) and (EI). It is clear that the effect of the interaction was significant in the relationship between (IA) and (CC), where ($\beta = -.0180$, $p < 0.05$), and therefore (EI) adjusts this relationship as we note the value of ($R^2\text{-CHNG} = .0238$, $p < 0.05$), and this explains the change due to interaction which is significant. We also notice a decrease in the effect of (IA) in (CC) with the interaction between (IA) and (EI). It is clear that the effect of the interaction was significant in the relationship between (IA) and (NC), where ($\beta = -.0290$, $p < 0.05$), and therefore (EI) adjusts this

relationship as we note the value of ($R^2\text{-CHNG} = .0652, p < 0.05$), and this explains the change due to interaction which is significant. We also notice a decrease in the effect of (IA) in (NC) with the interaction between (IA) and (EI).

Table 21. The effect of independent variable (IB) on dependent variables (AC, CC, NC) with the Moderator variable (EI)

	AC			CC			NC		
	β	T	SIG	β	T	SIG	β	T	SIG
Constant	25.7024	163.7982	.000	25.3127	157.9665	.000	24.895	137.4227	.000
IB	.1045	1.3429	.1805	.1876	2.3616	.0189	.1294	1.4407	.1509
EI	.2473	8.8397	.000	.1860	6.5089	.000	.0878	2.7188	.007
INT-1	-.0115	-2.7065	.007	-.0163	-3.7686	.000	-.0253	-5.1711	.000
R²	.6254			.5983			.4615		
F	143.0136			127.6053			73.4186		
SIG	.000			.000			.000		
R²-CHNG (IB*EI)	0107			.0222			.0560		
F (IB*EI)	7.3252			14.2025			26.7401		
SIG (IB*EI)	.007			.000			.000		

Table 21 shows the effect of the interaction between (IB) and (EI) on each of (AC), (CC), (NC) to assess if there is moderation or not. It is clear that the effect of the interaction was significant in the relationship between (IB) and (AC), where ($\beta = -.0115, p < 0.05$), and therefore (EI) adjusts this relationship as we note the value of ($R^2\text{-CHNG} = 0107, p < 0.05$), and this explains the change due to interaction which is significant. We also notice a decrease in the effect of (IB) in (AC) with the interaction between (IB) and (EI). It is clear that the effect of the interaction was significant in the relationship between (IB) and (CC), where ($\beta = -.0163, p < 0.05$), and therefore (EI) adjusts this relationship as we note the value of ($R^2\text{-CHNG} = .0222, p < 0.05$), and this explains the change due to interaction which is significant. We also notice a decrease in the effect of (IB) in (CC) with the interaction between (IB) and (EI). It is clear that the effect of the interaction was significant in the relationship between (IB) and (NC), where ($\beta = -.0253, p < 0.05$), and therefore (EI) adjusts this relationship as we note the value of ($R^2\text{-CHNG} = .0560, p < 0.05$), and this explains the change due to interaction which is significant. We also notice a decrease in the effect of (IB) in (NC) with the interaction between (IB) and (EI).

Table 22. The effect of independent variable (IM) on dependent variables (AC, CC, NC) with the Moderator variable (EI)

	AC			CC			NC		
	β	T	SIG	β	T	SIG	β	T	SIG
Constant	25.6648	167.2432	.000	25.1964	154.0526	.000	24.7522	141.9918	.000
IM	.1500	1.6297	.104	.0831	.8471	.3977	.3683	3.5236	.001
EI	.2550	10.4062	.000	.2512	9.6158	.000	.1015	3.6472	.000
INT-1	-.0087	-2.3713	.0185	-.0082	-2.0749	.039	-.0152	-3.6331	.000
R²	.6297			.5675			.4847		
F	145.6870			112.4128			80.5717		
SIG	.000			.000			.000		
R²-CHNG (IM*EI)	.0081			.0072			.0265		
F (IM*EI)	5.6229			4.3053			13.1995		
SIG (IM*EI)	.018			.039			.000		

Table 22 shows the effect of the interaction between (IM) and (EI) on each of (AC), (CC), (NC) to assess if there is moderation or not. It is clear that the effect of the interaction was significant in the relationship between (IM) and (AC), where ($\beta = -.0087$, $p < 0.05$), and therefore (EI) adjusts this relationship as we note the value of ($R^2\text{-CHNG} = .0081$, $p < 0.05$), and this explains the change due to interaction which is significant. We also notice a decrease in the effect of (IM) in (AC) with the interaction between (IM) and (EI). It is clear that the effect of the interaction was significant in the relationship between (IM) and (CC), where ($\beta = -.0082$, $p < 0.05$), and therefore (EI) adjusts this relationship as we note the value of ($R^2\text{-CHNG} = .0072$, $p < 0.05$), and this explains the change due to interaction which is significant. We also notice a decrease in the effect of (IM) in (CC) with the interaction between (IM) and (EI). It is clear that the effect of the interaction was significant in the relationship between (IM) and (NC), where ($\beta = -.0152$, $p < 0.05$), and therefore (EI) adjusts this relationship as we note the value of ($R^2\text{-CHNG} = .0265$, $p < 0.05$), and this explains the change due to interaction which is significant. We also notice a decrease in the effect of (IM) in (NC) with the interaction between (IM) and (EI).

Table 23. The effect of independent variable (IS) on dependent variables (AC, CC, NC) with the Moderator variable (EI)

	AC			CC			NC		
	β	T	SIG	β	T	SIG	β	T	SIG
Constant	25.7590	169.9448	.000	25.3763	156.7122	.000	24.8147	136.7973	.000
IS	.2266	2.9144	.003	.0328	.3951	.6931	.2897	3.1135	.002
EI	.2028	7.4710	.000	.1878	6.476	.000	.0886	2.7273	.007
INT-1	-.0157	-3.6381	.000	-.0212	-4.5841	.000	-.0202	-3.9048	.000
R²	.6546			.5947			.4665		
F	162.3718			125.6987			74.9080		
SIG	.000			.000			.000		
R²-CHNG (IS*EI)	.0178			.0331			.0317		
F (IS*EI)	13.2358			21.0136			15.2474		
SIG (IS*EI)	.000			.000			.000		

Table 23 shows the effect of the interaction between (IS) and (EI) on each of (AC), (CC), (NC) to assess if there is moderation or not. It is clear that the effect of the interaction was significant in the relationship between (IS) and (AC), where ($\beta = -.0157$, $p < 0.05$), and therefore (EI) adjusts this relationship as we note the value of ($R^2\text{-CHNG} = .0178$, $p < 0.05$), and this explains the change due to interaction which is significant. We also notice a decrease in the effect of (IS) in (AC) with the interaction between (IS) and (EI). It is clear that the effect of the interaction was significant in the relationship between (IS) and (CC), where ($\beta = -.0212$, $p < 0.05$), and therefore (EI) adjusts this relationship as we note the value of ($R^2\text{-CHNG} = .0331$, $p < 0.05$), and this explains the change due to interaction which is significant. We also notice a decrease in the effect of (IS) in (CC) with the interaction between (IS) and (EI). It is clear that the effect of the interaction was significant in the relationship between (IS) and (NC), where ($\beta = -.0202$, $p < 0.05$), and therefore (EI) adjusts this relationship as we note the value of ($R^2\text{-CHNG} = .0317$, $p < 0.05$), and this explains the change due to interaction which is significant. We also notice a decrease in the effect of (IS) in (NC) with the interaction between (IS) and (EI).

Table 24. The effect of independent variable (IC) on dependent variables (AC, CC, NC) with the Moderator variable (EI)

	AC			CC			NC		
	β	T	SIG	β	T	SIG	β	T	SIG
Constant	25.7047	172.9101	.000	25.3143	155.0642	.000	24.8673	136.9123	.000
IC	.3199	5.2498	0.00	.0553	.8258	.410	.1893	2.5433	.012
EI	.2110	8.0143	.000	.2180	7.5399	.000	.0988	3.0722	.002
INT-1	-.0111	-2.9771	.003	-.0157	-3.8290	.000	-.0223	-4.9012	.000
R²	.6605			.5790			.4534		
F	166.6632			117.8338			71.0661		
SIG	.000			.000			.000		
R²-CHNG (IC*EI)	.0117			.0240			.0511		
F (IC*EI)	8.8630			14.6613			24.0216		
SIG (IC*EI)	.003			.000			.000		

Table 24 shows the effect of the interaction between (IC) and (EI) on each of (AC), (CC), (NC) to assess if there is moderation or not. It is clear that the effect of the interaction was significant in the relationship between (IC) and (AC), where ($\beta = -.0111$, $p < 0.05$), and therefore (EI) adjusts this relationship as we note the value of ($R^2\text{-CHNG} = .0117$, $p < 0.05$), and this explains the change due to interaction which is significant. We also notice a decrease in the effect of (IC) in (AC) with the interaction between (IC) and (EI). It is clear that the effect of the interaction was significant in the relationship between (IC) and (CC), where ($\beta = -.0157$, $p < 0.05$), and therefore (EI) adjusts this relationship as we note the value of ($R^2\text{-CHNG} = .0240$, $p < 0.05$), and this explains the change due to interaction which is significant. We also notice a decrease in the effect of (IC) in (CC) with the interaction between (IC) and (EI). It is clear that the effect of the interaction was significant in the relationship between (IC) and (NC), where ($\beta = -.0223$, $p < 0.05$), and therefore (EI) adjusts this relationship as we note the value of ($R^2\text{-CHNG} = .0511$, $p < 0.05$), and this explains the change due to interaction which is significant. We also notice a decrease in the effect of (IC) in (NC) with the interaction between (IC) and (EI).

DISCUSSION:

The present research is the contribution to the literature of leadership in context of health sector by conceptualizing the relation of transformational leadership and organizational commitment through mediated model. Here in the recent study, we have introduced the concept of transformational leadership in terms of health managers of each hospital department. It is a new approach which has been highlighted. These leaders transform the health units and serve as role models, go any further daily activities, set objectives and targets, inspire and motivate health staff, also realize the individual needs and personal requirements of the staff and encourage staff efforts to present innovative ideas for the solution of problems.

The result analysis shows that the health care leadership practice transformational leadership in its all dimensions; idealized influence, idealized influence, inspirational motivation, intellectual stimulation and individual considerations. These results affirm that health care leadership promote an environment where novel ideas are aligned with the ethics, beliefs, and organizational objectives, and individuals are openly acknowledged for their contributions and for exceeding expectations of what was anticipated of them. In the recent study, we found that health managers of different units of hospitals possess the key features of transformational leadership and their commitment is really high with the hospitals. It is observed that significant correlations exist between organizational

commitment scores and transformational leadership scores. The effect of idealized influence, idealized influence, inspirational motivation, intellectual stimulation and individual considerations on commitment was found to be statistically significant. Results refer that health managers in the role of transformational leaders have emotional ties to the hospitals and they are eager to attain the objectives of their health units. This also indicates that by practicing ethical values and beliefs, instilling confidence, focusing on a shared sense of purpose, exhibiting a sense of authority and self-assurance, and taking into consideration an individual's particular needs, competences, and hopes and dreams, optimism and motivation, and seeking out different points of view for solutions to problems, they are willing to stay in the hospitals as they have a positive relationship with the work place.

Research studies emphasize that HR practices i.e training is the source of motivation for the employees which make them more committed to achieve organisational goals (Conway & Monks, 2007; Dikkers, Jansen, Kooij, & Lange, 2010). Training considered as beneficial for the employees in terms of organizational commitment and previous studies provided evidence that there is significant positive link between the construct perceived benefits of training and the sub constructs of organizational commitment (Silva and Dias, 2016; Alamri and Al-Duhaim, 2017). In the light of present study, it is noticed that Perceived benefits of training has a partial mediation effect between the sub variables of transformational leadership and organizational commitment. The results demonstrate that there is not only a significant correlation between the constructs but also some direct relationship. This shows that the attributes of transformational leadership, make them willing to stay in the hospitals as they have positive relations with the work place or due to some motivational factors or lack of availability of jobs. And this relation can be strengthened if the health managers who believe that attending training sessions conducted by their hospitals will enhance their performance at work and benefit their self-development are more likely to form strong emotional bonds with their health care organizations. This shows that the attributes of transformational leadership make them stay in the hospitals due to some motivational factors or lack of availability of jobs or due to their cultural norms and moral values. This relationship can be strengthened when they believe that engaging in and attending training programs will enhance their performance at work and help in self-development. This leads to making employees with supervisory roles more motivated, skilled, and competent, and this motivation will increase the organizational commitment of health managers to their health units. Similar findings were reported in other studies. (Silva and Dias, 2016).

Emotional Intelligence is considered as the key factor to boost organization commitment and many studies found clear relation between emotional intelligence, the utilization of transformational leader, and their association with constructive work place attitudes (Leban W and Zulauf, 2004; Stein SJ et al., 2009; Brown FW et al., 2006). In the light of present study results, it is found that Emotional Intelligence have a moderator effect on the relationship between the sub variables of transformational leadership and organizational commitment. in the context of the Pakistani health sector. This shows that the attributes of transformational leadership make them stay in the hospitals and this relation can be strengthened by emotional intelligence competences such as the ability to accurately identify, assess, and reveal emotion; the capacity to elicit emotions in order to stimulate thought; the comprehension of emotions and emotional quotient; and the management of emotions in order to promote emotional and cognitive talents. Moreover, as this research had been carried out in Pakistan, and it is a collectivist culture, where individuals' self-respect and self-esteem are highly valued; thus, any organization that only provides monetary benefits may not guarantee their workers' commitment to the workplace. In regards to the findings, effective application of these emotional intelligence skills may increase ones' commitment to their organization. Hence, it is suggested that hospitals should conduct EI training sessions time to time at supervisory and subordinate levels to improve individual interpersonal skills.

Future Implications & Research Limitations:

In the light of above stated discussion, it is found that improving Transformational

Leadership, Emotional intelligence features of health managers can impact on their organizational commitment working in different health sector of Pakistan. Moreover, it is also found that increasing health care managers' awareness of the benefits of training can improve their emotional attachment to their hospitals. This indicates training sessions may produce more positive results when participants comprehend the benefits of training which is likely to increase managers' commitment to the hospitals. Hence, it is suggested that hospitals should arrange training sessions timely. The research suggests few implications for the managers of health sector. First of all, to give priority to accomplish the vision of health organizations, the health industry must need to recruit health managers for the health units who have the features of Transformational Leadership(TL), through more stringent process of selection. Secondly, hospitals should conduct training programs to develop and improve the ability and competence of health managers in supervisory positions of each department of hospital. Thirdly, health managers should lead the health organization through their charismatic leadership characteristics in terms of direction and procedures and should work with them to find requisite changes. Moreover, the recent research has been limited to the health managers in Pakistan. Two hundred and sixty-one managers have been surveyed from hospitals of Karachi. In future research, comparative studies between different countries' health care sectors could be conducted to learn about different perspectives on health managers' organizational commitment in their respective health sectors. Moreover, it could be conducted at managerial levels in other service sectors too.

REFERENCES

- Aguinis, H., & Kraiger, K. (2009). Benefits of training and development for individuals and teams, organizations, and society. *Annual review of psychology*, 60, 451-474.
- Ahmed I. (2017), Staff well-being in high-risk operating room environment: definition, facilitators, stressors, leadership, and team-working – a case-study from a large teaching hospital. *Int J Healthc Manag*; April .doi:10.1080/20479700.2017.1298228.
- Ahmad, K. Z., & Bakar, R. A. (2003). The association between training and organizational commitment among white-collar workers in Malaysia. *International journal of training and development*, 7(3), 166-185.
- Alamri, M. and Al-Duhaim, T. (2017), "Employees perception of training and its relationship with organizational commitment among the employees working at Saudi industrial development fund", *International Journal of Business Administration*, Vol. 8 No. 2, pp. 25-39
- Antonakis, J., Ashkanasy, N. M., & Dasborough, M. T. (2009). Does leadership need emotional intelligence?. *The leadership quarterly*, 20(2), 247-261.
- Arroliga, A. C., Huber, C., Myers, J. D., Dieckert, J. P., & Wesson, D. (2014). Leadership in health care for the 21st century: challenges and opportunities. *The American journal of medicine*, 127(3), 246-249.
- Bar-On, R. E., & Parker, J. D. (2000). *The handbook of emotional intelligence: Theory, development, assessment, and application at home, school, and in the workplace*. Jossey-Bass.
- Barling, J., Slater, F., & Kelloway, E. K. (2000). Transformational leadership and emotional intelligence: An exploratory study. *Leadership & Organization Development Journal*, 21(3), 157-161.
- Bass, B. M. (1985). Leadership: Good, better, best. *Organizational dynamics*, 13(3), 26-40.
- Bass, B. M., & Avolio, B. J. (1996). Multifactor leadership questionnaire. *Western Journal of Nursing Research*.
- Bass, B.M. and Avolio, B.J. (1990), "Developing Transformational Leadership: 1992 and Beyond", *Journal of European Industrial Training*, Vol. 14 No. 5. <https://doi.org/10.1108/03090599010135122>
- Bhalerao, H., & Kumar, S. (2016). Role of emotional intelligence in leaders on the commitment level of employees: A study in information technology and manufacturing sector in India. *Business Perspectives and Research*, 4(1), 41-53.

- Brown, F. W., Bryant, S. E., & Reilly, M. D. (2006). Does emotional intelligence—as measured by the EQI—influence transformational leadership and/or desirable outcomes?. *Leadership & Organization Development Journal*, 27(5), 330-351.
- Bulut, C., & Culha, O. (2010). The effects of organizational training on organizational commitment. *International Journal of Training and Development*, 14(4), 309
322. <https://doi.org/10.1111/j.1468-2419.2010.00360.x>
- Burns, J. M. (1978). *Leadership*. New York: Harper & Row.
- Cohen, A. (2003). *Multiple commitments in the workplace: An integrative approach*. Psychology Press. 354.
- Conway, E., & Monks, K. (2008). HR practices and commitment to change: an employee-level analysis. *Human Resource Management Journal*, 18(1), 72-89.
- Côté, S., Lopes, P. N., Salovey, P., & Miners, C. T. (2010). Emotional intelligence and leadership emergence in small groups. *The Leadership Quarterly*, 21(3), 496-508.
- Chaudhry, S., & Joshi, C. (2017). TRANSFORMATIONAL LEADERSHIP, HR PRACTICES AND AFFECTIVE COMMITMENT TO CHANGE: A THEORETICAL PERSPECTIVE. *Journal of Organisation & Human Behaviour Volume*, 6(3).
- Dikkers, J., Jansen, P., Kooij, D., & Lange, A. (2010). The influence of age on the associations between HR practices and both affective commitment and job satisfaction: A meta-analysis. *Journal of Organizational Behavior*, 31, 1111-1136.
- Dhar, R. L. (2015). Service quality and the training of employees: The mediating role of organizational commitment. *Tourism management*, 46, 419-430.
- Elovainio, M., Kivimäki, M., & Vahtera, J. (2002). Organizational justice: evidence of a new psychosocial predictor of health. *American journal of public health*, 92(1), 105-108.
- Goleman, D., & Intelligence, E. (1995). Why it can matter more than IQ. *Emotional intelligence*.
- Goleman, D. (1998b). What makes a leader? Harvard Business Review, November/December.
- García-Morales, V.J., Jimenez-Barrionuevo, M.M., Gutierrez- Gutierrez, L. (2012), Transformational leadership influence on organizational performance through organizational learning and innovation. *Journal of Business Research*, 65, 1040-1050.
- Hackman, J. R., & Walton, R. E. (1986). Leading groups in organizations. Designing effective work groups, 72, 119.
- Huselid, M.A. (1995), “The impact of human resource management practices on turnover, productivity and corporate financial performance”, *Academy of Management Journal*, Vol. 38 No. 3, pp. 635-72.
- Ichniowski, C., Shaw, K. and Prennushi, G. (1997), “The effects of human resource management practices on productivity: a study of steel finishing lines”, *American Economic Review*, Vol. 87 No. 3, pp. 291-313.
- Kadiresan, V., Selamat, M. H., Selladurai, S., Ramendran, C. S., & Mohamed, R. K. M. H. (2015). Performance appraisal and training and development of human resource management practices (HRM) on organizational commitment and turnover intention. *Asian Social Science*, 11(24), 162.
- Leban W, Zulauf C. (2004). Linking emotional intelligence abilities and transformational leadership styles. *Leadership Organ Dev J*;25(7):554–564.
- Lejeune J, Chevalier S, Coillot H, et al. (2017). Déterminants managériaux et organisationnels, santé psychologique au travail des soignants et qualité de prise en charge des enfants en oncologie pédiatrique [Managerial and organizational factors, caregivers’ psychological health at work and quality of care of children in pediatric oncology]. *Rev Oncol Hématol Pédiatr.* ;5(2):84–93.
- Liden, R. C., Wayne, S. J., & Sparrowe, R. T. (2000). An examination of the mediating role of psychological empowerment on the relations between the job, interpersonal relationships, and work outcomes. *Journal of applied psychology*, 85(3), 407.
- Lindebaum, D., & Cartwright, S. (2010). A critical examination of the relationship between emotional intelligence and transformational leadership. *Journal of Management Studies*, 47(7), 1317-1342.

- Melita Prati, L., Douglas, C., Ferris, G. R., Ammeter, A. P., & Buckley, M. R. (2003). The role of emotional intelligence in team leadership: Reply to the critique by Antonakis. *The International Journal of Organizational Analysis*, 11(4), 363-369.
- Meyer, J. P., & Allen, N. J. (1997). *Commitment in the workplace: Theory, research, and application*. Sage publications.
- Mohammad Mosadegh Rad, A. and Hossein Yarmohammadian, M. (2006), "A study of relationship between managers' leadership style and employees' job satisfaction", *Leadership in Health Services*, Vol. 19 No. 2, pp. 11-28. <https://doi.org/10.1108/13660750610665008>.
- Mosadeghrad, A. M., & Ferdosi, M. (2013). Leadership, job satisfaction and organizational commitment in healthcare sector: Proposing and testing a model. *Materia socio-medica*, 25(2), 121.
- Meyer, J. P., & Allen, N. J. (1984). Testing the "side-bet theory" of organizational commitment: Some methodological considerations. *Journal of applied psychology*, 69(3), 372.
- Meyer, J. P., & Allen, N. J. (1991). A three-component conceptualization of organizational commitment. *Human resource management review*, 1(1), 61-89.
- Meyer, J. P., Allen, N. J. & Smith, C. A. (1993). Commitment to organizations and occupations: Extension and test of a three-component conceptualization. *Journal of Applied Psychology*, 78(4), 538-551.
- Meyer, J. P., & Herscovitch, L. (2001). Commitment in the workplace: Toward a general model. *Human resource management review*, 11(3), 299-326.
- Noe, R. A., & Wilk, S. L. (1993). Investigation of the factors that influence employees' participation in development activities. *Journal of Applied Psychology*, 78(2), 291-302. Nonaka, I. and Takeuchi, H. (1995), *The Knowledge-creating Company*, Oxford University Press, New York, NY.
- Orazi, D. C., Turrini, A., & Valotti, G. (2013). Public sector leadership: new perspectives for research and practice. *International Review of Administrative Sciences*, 79(3), 486-504.
- Petrides, K. V., Furnham, A., & Mavroveli, S. (2007). Trait emotional intelligence: Moving forward in the field of EI. *Emotional intelligence: Knowns and unknowns*, 4, 151-166.
- Pillai, R., & Williams, E. A. (2004). Transformational leadership, self efficacy, group cohesiveness, commitment, and performance. *Journal of organizational change management*, 17(2), 144-159.
- Porter, L. W., Steers, R. M., Mowday, R. T., & Boulian, P. V. (1974). Organizational commitment, job satisfaction, and turnover among psychiatric technicians. *Journal of applied psychology*, 59(5), 603.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of management*, 26(3), 513-563.
- Ramendram, C.S., Supian, C.M.N., Kadiresan, V., Kumar, R., Mohamed, M.H. and Rethinam, K. (2014), "Promoting employment security through training for employability", *International Journal of Management Sciences*, Vol. 3, pp. 45-55.
- Redmond, M. R., Mumford, M. D., & Teach, R. (1993). Putting creativity to work: Effects of leader behavior on subordinate creativity. *Organizational behavior and human decision processes*, 55(1), 120-151.
- Rinfret, N., Laplante, J., Lagacé, M. C., Deschamps, C., & Privé, C. (2020). Impacts of leadership styles in health and social services: A case from Quebec exploring relationships between emotional intelligence and transformational leadership. *International Journal of Healthcare Management*, 13(sup1), 329-339.
- Salovey, P., & Mayer, J. D. (1990). Emotional intelligence. *Imagination, cognition and personality*, 9(3), 185-211.
- Schwandt, D., & Marquardt, M. J. (1999). *Organizational learning*. CRC Press.
- Scheible, A.C.F. and Bastos, A.V.B. (2013), "An examination of human resource management practices' influence on organizational commitment and entrenchment", *BAR – Brazilian Administration Review*, Vol. 10 No. 1, pp. 57-76.

- Senge, P.M. (1990), *The Fifth Discipline: Five Practices of the Learning Organization*. New York: Doubleday.
- Senge, P., Roberts, C., Ross, R.B., Smith, B.J., Kleiner, A. (1994), *The Fifth Discipline Field Book*. New York: Doubleday Publ.
- Silva, R. and Dias, A. (2016), "The role of organizational training on organizational commitment. The case of private security employees working remotely", *European Journal of Business and Social Sciences*, Vol. 5 No. 8, pp. 14-30.
- Smith, Peter C., Anders Anell, Reinhard Busse, Luca Crivelli, Judith Healy, Anne Karin Lindahl, Gert Westert, and Tobechukwu Kene. "Leadership and governance in seven developed health systems." *Health policy* 106, no. 1 (2012): 37-49.
- Stein, S. J., Papadogiannis, P., Yip, J. A., & Sitarenios, G. (2009). Emotional intelligence of leaders: A profile of top executives. *Leadership & Organization Development Journal*, 30(1), 87-101.
- Tingvoll, W. A., Sæterstrand, T., & McClusky, L. M. (2016). The challenges of primary health care nurse leaders in the wake of New Health Care Reform in Norway. *BMC nursing*, 15(1), 1-8.
- Wong, C. S., & Law, K. S. (2002). Wong and law emotional intelligence scale. *The leadership quarterly*.
- Walumbwa, F. O., & Lawler, J. J. (2003). Building effective organizations: Transformational leadership, collectivist orientation, work-related attitudes and withdrawal behaviours in three emerging economies. *The International Journal of Human Resource Management*, 14(7), 1083-1101.
- Weberg, D. (2012, October). Complexity leadership: A healthcare imperative. In *Nursing forum* (Vol. 47, No. 4, pp. 268-277).
- Ulrich, D., Jick, T. and Von Glinow, M.A. (1993), "High-impact learning: building and diffusing learning capability", *Organizational Dynamics*, pp. 52-66.
- Vigoda-Gadot, E., & Meisler, G. (2010). Emotions in management and the management of emotions: The impact of emotional intelligence and organizational politics on public sector employees. *Public Administration Review*, 70(1), 72-86.
- Yang, H., Sanders, K., & Bumatay, C. P. (2012). Linking perceptions of training with organizational commitment: The moderating role of self-construals. *European journal of work and organizational psychology*, 21(1), 125-149.
- Zacharatos, A., Barling, J., & Kelloway, E. K. (2000). Development and effects of transformational leadership in adolescents. *The Leadership Quarterly*, 11(2), 211-226.
- Zahoor, H., Muhammad, G., & Mustafa, N. (2020). Emotional intelligence is the B blocker for job stress. A study of Pakistan and Turkey. In *Traders International Trade Academic Journal*, 2(2), 205-223.