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**Quality Work-Life as predictor to Organisational Commitment under contrasting Leadership Styles: I.T Responses from Pakistan's private software**

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**Abstract**

This study investigate the dimensions of organisational commitment under transformational and transactional leadership style while considering the attributes of Quality Work-life prevailing in Pakistan's private software houses. Theoretical framework is developed by considering studies commenced in last three decades on similar topic. This study considers positivist paradigm with objective epistemology, realism ontology, and hyopthetico-deductive quantitative method to explore the relationship between research variables. The sample size for study is 408 participants from 10 mega cities of Pakistan through combining probability and non-probability sampling technique. Self-administered survey questionnaire was circulated through HR department of targeted firms.

Results showed that transformational leadership has strong significant relationship with all dimensions of organisational commitment whereas transactional leadership has positive relationship with affective and continuance commitment. Employees prefer transformational leadership style and their level of commitment is driven by existing QWL programme.

This paper contributes to expansion of body of knowledge regarding QWL and organisational commitment under considered leadership styles in developed economies. This paper is unique in terms of strategic approach such as deductive quantitative approach under scientific paradigm.

**Key words:** *Quality Work-Life; Transformational Leadership; Transactional Leadership; Organisational Commitment; Job Satisfaction;*

## **Introduction**

I.T sector of Pakistan has gained dramatic boom in recent years. According to the official statistics of SMEDA Pakistan (2014) after 2008 recession, I.T sector's contribution to GDP has increased by 13% while in GNP of country, it contributes 9% and the rate is inclining at a constant rate since last five years. According to Tribune National Newspaper (2015) small software houses have been consistently contributing to the economy of Pakistan. The survey have revealed that alone in Karachi, there are over 700 unregistered software houses that are operating but contributing to the domestic economy of Pakistan. Interestingly a press report issued by Pakistan Press Foundation (2013) revealed that 63% of I.T sector's contribution comes from telephone and software firms but despite heavy contribution there are delays in launching projects such as 3G, 4G, Data base collaboration, etc. One of the reasons for delays in project is credited to organisational functioning system. There are several other factors such as political uncertainty, lack of IT universities, high rate of illiteracy, etc however this research only focuses in the dimension of organisational functioning system to investigate the relationship between organisational commitment, quality work-life and leadership styles.

The reason behind it is that these software houses offers cheap services and develop projects for local, international and interlinked MNCs. Despite high contribution there is high employee turnover evident as 21% employee turnover is shown in the report of Pakistan Press Foundation in 2013. Since this sector is contributing to the economy of Pakistan, thus it is essential to evaluate employee's satisfaction working in these private software houses. According to Nanjundeswaraswamy and Swamy (2015) the employees' individual needs must not be overlooked at the expense of technological needs when designing jobs. Thus, it is essential for the management to design a job that is aligned with the human features including; satisfying them, their work and workplace environment (Nanjundeswaraswamy & Swamy, 2015). Therefore, it is vital to construct job in a manner that it fulfils both; human as well technological needs.

The above argument emphasis that nowadays it is essential to enrich job design by moving away from traditional job designs where only organisational need was determine through effective and efficient use of technology. In other words, Quality of Work-Life (QWL) should be the focus of the organisations in modern era. The concept means developing an organisational support system that enables management to deal with their workforce as not just workers but resources to facilitate them in demonstrating high level of performance.

Moreover, employee participation, interpersonal relationship, empowerment, autonomy etc are new interventions to concept and scope of QWL by transforming from socio-technical system to versatile programme used to improve employees' commitment and work life experiences. The quality of workers tends to increase due to these features of QWL as it tends to improve their involvement in job at workplace.

The organisational commitment include; affective, normative, and continuance commitment (Mowday et al., 1982; Allen and Meyer, 2001; Haque & Yamoah, 2014). The idea of developing organisational commitment among workers is to ensure that they work for attainment of organisational goal and remain motivated and directed to it. However, the organisational commitment is not just developed through organisational support system but there is a need of proper leadership at the organisation. Now it is vital to understand the concept of leadership before emphasising on its significance in creating organisational commitment. Leaders who are effective are individuals having the ability to influence and inspire others in certain ways to accomplish desired goals. The organisational performance and organisational commitment of employees are affected by various types of leadership styles (Nahavandi, 2006; Nanjundeswaraswamy & Swamy, 2015). According to Yair et al., (2003), employees overall satisfaction and job related satisfaction is strongly predicted by transformational leadership style. Interestingly, Ogbonna and Harris (2002) argued that innovative and competitive culture significantly influences the organisational performances to large extent. In other words, organisational culture has an impact on the organisational performance whereas, leadership style influenced the organizational Culture and thus organisational performance is influenced by leadership style in organisational setting.

### **Aim**

Aim of this study is to increase understanding about linkage of leadership styles with QWL and Organisational commitment of employees in the I.T sector of Pakistan. In addition,, investigating the relationship between leadership styles and QWL and organisational commitment respectively. Hence, in order to examine the relationship between variables, we undertake transformational and transactional leadership style based on the findings of Haque et al., (2015) to take that research further by exploring the elements of QWL and dimensions of organisational commitment.

### **Hypotheses**

Following are the hypotheses:

H1: QWL of employees is not significantly influenced by transformational leadership style.

H1': QWL of employees is significantly influenced by transformational leadership style.

H2: QWL of employees is not significantly influenced by transactional leadership style.

H2': QWL of employees is significantly influenced by transactional leadership style.

H3: Organisational commitment (affective commitment, normative commitment, and continuance commitment) of employees is not significantly affected by transformational leadership style.

H3': Organisational commitment (affective commitment, normative commitment, and continuance commitment) of employees is significantly affected by transformational leadership style.

H4: Organisational commitment (affective commitment, normative commitment, and continuance commitment) of employees is not significantly affected by transactional leadership style.

H4': Organisational commitment (affective commitment, normative commitment, and continuance commitment) of employees is significantly affected by transactional leadership style.

## **Literature Review**

### ***Quality of Work Life***

Hackman and Oldham (1980) described QWL as the favorable working environment that supports and promoted satisfaction by providing employees with rewards, job security and career growth opportunities. The work environment enables to fulfill employees' personal needs is considered as an important factor to provide a positive interaction effect, which will lead to an excellent QWL. Cunningham and Eberle (1990) emphasized that the personal needs are satisfied when rewards from the organization, such as compensation, promotion, recognition and development meet their expectations. The elements that are relevant to an individual's QWL include the task, the physical and social work environment within the organization, organizational system and relationship between life on and off the job. Chan

and Einstein (1990) explained QWL reflects as a concern for people's experience at work, their relationship with other people, their work setting and their effectiveness on the job. European Foundation for the Improvement of Living Conditions 2002 described that the QWL is a multidimensional construct, made up of a number of interrelated factors that need careful consideration to conceptualize and measure. QWL is associated with job satisfaction, job involvement, motivation, productivity, health, safety, job security, competence development and balance between work and nonwork life. Quality of work life is a process by which an organization responds to employee needs for developing mechanisms to allow them to share fully in making the decisions that design their lives at work. Saraji and Dargahi (2006) study explained QWL as a comprehensive, department wide program designated to improve employee satisfaction, strengthening workplace learning and helping employees had better manage, change and transition by conducting descriptive and analytical study. QWL programs will benefit both employees and management, by mutually solving work related problems, building cooperation, improving work environments, restructuring tasks carefully and fairly managing human resource outcomes and payoffs according to the study of Rose et al. (2006).

According to Rethinam and Ismail (2007), QWL is a multi-dimensional construct, made up of a number of interrelated factors that need careful consideration to conceptualize and measure. It is associated with job satisfaction, job involvement, motivation, productivity, health, safety and well-being, job security, competence development and balance between work and non-work life and also he concluded as QWL from the perspective of IT professionals is challenging both to the individuals and organizations. However, from the literature it can be summarized that QWL may be viewed as a wide-ranging concept, which includes satisfaction towards work, participative management and improve work environment. It is evident from the available literature, there is very less research work has been undertaken in SMEs area. Based on the available literature important Nine Quality of Work Life components are considered for the present research, they are: Work environment, Organization culture and climate, Relation and cooperation, Training and development, Compensation and Rewards, Facilities, Job satisfaction and Job security, Autonomy of work, Adequacy of resources, which are more appropriate for Pakistani private software houses in I.T sector.

QWL model is undertaken in this study however it is determined under organisational support programme. This organisational support program include; Job security, work

environment, T&D, Compensation and reward, Organisational culture, work related facilities and resources, interpersonal relationship, and autonomy of work.

### ***Organisational Commitment***

"In order to understand the relationship between research variables, it is vital to understand the theoretical perspective of organisational commitment's distinctive antecedents. Organisational commitment is defined by large number of researchers and scholars in behavioural sciences" (Haque & Yamoah, 2014). Organisational Commitment (OC) is demonstrated by employees at workplace through attaining the goals of organisation via exhibiting positive intent (Sheldon, 1971) whereas Buchanan (1974) argued that, OC is a psychological pact between organisations and its workforce. A decade later, Bateman and Strasser (1984) explained OC as employees' own desire to retain his association and affiliation with the same organisation by demonstrating loyalty and efforts to achieve organisational outcome. However, Porter et al., (1974) offered conclusive definition that, volunteer efforts, acceptance of norms, and willingness to remain with same organisation is regarded as organisational commitment. In addition to that, "Mowday et al., (1979) offered further explanation of OC by exploring worth of Porter et al., (1974) by giving terms to these three dimensions; affective commitment (AC), normative commitment (NC), and continuance commitment (CC) respectively" (cited from Haque & Yamoah, 2014).

### ***Affective, Normative, & Continuance Commitment***

Employees' attachment, recognition, and actual involvement are components of organisational commitment (Haque & Yamoah, 2014). The aforementioned statement are in actual three components of OC as large number of empirical studies have identified it as, "affective commitment - actual involvement, normative commitment - recognition, and continuance commitment - attachment of employees" (Allen & Meyer, 1996; Bartlett & Kang, 2004; Haque & Yamoah, 2014).

Affective commitment (AC) is a type of organisational commitment evident in employees when they perceived organisational goals as their own goals (Robbins & Culter, 2003; Haque & Yamoah, 2014). Moreover, normative commitment (NC) is type of commitment demonstrated by employees when they show strong dedication and obligation towards organisation (Robbins & Culter, 2003; Haque & Yamoah, 2014). Furthermore, continuance commitment (CC) reflects employees' keen desire to remain with the same organisation



(ibid). Now that, all three antecedents of OC have been understood, there is a need to evaluate it in relations with leadership style existing in Pakistan's I.T sector. Interestingly, the previous work of Haque et al., (2015) showed that female employees are motivated to perform well under transformational leadership style however the organisational commitment and QWL is still not explored in depth to generalize results. Moreover, the large number of studies is carried out in Western part of world thus this study examines the relationship in eastern context. In other words, there is a gap in literature that the previous findings are more generalised to western style of leadership and companies whereas both QWL and OC needs to be examined in relation with leadership styles in Eastern part of the world.

### ***Leadership Styles***

Leadership is a social influence process in which the leader seeks the voluntary participation of subordinates in an effort to reach organization goals (Omolayo, 2007). Today's organizations need effective leaders who understand the complexities of the rapidly changing global environment. If the task is highly structured and the leader has good relationship with the employees, effectiveness will be high on the part of the employees (Smith, 1998). Smith's study further revealed that democratic leaders take great care to involve all members of the team in discussion, and can work with a small but highly motivated team. Barchiesi and La Bella (2007) measures the leadership effectiveness, leadership role and its influence on performance, leadership behaviors and attitudes. It was found that high leadership indexes are not related to past performance records, but it is associated with higher potentiality of enhanced performance and higher reputation of organization pointing in the direction of a meaningful influence of behavioral complexity and dynamics on the leadership perceived level. Voonl et al. (2011) used the factors like salaries, job autonomy, job security, workplace flexibility to investigate the relationship between leadership styles and employee job satisfaction, study revealed that transformational leadership style has a stronger relationship with job satisfaction.

Fang et al. (2009) identified that leadership style can affect organizational commitment, job satisfaction positively and job satisfaction intern can affect organizational commitment and performance. Leadership is largely culturally orientated, embracing traditional beliefs, norms and values, and a preoccupation (Prideaux & Be, 2007). According to Victor and Soutar (2005), leadership style is significantly influenced by the leader's immediate and extended

family, clan, and tribe. This study finds the linkages between organizational leadership and business ethics, thereby making a contribution toward increasing the quality of organizational life which may have a positive influence on both members of the organization and the wider community. Ye et al. (2011) explained that employees' perceptions about transactional or transformational leadership style of executive, both have highly positive correlation with perceptions about executive's encouragement factors of its innovation climate. According to Podsakoff et al. (1990), leadership behavior can affect trust and satisfaction of employees to organization and organizational citizenship behavior, further enhances the relationship between leadership style and organizational commitment directly. Mc Neese-Smith D (1995) explained how leadership behavior of hospital directors significantly positively and related to productivity, work satisfaction and organizational commitment of staff. Transactional leadership is considered as the subordinates' rewards though their efforts and performance.

Wang (2008) compared the Transactional leadership, Transformational leadership theory is deemed to improve the subordinates' performance by changing the motives and values of employees. Bernard et al. (1990) divided leadership style into transformational leadership and transactional leadership. Transformational leadership has the characteristics of individual influence, spiritual encouragement and intellectual stimulation. They often take individual into consideration, establish vision and aim inside, create open culture, trust the staff to reach their goals and give full play for staff's potential. Transactional leadership is focused on staff's basic and external demand, the relationship between leaders and subordinates is based on the contract. They tend to attain organizational goal by pacific job roles and mission design, their basic purpose is to maintain a stable organization. However from the available literature it can summarize the different types of leadership styles and their effect on employee satisfaction, team work, organizational change and employee performance. From the literature review it is identified that these styles need to be evaluated with respect to the components of Quality of Work Life and organisational commitment, which are more appropriate for I.T Firms in Pakistan.

## **Research Methodology**

### ***Research Paradigm and Philosophy***

Research paradigm indicates intent, choice, and motivation of researcher by following a pattern associated with concepts and assumption through logical sequence of attaining knowledge and interpreting it (MacKenzie & Knipe, 2006). Mack (2010) explained paradigm

is resultant of three main attributes including; ontology, epistemology, and methodology respectively. In this research we followed Mack (2010) explanation of paradigm for determining present research framework. Moreover, Easterby-Smith et al., (2015) identified positivist/scientific paradigm that consider quantitative methods whereas socio-anthropological paradigm follows qualitative methods. This research comes under scientific/positivist paradigm due to quantitative nature.

The ontology for present study is "realism" as from the theoretical framework it has been confirmed that relationship between QWL, organisational commitment and style of leadership exist thus ontological stance is "*reality exist out there in business world*". Moreover, the epistemology is "objective" because the body of knowledge is extracted directly from the subjects in objective manner. Additionally, deductive approach is used to commence quantitative research in collecting and sorting data thus methodology include adoption of quantitative methods so that findings are supported through numerical significance. After careful determination of ontological, epistemological stance, and methodology we explored the axiological view by considering the criterion of inclusion of private business sector functioning in various cities of Pakistan. Additionally, the axiology also includes the notion that QWL's attribute play significant role in developing and strengthening organisational commitment. Furthermore, specific style of leadership determines the organisational commitment of workforce.

According to Sekaran & Bougie (2012) explained research philosophy as the basic foundation to construct and follow research design and approach in commencing research. On the other hand, Saunders et al., (2012) argued that research philosophy is the first layer of research onion serving the basic construct to lay research strategy. Considering, positivist paradigm, this study follows "*positivist research philosophy*" due to nature and approach of research.

### ***Research Design and Approach***

Longitudinal study takes more than year while cross-sectional study design tends to complete within one year (Sekaran & Bougie, 2012). In this study, researchers opted for cross-sectional research design as the study completed in less than year. Additionally, deductive approach is study in which data is deduced to reach conclusion by testing hypotheses constructed at the start of research and inductive approach induce data to reach conclusion (Sekaran & Bougie, 2012). In present study, researchers used hypothetico-deductive model to commence this

research. Since, the approach was deductive therefore hypotheses were established in the start of research through theoretical framework in order to investigate the relationship between research variables.

### ***Nature and Type of Research***

The nature of present study is exploratory because this study attempts to explore the nature of relationship between variables at hand. Since, this research is based on the assumption to expand the body of knowledge about research variables existing in organisational setting therefore it is "basic" type of research. Moreover, the research is causal-effect as it seeks to investigate the causes and effects among research variables.

### ***Sample size and technique***

Sample is subset of population (Sekaran & Bougie, 2012). Since, it is difficult to include entire population therefore sample set is considered to study and generalise findings to population as sample is representative of population (Bryman, 2013). Thus, it is essential to determine the appropriate sample set. To determine sample size, we used statistical formula explained by Charan and Biswas (2013).

$$n = \left[ \frac{m}{1 + \frac{m-1}{N}} \right]$$

n=Sample size

N=Population size

$$m = \frac{Z^2 \times P \times (1 - P)}{e^2}$$

z=1.64 for 90% confidence level

P=Preliminary estimate of percentage (90%)

E=Accuracy desired (10%)

$$\text{Sample Size} = \frac{2.6896 \times 0.90 \times (1 - 0.90)}{0.0001}$$

$$\text{Sample Size} = \frac{0.24206}{0.0001}$$

Sample Size = 242.06

Sample Size = 242

For this m value and the population size = 785 (registered software houses with SMEDA Pakistan), and the sample size "n" is determined through earlier mentioned formula.

$$n = \frac{242}{1 + \frac{242 - 1}{785}}$$

$$n = 184.9$$

$$n = 185 \text{ (round figure)}$$

Therefore, the minimum sample size required for this study is 185 private software houses operating in Pakistan. Moreover, through preliminary research, it is confirmed that in each targeted city of Pakistan there are 20 on average private software houses working thus 11 were minimum number of firms targeted as it constitute 55% representation. This was done to ensure more than 50% of firms are at least targeted from all cities of Pakistan. Approximately 200 software houses were approached and 189 responded while 11 did not participated however it was ensured that on average 2 participants are included from each organisation. According to Waliman (2001) probability and non-probability are two basic types of sampling techniques. Moreover, Sekaran & Bougie (2012) explained that in probability sampling each event has equal chance of selection while in non-probability sampling technique each event's selection chances are unequal. The researchers have combined various probability and non-probability (sampling technique) to reach targeted audience. Purposive, stratified, snowball, and convenience sampling is combined to reach targeted audience.

### ***Data Collection***

Data collection include primary source of extraction directly from respondents at first hand. Self-administered survey questionnaire developed through TYPEFORM was used to collect information. Through HR department of each targeted firm was contacted through email by informing them about the purpose of research. With the consent of HR department, survey was circulated. The data collection process was from February 2016 to May 2016. Highest rate of response came from Karachi, Lahore, and Islamabad due to high private software houses operating in these business-hub cities.

### ***Data Analysis Tool***

Since, this is quantitative research thus researchers used SPSS 23.0 for analysis of data. Data were coded and entered to SPSS (23.0) software to generate and quantify findings. The reason for opting to SPSS is because it is cost-effective in quantitative research. According to Prabhakar (2008) in social science researches, SPSS is cost-effective and user-friendly software package. Through 5 point Likert scale, responses related to QWL and organisational commitment under transactional and transformational leadership was examined. Through correlation and regression, the significance of relationship is measured and model summary, co-efficient standardised beta along with ANOVA containing  $R^2$ ,  $\beta$ , and F to reflect the variation, strength, and acceptance of results.

### ***Ethics, Reliability, Validity, and Credibility***

According to Guillemin & Gillan (2004), ethical concerns and dilemmas are often faced by researchers during research phase. Since, this study involved humans therefore ethical considerations were made because any study involving human must maintain ethical standards to avoid long-term consequences. Since, HR department of targeted firms were informed about the purpose of research and each participant was prior to participation in research. Furthermore, participants were ensured that information shared by them will be kept confidential and information will only be used for academic purpose. Additionally, Mizayaki & Taylor (2008) stated that when researcher comes in direct contact with participants there are chances of biased responses. In order to avoid it, researchers used HR department so that no direct involvement creating biased responses emerge.

For the purpose of validity, researchers opted for '*content validity*' by using the content of an instrument's appropriateness during and prior to research process. Adequate measures were considered by researchers to measure questions and flow of the question's structure is appropriately maintained. Moreover, in order to ensure credibility aspect is maintained, researchers considered all similar type of organisations and out of selected organisation, opted for organisations that were linked with the nature of the study. Furthermore, objective of study, research instruments' copies along with cover letter explaining research purpose were sent to targeted organisations. Once permission was granted, HR department was approached to administer research instrument on behalf of researchers.

However, researchers could have used the Cornbach's alpha to measure the reliability of items in a questionnaire but since researchers adapted the scales used by early researchers

such as Allen & Meyer, (1991); Bass and Avolio (1994) Full Range MLQ Model and WMS; Haque and Yamoah (2014) OSP model self-reported questionnaire for organisational commitment, transformational and transactional leadership, and QWL by considering 27-item reflecting that researchers used 'test-retest reliability' approach by measuring the consistency of items measured and evaluated over time again.

### Findings and Discussions

To explore the relationship between QWL among the employees of I.T software houses in Pakistan, the QWL mean score of employees for every single organisation was determined. In addition, the organisation's QWL was categorised through total grand mean score formed by all organisations. Thus, through comparison approach, mean score of each software house in every considered city of Pakistan was compared against grand mean and based on that two groups were formed, "satisfied group" and "not satisfied group" respectively based on QWL score. To further explain the comparative approach, QWL mean score was taken as par value and software houses scoring overall mean more than QWL mean score were categorised as satisfied group while software houses scoring overall mean lower than QWL mean score were put into not satisfied group. Additionally, both groups were ranged on (1-to-5) point scale on two intervals to determine the level of Quality Work-Life.

In each city of Pakistan, the total frequency of respondents' choice is summarised below in Table 1, reflecting the mean score for each city by classifying them under either group QWL satisfied or QWL not satisfied.

City * QWL	Cases					
	Valid		Missing		Total	
	N	Percent	N	Percent	N	Percent
	408	100.0%	0	0.0%	408	100.0%

**Table1:** Total frequency cases and percentages.

City	City * QWL in Software houses		Total
	Satisfied	not satisfied	
Faisalabad	12	6	18
Gujranwala	15	2	17
Hyderabad	16	4	20
Islamabad	44	12	56
Karachi	98	36	134

Lahore	69	29	98
Multan	15	2	17
Peshawar	15	3	18
Rawalpindi	11	6	17
Sialkot	11	2	13
Total	306	102	408

**Table 2:** Frequency of employees in cities indicating level of satisfaction related to QWL.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Satisfied	306	75.0	75.0	75.0
	not satisfied	102	25.0	25.0	100.0
	Total	408	100.0	100.0	

**Table 3:** Percentage frequency of overall software houses level of satisfaction regarding QWL.

The above analysis showed that 306 employees working in private software houses (75%) are satisfied with QWL whereas remaining 106 employees (25%) are not satisfied with existing QWL in this survey. Moreover, in terms of cities of Pakistan, software houses in Karachi have highest frequency (134), followed by Lahore (98), and Islamabad (56).

### Leadership styles in Software houses

Two basic styles of leadership in this study include; transformational and transactional leadership respectively. The only two styles of leadership was based on preliminary research showing that transformational and transactional leadership styles are most widely evident in the software houses of Pakistan. Thus, employees' perspective was explored by asking them in survey 4 each set of questions related to both styles of leadership in order to attain their opinion regarding existing style of leadership in their respective organisations. The type of leadership style was determined through mean scores attained through testing set of interlinked variables based on 5 point LIKERT scale.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Faisalabad	18	4.4	4.4	4.4
	Gujranwala	17	4.2	4.2	8.6
	Hyderabad	20	4.9	4.9	13.5
	Islamabad	56	13.7	13.7	27.2



Karachi	134	32.8	32.8	60.0
Lahore	98	24.0	24.0	84.1
Multan	17	4.2	4.2	88.2
Peshawar	18	4.4	4.4	92.6
Rawalpindi	17	4.2	4.2	96.8
Sialkot	13	3.2	3.2	100.0
Total	408	100.0	100.0	

**Table 4:** *Employees preferred leadership style in different cities of Pakistan*

**Type of Leadership style preferred by employees in Pakistan's private software houses.**

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Transactional	174	42.6	42.6	42.6
	Transformational	234	57.4	57.4	100.0
	Total	408	100.0	100.0	

**Table 5:** *Preferred leadership style in Pakistan's software houses.*

From Table 4 it is evident that in sequential order Karachi, Lahore, and Islamabad have high frequency. Interestingly, in all three cities transformational leadership is more preferred style of leadership among workforce. Moreover, the preferred leadership style in Pakistan's software houses in this study "*transformational leadership*" is more preferred with 57.4% whereas "*transactional leadership*" has been considered by 42.6% (Table 5).

**Leadership styles and Type of Organisational Commitment**

Descriptive Statistics			
	Mean	Std. Deviation	N
Transactional Leader.	2.08	1.180	408
AC	11.4167	2.35288	408
NC	11.6422	2.35736	408
CC	10.8676	2.42049	408

**Table 6:** *Descriptive statistic is reflecting mean value and standard deviation for antecedents of organisational commitment.*

The descriptive statistic showed that Mean value of all three attributes of organisational commitment (AC, NC, & CC) is approximately close to each other and interestingly all three attributes standard deviations are close in numeric expression confirming that all items are consistent on scale.

**Correlations**

		Transactional Leader.	AC	NC	CC
Transactional Leader.	Pearson Correlation	1	.247**	-.163**	.775**
	Sig. (2-tailed)		.000	.125	.000
	N	408	408	408	408
AC	Pearson Correlation	.247**	1	.742**	.589**
	Sig. (2-tailed)	.000		.000	.000
	N	408	408	408	408
NC	Pearson Correlation	-.163**	.742**	1	.563**
	Sig. (2-tailed)	.125	.000		.000
	N	408	408	408	408
CC	Pearson Correlation	.775**	.589**	.563**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	408	408	408	408

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

**Table 7:** *Correlation between transactional leadership style and types of organisational commitment*

Transactional leadership style has positive correlation with affective commitment as sig value is lesser than alpha value at 90% confidence level ( $P=0.000 < 0.01$ ). Thus, null hypothesis is rejected that employees' affective commitment is not significantly affected by transactional leadership style. However, the relationship established above is positive but this is weak as  $r=.247$  is derived value indicating that it is below moderate par value (0.5). Moreover, there is weak negative relationship between transactional leadership style and normative commitment of employees in the I.T sectors of Pakistan. Moreover, the correlation is negative as sig value is greater than alpha value at 90% confidence level ( $P=0.125 > 0.01$ ). Since, P value is greater than alpha value therefore we do not reject null hypothesis that normative commitment of employees are not significantly affected by transactional leadership style. Interestingly, the statistical test showed that there is strong positive correlation between transactional leadership style and continuance commitment of employees in I.T sector of Pakistan as  $r=0.775$  which is moderately strong and positive. The P value is 0.000 which is lesser than alpha value 0.01 indicating that null hypothesis is rejected ( $P=0.000 < 0.01$ ). In other words, the continuance commitment of employees is significantly affected by transactional leadership.

Thus, it can be concluded from the analysis that, transactional leadership has positive correlation with affective commitment and continuance commitment whereas it has weak correlation with normative commitment in this study. Moreover, in this study, normative

commitment is not significantly affected by transactional leadership style whereas both; affective commitment and normative commitment are significantly affected by transactional leadership style. Interestingly, despite correlation is established it is evident that only continuance commitment has strong relationship with transactional leadership style. Affective commitment has positive but weak while normative commitment has negative weak relationship with transactional leadership.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.607 <sup>a</sup>	.368	.363	.942	.368	78.388	3	404	.000

a. Predictors: (Constant), CC, NC, AC

**Table 8:** Model Summary reflecting R and R<sup>2</sup> value for variation

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	208.674	3	69.558	78.388	.000 <sup>b</sup>
	Residual	358.492	404	.887		
	Total	567.167	407			

a. Dependent Variable: Transactional Leader.

b. Predictors: (Constant), CC, NC, AC

**Table 9:** ANOVA model reflecting F value for acceptability purpose

The model summary above showed that R<sup>2</sup> is approximately 0.368 indicating that 36.8% variation in transactional leadership behaviour is due to variation in affective, normative, and continuance commitment of employees working under them. Furthermore, ANOVA model reflected that F=78.388 means that explanatory power is 78% thus making it highly acceptable.

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.298	.251		1.185	.237	-.196	.792
	AC	.005	.031	.011	.173	.000	-.056	.067
	NC	-.121	.030	-.241	-3.978	.125	-.181	-.061

CC	.317	.023	.704	13.991	.000	.273	.362
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a. Dependent Variable: Transactional Leader.

**Table 10:** *Coefficients of Items.*

Three items are considered in coefficient table and in the above table standardized coefficient Beta Values are undertaken to measure the affect of variables on transactional leadership style. The regression analysis revealed that affective commitment affects leadership 0.11 positively when there is 1 standard deviation increase in affective commitment. Additionally, sig value is 0.000 lesser than alpha value ( $P=0.000 < \alpha=0.01$ ) thus confirming that there is sufficient evidence against the null hypothesis that transactional leadership is not affected by affective commitment. Moving further, it is evident that normative commitment influenced transactional leadership 0.241 negatively due to increase in standard deviation by 1. Moreover,  $P=0.125$  is greater than  $\alpha = 0.01$  indicating that there is no strong evidence against null hypothesis stating normative commitment affects transactional leadership. In other words, we reject null hypothesis that transactional leadership is affected by normative commitment of employees. Lastly, regression table confirmed that, transactional leadership is affected by 0.704 positively due to variation in continuance commitment. In addition to that, the transactional leadership is affected 0.704 when 1 standard deviation increased is evident in continuance commitment of employees. Furthermore,  $P=0.000$  is less than  $\alpha = 0.01$  therefore there is strong evidence against the null hypothesis that transactional leadership is not significantly linked with continuance commitment of employees.

**Descriptive Statistics**

	Mean	Std. Deviation	N
Transformational Leadership	2.137	1.1415	408
AC	11.4167	2.35288	408
NC	11.6422	2.35736	408
CC	10.8676	2.42049	408

**Table 12:** *Descriptive statistic demonstrating antecedents of organisational commitment linked with transformational leadership*

Interestingly, transformational leadership's mean value is higher in comparison to transactional leadership. Moreover, standard deviation is slightly higher than transactional leadership. Additionally, the mean and standard deviation for dimensions of organisational commitment is same.

**Correlations**

		Transformational Leadership	AC	NC	CC
Transformational Leadership	Pearson Correlation	1	.618**	.479**	.878**
	Sig. (2-tailed)		.000	.000	.000
	N	408	408	408	408
AC	Pearson Correlation	.618**	1	.742**	.589**
	Sig. (2-tailed)	.000		.000	.000
	N	408	408	408	408
NC	Pearson Correlation	.479**	.742**	1	.563**
	Sig. (2-tailed)	.000	.000		.000
	N	408	408	408	408
CC	Pearson Correlation	.878**	.589**	.563**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	408	408	408	408

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

**Table 12:** *Correlation between transformational leadership and organisational commitment*

Considering 90% confidence level, the correlation between transformational leadership and organisational commitment's antecedents is evaluated and results showed that, transformational leadership has positive relationship with all three attributes of organisational commitment; affective commitment, normative commitment, and continuance commitment respectively. Transformational leadership is positively associated with affective commitment as  $r=.618$  reflecting that there is moderate positive relationship. Moreover, the P value= $0.000$  lesser than  $\alpha=0.01$  therefore in present study strong evidence is available to reject null hypothesis that employees' affective commitment is not significantly affected by transformational leadership. As ( $P=0.000 < \alpha=0.01$ ) is evident thus this study confirms that affective commitment of employees is linked with transformational leadership in Pakistan's I.T sector.

Furthermore, transformational leadership has moderate positive relationship with normative commitment as confirmed by  $r=0.489$  value driven from statistical test. In addition to that, P value= $0.000$  is greater than  $\alpha=0.01$  ( $P=0.000 < \alpha=0.01$ ) thus we reject null hypothesis. In other words, there is strong evidence against null hypothesis that normative commitment of employees is not affected by transformational leadership. Moreover, for linkage between transformational leadership and continuance commitment at 90% confidence interval the derived value  $r=.878$  indicating there is strong positive correlation between them.

Furthermore, the P value is lesser than  $\alpha$  value ( $P=0.000 < \alpha=0.01$ ) reflecting that we reject null hypothesis. In other words, there is strong evidence against null hypothesis stating that continuance commitment of employees is not significantly affected by transformational leadership in this study.

From the above test results, it is confirmed that transformational leadership has positive relationship with all antecedents of organisational commitment; affective commitment, normative commitment, and continuance commitment. Additionally, there is strong evidence from statistical test confirming that transformational leadership is significantly associated with affective, normative, and continuance commitment of employees. Moreover, the results showed that in comparison to transactional leadership, transformational leadership is more strongly associated with the organisational commitment of employees.

**Model Summary**

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.491 <sup>a</sup>	.241	.235	.9982	.241	42.754	3	404	.000

a. Predictors: (Constant), CC, NC, AC

**Table 13:** Model summary for transformational leadership and organisational commitment predicting R<sup>2</sup>

**ANOVA<sup>a</sup>**

Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	127.792	3	42.597	82.754	.000 <sup>b</sup>
	Residual	402.521	404	.996		
	Total	530.314	407			

a. Dependent Variable: Transformational Leadership

b. Predictors: (Constant), CC, NC, AC

**Table 14:** ANOVA table reflecting F value for high acceptability

The above two tables reflect the variation and explanatory power related to items in this study. Since, R<sup>2</sup> is 0.241 reflecting that 24.1% variation in transformational leadership is due to change in organisational commitment; affective commitment, normative commitment, and continuance commitment in this study. Interestingly, transformational leadership has low R<sup>2</sup> in comparison to transactional leadership despite having strong positive correlation with antecedents of organisational commitment. This is a significant development in this study

that though R<sup>2</sup> (variation) in transformational leadership is low comparing to transactional leader but the correlation is strong and positive among antecedents of organisational commitment with transformational leadership. Moreover, ANOVA model reflected F=82.754 indicating that 82.75% is explanatory power therefore the variation of items and correlation is highly acceptable.

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	95.0% Confidence Interval for B	
		B	Std. Error	Beta			Lower Bound	Upper Bound
1	(Constant)	.524	.266		1.969	.050	.001	1.048
	AC	-.008	.033	-.016	-.231	.000	-.072	.057
	NC	-.060	.032	-.123	-1.854	.000	-.123	.004
	CC	.243	.024	.557	10.099	.000	.195	.290

a. Dependent Variable: Transformational Leadership

**Table 15:** Coefficient of items and Beta Value explaining variation in research variables

The above table reflects standardized coefficient Beta indicating the impact of transformational leadership on affective commitment, normative commitment, and continuance commitment. Interestingly, regression analysis showed that transformational leadership is affected 0.16 negatively by 1 standard deviation in affective commitment of employees. Furthermore, sig value is lower than alpha value ( $P=0.000 < \alpha=0.01$ ). Hence, there is strong evidence that against null hypothesis; affective commitment of employees is not significantly affected by transformational leadership.

Moreover, 0.123 negatively variation is evident in transformational leadership when there is 1 standard deviation increase in the normative commitment of employees. Additionally, sig value is less than alpha value ( $P=0.000 < \alpha=0.01$ ) therefore we reject null hypothesis of normative commitment is not significantly affected by transformational leadership style in Pakistan's I.T sector. Lastly, standardized coefficient showed that transformational leadership is affected by continuance commitment of employees by 0.557 positively when there is 1 standard deviation increase in the level of continuance commitment. Since, sig value=0.000 is lesser than alpha value=0.01 confirming ( $P=0.000 < \alpha=0.01$ ) therefore we reject null hypothesis that continuance commitment of employees are not significantly affected by transformational leadership style.

**Quality of Work-Life and style of Leadership:**

		Transactional Leadership		Transformational Leadership	
			Percent		Percent
Valid	Satisfied	173	42.4	235	57.6
	not satisfied	235	57.6	173	42.4
	Total	408	100.0	408	100.0

**Table 16:** *Level of satisfaction for QWL under Leadership style*

Earlier, it was evident that level of satisfaction regarding Quality of Work-Life was established. Now, moving forward under two considered styles of leadership; transactional and transformational leadership respectively the level of satisfaction is explored. Test showed that QWL by employees under transformational leadership is high (57.4%) in comparison to transactional leadership style (42.6%). Thus, this survey found that employees' QWL is more satisfied under transformational leadership in Pakistan's private software houses.

**Attributes of QWL and Satisfaction percentage under Leadership styles**

Model	Transactional Leadership			Transformational Leadership		
	Satisfied	Not Satisfied	Satisfaction percentage	Satisfied	Not Satisfied	Satisfaction percentage
Work Environment	44	61	25.4	61	44	25.9
Organization	17	37	9.8	37	17	15.7
Culture & Climate	15	41	8.6	41	15	17.4
Relation & Cooperation	21	23	12.1	23	21	9.7
T&D	31	13	17.9	13	31	5.5
Compensation & Rewards	11	17	6.3	17	11	7.2
Facilities	9	28	5.2	28	9	11.9
Job Satisfaction	25	15	14.4	15	25	6.8
Job Security						

**Table 17:** *Individual attributes' satisfaction percentage for QWL under Leadership style*

173 employees were satisfied under transactional leadership style whereas 235 employees under transformational leadership style. Based on the findings, through filter programming each attribute of QWL considered in this study was measured in terms of frequency and percentage. The above table is constructed to explain highest frequency and percentage of each attribute reflecting satisfaction percentage under considered leadership style. Interestingly, under transactional leadership highest frequency is formed by work environment (QWL Attribute) indicating 25.4%, followed by Compensation and Rewards



(17.9%), Job Security (14.4%), and T&D (12.1%) whereas all other attributes scored below 10%.

On the other hand, under transformational leadership style highest frequency is again constituted by Work environment (25.9%), followed by Relation and Cooperation (17.4%), Organization culture and climate (15.7%) and Job Satisfaction (11.9%). All other variables of QWL scored below 10%. Interestingly, there is variation in variables as some of attributes have been evident to be more effective under certain type of leadership. For instance, organization culture and climate has been preferred by employees working under transformational leadership whereas compensation and reward is not preferred under transformational leadership. Moreover, job satisfaction is evident high among employees under transformational leadership whereas job security is high under transactional leadership style. However, it can be concluded that overall existing QWL of employees is good under transformational leadership in contrast to transactional leadership style.

The findings revealed that QWL is strong predictor in creating organisational commitment among the employees in the private software houses operating in Pakistan. Interestingly, the study also evident that both transactional leadership as well transformational leadership plays visible role in developing organisational commitment of employees however there exist variation in both; QWL and organisational commitment under the considered leadership styles. Additionally, transformational leadership is more preferred style in contrast to transactional leadership as it is more positively linked with all three attributes of organisational commitment; AC, NC, and CC respectively. Transactional leadership style has positive correlation with AC and CC whereas negative relationship with NC. Moreover, affective and normative commitment of employees is significantly affected by transactional leader whereas normative commitment is not influenced by transactional leadership style. Furthermore, continuance commitment of employees is most strongly influenced under transactional leadership style. Interestingly, continuance commitment is also strongly evident under transformational leadership style.

The elements of QWL considered in this study is also are evident to be creating a satisfaction among the workforce under transformational leaders (57.4%) in contrast to transactional leaders (42.4%). However, there has been a variation in some of the attributes in terms of percentages but to large extent employees are more satisfied with the existing QWL under transformational leadership. Thus, it is confirmed that most preferred and practiced style of leadership in private sectors is "transformational leadership".

The present study support partially the work of Hackman and Oldham (1980) regarding QWL creating the pleasant environment for employees however further findings oppose the work of Hackman and Oldham (1980) that QWL helps in promotion and career growth. Particularly, considering specific style of leadership it can be state that QWL's support for employees relies upon the style of leadership. Additionally, under transformational leadership, QWL is more effective in creating organisational commitment of employees.

This study strongly support the findings of Saraji and Dargahi (2006) stating that study commitment and satisfaction increases due to QWL however interestingly, this study oppose the work of Nanjundeswaraswamy and Swamy (2014) in terms of QWL under style of leadership as this study evident contrasting findings as QWL under transformational leadership is more effective in comparison to transactional leadership which is vice-versa to work of Nanjundeswaraswamy and Swamy (2014). Interestingly, the work of Rose et al., (2006) and Rethinam and Ismail (2007) is confirmed to some extent as some of the constructs such as; working condition, job security, compensation and reward, organization culture and climate but only to small level.

Furthermore, the work of Haque and Yamoah (2014) is confirmed that organisational support program is vital in creating and enhancing organisational commitment. Interestingly, all three dimensions of organisational commitment identified in the work of (Allen & Meyer, 1996; Robin & Culter, 2003; Bartlett & Kang, 2004; Haque & Yamoah, 2014) namely affective commitment (AC), normative commitment (NC), and continuance commitment (CC) have been established in this study. However, in relation to style of leadership, this study support previous work of Haque et al., (2015) that all antecedents of organisational commitment (OC) are differently linked with transactional and transformational leadership. Moreover, present study findings also support the notion of Haque et al., (2015) study that transformational leadership is more effective in comparison to transactional leadership in motivating employees by shaping positively their organisational commitment. Additionally, the notion such as "leaders' role in creating organisational culture and climate (Smith, 1998; Prideaux & Beg, 2007); relation and cooperation (Omolayo, 2007; Barchiesi & La Bella, 2007); job security (Voonl et al., 2011); and job satisfaction and organisational commitment (Fang et al., 2009) have been confirmed in this study.

## **Conclusion**

This study concludes that in Pakistan's private software houses both transformational and transactional leadership style exists however, under transformational leadership style employees organisational commitment is more evident and positively linked. Interestingly, all

three dimensions of organisational commitment has been confirmed in this study to be significantly positively associated with transformational leadership whereas normative commitment is only dimension that is negatively linked with transactional leadership. Moreover, QWL is more effective for employees when working under transformational leadership style but under transactional leadership style also the considered elements of QWL are confirmed to be effective however the impact is fractionally low in contrast to transformational leadership. Lastly, under transformational leadership there is high employee job satisfaction leading to strengthen their organisational commitment in contrast to transactional leadership style where high level of dissatisfaction prevailed.

Despite various measure were taken but there are certain limitations to present study such as time constraint, research design, sample size, and research approach. Due to time constraint, each respondent could not be studied in two different intervals of time. Moreover, sample size was small by only having 408 employees working in this sector due to shortage of time and unwillingness of private software houses' management. Additionally, only survey questionnaire was used following deductive approach. The future researchers should consider the longitudinal panel study to investigate in more depth. Furthermore, researchers should also consider in-depth interviews with the management as well employees to gain qualitative perspective related to research problem. Moreover, the sample size should be expanded by visiting personally software houses to seek more respondents. Additionally, through professional networking sites, the experts on the subject along with the participants from the targeted sector should also be interviewed to include their perspective.

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