LEADERSHIP STYLES IN MEDIATING THE RELATIONSHIP BETWEEN QUALITY OF WORK LIFE AND EMPLOYEE COMMITMENT

Abstract: In the present competitive, technology-driven environment, maintaining a talented workforce is the big challenge to the firms irrespective of their size and type. Through the proper scientific and systematic humanized job design by making an allowance for Quality of Work Life (QWL) interventions, it is possible to enhance the Employee Commitment (EC) under effective leadership in Small and Medium-sized Enterprises (SMEs). The extent of literature has explored the role of Quality of Work Life in increasing employee commitment, on the other hand, there is a lack of research to explore and describe the need for this relationship. This study examines the mediating effect of leadership style in the association between QWL and Employee Commitment. By collecting data through the structured questionnaires from 1092 of employees of mechanical manufacturing SMEs in Bangalore City, Karnataka, India. The data were analyzed using SPSS 20 by considering Baron and Kenny mediation analysis method and Sobel test. The results indicated that Leadership Styles act as a significant partial mediator between QWL and Employee Commitment relationship. Mediation study was also conducted for selected four dimensions of QWL, Employee Commitment and Leadership Style to strengthen the results. The research finding will help the policymakers to understand the importance leadership styles in SMEs to decide the policies on QWL and EC and also it will help in designing intervention program to improve EC and QWL in SMEs.

Keywords: Quality of Work Life; Employee Commitment; Leadership Styles; Mediation; SMEs

1. Introduction

The outstanding growth of Small and Medium-sized Enterprises (SMEs) in India drives the Indian economy and SMEs contributed for major employment generation, innovation and entrepreneur skill. SMEs segment in India is extremely heterogeneous in the form of the size of the firm, product mix, services offered and intensity of technology. This segment not only plays a pivotal responsibility in creating employment opportunities at reasonably minimum capital cost as compared with large industries and also contributes, in the industrialization of rural and socially and
economically backward areas. According to annual report 2017-18 of Ministry of Micro, Small & Medium Enterprises, Government of India, about 36 million SMEs are created 80 million employment opportunities, contributing 8 per cent of total Indian GDP, 45 per cent to the whole manufacturing output and 40 per cent to the total export from India. Further, more then 80 per cent of the whole industrial establishment in India generating greater than 8000 value-added products. It also helps to achieve socio-economic balance, like equality of income and balanced regional development. SMEs complement the large industry as ancillary units and give a major contribution to the socio-economic progress of the country. The SMEs sector contributes socio-economic development of the country through creating large scale employment, economic stability in terms of inclusive growth and exports. Indian government strongly supporting this sector through the different initiatives schemes like Make in India, Startup India and Skill India. These initiatives will boost the growth of SMEs in the long run in socially as well as economically.

In spite of admirable contribution to the Indian economy, the SMEs sector facing a lot of challenges such as limited capital and knowledge, inadequate and timely banking finance, non-availability of skilled labour, employee turnover and low production rate. Amongst the most important and controllable factor is employee turnover. There are so many factors associated with employee turnover such as the status of the Labour Market, Job Satisfaction, Compensation, Facilities, Work Environment, Job Security, relationship with Co-Workers, Career Development Opportunities, Work Stress, Leadership Styles of the superior and Employee Commitment towards the organization. In this cutthroat aggressive business atmosphere, retaining and maintain skilled capable workforce is a big challenge for any organization. Nowadays Human Capital Management cannot depend on the “one size fits all” philosophy. Nanjundeswaraswamy (2015) opinionated that jobs need to be excellent both from technology and human need viewpoint. This is possible through the effective implementation of QWL interventions. Therefore, QWL it is a vital construct, it fulfils both humans as well as technological needs. Amankwaa and Anku-Tsede (2015) and De Jong and Den Hartog (2007) defined that superior leadership is a practice, influencing people to achieve predefined organizational goals. Lok and Crawford (2004) opined that leadership styles play a vital role in the success of a firm.

The effective implementation of QWL interventions in SMEs under effective and efficient leadership will enhance the Employee Commitment this will leads to an increase in the retention rate of employees in SMEs sector. All together these three variables such as QWL, Leadership Styles (LS) and Employee Commitment (EC) will help to increases the performance, to attract and maintain a talented workforce to meet the challenges in the competitive market. Nayak and Sahoo (2015) stated that QWL is the base for the well-being of the workforce and it leads to superior performance.

Canadian Council for Integrated Health (CCIH 2000) defined leadership as one of the critical characteristics of a healthy work environment and without effective leadership, it is not possible to create a pleasant workplace environment. Voon et al. (2011) research explored that there is a significant positive relationship among superiors leadership style and job satisfaction of the employee. Fang et al. (2009) and Podsakoff et al. (1990) argued that leadership styles affect the satisfaction and trust of employees, this leads to enhance the organizational citizenship behaviour, the research also explored that there is a significant and constructive association between LS and EC. QWL effects on employee commitment under effective leadership styles.
Kanna (2014) observed that in the cutthroat business atmosphere of SMEs, keep hold of the capable employees is the immense challenges. Mayer and Schoorman (1992) noted that retention is more in the case of committed employees. According to the Annual report of MSMEs (2015) in India, the employment provided by SMEs is projected to be four times more than that of large enterprises that indicates the role of SMEs on the socio-economic factors of the nation.

Organizational initiations towards higher QWL of employees are less considered in the SMEs, of developing nations like India and there is a short of evidence for designing appropriate intervention program for employees in this direction. Therefore, the present research targets Mechanical Manufacturing SMEs locate in Bangalore, India to explore the QWL effectiveness on EC under effective LS.

Therefore, it is imperative for the superiors to appreciate the perception of employees towards the QWL and its influences on the commitment of employees by considering potential mediating effects of leadership styles. The objective of the present study has two folds. The First one is to discover the mediating effects of leadership styles on the relationship between quality of work-life and Employee commitment and second objective being to examine mediating effect of leadership styles on the association between dimensions of QWL and employee commitment. This study proposes a novel outlook on the effect of leadership styles on the relationship between Quality of Work Life and Employee Commitment.

2. Literature review

Prior to state the relationships in the present research framework, the paper presents a brief literature survey of all the variables and the establishment of a systematic foundation for the relationship.

2.1. Quality of Work Life (QWL)

Hussain et al. (2018); Hsu and Kernohan (2006); Adhikari and Gautam (2010) and Mosadeghrad et al. (2011) mentioned that QWL is a multidimensional idea which depicts an employee’s emotion related to a number of aspects of work. Which include the Career Advancement Chances, Employment Security, Fair and Adequate Compensation, Involvement in Decision Making, Job Content, Job Discretion, Occupational Health and Safety, Organizational and Personal Relations, Working Situations, Work-Life Stability and Work Stress. Jabeen et al. (2018) research revealed that QWL of employees positively effect on job satisfaction and negatively effect on turnover intention.

Blaauw et al. (2014) research explored that QWL is one of the most important components in employing and retaining skilled employees, which has a huge impact on retaining the required number of workforce in each organization. To achieve good QWL a range of issues need to address such as workload, leadership and support, adequate facilities, career development, flexibility time, proper planning and placement, effective admiration, and better salaries.

2.2. Dimensions of Quality of Work Life

QWL is a multidimensional construct Sahni (2017) and Swamy et al. (2015). Various authors used different dimensions to determine the intensity of QWL among employees. Swamy et al. (2015) designed and validated an instrument to determine the level of QWL among employees of SMEs, it consists of nine predominant dimensions such as Work Environment, Training and Development, Relation and Co-Operation, Organization Culture and Climate, Job Satisfaction and Job Security, Facilities, Compensation and Rewards, Autonomy of Work and Adequacy of Resources, these components together address 82.24 % of
total variance. This instrument is adapted for the present study. Through the Confirmatory Factor Analysis (CFA) following significant QWL components were extracted such as; Compensation and Rewards, Work Environment, Job Satisfaction and Organizational Culture.

2.2.1. Work Environment (WE)

A work environment is a place where the employee has to work. It is a professional workplace in which an employee has to interact with co-workers to fulfill his duty. Many research proved that excellent work environment will enhance employee performance and QWL. Work Environment includes both physical and mental work situation. Nanjundeswaraswamy and Sandhya (2016) proposed that an excellent leader will create a pleasant work environment. Many research such as Chandra and Priyono (2015); Mohammed et al. (2014); Cummings et al. (2010); Nanjundeswaraswamy (2015); Nanjundeswaraswamy & Swamy (2015); Balsanelli and Cunha (2014) identified that there is an important positive relationship between LS and WE.

2.2.2. Compensation and Rewards (COM)

Compensation is the reimbursement made to an employee for services delivered in the organization as an employee from the employer. The main impulse for employment is to earn the money to fulfill the needs of employees. To motivate the employee's organizations provides rewards for the best performers; this builds healthy competitions among employees. Compensation should be set based on the amount of work done, skill, the technicality of work and responsibilities etc. Few studies such as Bhatt (2018); Nanjundeswaraswamy (2015); Adeoye (2014); Nanjundeswaraswamy & Swamy (2015); Bass and Avolio (2000) clearly reveals that leadership styles associated with compensation and rewards.

2.2.3. Job Satisfaction (JS)

Roodt et al. (2002) defined Job Satisfaction is the personnel assessment of their job against the issue and concern that issues to the individual, and study also revealed that employees emotions, sentiments are associated and, have an influence on employees work attitude. Nanjundeswaraswamy and Sandhya (2016) defined Job satisfaction is a multi-dimensional facet includes Work Environment, Job Security, Rewards, Organization Culture, Productivity Target, Effective Salary, Trade Union Activity, Effective Job Rotation, Autonomy of Work etc.. Many researcher identified that a important positive association associated between Leadership Styles and Job Satisfaction Nidadhavolu (2018); Asghar and Oino (2017); Nanjundeswaraswamy (2015); Saleem (2015); Nanjundeswaraswamy & Swamy (2015); Mehrad and Fallahi (2014); Loganathan (2013); Ali et al. (2013); Barling et al. (2002). According to Nanjundeswaraswamy et al. (2020) job satisfaction is a critical and significant component with great impact on organizations performance.

2.2.4 Organizational Culture (OC)

Organization Culture can be defined as it is a set of properties of organization values, vision, norms etc. Based on the Organizational Culture employees will set both professional and personal goals. Nanjundeswaraswamy and Sandhya (2016) proposed Organizational Culture includes so many parameters such as; Communication, Comments and Suggestion, Co-Operation from another department, participation in the decision making the process, Standardization of wage procedure and policies. Only few research show that Leadership Styles affect on the Organizational Culture such as Nanjundeswaraswamy and Swamy (2015);
Shravasti and Bhola (2014); Nanjundeswaraswamy (2015); Acar (2012); Bass (1985); Ogbonna & Harris (2000).

2.3. Leadership Styles (LS)

Gray and Starke (2007); Porter-O’Grady (2003) argued that Leadership Style is a multi-dimensional practice to recognizing an objective, inspiring other employees to take steps and providing support and enthusiasm to accomplish stated objectives. Slavin and Morrison (2013) research revealed that displayed type of leadership styles affects employee’s attitudes and behaviours. Rehman et al. (2012) research identified the association between leadership behaviour and employees, the study also argued that Leadership Styles have a major influence on the Work Environment.

2.4. Association between Leadership Styles and Quality of Work Life

Leadership style is a social influence process in which the leader seeks the voluntary participation of co-workers in an attempt to reach predefined organizational goals. Eisenbeiß and Boerner (2013) research explored that leadership styles had an impact on creativity; goal setting and attainment; job satisfaction of employees and well being of employees. LS influences on the QWL of employees based on the types of Leadership Style exhibited by his or her superior. In the literature plethora of studies identified the association of Leadership Styles with employee QWL such as Kara et al. (2018); Bhatt (2018); Hermawati and Puji (2018); Pratama (2016); Nanjundeswaraswamy et al. (2015); Rubel and Kee (2014); Pawar (2013); Gillet et al. (2013); Barzegar et al. (2012); Normala (2010), Lewis et al. (2001), Chander and Singh (1993), Stein (1983) researches explored that LS has a significant impact on QWL of employees.

2.5. Employee Commitment (EC)

Ozsahin et al. (2013) defined Employee Commitment is an employee’s aspiration to stay a part of the organization and to achieve organizational goals by putting more effort. Morris and Sherman (1981) argued that efficient and dedicated employees are required to achieve organizational strategic goals and employees performance and retention is associated with employee commitment. Allen and Meyer (1996) classified the employee commitment into three parts such as Continuance Commitment, Normative Commitment and Affective Commitment. Nidadhavolu (2018); Lee and Chen (2015); Gelaidan and Ahmad (2013); Vandenbergh and Bentein (2009); Freyermuth (2007); Becker et al. (1996) research reveals that Leadership Styles are positively associated with Employee Commitment.

2.6. Association among Quality of Work Life and Employee Commitment

Indumathy (2012) argued that employees who get pleasure from their work are believed to have a good status of QWL, while those employees who are despondent are said to have a low status of QWL. There is a plethora of research explore that the status of employee QWL has a considerable impact on Employee Commitment such as; Sahni (2019); Ashoob (2006); Srivastava (2008); Farahani et al. (2009); Daud (2010); Hyde et al. (2012); Zhao et al. (2012); Birjandi et al. (2013). Normala (2010) research reveals that, through the proper implementation of QWL intervention, employees job satisfaction and commitment will enhance. From the above literature provides sufficient evidence to ascertain the association between QWL and Employee Commitment. With respect to SMEs, exploring this relationship is of critical importance because of the SMEs contributions towards employment.
2.7. Relationship between Leadership Styles and Employee Commitment

Effective leadership creates potential opportunities for employees; this will lead to enhance the commitment among employees Bennis and Nanus (1985). Correlation analysis results show that Transactional Leadership and Transformational Style is associated with Employees’ Commitment explored by Marmaya et al. (2011) research. There is substantial literature exists, it will be signifying that leadership is positively coupled with Employee Commitment such as; Garg and Ramjee (2013); Guan et al. (2012); Nyengane (2007); Bono and Judge (2003); Walumbwa and Lawler (2003); Avolio et al. (2004); Koh et al. (1995); Lowe et al. (1996); Muterera (2008).

4. Mediating Effects of Leadership style on Quality of Work Life

Omolayo (2007) stated that “Leadership is a social influence process in which the leader seeks the voluntary participation of subordinates in an effort to reach organizational goals”. Kane and Tremble Jr (2000) study that a positive relationship among leadership styles and performance of employees, the motivation level of employees, job satisfaction and employee commitment. Bass and Avolio (1990) classify the leadership style into transactional leadership and transformational leadership. Characteristics of Transactional Leadership Styles are that they will focus only on basic and external demand of the employees; the bond between leaders and subordinate is only based on the deal, like give and take policy. Characteristics of transformational leadership are that they will focus on the total transformation of employees i.e. moulding of a subordinate by influencing, supporting, providing spiritual encouragement and intellectual stimulation. Barzegar et al. (2012) and Nanjundeswaraswamy (2015) research revealed that Leadership Styles affect on employee QWL, i.e. it can be concluded that superiors Leadership Styles will influence on the employees Quality of Work Life.

The literature above, clearly points out that sufficient study to examine the association among any two of these three variables (Quality of Work Life (QWL), Employee Commitment (EC) and Leadership Styles (LS)) was not done. The objective of the present research is to explore the relationship between the three variables QWL, EC and LS, by identifying the mediating role of leadership styles. By keeping this as an objective following one research hypothesis was designed.

H1: Leadership Style mediates the relationship between QWL and Employee Commitment
To check the mediation effect of selected four QWL dimensions following four sub-hypotheses of \( H_1 \) were designed.

**H11**: Leadership Style mediates the relationship between Work Environment and Employee Commitment.

**H12**: Leadership Style mediates the relationship between Compensation & Reward and Employee Commitment.

**H13**: Leadership Style mediates the relationship between Job Satisfaction and Employee Commitment.

**H14**: Leadership Style mediates the relationship between Organizational Culture and Employee Commitment.

**Figure 1.** The framework representing the mediating effect of Leadership Styles on the relationship between Quality of Work Life and Employee Commitment.
5. Methodology

A quantitative approach was used to estimate the associations among Leadership Styles, Quality of Work Life and Employee Commitment. The theoretical facts proposed the development of following hypothesized model and research framework. Based on the literature and underpinning theory, Figure.1 describes the research framework, representing the mediating effect of LS on the relationship between QWL and EC.

5.1. Sample and data collection

The sampling technique utilized in the present study is simple random sampling. To represent this population for the study realistically, a sample of size “n” is chosen using the Bartlett et al. (2001) and Hogg and Tanis (1997) formula, i.e 240 SMEs is the sample size considered for the present study. The questionnaire was distributed to the 1500 employees of 300 mechanical manufacturing SMEs registered with the department of industries and commerce, Government of Karnataka, India. Among that only 1092 usable responses were received, yielding a response rate of 72.8%. The managers and owners are excluded from the sample.

The respondents included 898 (82.3%) male employees and 194 (17.7%) female employees. The majority of the respondent's age is between 20–30 years (59.80%) followed by 31–40 years (27.6%) and 41–50 years (9.3%). The majority of the respondents had work experience less than 10 years (78.10%) followed by 11–20 years (15.50%), 21–30 years (5.2%) and 31 years and above (1.20%). Most of the respondent's nature of the job was Technical (68.30%) followed by Non-technical (31.70%). Most of the respondent's educational qualification is ITI (25.27%) followed by Diploma (21.24%), Graduation (20.51%) and post-graduation (11.56%).

6. Measuring Instrument

The survey questionnaire was designed to measure the QWL of employees in SMEs by considering the Swamy et al. (2015) research instrument. The present research adopted Swamy et al., instrument since it is developed and validated to measure the QWL of employees working in the Mechanical Manufacturing SMEs. Instrument consists of nine predominant dimensions such as the Work Environment, Training and Development, Relation and Co-Operation, Organization Culture and Climate, Job Satisfaction and Job Security, Facilities, Compensation and Rewards, Autonomy of Work and Adequacy of Resources to collect the perception of employees towards QWL those who are working in mechanical manufacturing SMEs. The measuring instrument consists of 50 items, which represent the 9 components. The Multifactor Leadership Questionnaire (MLQ) designed and refined by Avolio and Bass (2004) were used to evaluate the leadership styles of the superior. The instrument is the 360-degree tool it helps to collect the information in a different perspective like charisma, inspirational motivation, contingent rewards, individualized consideration, intellectual stimulation, and management by exception; these characteristics represent the Transformational and Transactional Leadership Styles. The instrument was modified by considering the stated objectives of the research, considering the suggestion from the academician as well as employees and superiors in the SMEs through the content validation. Finally, the instrument consists of 18 items.

For the assessment of employees’ commitment towards the organization Allen and Meyer’s (1990) instruments were used, it consists of three types of employee commitment such as affective commitment, continuance commitment and normative commitment. The modified instrument consists of three dimensions with 15 items,
representing 5 items for each commitment type.

Questionnaires were designed based on Likert 5 point scale, with “1” is “strongly disagree” and “5” is “strongly agree”. The questionnaires were designed and a pilot study was carried out for a sample of 45 employees in 5 SMEs to check the feasibility of the study and to obtain information about the question framed and its meaningfulness. By considering the outcome of the pilot study, questionnaire, the content and construct were validated and also incorporated qualitative modifications, based on the feedback of the experts, respondents and employees of the SMEs. The reliability coefficient is obtained as Cronbach's alpha value 0.91 it is greater than 0.6 and hence the questionnaire designed is adequate for exploring research. The research refined the components and items using EFA and CFA by considering different validation criteria. The collected data were analyzed using various statistical tools such as basic descriptive statistics, Sobel test, correlation analysis and multiple regression analysis using SPSS.

6.1. Confirmatory Factor Analysis for of Quality of Work Life Components

Byrne (2001); Schumacher and Lomax (2004) and Suhr (2006) opined that Confirmatory Factor Analysis (CFA) allows investigating the hypothesis that exists the association between the indicator and one or more latent factors. In the current study, CFA was conducted using Structural Equation Modeling (SEM) using AMOS software. The nine factors QWL model was tested for validation using CFA which resulted in four dimensions of QWL with twenty items and the dimensions were Work Environment, Compensation and Rewards, Job Satisfaction and Organizational Culture. The remaining 5 factors are dropped because of poor loading. The first order 4-factor measurement model of QWL exposed a sufficient fit as represented in figure 2. The model fit indices specifically chi-square statistics was 292.9 with CMIN is 1.88 it is less than 3, it is within the acceptable region as mentioned by Bentler and Bonett (1987); Hair et al. (1998); and Bentler (1992). GFI = 0.918, AGFI = 0.889, IFI = 0.941, CFI = 0.940, TLI = 0.927 are more than 0.9 it is also in acceptable region as stated by Daire et al. (2008); Hair et al. (2006); Hu and Bentler (1999) and Hair et al. (1998) and RMSEA = 0.053 less than 0.08 indicates that it acceptable and good model fit according to Hair et al. (2006).

![Figure 2. Measurement model of QWL](image)

Most essential model fit indices of the CFA measurement model shows an excellent fit and proposed QWL measurement model consisting of 4 factors with 20 items encompass construct validity i.e. all the four components and their respective items can measure the QWL of employees at Mechanical Manufacturing SMEs.
6.2. Confirmatory Factor Analysis for Leadership styles Components

CFA was done through SEM using AMOS software. The 18 items of Leadership Style model were tested for validation through CFA which resulted in 2 groups with 9 items and the groups were named as Transformational Leadership Style (TR) with 4 items and Transactional Leadership Style (TC) with 5 items. The remaining 9 items were dropped because of poor loading. The first order two factors leadership measurement model exposed a sufficient fit as represented in Figure 3. The fit indices like Chi-square statistics were 50.8 with CMIN was 2.42 which is less than 3, it is within the acceptable region. GFI = 0.966, AGFI = 0.928, IFI = 0.965, CFI = 0.964, TLI = 0.938 are more than 0.9 it is also in acceptable region as mentioned by Daire et al. (2008) and RMSEA = 0.067 less than 0.08 indicates that it is acceptable and good model fit. Key measurement model fit indices of the CFA point out a superior fit and proposed measurement model for Leadership Style of 2 factors with 9 items have construct validity i.e. The 2 factors and their particular items can measure the leadership styles of the superior.

![Figure 3. Measurement model of LS](image)

6.3. Confirmatory Factor Analysis for Employee Commitment

CFA was done through SEM using AMOS software. The 15 items of Employee Commitment model were tested for validation through CFA which resulted in 3 groups with 11 items and the groups were named as Affective Commitment (AC) 4 items, Continuance Commitment (CC) with 4 items and Normative Commitment (NC) 3 items. The remaining 4 items were dropped because of poor loading. The first order three-factor Employee Commitment model explored an adequate fit as represented in figure 4. Important measurement model fit indices such as Chi-square statistics was 57.934 with CMIN was 1.485 which is less
than 3, it is within the acceptable region as mentioned by Hair et al. (1998). GFI = 0.969, AGFI = 0.947, IFI = 0.978, CFI = 0.978, TLI = 0.968 are more than 0.9 it is also in acceptable region as mentioned by Daire et al. (2008) and RMSEA = 0.039 less than 0.08 it indicated that it is acceptable and good model fit. Critical measurement model fit indices of the CFA indicated an excellent fit and proposed measurement model for Employee Commitment of 3 factors with 11 items exhibits the construct validity i.e. all the 3 components and their relevant items can measure the Leadership Styles of the superior.

![Diagram](image)

**Figure 4.** Measurement model of EC

7. Descriptive Statistics and Correlations

Initially collected data were processed for descriptive analysis statistics to identify the mean and standard deviations to explain the central tendency and dispersion of the responses respectively. The descriptive statistics reveal the central tendency of responses of six variables which lies between 3.47 and 3.93. The value of the standard deviation for the selected six variables is in the range of 0.62 to 1.05. To identify the association between QWL, LS and EC correlation analysis were conducted. All the six variables such as; Work Environment (WE), Compensation and reward (COM), Job Satisfaction (JS), Organizational Culture(OC), Leadership Styles (LS) and Employee Commitment (EC) are positively correlated with QWL. It is represented in table 1.
Table 1. Descriptive Statistics and Pearson Correlation coefficient

<table>
<thead>
<tr>
<th>Variables</th>
<th>Mean</th>
<th>Standard Deviation</th>
<th>QWL</th>
<th>LS</th>
<th>EC</th>
</tr>
</thead>
<tbody>
<tr>
<td>WE</td>
<td>3.47</td>
<td>1.05</td>
<td>0.834</td>
<td>0.559</td>
<td>0.853</td>
</tr>
<tr>
<td>COM</td>
<td>3.93</td>
<td>0.65</td>
<td>0.765</td>
<td>0.828</td>
<td>0.759</td>
</tr>
<tr>
<td>JS</td>
<td>3.80</td>
<td>0.72</td>
<td>0.766</td>
<td>0.869</td>
<td>0.710</td>
</tr>
<tr>
<td>OC</td>
<td>3.75</td>
<td>0.73</td>
<td>0.761</td>
<td>0.547</td>
<td>0.614</td>
</tr>
<tr>
<td>QWL</td>
<td>3.74</td>
<td>0.62</td>
<td>-</td>
<td>0.867</td>
<td>0.947</td>
</tr>
<tr>
<td>LS</td>
<td>3.89</td>
<td>0.62</td>
<td>-</td>
<td>-</td>
<td>0.815</td>
</tr>
<tr>
<td>EC</td>
<td>3.71</td>
<td>0.63</td>
<td>-</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

8. Mediation Analysis

Multiple regression analysis was conducted to know the mediating effect of Leadership Styles. Baron and Kenny (1986) mediation analysis procedure were followed to check the mediating effect of Leadership Styles on the relationship between QWL and Employee Commitment.

Step1: Controlled variable and predicted variable must be associated significantly
Step2: Controlled variable and mediating variable must be associated considerably
Step3: Mediator and predicted variable must be associated considerably and
Step4: The controlled variable must have no effect on the predicted variable when the mediator is kept constant or should become considerably smaller.

To know the mediation effect among variable for the present study Sobel test and multiple regression analysis was used. Sobel test is the most reliable and accurate to test the mediation effect between the variables according to Simsek (2007) and Jose (2013).

8.1. Mediating Effects of Leadership Styles between QWL and EC

Table 2 indicates Quality of Work Life is significant and positively associated with Employee Commitment ($\beta = 0.742$, $p < 0.001$), QWL is significant and positively related to Leadership Styles ($\beta = 0.548$, $p < 0.001$) and Leadership Style is significant and positively allied with Employee Commitment ($\beta = 0.589$, $p < 0.001$). That is the first three steps of mediation analysis were satisfied and supported. Multiple regressions also reveal that after mediating variable Leadership Style was taken into account, the $\beta$ weight for QWL was reduced from 0.742 to 0.632 and it is also significant. Thus, Leadership Style acts as a partial mediator in the association between QWL and EC. Additionally, Sobel test was conducted to check the significance of mediation, Sobel test statistics ($z = 3.69$, $p < 0.001$) reveals that there is no proof to reject the predefined null hypothesis $H_1$, i.e. Leadership Styles will mediate the relationship between QWL and EC (figure 5).

Figure 5. Mediating Effects of Leadership Styles between QWL and EC
Table 2. Mediating Effects of Leadership between QWL and EC

**Multiple Regression Results**

<table>
<thead>
<tr>
<th>Steps of Mediation</th>
<th>Unstandardized β</th>
<th>Standard Error</th>
<th>Standardized β</th>
<th>Value of t</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td>Step 1</td>
<td>0.804</td>
<td>0.071</td>
<td>0.742</td>
<td>12.692</td>
<td>0.000</td>
</tr>
<tr>
<td>Step 2</td>
<td>0.687</td>
<td>0.094</td>
<td>0.548</td>
<td>8.026</td>
<td>0.000</td>
</tr>
<tr>
<td>Step 3</td>
<td>0.509</td>
<td>0.062</td>
<td>0.589</td>
<td>8.863</td>
<td>0.000</td>
</tr>
<tr>
<td>Step 4</td>
<td>0.684</td>
<td>0.075</td>
<td>0.632</td>
<td>10.09</td>
<td>0.000</td>
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</table>

**Sobel Test Result**

<table>
<thead>
<tr>
<th>Type of Mediation</th>
<th>Z Score</th>
<th>Effects</th>
<th>Level of Significance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>Direct</td>
<td>Indirect</td>
</tr>
<tr>
<td>Partial</td>
<td>3.69</td>
<td>0.632</td>
<td>0.110</td>
</tr>
</tbody>
</table>

* Controlled variable (QWL), predicted variable (EC), Mediating variable (LS)

8.2. Mediating Effects of Leadership Styles between Work Environment and Employee commitment

The Table 3 indicate Work Environment is significant and positively coupled with EC (β = 0.781, p < 0.001), Work Environment is significant and positively related to LS (β = 0.736, p < 0.001) and LS is significant and positively allied with the Employee Commitment (β = 0.678, p < 0.001) (figure 6).

Table 3. Mediating Effects of LS between WE and EC

**Multiple Regression Results:**

<table>
<thead>
<tr>
<th>Steps of Mediation</th>
<th>Unstandardized β</th>
<th>Standard Error</th>
<th>Standardized β</th>
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<td>0.057</td>
<td>0.781</td>
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</tr>
<tr>
<td>Step 3</td>
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<td>0.062</td>
<td>0.678</td>
<td>7.650</td>
<td>0.000</td>
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<tr>
<td>Step 4</td>
<td>0.479</td>
<td>0.064</td>
<td>0.656</td>
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**Sobel Test Result**

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<td>3.53</td>
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* Controlled variable (Work Environment), predicted variable (Employee Commitment), Mediating variable (Leadership Styles)
That is the first three steps of mediation analysis were satisfied and supported. Further, it is noted from the multiple regression analysis reveals that the negative influence (from $\beta = 0.781$ to $0.656$ with $p < 0.001$) of mediating variable (LS) on WE. Thus, LS acts as a partial mediator in the relationship between Work Environment and Employee Commitment. Additionally, Sobel test was conducted to check the significance of mediation, Sobel test Statistics ($z = 3.53$, $p < 0.001$) reveals that there is no proof to reject the predefined null hypothesis $H_{11}$, i.e. leadership styles will mediate the relationship between Work Environment and Employee Commitment.

8.3. Mediating Effects of LS between Compensation & Reward and EC

The Table 4 indicate Compensation & Reward is significant and positively related with Employee Commitment ($\beta = 0.687$, $p < 0.001$), Compensation & Reward is significant and positively related with LS ($\beta = 0.607$, $p < 0.001$) and LS is significant and positively allied with the EC ($\beta = 0.589$, $p < 0.001$) (figure 7). That is the first three steps of mediation analysis were satisfied and supported. Multiple regressions revealed that after mediating variable LS was taken into account, the $\beta$ weight for Compensation & Reward reduces from 0.687 to 0.549 and it also significant.

![Figure 7. Mediating Effects of Leadership Styles between Compensation & Reward and Employee commitment](image)

Table 4. Mediating Effects of Leadership between Compensation & Reward and Employee Commitment

<table>
<thead>
<tr>
<th>Steps of Mediation</th>
<th>Unstandardized $\beta$</th>
<th>Standard Error</th>
<th>Standardized $\beta$</th>
<th>Value of t</th>
<th>Level of Significance</th>
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<td>Step 1</td>
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<td>0.687</td>
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<td>Step 2</td>
<td>0.591</td>
<td>0.069</td>
<td>0.607</td>
<td>8.659</td>
<td>0.000</td>
</tr>
<tr>
<td>Step 3</td>
<td>0.509</td>
<td>0.061</td>
<td>0.589</td>
<td>7.989</td>
<td>0.000</td>
</tr>
<tr>
<td>Step 4</td>
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Sobel Test Result

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<tr>
<td>Partial</td>
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<td>0.549</td>
<td>0.138</td>
<td>0.687</td>
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* Controlled variable (Compensation & Reward), predicted variable (Employee Commitment), Mediating variable (Leadership Styles)
Thus, LS acts as a partial mediator in the relationship between Compensation & Reward and Employee Commitment. Additionally, Sobel test was conducted to check the significance of mediation, Sobel test Statistics ($z = 3.71, p < 0.001$) reveals there is no evidence to reject the predefined null hypothesis $H_{12}$, i.e. Leadership Styles will mediate the relationship between Compensation & Reward and Employee Commitment.

### 8.4. Mediating Effects of Leadership Styles between Job satisfaction and Employee Commitment

The table 5 indicate Job satisfaction is significant and positively associated with EC ($\beta = 0.663, p < 0.001$), Job Satisfaction is significant and positively related to LS ($\beta = 0.559, p < 0.001$) and LS is significant and positively allied with EC ($\beta = 0.582, p < 0.001$) (figure 8). That is the first three steps of mediation analysis were satisfied and supported. Multiple regressions revealed that after mediating variable Leadership Style was taken into account, the $\beta$ weight for Job Satisfaction was reduced from 0.663 to 0.460 and it also significant. Thus, LS acts as a partial mediator in the relationship between job satisfaction and employee commitment. Additionally, Sobel test was conducted to check the significance of mediation, Sobel test Statistics ($z = 3.55, p < 0.001$) reveals there is no evidence to reject the predefined null hypothesis $H_{13}$, i.e. LS will mediate the relationship between Job Satisfaction and Employee Commitment.

![Diagram](image.png)

**Figure 8. Mediating Effects of LS between JS and EC**

| Table 5. Mediating Effects of LS between JS and EC |

<table>
<thead>
<tr>
<th>Steps of Mediation</th>
<th>Unstandardized $\beta$</th>
<th>Standard Error</th>
<th>Standardized $\beta$</th>
<th>Value of $t$</th>
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<td>Step 3</td>
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<td>0.582</td>
<td>5.989</td>
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<td>0.062</td>
<td>0.460</td>
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* Controlled variable (Job Satisfaction), predicted variable (Employee Commitment), Mediating variable (Leadership Styles)
8.5. Mediating Effects of Leadership Styles between Organization Culture and Employee commitment

The Table 6 indicate Organization Culture is significant and positively coupled with Employee Commitment ($\beta = 0.653$, $p < 0.001$), Organization Culture is significant and positively related to LS ($\beta = 0.493$, $p < 0.001$) and Leadership Styles is significant and positively allied with EC ($\beta = 0.579$, $p < 0.001$). That is the first three steps of mediation analysis were satisfied and supported. Multiple regressions also reveal that after mediating variable Leadership Style was taken into account, the $\beta$ weight for Organization Culture was reduced from 0.653 to 0.560 and it also significant (figure 9). Thus, LS acts as a partial mediator in the relationship between OC and Employee Commitment. Additionally, Sobel test was conducted to check the significance of mediation, Sobel test Statistics ($z = 3.33$, $p < 0.001$) reveals there is no evidence to reject the predefined null hypothesis $H_{14}$, i.e. Leadership styles will mediate the relationship between Organization Culture and Employee Commitment.

Figure 9. Mediating Effects of Leadership Styles between OC and EC

<table>
<thead>
<tr>
<th>Steps of Mediation</th>
<th>Unstandardized $\beta$</th>
<th>Standard Error</th>
<th>Standardized $\beta$</th>
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<td>0.579</td>
<td>5.632</td>
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<td>Step 4</td>
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<table>
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<th>Type of Mediation</th>
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<td>0.653 0.093 0.653 0.000</td>
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* Controlled variable (Organization Culture), Predicted variable (Employee Commitment), Mediating variable (Leadership Styles)

9. Result and discussion

Aim of this research is to check the mediating effect of Leadership Style on the relationship between Quality of Work Life and Employee Commitment in the mechanical manufacturing SMEs both theoretically and empirically. The descriptive statistics reveal the central tendency of responses of six variables which lies between 3.47 and 3.93 it is shown in Table 1. This table also depicts the
correlation between the 6 variables such as Work Environment, Compensation and reward; Job Satisfaction, Organizational Culture, Leadership Styles and Employee Commitment are positively correlated with Quality of Work Life.

The CFA and SEM results evident that all the three measurement model such as Quality of Work Life, Leadership Style and Employee Commitment satisfies all the major model fit indices, that is all the components and their respective items measures the defined three variables.

The results of mediation analysis and Sobel test statistics are shown in Figure 5 and Table 2, it reveals that p < 0.001so H1 is accepted, which indicates that Leadership Styles partially mediates the association among the Quality of Work Life and Employee Commitment. This indicates that in Mechanical Manufacturing SMEs, Employee Commitment can be enhanced by providing QWL interventions under effective Leadership Style.

Mediation analysis and Sobel test statistics are shown in Figure 6 and Table 3, it discloses that p < 0.001so H11 is accepted, which indicates that Leadership Styles partially mediates the relationship between the Work Environment and Employee Commitment. This reveals that in mechanical manufacturing SMEs, Employee Commitment can be enhanced by providing a superior work environment under effective Leadership Style.

Mediation analysis and Sobel test statistics are exhibited in Figure 7 and Table 4, it exposes that p < 0.001so H12 is accepted, which indicates that leadership styles partially mediates the relationship between the Compensation & Reward and Employee Commitment. This can be concluded that in Mechanical Manufacturing SMEs Employee Commitment can be enhanced by providing good Compensation & Reward under effective Leadership.

Mediation analysis and Sobel test statistics are represented in Figure 8 and Table 5, it reveals that p < 0.001so H13 is accepted, which indicates that Leadership Styles partially mediates the relationship between the Job Satisfaction and Employee Commitment. This means that in Mechanical Manufacturing SMEs Employee Commitment can be enhanced by providing effective job satisfaction interventions under effective Leadership.

The results of mediation analysis and Sobel test statistics are shown in Figure 9 and Table 6, it reveals that p < 0.001so H14 is accepted, which indicates that Leadership Styles partially mediates the relationship between the Organizational Culture and Employee Commitment. This shows that in Mechanical Manufacturing SMEs Employee Commitment can be enhanced by establishing a good Organizational Culture under effective Leadership Style.

The mediation analysis reveals that in Mechanical Manufacturing SMEs Employee commitment can be enhanced by providing a superior work environment, good Compensation & Reward, effective job satisfaction interventions and establishing a pleasant organizational culture under effective leadership Styles.

10. Conclusions

It is reasonably evident from the results that theory and practices in different parameters of employee and organizational parameters are closely related; for instance, QWL dimensions and leadership styles of superiors are very important and there is a positive and significant relationship between these variables, which means QWL under effective leadership styles superiors can enhance commitment of employees towards the organization in mechanical manufacturing SMEs.

The results show that leadership styles partially mediate the relationship between Quality of Work Life and employee commitment. This finding supports H1; this implies that employee commitment will
enhance due to the effective implementations of QWL dimensions under effective leadership styles. SMEs need to consider leadership. The present study findings will contribute to the growing literature on the importance of leadership styles for enhancing employee commitment by providing effective QWL interventions. Another contribution of the current work is establishing the relationship between QWL, employee commitment and leadership styles. The relationship among the three variables considering together was not tested empirically in the research made earlier.

In addition to QWL, all the selected four individual Quality of Work Life components are empirically tested to know the mediation effect of leadership styles between the Independent and dependent variables. For all these four variables also leadership acts as a mediator in the relationship with Employee Commitment. These identified components will help in developing policies and strategies that would address and improve the employees’ QWL and commitment in SMEs. Therefore, firms have to focus specifically on these factors such as Quality of Work Life dimensions and superiors leadership styles in order to enhance the commitment of employees towards the organization, this will improve retentions rate and reduces the absenteeism of employees. Many research such as Kim and Kao (2014); Halbesleben and Wheeler (2008) and Lambert et al. (2001) demonstrated that Work Environment, Job Satisfaction and Employee Commitments are the significant antecedents for retention.

This research facilitates to policymaker by recognizing crucial indicators that can improve employees Quality of Work Life and Job Satisfaction, as it will finally result in less staff turnover, greater productivity, and will also support the localization strategy.

11. Limitations and future research

This study was carried out only in Mechanical Manufacturing SMEs, and it is based upon random sampling technique, due to limitations of time and budget study is confined to one group of SMEs. Future researcher can extend the scope of this study by including other sectors. Therefore, the results of the study are not possible to draw the general conclusion about all types of SMEs, have diverse components which may affect employees perception towards Leadership styles, QWL and Employee commitment.

References:


Bentler, P. M., & Bonett, D. G. (1987). This week’s citation classic. *Current contents, Social and Behavioral sciences,* 19, 16


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<th>T S Nanjundeswaraswamy</th>
<th>D R Swamy</th>
<th>P Nagesh</th>
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