

## Impact of Leadership Styles on Project success: Evidence from Private Sector Firms of Construction Industry

M Anwar Khan<sup>1</sup>, M. Ifitkhar Ali<sup>2</sup>, M Umar<sup>3</sup>

### Abstract

Leadership styles have a key role in the success of construction industry projects. Construction industry is a vast and complex industry and is known for a number of decisive factors involved. Hence, role of project leadership is critical in the success of this industry. Accordingly, this research is targeted to examine the role of leadership in this industry through studying the impact of various leadership styles i.e. transformation leadership, transactional leadership, laissez fair leadership and spiritual leadership styles with its dimension on project success in private sector firms of the construction industry. It is a deductive approach and cross-sectional survey-based research in which hypotheses are tested. Reliability of the survey is checked through pilot testing before the final distribution among the responded. Simple random sampling technique is used to collect the sample from the selected population including project leaders, project directors, project managers, supervisors and team members with sample size n=320 in the region of Islamabad and Rawalpindi. Results of the analysis show that transformational leadership styles with its dimension are significantly positively associated with project success. Contingent reward and management by exception (active) dimensions of transactional leadership are significantly positively associated with project success, where management by exception (passive) dimension has shown negatively relationship with project success. Laissez fair leadership also shown a negative association with project success. Finally, the two dimensions of vision and hope/faith of Spiritual leadership show a significant positive impact on project success and altruistic love show a negative relationship with project success. Further, this research contributes to the project management literature in the context of private sectors constructions firms. This is the first study which explored the impact of spiritual leadership style on project success. In addition, this is the first study which explored the impact of dimensions of leadership styles on project success in the constructions firms. The study presented recommendations on the basis of results and findings. Based on the limitation of the study, future research recommendations are also presented

**Keywords:** Leadership styles, Project success, Transformational leadership, Laissez fair, transactional leadership and spiritual leadership

### 1. Introduction:

In last three to four decades researchers explored a numbers of new success factors (when used within the project life cycle, create a chance to make project successful) and increase the variety of success

---

<sup>1</sup> MS Scholar, Abasyn University Islamabad Campus, [anwarbahria275@gmail.com](mailto:anwarbahria275@gmail.com)

<sup>2</sup> PhD Scholar, Bahria University Islamabad Campus, [iftikhar.kfp@gmail.com](mailto:iftikhar.kfp@gmail.com)

<sup>3</sup> Chairman/Assistant professor, CASE University Islamabad [umerbayyone@gmail.com](mailto:umerbayyone@gmail.com)

criteria (i.e those criteria used after project completion to measure the project success). Project success is achievement of specific mixture of subjective viz a viz objective measures, demonstrate in success criteria at completion of project (Muller and Jugdev, 2012). Researcher explored that the expectations from project success rates are not satisfying yet (Judgev & Muller, 2005; Lehtonen and Martinsuo, 2006). Because researcher have focused to broaden the boundary of possible success factors and target more at structural features of the project framework and find out their effect at success.( Biesenthal & Wilden, 2014).

In this context, researchers explored one of the critical success factors is the leadership styles (Aga et al., 2016; Raziq et al., 2018). In the project management literature, various leadership styles are identified in different industries. Construction industry being a vast field has been researched by various scholars and have considered as safety leadership (Stiles et al, 2018). Transformational leadership (TFL) (Potter et al., 2018), Transactional leadership (TL) and laissez fairs styles (LFL) (Zhang et al, 2018). Where the spiritual leadership (SL) is increasing researcher consideration during the last two to three decades in various industries (e.g., Chen and Yang, 2012; Hannah and Avolio, 2011). There are three major leadership styles, including transformational leadership styles, transactional leadership styles and laissez fair leadership as pointed out by the Full Range Leadership Theory (Bass and Avolio, 1997; Sohmén, 2013). Hence, LW Fry (2003) emphasized on spiritual leadership for potential results. Involvement of number of decisive factors, dimension of each leadership style has different impact on project success in the construction industry. It is important to find the relationship between leadership styles such as transformational transactional, laissez Fair and spiritual leadership styles with its dimensions and project success in the project-based organization (Raziq et al., 2018). There is a lack of research while examining the impact of the dimensions of leadership styles and their impact on project success in the construction firms. Therefore, it would be significant to explore the relationship between leadership styles and project success (Aga et al., 2016). Some authors also invite to research the effect of project manager's leadership styles on projects. (Tyssen et al., 2014; Martens et al., 2018). Research gap still prevails in examining spiritual leadership and project success. The research gap poses a research question that is there any significant effect of leadership styles on the project success. To answer this research question the present study focuses on highlighting role of project manager's leadership styles in making public sector development projects successful.

This research will contribute to prevailing literature regarding leadership styles and project success in construction firms of Pakistan. Research in construction industry is significant because it creates industry's opportunities and uplifts the economic growth. The result would specifically vital for project manager and stakeholders of the construction firms. In addition, the result of this study will be helpful for the private sector firms to figure out that how much the leadership styles are important to accomplish the project success. In addition, to provide idealistic phenomena to project leaders that how can they optimize their leadership styles to achieve project success in the construction projects. Due to these results, this

study will create more opportunities for the private sectors firms to become more efficient, which ultimately increase the economic growth of Pakistan.

### **1.1 Problem statement**

This research states the following problem statement; Impact of various leadership styles transformational, transactional, laissez- and spiritual leadership with its dimensions on project success in private sectors construction (project base) firms of Pakistan. According to Ministry of Planning Development & Reform, in 2016-17 growth rate of Pakistani construction industry was 9.8% and declined to 9.1% in the year 2017-18 (Annual Plan, 2018-19). According to the Fahim Ullah et al., (2017) involvement of leaders is one of critical success factor of Pakistani construction industry. Research explored that lack in leadership and management of performance, these are the important reason of project failure (Harrington et al., 2012; Steyn et al., 2018; Gupta et al., 2018). There is gap and need to examine this association among project success and leadership styles in the temporary projects (Raziq et al., 2018).

### **1.2 Research Questions**

- Does a Transformational leadership style has a significant effect on project success?
- Does a Transactional leadership style has a significant effect on project success?
- Does a Laissez- Fair Leadership style has a significant effect on the project success?
- Does Spiritual leadership style has a significant effect on the project success?

### **1.3 Research Objectives**

Following research objectives are set to answers the research questions:

- To investigate the effect of Transformational leadership on project success.
- To investigate the effect of Transactional leadership on project success.
- To investigate the effect of Laissez- Fair Leadership on project success.
- To investigate the effect of Spiritual leadership on project success.

## **2. Literature review**

### **2.1 Transformational Leadership**

Construction industry need to motivate the transformational leadership to create the collaborative environment for the team members as well as to achieve the economical and modern solutions of the problems, which will be profitable for industry, client, team and individual (Potter et al., 2018). Leaders do need having the necessary abilities to lead their follower, which helps followers in accomplishing the project success (Maqbool et al., 2017). Temporary organizations are required to build up the transformational leaders in the project management through different ways like leadership development programs and selections (Tyssen et al., 2014). Transformational leadership (TFL) is considered as visionary leadership, because in TFL, leaders encourage their subordinates to achieve the target expectations (Doucet et al., 2015). Recent research indicates for this type of leadership style, the suggested name involves around a

transformation, the transformational practices involve the system, leaders and followers for which the follower and leader work together (Raziq et al., 2018). In this style, leaders required to optimize their behaviors according to the existing situation in their firms. (J.-X. Chen et al., 2019). Companies need to adopt the transformational leadership behaviors to become more efficient in their daily work as well as to find creative solutions of the problems. (Khatri et al., 2019). According to the Bass & Bass (2009), there are four multi dimensions of TL (a) Inspirational motivation (b) Individualize consideration (c) Intellectual stimulation (d) Idealized influence. Individual consideration is known one of the key behaviors of transformational leaders, because it is involved in the requirements and development of the followers (Maqbool et al., 2017). Desired goals of inspirational leaders and organization's requirement can be accomplished with the help of motivation and an expectation. (Krishnan, 2012). Intellectual stimulation by motivating, empowering the followers to find and answer the problems, find the opportunities and use their own vision and creativity as well as creates the regular learning environment inside an organization (Balyer, 2012). In the organization, follower's attitude and environment can be established through example set by leaders with the behavior of idealized influence (Kouzes & Posner, 2016).

## 2.2 Transactional Leadership

Research explored that only one dimension (i.e. contingent reward) of transactional leadership (TL) show positive relationship with project success out of three (Aga, 2016). Few research explored that ("active management by exception") dimension of TL has shown negative relation with project success. (Raziq et al., 2018; Aga et al., 2016). TL is defined as an approach to take "action and reaction" against the problems and reward those individuals who accomplished the objectives efficiently (Walumbwa et al., 2008). According to the Aga et al., (2016), contingent reward relationship towards project success is positive and active management is negative related with project success by its exemption aspect. To get efficient performance from followers, Project managers need to avoid the stick approach, while focusing more on collaborative and reward approaches. Transactional leadership style is also define as corrective approach, with three dimensions (a) management by exception (passive) MBE (A) (b) management by exception (active) MBE (P) (c) Contingent Reward (CR) (Asrar & Anwar, 2018). Transactional leaders try to make sure to rewarded subordinates fairly (contingent reward) where subordinates know that they will be motivated after the efficiently compilation of assignments. (Avery et al., 2019). In management by exception (Passive) MBE (P), Leader takes no interest unless the mistakes of subordinates become serious. It is a behavior where the leader takes action after the problems occurred and is less effective than active form (Bass and avilo, 1997). Where in management by exception (active), leaders sets the standard for their followers for efficient result but when the standards are not meet by subordinates than they have to face the punishment. It is also the characteristics of observing and rectification of errors through undesirable corroboration (Barling, 2014).

### 2.3 Laissez-faire leadership - LFL

One of most common definitions of LFL is the hand off approach of a leader. The leader goes step down from his responsibility, takes delays in the decisions, no feedback, and does not support too much to his followers to satisfy their requirements. No exchange is found with the followers, which help them to buildup (Zhang et al., 2018). In this behavior leaders want to avoid leading and avoid taking action against the followers. This is one of the most ineffective and passive leadership types (Sohmen, 2013). Due to the lack of traditional leadership behaviors, it is one of least studied style. Normally in Laissez – faire behavior leaders are mostly absent and they handover their responsibilities to the followers. Laissez-faire leaders do not utilize their authority on subordinates and do not takes decisions according to the day to day process, therefore it is very difficult for the followers to solve the problems itself (Bass & Avolio, 2004). Where followers need to work independently and do not have the capability or skills to solve the problems. Laissez faire is not a recommended behavior of leadership style. Research suggests that Laissez-faire is mostly considerable behavior of leadership style where multiple tasks and self-thinking are needed by specialization (Wong & Giessner, 2018). Research explored that LFL is fully failed to clarify their subordinates (M. Diebig et al., 2016).

### 2.4 Spiritual Leadership – SL

It is the basic requirement for spiritual survival of both leader and subordinates whereby consequently they will be able to make it organizationally productive and committed. Spiritual leadership includes, behavior, attitude and values which are essential to internally encourage itself & subordinates, then they have logic of spiritual survival on behalf of member ship and calling (Fry, 2003). It is a significant characteristic in individuals; few scholars explored the idea of spirituality in workplace management, it is also recognized that workers need to search for the aim of life, meaning of work and better interpersonal relationship (Wagner M et al., 1999). Mostly spiritual leadership style in studies is in the field of healthcare, psychology management and education. Presently, there is more research showing the attention in the spiritual leadership. Where in the field of construction, there are least studies. Research highlights that SL has positive impact on the independent teams, to construct the organization values and a logic of community. Research suggests that for ethical behavior spirituality is necessary as well as worker employee dedication, advantage, productivity and job satisfaction (Benefiel, 2005). Research exposed the three dimension of SL (a) Vision (b) hope/faith (c) Altruistic Love (Afsar et al., 2016). Basically on the basis of servant leadership philosophy, spiritual leader movement includes leadership patterns, follower's development and participation. (Moradi, et al 2019). Research show that there is positive association among spiritual leadership and workers performance and effectiveness (Wang et al., 2018; Akbar and Udin, 2018). Recently research explored that for intrinsically motivation for itself and others needed the principle of vision, Altruistic love and hope/faith with in SL consist of the values, attitudes and behavior (Clinebell, et al., 2017).

## 2.5 Project success

In the literature there are number of researchers who explore the criteria for measuring of project success, one of the most heuristic concept is triple constraint which is recognized as the iron triangle to something that include extra additional criteria of project success such as quality, satisfaction of shareholder and knowledge management (Muller and Jugdev, 2012). There are number of models introduced by different researchers to measure the project success (Shenhar and Dvir, 2007). In the industry of construction and engineering, project success is known in sense of budget, schedule & fulfillment of the desired requirements of the customer or quality. However, in these days project management (PM) has turned into ubiquitous in the area of capacity building, service sector and developmental projects (Diallo & Thuillier, 2005). PS is equal to competing requirements for project time, scope, and budget, meet the expectation of the all project shareholders as well as quality (PMI, 2013).

Initially, project success is highly related to project management, the full responsibility of success or decline of project reflects on choosing of stakeholder (team members, project managers, team supervisors, resource suppliers) on one side, on the other iron triangle of project such budget, scope & time taken as measurement of PS. (Raziq et al., 2018). However, before going deeper in our judgment on the project let us define project success. Authors have dissolved project success measurement into two parts, first outcome has a relation with project success is relying mainly on second part that is related to participant's satisfaction, assigned different influential factors such as degree of complexity, commitment, goal, expectancy and environmental change to a fundamental in appreciating of project outcome. Additional research, Williams et al., (2015) has studied project success definition by examine the correlation between multiple measurable and psychosocial factors, the finding of this paper revealed the success factors effect upon project performance, another way the study illustrate how could looking backward to map out problem root lead to successful criteria. Primarily, the degree of success is controversial topic between scholars and iron triangle (Budget, Time and scope) depicts insufficient measurement for project due to one side judgment that some cases project could reach satisfaction in perception of client despite on time, on budget. Therefore, client's opinion needs to be incorporated under project success criteria. Aga et al., (2016) in his study authors argued the concept of project success and backed his disagreement with various scenarios when project become on budget on time but considered as failure. On the contrary, project could deliver its objectives late as well as over budget but perceived as successful. Another new study, Davis, (2017) has argued that failure of a project refers to various interpretation of project success factors and criteria by stakeholders, consequently, findings dictate behavioral instrument is the productive tool to support project success perception. According to the Joslin & Muller (2016), there are five dimensions of project success, such as impact of project, efficiency of projects, satisfaction of potential stakeholder and benefits for organization.

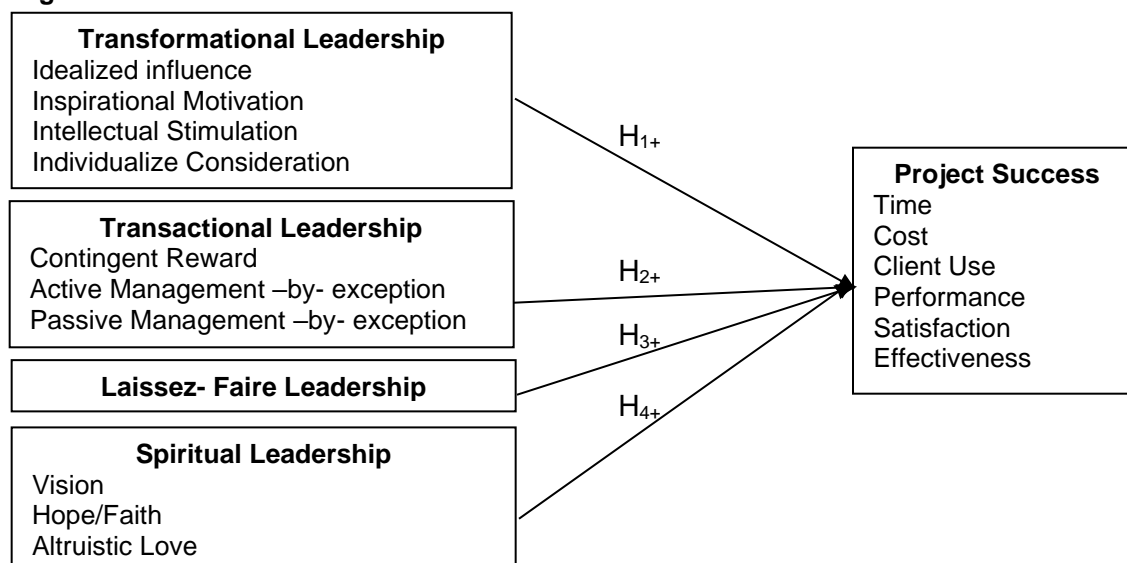
After extensive literature review following hypothesis are set:

## 2.6 Research Hypothesis

- H<sub>1</sub>. Transformational leadership positively relates to project success.
- H<sub>2</sub>. Transactional leadership positively relates to project success.
- H<sub>3</sub>. Laissez-faire leadership positively relates to project success.
- H<sub>4</sub>. Spiritual leadership positively relates to project success.

## 2.7 Research model

Figure 1: research model



## 3. Research methodology

The research based on positivism philosophy and deductive approach with survey strategy. Quantitative methodology is used to find out the impact of various leadership styles i.e. transformation leadership, transactional leadership, laissez fair leadership and spiritual leadership styles with its dimension on project success in private sector firms of the construction industry in cross sectional time horizon. Unit of analysis was the project employees.

The population of the research was construction firm's employee. The population size was not clear due because these construction firms are project based. Therefore simple random sampling technique was used to select the sample size. In Islamabad and Rawalpindi region, there was 1919 construction firms are associated with PEC in the years of 2017-18 in various category C-A, CB, C-1 to C-6.

The questionnaires was adopted from previous studies to collect data. Transformational leadership constructs is adopted from Aga, et al., (2016), which is divided in to four parts: idealized influence (three items); inspirational motivation (three items); intellectual stimulation (four items) and individual consideration (three items). Transactional and laissez fair leaders styles construction are adopted from

Dussault et al., (2013). The construct of transactional leadership is divided in to three parts: contingent reward (four items); management by exception (active) (one items) and management by exception (passive) (one items). Spiritual leadership construct is adopted from L.W. Fry et al., (2005), which is divided into three parts: vision (five items); hope/faith (five items) and altruistic love (seven items). Finally the project success constructs adopted from Aga, et al., (2016) which have (Fourteen items). The survey questionnaire is divided into three section. First section is covering the brief regarding the purpose of survey questionnaire, in second phase demographics information such as gender, age and experience etc. The third section cover the variables items. It was necessary to check reliability and validity of survey questionnaire before distribution. Therefore 50 questionnaires were distrusted in the field experts for inputs and to investigate if they understood the questions asked. The results of test were well above the threshold value of alpha as suggested in literature i.e. 0.7. The results of validity and reliability test shown in the table 4.1.

The survey questionnaire was disturbed into two phases. In first phase email was sent to 486 construction firms in which only 108 responses are received with 76 valid questionnaire. In second phase 260 questionnaire was disturbed among 90 construction firms through personal visits, in which 244 valid questionnaires was received. So the final sample size is 320. SPSS is used to find the correlation and regression between the variables. Through Cronbach's alpha, find the reliability and validity of the scale.

#### 4. Data analysis

##### 4.1 Reliability of scale

**Table 1: Reliability Analysis**

<b>Item-Total Statistics</b>		
<b>Variable</b>	<b>No. of Items</b>	<b>Cronbach's Alpha</b>
Transformational Leadership	13	0.811
Transactional Leadership	06	0.801
Laissez-faire Leadership	03	0.79
Spiritual Leadership	17	0.712
Project Success	14	0.812

**n=320**

**Table 2: Scale Reliability dimension wise**

<b>Measure</b>	<b>N</b>	<b>Reliability (Alpha)</b>
<b>Transformational Leadership</b>		0.811
Idealized influence	50	0.90
Inspirational Motivation	50	0.88
Intellectual Stimulation	50	0.89
Individualize Consideration	50	0.90
<b>Transactional Leadership</b>		0.801
Contingent Reward	50	0.83
Active Management –by- exception	50	0.86
Passive Management –by- exception	50	0.87
<b>Laissez- Faire Leadership</b>	50	0.79



<b>Spiritual Leadership</b>		0.712
Vision	50	0.79
Hope/Faith	50	0.89
Altruistic Love	50	0.75
<b>Project Success</b>	50	0.812

In above tables reliability of scale is checked. Reliability Analysis is normally used to create reliable measurement scales, they are conducted to progress the current scales, and to assess the dependability of scales that are previously in use. Precisely, Reliability Analysis then supports in the strategy and appraisal of some scales. A person can calculate plentiful measurements that permit a researcher to construct and gauge scales ensuing the ostensible traditional testing theory. No variable was dropped due to low Cronbach Alpha value because all variables of the study have reliability ( $\alpha$ ) well above than the cut off value (0.70) recommended by (Hair et al., 2009).

## 4.2 Descriptive Statistics

**Table:3 Descriptive Statistics**

		Frequency	Percentage
<b>Gender</b>	Male	286	89.38
	Female	34	10.62
<b>Age</b>	1-20 years	15	5
	21-25 Year	42	13.13
	26-30 year	60	18.75
	31-35 years	49	15.31
	36-40 Year	43	13.44
	41-45 year	64	20
	46-50 years	28	8.75
	above 50	19	5.94
<b>Education</b>	Postgraduate	17	5.31
	Master	42	13.13
	Bachelor	85	26.56
	Intermediate/DAE	112	35.00
	Matric	64	20.00
<b>Designation</b>	Project Leader	16	5.00
	Project Director	36	11.25
	Project Manager	102	31.88
	Supervisor	91	28.44
	Team member	75	23.44
<b>Experience</b>	1-5 years	64	20.00
	6-10 Year	86	26.88
	11-15 year	57	17.81
	16-20 years	47	14.69
	21-25 Year	27	8.44
	26-30 year	22	6.88
	above 30 years	17	5.31
<b>Employee</b>	1-150	137	42.81
	150-300	121	37.81
	Above 300	62	19.37

<b>Budget</b>	C-1 (2500 Million)	34	10.63
	C-2 (1000 Million)	52	16.25
	C-3 (500 Million)	43	13.44
	C-4 (200 Million)	72	22.5
	C-5 (65 Million)	56	17.5
	C-6 (25 Million)	63	19.69

The above table show the demographic information of the responded. The majority of the participants were male (89.38%). Average ages from 21 to 30 years (31.88%). Their average education was Intermediate/DAE (35%). The average designation of the participants were project managers (31.88 %). The majority working experience of the respondents are 10 years (26.88%). The average strength of employees in construction firms are 150 (42.81 %) The average response rate of the firms categories are C4 (22.5%)

### 4.3 Descriptive statistics

Larger sets of quantitative information as means and standard deviations deliver the view of data in descriptive statistics. Detail are given below in table 4.9:

**Table 4: Descriptive Statistics**

Variable	Mean	Std. Deviation
Transformational Leadership	3.6383	.69224
Transactional Leadership	3.7681	.75950
Laissez-faire Leadership	3.5558	.71649
Spiritual Leadership	3.5893	.57923
Project Success	3.8125	.57354

A questionnaire designed on likert scale measured variables with n=320 as shown in Table 4.10. The table shows means and values of standard deviations. It shows that PS has high M=3.81 and SD=0.57, TL shows M=3.76 and SD=0.75. TFL M=3.63 and SD=0.69, SL shows M=3.58 and SD=0.57.

### 4.4 Correlation Analysis

The Pearson correlation coefficient was determined to measure the level of association among the variables of TFL, TL, LFL, SL and PS. The correlation coefficient is always between +1 and -1. The value near to +1 or -1 indicate a negative and positive association among variables and the value closer to zero indicate the weak relationship. Correlation determines the strength of the relationship and direction of the relationship. The correlation coefficient is designated by (r) and the path of the association among the variable is determined by the sign of the correlation coefficient (Hair et al., 2010; Pallant, 2010). The results of Pearson correlation analysis between dimensions of leadership styles and PS are shown in Table 4.6:

**Table 5: Correlation Analysis**

	1	2	3	4	5
Transformational	1				
Transactional	.826**	1			

Laissez Fair	-.346**	-.544**	1		
Spiritual	.336**	-.006	.763**	1	
Project Success	.990**	.868**	-.459**	.213**	1

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

**Table 6: Correlations among dimensions of leadership styles and Project success**

Correlations												
	1	2	3	4	5	6	7	8	9	10	11	12
Ideal Influence	1											
Inspirational motivation	.905**	1										
Intellectual Stimulation	.271**	.285**	1									
Individual consideration	.869**	.867**	.663**	1								
Contingent Reward	.789**	.812**	.321**	.756**	1							
MBE (Active)	.477**	.465**	.657**	.602**	.408**	1						
MBE (Passive)	-.224**	-.236**	-.398**	-.338**	-.219**	-.549**	1					
Laissez Fair	-.570**	-.555**	-.118*	-.303**	-.392**	-.575**	.252**	1				
Vision	.767**	.779**	.672**	.927**	.609**	.406**	.215**	-.090	1			
Hope/Faith	.662**	.709**	.855**	.921**	.690**	.758**	.445**	.243**	.818**	1		
Altruistic Love	-.585**	-.596**	-.103	-.331**	-.445**	-.571**	.254**	.996**	-.116*	.277**	1	
Project Success	.900**	.882**	.641**	.976**	.792**	.708**	.379**	.459**	.877**	.917**	.484**	1

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

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

The above table shows that each dimension of each leadership styles have different correlation with project success. All four dimensions of transformational leadership are positively associated with project success. Only one dimension management of exception (passive) of transactional leadership show negative relationship with project success out of three. Laissez fair leadership is also show negative relationship with project success. Altruistic love dimension of spiritual leadership also show negative relationship with project success, where vision and hope/faith positive relationship with project success.

#### 4.5 Regression Analysis

Regression analysis is a statistical method to estimate association among variables. It embraces numerous procedures and techniques for analyzing and modeling various variables, when the emphasis is on the connection among dependent variable and one or additional independent variables. Specifically, the regression analysis aids to comprehend how the representative value of dependent variable become vary

when any one of the independent variables is diverse, while the additional independent variables are detained stable.

**Table 4.7: Regression analysis for Idealized influence and project success**

Variable	Project Success				
	$\beta$	t- stats	R2	F- stats	sig
Constant	20.583	18.662			.000 <sup>b</sup>
Idealized influence	.900	36.774	0.810	1352.340	

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .005$ , \*\*\*\*  $p < .001$

The above table shows that both idealized influence and Project are positively related with each other. If idealize influences increases then Project will also increase 0.90 which is significant at 5 % level of significance.  $R^2$  shows that project success is 81 percent explained by idealize influence. Moreover the value of F- stats (1352.340) shows that overall model is best fit.

**Table4.8: Regression analysis for Inspirational Motivation and project success**

Variable	Project Success				
	$\beta$	t- stats	R2	F- stats	sig
Constant	13.899	9.810			.000 <sup>b</sup>
Inspirational Motivation	.882	33.310	.777	1109.576	

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .005$ , \*\*\*\*  $p < .001$

The above table shows that Inspirational Motivation and PS both are positively related with each other. If inspirational motivation increase then PS will also increases 0.88 which is significant at 5 % level of significance.  $R^2$  show that PS is 77 percent explained by inspirational motivation and value of F- stats (1109.576) shows that overall model is best fit

**Table 4.9: Regression analysis for intellectual stimulation and project success**

Variable	Project Success				
	$\beta$	t- stats	R2	F- stats	sig
Constant	31.313	15.696			.000 <sup>b</sup>
Intellectual Stimulation	.641	14.909	.411	222.282	

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .005$ , \*\*\*\*  $p < .001$

The above table shows that intellectual stimulation and project success are positively related with each other. If intellectual stimulation increases then project success will also increases .64 which is significant at 5 % level of significance.  $R^2$  show that PS is 41 % explained by intellectual stimulation where value of F- stats (222.282) shows that overall model is best fit.

**Table 4.10: Regression analysis for Individualized consideration and project success**

Variable	Project Success				
	$\beta$	t- stats	R2	F- stats	sig
Constant	-5.119	-6.209			.000 <sup>b</sup>

Individualized consideration	.976	80.286	.953	6445.862	
------------------------------	------	--------	------	----------	--

\* p<.05, \*\* p<.01, \*\*\* p<.005, \*\*\*\* p<.001

The above table shows that individualized consideration and project success both are positively related with each other. If individualized consideration increases then PS will also increase 0.97 which is significant at 5 % level of significance. R<sup>2</sup> show that PS is 95 % explained by individualized consideration where value of F- stats (6445.862) shows that overall model is best fit.

**Table 4.11: Regression analysis for Contingent reward and project success**

Variable	Project Success				
	$\beta$	t- stats	R2	F- stats	sig
Constant	7.402	3.196			.000 <sup>b</sup>
Contingent reward	0.792	23.157	.628	536.250	

\* p<.05, \*\* p<.01, \*\*\* p<.005, \*\*\*\* p<.001

The above table shows that contingent reward and project success are positively related with each other. If contingent reward increases then project success will increase 0.79 which is significant at 5 % level of significance. R<sup>2</sup> show that PS is 62 % explained by contingent reward where value of F- stats (536.250) shows that overall model is best fit.

**Table 4.12: Regression analysis for MBE (active) and project success**

Variable	Project Success				
	$\beta$	t- stats	R2	F- stats	sig
Constant	44.104	45.933			.000 <sup>b</sup>
MBE (Active)	0.708	17.880	.501	319.689	

\* p<.05, \*\* p<.01, \*\*\* p<.005, \*\*\*\* p<.001

The above table shows that active management and project success both are positively related to each other. If active management increase then project success will increases 0.70 which is significant at 5 % level of significance. R<sup>2</sup> show that PS is 50 % explained by active management where value of F- stats (319.689) shows that overall model is best fit.

**Table 4.13 Regression analysis for MBE (passive) and project success**

Variable	Project Success				
	$\beta$	t- stats	R2	F- stats	sig
Constant	66.303	83.597			.000 <sup>b</sup>
MBE (Passive)	-0.379	-7.298	0.143	53.260	

\* p<.05, \*\* p<.01, \*\*\* p<.005, \*\*\*\* p<.001

The above table shows that MBE (passive) and Project success both are negatively related with each other. If Passive management increase then project success will decrease -0.37 which is statistically insignificant.

R<sup>2</sup> show that PS is 14 % explained by passive management where value of F- stats (53.260) shows that overall model is best fit

**Table 4.14: Regression analysis for Laissez- Faire Leadership and project success**

Variable	Project Success				
	$\beta$	t- stats	R2	F- stats	sig
Constant	70.063	67.844			.000 <sup>b</sup>
Laissez- Faire Leadership	-.459	-9.206	0.210	84.743	

\* p<.05, \*\* p<.01, \*\*\* p<.005, \*\*\*\* p<.001

The above table show that Laissez- Faire Leadership and PS both are positively associated with each other. If LFL increases then PS will decrease -.45 which is statistically insignificant. R<sup>2</sup> show that PS is 21 % explained by LFL where value of F- stats (84.743) shows that overall model is best fit.

**Table 4.15: Regression analysis for vision and project success**

Variable	Project Success				
	$\beta$	t- stats	R2	F- stats	sig
Constant	4.993	2.897			.000 <sup>b</sup>
Vision	0.877	32.527	0.769	1057.982	

\* p<.05, \*\* p<.01, \*\*\* p<.005, \*\*\*\* p<.001

The above table show that vision and PS both are positively associated with each other. If vision increases then PS will increases 0.87 which is significant at 5 % level of significance. R<sup>2</sup> show that PS is 76 % explained by vision where value of F- stats (1057.982) shows that overall model is best fit

**Table 4.16: Regression analysis for Hope/Faith and project success**

Variable	Project Success				
	$\beta$	t- stats	R2	F- stats	sig
Constant	3.717	2.660			.000 <sup>b</sup>
Hope / Faith	0.917	41.043	0.841	1684.512	

\* p<.05, \*\* p<.01, \*\*\* p<.005, \*\*\*\* p<.001

The above table show that show that the hope / faith and PS both are positively associated with each other. If hope/faith increases then PS will increases 0.91 which is significant at 5 % level of significance. R<sup>2</sup> show that PS is 84 % explained by hope/faith where value of F- stats (1684.512) shows that overall model is best fit.

**Table 4.17: Regression analysis for Altruistic Love and project success**

Variable	Project Success				
	$\beta$	t- stats	R2	F- stats	sig
Constant	70.023	72.666			.000 <sup>b</sup>
Altruistic Love	-0.484	-9.861	0.234	97.230	

\* p<.05, \*\* p<.01, \*\*\* p<.005, \*\*\*\* p<.001

The above table show that Altruistic Love and project success both are positively associated with each other. If altruistic love increases then PS will decrease -0.48 which is statistically insignificant.  $R^2$  show that PS is 23 % explained by altruistic love where value of F- stats (97.230) shows that overall model is best fit.

#### 4.6 Summary of Hypothesis

**Table 4.18: Summary of Hypothesis**

S. No	Hypothesis	Status Accepted or rejected
H <sub>1</sub>	Transformational leadership positively relates to project success.	Accepted
H <sub>2</sub>	Transactional leadership positively relates to project success.	Accepted
H <sub>3</sub>	Laissez-faire leadership positively relates to project success.	Rejected
H <sub>4</sub>	Spiritual leadership positively relates to project success.	Accepted

#### 5. Discussion

In the existing PM literature, the role of PL is essential for project success. (Junyoung. h et al., 2019). The basic objective of this study was to investigate the association among leadership styles and PS. For this objective PS was selected as the measure of qualifying of construction firm's success. It is also desired to test the empirical research weather leadership styles are any significant impact on project success. This research investigates four leadership styles such transformational leadership, Transactional leadership, Laissez fair leadership and Spiritual leadership alongwith its dimensions and their impact on Project success in construction industry firm in the region of Islamabad and Rawalpindi.

As predicate the result show that each leadership style is different effect on PS as well as each dimension of each leadership style are also having different relationship with PS. The result of this study answer to the Steyn et, al. (2018), who claim that the role of leadership styles have less attention in the project management literature. The result agreed with the finding of Aga et al. (2016), who claim that transformational leadership have direct as well as indirect positive relationship link with project success. In addition, research confirmed that transformational leadership has positive impact on PS (Raziq et al., 2018; Maqbool et, al., 2017 Liphadzi et al., 2015). Research also explored that transformational leadership styles is more suitable to private sector project (Junyoung oh et al., 2019). So, this research supports the existing literature regarding transformational leadership and project success. Essentially transformational leadership is the ability of leaders to motivate their subordinate to behave up to expectation. (Resick et al., 2009).

The result support the Raziq et al., (2018), who explored that contingent reward dimension of transactional leadership has positive link with project success, because subordinates are rewarded and punished for their work. Where incase of management by exception (active) dimension of transactional leader, the conclusion of this study is not supporting the Raziq et, al., (2018) because they find the negative

association among active management by exception and project success where this research find the significant positive relationship between the same variables. Essentially, the leaders monitor and control the situation before the occurrence. The result indicates that passive management by exception have negative relation with project success. Research indicates that transactional leadership is more suitable for public sectors projects (Junyoung. oh. et al., 2019).

Additionally, finding of this study is not support Muredeni Liphadzi et al. (2015), because they conclude that laissez fair leadership has no relationship with project success in construction industry where this research find the negative relation between the same variables in private sector construction firms. Actually, laissez fair leadership style is non-series attitude of project leader. Finally, this research support the previous study (L. W. Fry et al., 2016), which claim that organizational performance and employee well-being can be increase through spiritual leadership. Where, the vision and hope/faith of spiritual leadership have positive relationship with project success, because with clear vision and positive thinking regarding objective increase the performance of followers in the construction industry of Pakistan. Finally, the altruistic love also show negative relationship with project success in the private sector construction industry of Pakistan, because the mostly construction firms are project base. This is the first research which explored the spiritual leadership with project success in the project base firms in the construction industry. Thus, this research adds extra efforts that spiritual leadership is significant impact on project success in the project base firms in the construction industry of Pakistan.

This research measured project success, for this purpose the research was conducted from 2015-2018 projects completed by different construction firms working in the region of Islamabad and Rawalpindi. In this study, 320 managerial level employees working in the construction firms in the region of Islamabad and Rawalpindi. In the cross-sectional study organized questionnaire is one of the best approaches to gathered data (Kifle, 2008). To draw the sample size for population this study used stratified sampling techniques. The construction industry firms are project base therefore, population are not clear and they are also divided in to different categories by Pakistan Engineering Council. Data was collected with two approach, one use of online survey questionnaire second, we collect data through personal visits. On the basis of deducted finding, it can be recognized that project leadership styles play a important role in the accomplishment of project success in construction firms. Such industries which are trying to ensuring effective leadership styles can be enhance the project success rate.

## **6. Conclusion**

Project leaders of private sector construction industry may require fully attention to their behaviors while dealing their subordinates during daily routine work of project, which may boost the subordinate's performance to efficiently accomplish the projects. This research show that TFL style along with its dimension are significant positively associated with project success. Where only two dimensions including



(management by exception active & contingent reward) of TL shows significant positive association with project success and management by exception passive show negative association with project success. Laissez fair leadership also shown negative relationship with project success. Where two dimensions of SL including (hope/faith & vision) significant positive relationship with project success and altruistic love show negative relationship with project success.

### 6.1 Limitation of the study

This research has several limitations. In this research, the depended variable is project success so therefore this research needs to explore the effect of leadership styles of completed projects in the construction industry. For this purpose, this research only focused private sector industry of the construction because there is no authentic list available of completed project of public sectors in the Pakistan. This study is cross sectional in nature because the availability of respondents are very difficult. This study has also limitation of population size, because the private sector firms of construction industry are project base, employees are not permanent so therefore the exact population is not clear. There are eight different categories construction firms are registered with Pakistan Engineering Council (Table 4.7), this research exclude two categories C-A and C-B, because the response rate of those categories are very low, which may create biasness in the result. This research include only three dimensions of spiritual leadership. In addition, this study only focused one region of Pakistan such as Islamabad and Rawalpindi which may not present the exact presentation of such vast construction industry.

### 6.2 Future research

This study has meaningful information added to the project management literature in the area of leadership styles and project success and this is one of the basic theme to conduct this research. Future research may extend this model with mediating variables, such as goal clarity, employee engagement and trust etc. Future research may also to extend to other industries such as banking, Education and Energy sector etc.

### Reference:

- Akbar, A. B., Udin, S. W., & Djastuti, I. (2018). Spiritual Leadership and Employee Performance: Mediating Role of Organizational Commitment in Indonesian Public University. *Journal of Engineering and Applied Sciences*, 13(12), 4344-4352.
- Afsar, B. Badir, Y. Kaini, U. S. (2016). "Linking spiritual leadership & employee pro-environment behavior; the influence of workplace spirituality, intrinsic motivation, & environment passion". *Journal of Environment Psychology*, 45, 79-88
- Aga, D. A Noorderhaven, N. & Vallejo, B. (2016). "Transformational leadership & Project Success; the mediating role of Team building". *International Journal of Project Management*, 34(5), 806-818

- Asrar, ul. Haq & Anwar. S (2018). "The many faces of leadership; Proposing research agenda through a review of literature". *Future Business Journal*, 4 (2), 179-188
- Avery, G. Jing, F. Bergsteiner, H (2019). "Leadership Variables and Business Performance: Mediating and Interaction Effect". *Journal of Leadership and Organizational Studies*, 26 (1), 1-18
- Barling, J. (2014). *The Science of Leadership: Lessons from Research for Organizational Leaders*, Oxford University Press.
- Balyer, A. (2012). Transformational Leadership Behaviors of School Principals: A Qualitative Research Based on Teachers' Perceptions. *International Online Journal of Educational Sciences*, 4(3).
- Avolio, B. J., & Bass, B. M. (2004). Multifactor leadership questionnaire (MLQ). *Mind Garden*, 29.
- Bass, B. M. & Avolio, B. (1997). Concepts of leadership. *Leadership; understanding the dynamics of power and influence in organization*, 3-22
- Bass, B. M. & Bass, R. (2009). *The bass handbook of leadership: theory, reasrach & managerial application*. Simon & Schuster
- Benefiel, M. (2005). "Second half of the journey; spiritual leadership for organizational transformation". *The leadership quarterly*. 16(5), 723-747
- Biesenthal, C., & Wilden, R. (2014). Multi-level project governance: Trends and opportunities. *International Journal of Project Management*, 32(8), 1291–1309.
- Chen, Y. & Yang. F. (2012). "Impact of spiritual leadership styles on organizational citizenship behavior; A multi- sample analysis". *Journal of Business Ethics*, 105(1), 107-114
- Clinebell, S.K. Latham. J.R. Fry, L.W. & Krahnke, K. (2017). Spiritual leadership as a model for performance excellence: a study of Baldrige award recipients. *Journal of Management, Spirituality & Religion*, 14(1), 22-47.
- Davis, K. (2017). "An empirical investigating into difference shareholder groups perception project success". *International Journal of project management*, 35(4), 604-617
- Diallo. A. & Thuiller, E. (2005). "Success of international development projects, trust & communication; African perspective". *International Journal of Project Management*, 23(3), 237-252
- Diebig, M., Bormann, K. C., & Rowold, J. (2016). A double-edged sword: Relationship between full-range leadership behaviors and followers' hair cortisol level. *The Leadership Quarterly*, 27(4), 684-696.
- Doucet, P. Fredette, M., Simard, G & Tremblay N, (2015), Leader profiles and their effectiveness on employees, outcome. *Human Performance*, 28(3), 244-264
- Dussault, M., Frenette, É., & Fernet, C. (2013). Leadership: Validation of a self-report scale. *Psychological reports*, 112(2), 419-436.
- Fry, L. W. (2003). "Toward theory of spiritual leadership", *The leadership Quarterly*, 14(6) 693-726
- Fry, L. W. (2016). Spiritual leadership. *Global Encyclopedia of Public Administration, Public Policy, and Governance*, 1-6.
- Ghahremani, M. Abolghasemi, M. Moradi, N.H. & Moosavi, F.H. (2019). Developing a Pattern of Spiritual Leadership among Academic Directors. *Revista Publicando*, 5(18), 399-414.

- Hair, J., Black, W. C., Babin, B. J., & Anderson, R. E. (2009). *Multivariate data analysis*. 17ª Edição.
- Harrington, M. Parker, D. & Nixon, P. (2012). "Leadership performance is significant to project success or failure: a critical analysis". *International Journal of productivity and performance management*, 61(2), 204-216.
- Hannah, S. T. & Avolio, B. J. (2011). "Leader Character, ethos & virtue; Individual & collective consideration". *The leadership Quarterly*, 22(5), 989-994
- Judgev, K., & Müller, R. (2005). A retrospective look at our evolving understanding of project success. *Project Management Journal*, 36(4), 19–31
- Joslin. R. and Muller. R. (2016). The relationship between project governance and project success, *International journal of project Management*, 34(4), 613-626
- Kifle, H. (2008, September). Policy and its implications to ICT innovations: the case of e-government in Brunei Darussalam. In *Government Workshop, September 8 2008*.
- Kouzes, J. M., & Posner, B. Z. (2016). *Learning leadership: The five fundamentals of becoming an exemplary leader*. John Wiley & Sons.
- Khatri, N. Chaubey, A & Sahoo C. (2019) " Relationship of transformational leadership with employee creativity and organizational innovation. *Journal Of Strategy And Management*. doi: 10.1108/jsma-07-2018-0075
- Krishnan, V. R. (2012). "Transformational leadership and personal outcomes: empowerment as mediator". *Leadership & Organization Development Journal*, 33(6), 550-563.
- Lehtonen, P. & Martinsuo, M. (2006). "Three ways to fail in project management & the role of project management methodology". *Projective prospective*, 28 (1), 6-11
- Martens, C. P. Machado, F. J. Martens, M.L. Silva, Q.P & Freitas, H. M. (2018). Linking entrepreneurial orientation to project success. *International Journal of Project Management*, 36(2), 255-266
- Liphadzi, M., Aigbavboa, C., & Thwala, W. (2015). Relationship between leadership styles and project success in the South Africa construction industry. *Procedia Engineering*, 123, 284-290.
- Maqbool, R. Suding, Y. Manzoor, N. & Rashid, Y. (2017). "Impact of Emotional intelligences, Project Mangers' Competencies & Transformational leadership on project success; An expectancy perspective". *Project Management Journal*, 48(3), 58-75
- Ministry of Planning Development & Reform. (2018). *Annual Plan*. Islamabad, Pakistan.
- Muller, R. & Jugdev, k. (2012). "Critical Success factors in projects; Pinto Slevin & Prescott the elucidation of project success". *International Journal of Managing projects in Business*., 5(4), 757-775
- "PEC Constructor/Operation List. 2018". Retrieved from. [http://verification.pec.org.pk/COFirmList access](http://verification.pec.org.pk/COFirmList%20access), [28 Nov, 2018]
- Potter, E. M, Egbelakan, T. Phipps, R. (2018). "Emotional intelligence & transformational leadership behaviors of construction project managers". *Journal of Financial Management of Property & Constructions*, 23 (1), 73-89

- Pallant, J., & Manual, S. S. (2010). A step by step guide to data analysis using SPSS. *Berkshire UK: McGraw-Hill Education*.
- PMI, "annual Report" (2013)
- Raziq, M. M., Borani, F. m, Malik, O. F, Ahmed, M & Shabaz, M. (2018). "Leadership styles goal clarity and project success; Evidence from project based organizations in Pakistan". *Leadership and Organization Development Journal*, 39(2), 309-323
- Shenhar J. A. & Dvir. D. (2007). *Reinvention project management; diamond approach to successful development and innovation*. "Harvard Business Review Press"
- Sohmen. V.S.(2013). "Leadership and Team Work; two sides of same coins". *Journal of Information Technology and Economics Development*, 4(2).
- Steyn, H. Bond- Barnard & Pretorius, S. (2018). Leadership styles in project: Current trends and future opportunities ". *South African Journal of Industrial Engineering*, 29 (3), 161-172
- Stiles, S. Ryan, B, Goleghtly, D. (2018). "Evaluating attitudes to safety leadership within rail construction projects". *Safety Sciences*, 110, 134-144
- Tyssen.K.A. Wald, A. Speith, P. (2014). "Leadership in temporary organization; A review of leadership theories & a research agenda". *Project Management Journal*, 44(6), 52-67
- Ullah, F., Thaheem, M. J., Siddiqui, S. Q., & Khurshid, M. B. (2017). Influence of Six Sigma on project success in construction industry of Pakistan. *The TQM Journal*, 29(2), 276-309.
- Walumbwa.O.F. Wu. B & Orwa, C. (2008). "Contingent reward transactional leadership work attitudes & Organization citizenship behavior; role of procedural justice climate perception & strength". *The Leadership quarterly*, 19(3), 251-265
- Wang, M., Guo, T., Ni, Y., Shang, S., & Tang, Z. (2018). The effect of spiritual leadership on employee effectiveness: An intrinsic motivation perspective. *Frontiers in psychology*, 9.
- Wagner Marash, E. Conley. J (1999). "The fourth wave; spiritually based firm". *Journal of organization change management*, 12(4), 292-302
- Williams, E. Ashill.J.N. Naumann. E, & Jackson. F. (2015), "Linkages quality & stratification; Customer perceived success elements for on time projects". *International Journal of Project Management*, 33(8), 1836-1850
- Wong, S. J. & Giessner, R.S. (2018). "Thin line between empowering & laissez-fair leadership; Expectation match perspective". *Journal of Management*, 44(2), 757-783
- Zhang, Le. Cao, T. Wang, Y. (2018). "The mediation role of leadership styles in integrated project collaboration; An emotional intelligences perspective". *International Journal of Project Management*, 36(2), 317-330