

# Measuring The Impact Of Trust On Job Performance And Self-Efficacy In A Project: Evidence From Saudi Arabia

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## ABSTRACT

*The individual's ability to complete the given task effectively can be termed as Self-efficacy. Employee performance is examined about outcomes and behavior. Job performance determines the quality as well as the quantity accomplished by employees over a period. Trust has been widely used as a mediating variable in previous research and has been found to exhibit positive mediating effects on the variables.*

*In our research, we have investigated the factors (Team-self-efficacy and trust) affecting the project team members' job performance. We have conducted a study to collect data and test the model proposed on 155 respondents (project team members) of a large construction company at Saudi Arabia. The findings demonstrated that trust partially mediated the relationship between the team job performance and self-efficacy. Additionally, significant positive correlations between the variables were found. There have been several studies examining the variables as discussed in the paper. However, there is a paucity of research on small groups like the project teams worldwide. The significance of the results and future research directions were analyzed and discussed. The importance of the results and directions for future research were also put forward.*

**Keywords:** Job Performance; Project Team; Saudi Arabia; Team Self-Efficacy; Trust

## INTRODUCTION

The emergence of project management in the last few decades has ushered in a paradigm change. The driving forces have been multi-faceted such as shifts in the production and information technology aspects, changes in the human capital development and work patterns- all of which have resulted in a movement from Tayloristic organization to a more holistic organization with a major focus on coordination, integration of tasks and activities and job multitasking. The success of projects demands a focused orientation towards the completion of the task and proper management. The appropriate management of projects is significant for successful execution and consists of several areas (Kerzner, 2013; Meredith & Mantel, 2011; Schwalbe, 2013). The use of updated technologies has also ensured faster processes and dexterous forms of organizing (Levitt, 2011; Whyte & Levitt, 2011). In assessing the success or failures of construction projects, the salient aspects of assessment were processes, individual sequences or elements in projects (financial capacity of investors, expertise of the project manager, contractor's experience, level of managing and monitoring the site and the access to materials and equipment (Alzahrani & Emsley, 2013). In contrast, the latest construction projects are not so simple and consist of different and connected parts, resources, stakeholders (Zhu & Mostafavi, 2014). Additionally, the project meets with resource shortcomings, and efficient project management ensures the optimum utilization of resources and efforts to achieve efficiency in results (Maylor, 2010). The essential responsibility of the project head is to oversee that the assignments are finished timely and with the prescribed budget and range and according to the correct performance standard (Lewis, 2007). The role of project manager is to get the work done at efficient and effective ways by meeting the requirements of the sponsor by coordinating the resources (both human and capital) in a way that will yield maximum results (Tetteh, 2014). The life cycle of a project is a sequence of activities that the project passes through from the inception to the end. There are some marked stages in the life of the project, namely: inception, integration and coordination, implementation and the finish of the project as a whole (Project Management Institute, 2013).

Another challenging perspective of Project Management is the unclear evidence associating a project success factor and the real project success (Andersen, 2006). The essential concept of a Project is that it is a short-term venture to produce a unique product or outcome. A project encompasses risk, which implies characteristics of unpredictable features that needs sophisticated management by the project manager or leader.

## **REVIEW OF LITERATURE**

There has been ongoing research on the various dimensions of complexity and their influence on project performance. The various variables that were supposed to be responsible for project complexity (scale of the project, contingent factors, innovation in technology, variety of tasks and the rapidity of changes) were traced. Their impact on the project performance was analyzed (Bosch- Rekveldt, Jongkind, Mooi, Bakker & Verbraeck, 2011; Giezen, 2012; Kardes, Ozturk, Cavusgil & Cavusgil, 2013). Another area of research that is on contingency theory has given new insights for evaluating and discerning the performance of projects. The current literature has recognized contingency theory as the most relevant one for comprehending, formulating and managing projects (Hanisch & Wald, 2014).

Cohen and Bailey (1997) describe the team as a group of employees who perform jobs in an integrated manner and at the same time are accountable for the results. Individuals in a team collaborate, exhibit competencies, work on helpful feedback, and alleviate conflict between people (Jones, Richard, Paul, Sloane & Peter, 2007). Team dynamics is a salient factor that ensures the smooth management of the firm, especially because of the rapid technological development. Pfaff and Huddleston (2003) pointed out in their research that team is pivotal for the different types of companies.

### **Self-Efficacy**

Self-efficacy directly affects the way in which tension and despondency become apparent because of a certain faith or lack of confidence in one's abilities (Hicks & McFrazier, 2014). In fact, the belief in oneself results in accomplishments, drive and complete physical and mental well-being (Ashford & LeCroy, 2010). Sahertian and Soetjipto (2011) asserts that self-efficacy has a major influence on the assigned work, the ability to stick to the goal, more focused and deeper endeavor and a high degree of employee absorption.

### **Trust**

Trust is multi-dimensional, multi-faceted and encompasses interpersonal and impersonal trust (Vanhala, Puumalainen, & Blomqvist 2011). Greenwood and Van Buren, III (2010) further advanced in their research that organizational trustworthiness consists of behavior related to expectations, uprightness and benignity needs to be explored further.

The members of a team that possesses high reliance in the competencies and proficiencies of the members generate deep trust. The development of such trust among team members creates distinctive qualities and the commendable organization of employees. Research demonstrates a positive association between team performance and confidence. Additionally, trust outlines the behavioral context of team functioning and in turn, boosts company's productivity and employee's output. The individual employee is responsible for the growth of trust in the organizations, but the organization is responsible for developing a congenial and trust-oriented climate (Park & Popescu, 2014). It is crucial that the team leader or manager foster the creation of trust at the start of the team formation and continues until the completion of the project (Greenberg, Greenberg & Antonucci, 2007). Research in trust building of projects emphasizes the importance of initial physical meetings, develop familiarity and understand the motivational dynamics of each other. Findings of Mortensen and O'Leary (2012) corroborate that several physical meeting sessions are considered effective when taking place at normal times and after gaps. Such physical meetings generate trust development and affinity among the team members through personal activities, team-building interventions and assisting each other (Park & Popescu, 2014). Several models have been identified to explain why performance occurs. For example, we know that personality explains some of the variances in job performance (Barrick & Mount, 1991). Studies show that trust may have a positive impact on the different organizational and individual outcomes. Trust also enhances positive mental situations, accessibility, and protection. These conditions are the predictor variables of individual job performance (Li & Tan, 2013).

**Employee Job Performance**

It would be unfair to evaluate organizational performance as a combination of the total of individual performances. Usually, employee attitudes and job satisfaction have a strong influence on the outcome behavior in most situations. However, there are cases when performance is intercepted by external variables, situations, and context (Bakotic, 2016). Afshan, Irum, Ahmed and Mahmood (2012) have aptly described performance as the accomplishment of particular work assignments evaluated as against previously decided standards of perfection, totality, fastness, the cost incurred. Moreover, employee performance can be demonstrated by effective production, efficient use of the technology, and an extremely driven workforce. The organizations are in the constant pressure to achieve the targets and objectives and can do so by employing performing employees (Dessler, 2011).

There has been past research on the different antecedents that predict job performance, namely cognitive ability (Schmidt & Hunter, 1998) and personality (Barrick & Mount, 1991).

**Trust as a Mediator**

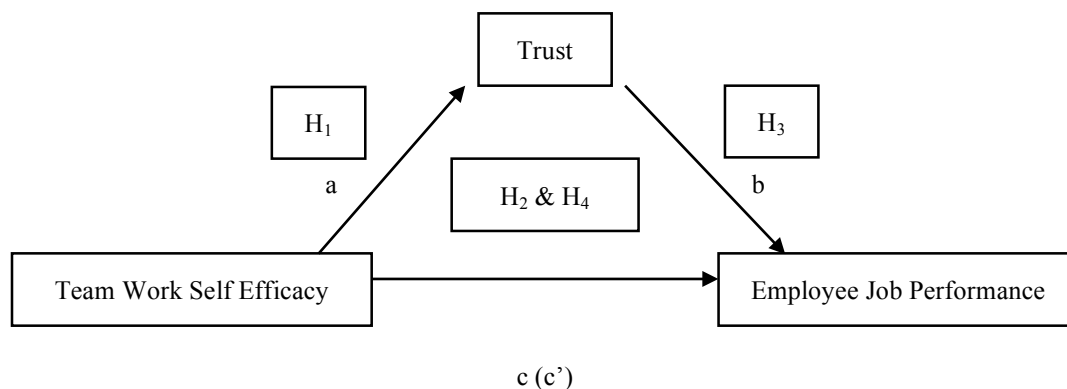
Ho, Kuo and Lin (2012) concluded that some performance results had been impacted by the trust. Smith (2011) highlighted employee’s trust as institutional trust. There have been several studies, which examined trust as a mediator between various variables (Wu, 2012; Crawshaw & Brodbeck, 2011). Salz (2012) argued that increased levels of employee’s trust generate a conducive working context and there is a subsequent reduction of turnover and enhanced performance and inspiration to work. Additionally, Ho et al. (2012) found in his study that social identification and trust at the administrative position have an important mediating effect on the online knowledge sharing among organizations. Similarly, Freund (2014) highlighted that there is a positive correlation between employees’ trust and the extent of commitment in the organizations. Wong, Wong, and Ngo (2012) propose that a good supervisor-subordinate relationship increases mutual trust (mediating role of trust in a leader). On the contrary, when trust diminishes, there will be a stress built up and a collapse of employee morale and interest. Furthermore, trust significantly affected productivity (Spreitzer & Mishra, 1999), team performance (Dirks, 2000), organizational performance (Jung & Avolio, 2000), empowerment (Gomez & Rosen, 2001).

We have posited the hypotheses below after a meticulous study of the literature:

- H<sub>1</sub>:** Team self-efficacy has a significant positive relationship with trust.
- H<sub>2</sub>:** Team self-efficacy has a significant positive relationship with job performance.
- H<sub>3</sub>:** Trust has a significant positive relationship with job performance.
- H<sub>4</sub>:** Trust mediates the relationship between team self-efficacy and job performance

We have given below the proposed model:

**Figure 1. Research Model**



The proposed research model shows the total effect of the trust on employee job performance denoted by (c'), whereas (c) represents the direct effect. The effect of the teamwork self-efficacy on trust is represented by 'a' and the impact of the trust, employee job satisfaction is represented by 'b'.

## METHODOLOGY

The sample was part of a larger study on trust, team work self-efficacy and employee job performance and other factors on employee's job motivational aspects.

About the Organization: It is one of the leading construction companies in Saudi Arabia with its presence in almost all parts of the country. It had prior experience in real estate development and mainly in creating distinct residential communities that understand the dynamics of the Saudi labor market. The accumulation of experience led owners to think of launching mega projects that adopt the international standards along with thorough understanding of Saudi market. The aim of this mega project at Jeddah had been to chart a new standard for quality lifestyle while embracing sustainable development. We had administered the questionnaires to the members of the respective project. We had secured permissions from the top management, and the HR department has given the employee list for the project concerned. However, the company had requested for confidentiality in this study, so we have only provided with the background disclosure. In addition, taking part in this study was respondent's discretion. Furthermore, it was promised to the respondents (project team members) that their identities would not be disclosed.

350 questionnaires were circulated, and we had received 155 complete responses out of it representing a response rate of 44%. The average age of the respondents was 35.59 years with an average experience of 9.5 years. 58.3 percentage of the respondents held a graduate degree and 41.7% held postgraduate qualifications such as M.B.A., Ph.D., and other postgraduation courses. All respondents were males. SPSS 20.0 was used to analyze the relationships.

### Measures

#### *Teamwork Self- Efficacy*

Weyhrauch and Culbertson (2011) had developed the Teamwork Self-Efficacy Scale (TWSES) to measure an individual's determination of one's capability to perform efficiently in a group. The scale comprises of 13 items which were measured on a five-point Likert scale. The illustration of an item is "Be a good team player." *Reliability alpha value was found to be 0.765.*

#### *Trust*

The trust scale of Park and Popescu (2014) was used for this research. It consists of 11 questions of Likert scale. Some examples of the questions used in the scale are, "I had a clear role and clear tasks assigned within the team"; "My team leader provided us with accurate and unbiased feedback regarding individual and team performance." *Reliability alpha value was found to be 0.739.*

#### *Employee Job Performance*

Employee job performance scale was adapted from Wiedower (2001). There are 5-items (dimension-based) in the scale and uses a Likert scale (1=unsatisfactory, 2, 3=satisfactory, 4, 5= excellent). An example of the question – dimensions were "Quality of work," Quantity of Work." *The reliability of alpha value was found to be 0.699.*

## RESULTS

Based on Table 1, we had stated that age was found to have significant positive correlation with experience (0.96\*\*) and teamwork self - efficacy (0.25\*\*) whereas experience had a significant correlation with teamwork self-efficacy (0.20\*). Trust had significant positive correlation with teamwork self- efficacy (0.47\*\*) and employee job performance (0.67\*\*) whereas teamwork self - efficacy had a positive correlation with employee job performance

(0.48\*\*). In other words, it can be stated the chosen variables have been positively correlated, and the increase in one variable would lead to the growth in other variables.

To analyze, the mediating effect of trust on the teamwork self - efficacy and employee job performance, linear multiple regression analysis was performed.

**Table 1.** Mean, Standard Deviation, Reliability, Spearman Correlations between the major variables

	Mean	S.D.	Age	Experience	Trust	Team Work Self-Efficacy	Employee Job Performance
Age	35.59	7.28	1.00				
Experience	9.5	8.45	0.96**	1.00			
Trust	2.65	2.63	0.10	0.06	(0.739)		
Team Work Self- Efficacy	2.68	2.54	0.25**	0.20*	0.47**	(0.765)	
Employee Job Performance	2.32	2.20	0.01	-0.09	0.67**	0.48**	(0.699)

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

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

As per Baron and Kenny (1986), all the chosen variables must have a significant relationship. Firstly, we had checked teamwork self- efficacy and employee job performance relationship. Employee job performance was entered as a dependent variable. The relationship was significant with regression coefficient value with 0.546\*\*, p<0.000. The hypothesis that teamwork self-efficacy and employee job performance have a significant relationship was accepted. Secondly, we analyzed the relationship between trust and employee job performance. The regression coefficient value was 0.589\*\*, p<0.000. The hypothesis H<sub>2</sub> that trust and employee job performance has a significant association was accepted. In the third step, teamwork self -efficacy and trust relationship was computed. The relationship was significant with regression coefficient value of 0.648\*\* ay p<0.0000. In other words, the hypothesis that teamwork self- efficacy has a significant relationship was accepted.

The last hypothesis of this study regards the ability of the trust to mediate the association between employee job performance and teamwork self-efficacy. According to the study findings, it can be stated the previously significant relationship between the team work self-efficacy and employee job performance remain significant ( c = 0.212, p< 0.000). Also, the relationship between the employee job performance and trust was found to be significant which shows that trust partially mediates the relationship between the team work self-efficacy and employee job performance. The significance of the regression coefficient indicates a partial mediation. Thus, the study findings support the hypothesis that trust mediates the relationship between the employee job performance and teamwork self-efficacy.

To test the proposed mediation of trust on employee job performance and teamwork self-efficacy, the INDIRECT macro for SPSS suggested by Preacher and Hayes (2008) was used. As compare to Baron and Kenny (1986) and Sobel test, Bootstrap procedures are considered more preferable.

**Table 2.** Bootstrap Analysis

Variables			A	B	C	c'	Bootstrap Results for Indirect Effect			
IV	M	DV	Effect IV on M	Effect M on DV	Direct effect IV on DV	Total effect IV on DV	Indirect Effect	SE	BCa 95% CI (5000 Bootstraps)	
									Lower	Upper
TWSE	TRUST	EJP	0.52**	0.65**	0.21*	0.55**	0.33**	0.07	0.216	0.487

Note:

N= 155

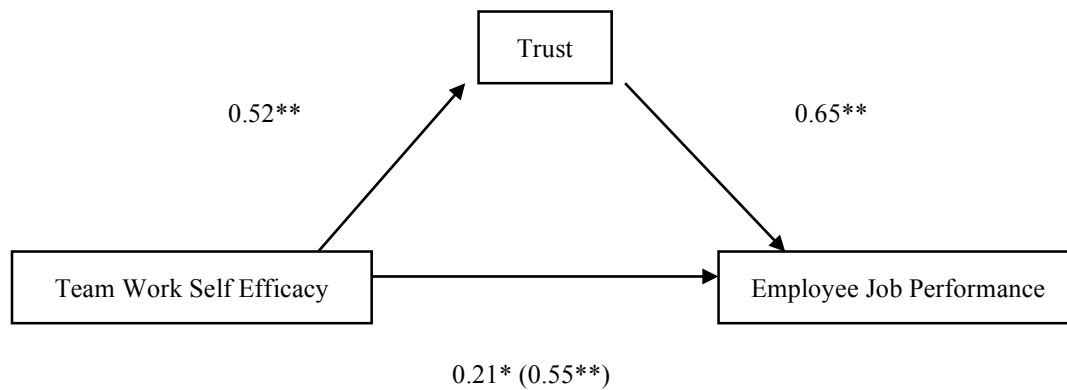
IV = Independent Variable, M = Mediating Variable, DV = Dependent Variable, SE = Standard Error,

TWSE = Team Work Self- Efficacy, EJP = Employee Job Performance

BCa = bias corrected and accelerated, \*\*p<.001, \*p<.05

The significance of the indirect effect using bootstrapping is established to determine whether zero is contained within the 95% confidence intervals as the absence of zero confirms the effect. The results presented in (Table 2 and Figure 3) are based on 5,000 bias-corrected bootstrapped samples (Preacher & Hayes, 2004).

**Figure 2. Research Model with results**



The results show that the indirect effect of trust is indeed significantly different from zero (coefficient = 0.3340, LLCI = 0.2158 and ULCI = 0.4870).

**DISCUSSION**

Past research reinforces the importance of self-efficacy related to performance (Judge & Bono, 2001). There have also been similar studies that have found a positive relationship between self-efficacy and task performance. Hu and Liden (2013) concluded that self-efficacy partially mediated the relationship between relative leader-member-exchange (LMX) and in role-performance in their sample of teams.

There has been found a positive relationship between the effects of self-efficacy on endeavor, perseverance, goal and performance (Pajares, 2009). According to Meyer and Maltin (2010) research conducted both in the industrial and academic context demonstrated that higher levels of self-efficacy enhance performance. Spychala and Sonnentag (2011) presented that job-related control is associated with proactive behavior. In fact, this study is connected to Chang and Edwards (2015) where social cognitive career theory is explored in the perspective of adjustment mechanisms, self-efficacy and job satisfaction. Commensurate with these findings, teamwork self-efficacy has shown to be positively related to team effectiveness (Staples & Webster, 2007).

Trust among the team members is created when they possess confidence in the capabilities of each other. It is the trust that fosters distinctive skills and the interconnection and interdependence among the employees (Erdem & Ozen, 2003). Another research demonstrates that there is a significant positive relationship between team performance and trust. In fact, trust builds the behavioral dimension of teamwork, and as a consequence, there is a synergistic climate and increased productivity of employees. The inception and growth of trust are the essential responsibility of the employees. However, the conception and advancement of a congenial and credible environment for performing teams are the sole onus of the management of the firm. Even brilliant performing teams survive and excel because of deep partnership and sense of interdependence (Manz & Neck, 2002). Besides, the team’s effectiveness is examined by some factors like minimal errors, improved customer satisfaction, output quality (Mickan & Rodger, 2000).

**LIMITATIONS OF THE STUDY AND FUTURE IMPLICATIONS**

Like other research, this study has some limitations. Firstly, it had studied one organizational sample; there should be more comparative studies to assess the project effectiveness of different Saudi constructions organizations. Secondly, it was a cross-sectional study; future studies should focus on longitudinal research. Thirdly, this research only had a

mediating variable, but future research should incorporate more job-related attitudes and characteristics as mediating and moderated models. Finally, the respondents in this study were males, which is a constraint of the working culture in Saudi Arabia. Nevertheless, as the Saudi economy is opening and there is a growing scope of female employment, there can be further future studies on female project teams to make project research more comprehensive and enriching.

A major shortcoming of this project was that the selection of the members was made based on the judgment of the top management and the project leader without any prior assessment program through Assessment Centers (AC). Future research should involve the AC to formulate and put into application assessments in sync with the Saudi psyche and cultural context. To sum, the constructs of the evaluation instruments should have the cultural aspects and the variables of the Saudi Arabian perspectives incorporated (Varshney, 2015).

#### AUTHOR BIOGRAPHIES

**Dr. Deepanjana Varshney** (Associate Professor-HRM) has around 15 years of academic experience. Her research focus is in Organizational Psychology, Human Resource Development and Organizational Development. She has also written chapters of books based on her areas of research. She is a reviewer for internationally cited journals.

**Dr. Nirbhay K. Varshney**, professional with around 13 years of experience in Management which comprises of Product Management, Team Management, Strategic Management, Inventory Management & Channel Management in different companies in India & Gulf region, and have been conducting research projects, management consultancies.

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**NOTES**