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The Effect of Project Success on Corporate Reputation of the Public Sector Organizations in Pakistan

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ABSTRACT

The purpose of this study is to assess the effect of project success on the corporate reputation of the public sector organizations in Pakistan in the light of signaling theory. A cross-sectional survey across Pakistan yielded 425 valid responses. The sample was restricted to respondents registered with Pakistan Engineering Council. Smart PLS version 3.0 was employed to assess the proposed reflective-formative model through path modelling and bootstrapping technique. The results showed that project success is positively related to corporate reputation. This paper provides empirical evidence about the positive effect of project success on the corporate reputation from public sectors' view, in Pakistan..

Keywords: corporate reputation, project success, public sector organization

JEL Classification: M110, M14

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INTRODUCTION

Of late, the public sector organizations have begun to realize the value of their reputation worldwide. Having a good reputation allows the organizations to reduce their transaction costs, improve employee loyalty, and form a basis for their legitimacy (e.g. see: Luoma-aho, 2007; Abratt & Kleyn, 2012; Raithel *et al.*, 2010). It is also believed that having a strong reputation is an asset that ensures financial returns and provides competitive advantage to organizations. Currently, it has become one of the major challenges, because in a global context, most of the countries either have an average or weak reputation (Reputation Institute, 2016). On the contrary, a few developing economies have a poor reputation due to their inability in fulfilling their obligations to the public.

The reputation of Pakistan, like any other developing countries, is predominantly negative and worsening due to corruption and poor performance of the public sector organizations (Nasir & Bashir, 2012; Bashir *et al.*, 2011). Similarly, BBC in 2014, rated Pakistan as the second worst country after Iran due to its inability in fulfilling its commitments to the public (GlobeScan/PIPA, 2014). This nuisance has caused discontent among the public and other stakeholders.

Conventionally, quantitative and qualitative studies have focused on corporate social responsibility, corporate governance, firm age and managerial styles (Abdullah & Abdul Aziz, 2013; Dickinson-Delaporte *et al.*, 2010; Learmount, 2002; Olmedo-Cifuentes & Martínez-León, 2014) as a means of developing and improving reputation. In recent times, it has been observed that a facet of project management namely "project success" has an association with the organization's reputation (e.g. see: Sandu, 2015; Taghian, D'Souza, & Polonsky, 2015). Moreover, Badewi (2016) & Mir & Pinnington, (2014) claimed that an organizations reputation is dependent on the success of projects undertaken. To further strengthen this association, signaling theory is hereby seen as a proxy in determining the effect of project success on corporate reputation.

To the best of our knowledge, there is no empirical evidence available in the literature, on the relationship between project success and corporate reputation. Additionally, the focus of the existing literature is explicitly on reputation management for private sector organizations (Wæraas & Byrkjeflot, 2012). Finally, the reputation of public sector organizations in Pakistan has been ignored and under studied in the past.

Thus, the present study aims to contribute to fulfilling the discussed research gap by proposing and validating a research model in public sector organizations on project success and corporate reputation. Furthermore, it aims to relate the dimensions of project success and corporate reputation. The approach adopted in this study is a survey-based research, using partial least squares structural equation modeling to validate the research model. Also, this study will contribute to the body of knowledge by investigating this relationship in the light of signaling theory.

LITERATURE REVIEW

Corporate Reputation

Corporate reputation has its origins in the 1950s, when a related concept of corporate image was developed (e.g. see: Sarstedt *et al.*, 2013; Weiwei, 2007). Since then, several definitions of corporate reputation have been proposed. Initially, reputation was understood as the shared experience of employees and the ones who interact with the organization (Levitt, 1965). Later on, Fombrun & Shanley (1990) defined corporate reputation as the stakeholder's opinion of an organization, which includes customers, employees, distributors, competitors, suppliers and the public. However, Walsh *et al.* (2006) stated that reputation is a perception of the people on how positively or negatively they evaluate the organization. Similarly, Shamma & Hassan (2009), suggested that corporate reputation is the aggregate of interpretations of stakeholders, based on the outcomes, behaviors and communications of the organization. While, a variety of definitions are given in this study, corporate reputation is understood as the assertion and perception of stakeholders which are formed by the actions and results of the organizations.

Moreover, since the last three decades, corporate reputation has been considered as an important asset to organizations with several benefits. Fombrun & Shanley, (1990) stated that reputation serves as a favorable means for organizations to charge premium prices, attract qualified applicants, improve the chances of organizations to gain admittance to capital markets and appeal investors. Furthermore, it is believed that, survival of enterprises is facilitated by corporate reputation, and it is a requirement for the formation of solid and lasting bonds of trust with stakeholders and customers, and also it enhances organizations ability to create value (Nicolò, 2015). Similarly, Fernández-gámez *et al.* (2016) posited that a positive reputation helps organizations to gain a competitive advantage, and allows them to survive in times of economic turbulence. Hence, to achieve those fruitful benefits, organizations strive to develop positive reputations.

It is evident from the literature, that researchers have mainly investigated the determinants of reputation in the private sector. Specifically, in Pakistan, a study was conducted in the context of a cement and cellular industry (Ali, Alvi & Ali, 2012; Khan *et al.*, 2013). It was concluded that the reputation of organizations in these industries can be developed and improved by high quality products and services, and corporate social responsibility. Hence, it is ascertained here, that the focus of the previous studies is mostly on identifying the determinants of reputation for private sector organizations in Pakistan. Whereas, there is a need for research on the development and improvement of reputation for public sector organizations. Further insights into the antecedents of corporate reputation is much needed given the importance of reputation worldwide.

Project Success

Project success has been the center of attention in the literature due to numerous reasons; (1) to identify the attainment of project objectives (Cooke-Davies, 2002), (2) to evaluate projects in terms of cost, time and quality (Atkinson, 1999) and (3) to strategically align projects to organizational objectives (Joslin & Muller, 2016). Project success is understood as the

achievement of targets and objectives, that have been well set before, but measured when the project is closed (Müller & Jugdev, 2012).

In the public sector organizations, success is a major concern as a great number of stakeholders are affected by the results (e.g. see: Jałocha *et al.*, 2014; Koops *et al.*, 2015; Ozguler, 2016). To measure project success in public sector organizations, several models have been developed. In this study, we adopted the criteria proposed by Khan *et al.*, (2013). They scrutinized literature on the success criteria for the last 40 years and developed a new model which comprised of five distinct dimensions and it is a combination of all the previous models.

Project Efficiency

Conventionally, Pinto & Slevin, (1988a) viewed project success as the achievement of time, cost and quality criteria, which later was termed as "project efficiency" by Shenhar & Dvir (2007). Project efficiency, in the public sector, measures how effectively time and other resources are planned and used to produce outputs of the desired quality (Khan *et al.*, 2013).

Organizational Benefits

Additionally, over the years, the criteria of project efficiency has been criticized due to its insufficiency in measuring the concept (Jugdev & Müller, 2005). Thus, another dimension to the construct was added by Khan *et al.*, (2013) to measure the macro success or long term success of the project. This dimension is associated with benefits that an organization attains from completing a project.

Project Impact

Further investigation has been done by researchers to overcome the inadequacies that has resulted into new dimensions. Khan *et al.*, (2013) suggested that an organizations reputation is established when a project delivers the benefits for which it was created. Thus, long term results from the successful completion of a project were nested under project success as "Impact of the projects".

Future Potential

Similarly, an additional dimension was proposed by Shenhar & Dvir (2007) who discussed the capability and motivation of an organization to undertake projects in the future. This success dimension is described as 'Preparing for the Future' (Khan *et al.*, (2013). The success of a public sector organization in building new capacities/capabilities from the projects it performs is understood through this dimension.

Stakeholder Satisfaction

Lester (1998) suggested that internal and external stakeholders play an important role in project success. Thus, Khan *et al.*, (2013) proposed to include sponsor, steering group, public and team member satisfaction under one dimension of project success. This dimension is labelled as stakeholders' satisfaction because it covers different groups.

The model was selected to measure the project success in this study, because it is sensitive to public sector projects and provides a comprehensive view on the success criteria given by leading researchers on project success.

However, project success is considered as a possible antecedent i.e. the independent variable in a causal relationship with corporate reputation in this study.

Bridging Corporate Reputation and Project Success

Literature was scrutinized from 1990 until today to find a point of intersection between Project Success and Corporate Reputation. After a thorough search, sufficient theoretical evidence was gathered to develop a link between the two constructs. A summary of the relevance of project success to corporate reputation is given in Table.1.

Table 1: Bridging Project Success & Corporate Reputation

Construct	Relevance to Corporate Reputation	Proposed by	
		Badewi (2016)	
	The actions and results of organizations form their overall reputation. The more successful results the organizations will produce, the better the reputation of the organizations will be.	Taghian et al. (2015)	
		Sandu, (2015)	
		Mir & Pinnington, (2014)	
		Alzahrani & Emsley, (2013)	
Duning & Comment		Ruuska & Teigland, (2009)	
Project Success		Luo & Liberatore, (2009)	
		Shenhar et al., (2007)	
		Kealey et al., (2005)	
			Dvir, Raz, & Shenhar., (2003)
		Dvir et al., (1998)	
		Fombrun and Shanley (1990)	

From a historical perspective, Fombrun and Shanley (1990) argued that "reputation" is created by the actions and results of the organizations, whereas, Dvir *et al.*, (1998) postulated that "project success" is a result of organizations. Thus, it can be stated here that the reputation of organizations can possibly be effected by project success. Furthermore, Dvir *et al.*, (1998) suggested that project success may result in potential benefits to organizations such as improved reputation, and this argument was later reinforced by other authors (e.g. see: Luo & Liberatore, 2009; Mir & Pinnington, 2014; Shenhar *et al.*, 2007). Hence, it may be summarized here that reputation is a benefit or a consequence of project success.

Moreover, in other studies, project success was considered as a key component in achieving a number of benefits for organizations along with the formation of reputation. Kealey *et al.*, (2005) stated that the organizations which had good reputation on completing their projects successfully have a higher probability of being selected as partners. Similarly, Ruuska & Teigland, (2009) stated that, if projects are completed on time and within budget they are viewed by the public as prestige projects which also allow the organizations to improve their reputation. On the other hand, Sandu, (2015) believed that the reputation of organizations is

built over time by the organization's performance, and Alzahrani & Emsley, (2013) considered project success as a performance of the organizations. Furthermore, Badewi, (2016) concluded that the effects of project success can either be measurable (financial gains) or non-measurable (organization's reputation).

Moreover, from extant literature, the association between the constructs (project success and corporate reputation) is evident. This relationship has been theoretically hypothesized time and again by different authors. In line with previous studies, the author will empirically test the relationship to provide further insights. Hence, we can hypothesize as follows:

Hypothesis.1. There is a positive relationship between project success and corporate reputation.

Hypothesis.1a. There is a positive relationship between project efficiency and corporate reputation.

Hypothesis.1b. There is a positive relationship between organizational benefits and corporate reputation.

Hypothesis.1c. There is a positive relationship between project impact and corporate reputation.

Hypothesis.1d. There is a positive relationship between future potential and corporate reputation.

Hypothesis.1e. There is a positive relationship between stakeholder satisfaction and corporate reputation.

Signaling Theory

Signaling theory is primarily about reducing the irregularities of information that may arise between two entities (Spence, 2002). This theory suggests that the reputation can be formed by organizations through a process of signals which they transmit to their stakeholders in the shape of their strategic choices and activities (Weigelt & Camerer, 1988). These signals according to Galbreath, (2010) are used by the stakeholders to develop perceptions and impressions of organizations.

In the context of the signaling theory, project success is a result of an organization or a signal transmitted by an organization to its stakeholders who rely on these signals to develop impressions and form the reputation of the organization. This theory has been chosen because it has provided justification for other antecedents of corporate reputation in recent literature (e.g. see: Ali *et al.*, 2015; Walsh *et al.*, 2015).

Fig. 1 shows the related research model with project success and its dimensions on the left-hand side, the corporate reputation on the right-hand side and the signaling theory acting as a bridge in the middle.

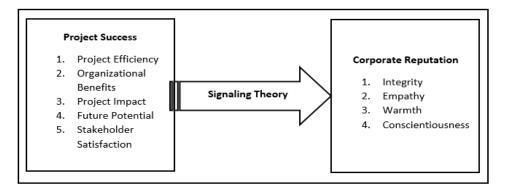


Figure 1: Proposed Research Model

RESEARCH METHODOLOGY

For a robust research design, a deductive approach is chosen because it allows the researcher to test the theory and produce an empirical evidence on the causality. A cross sectional, quantitative survey was conducted to collect the data from the middle level managers, working in the public sector organizations of Pakistan. The list of potential respondents was obtained from the Pakistan Engineering Council (www.pec.gov.pk). A total of 1200 questionnaires were mailed to the respondents using the local courier service across the country but only 425 returned questionnaires were usable.

The questionnaire consists of three sets. In the first set, the demographic information of the respondents is recorded. The second set includes questions pertaining to project success. Project success is measured using the instrument developed by Khan *et al.*, (2013). They provided a comprehensive set of dimensions to measure the construct; namely i) project efficiency, ii) organizational benefits, iii) project impact, iv) future potential and v) stakeholder satisfaction. The long and short term implications of project success are covered using these dimensions. The last set of questionnaire includes questions that are related to corporate reputation. The corporate reputation items are taken from Chun & Davies, (2010). This instrument was chosen, because it depicts how employees view the corporate reputation in terms of integrity, empathy, warmth and conscientiousness. The responses are elicited on a five point "Likert" scale with 1 = strongly disagree and 5 = strongly agree.

Partial Least Square – Structural Equation Modeling (PLS-SEM) is used to analyze the measurement and structural model, using Smart PLS version 3.0 (Ringle *et al.*, 2015). PLS-SEM is preferred because we intend to predict the relationship between the variables in the research model and Hair *et al.*, (2017) suggests that it is a better approach for prediction. Additionally, PLS-SEM has the capability to analyze models that include a combination of formative and reflective constructs. A number of researchers have suggested the use of PLS-SEM when a model has a higher order formative and reflective constructs (e.g. see: Rasoolimanesh, Dahalan & Jaafar, 2016; Chin, 2010; Hair, Ringle & Sarstedt, 2011). Finally, PLS-SEM uses the data to estimate the path relationships with the objective of reducing the error terms (Hair *et al.*, 2017).

Analysis and Findings

Descriptive Analysis

The largest number of responses came from Balochistan 30.1%, followed by Punjab 21.4%, Khyber Pakhtunkhwa 20.0%, Sindh 14.4% and Islamabad 14.1%. Most of the respondents were bachelor degree holders i.e. 56.9%, followed by Masters and diploma 32% and 9.2% respectively and eight respondents who accounted for 1.9% of the distribution possessed a Ph.D. Project Managers accounted for 59.5% of the distribution, whereas, 12.7% of the respondents were program managers. The average experience on projects for the respondents was fifteen years. 63.1% of the respondents were working on engineering/construction projects followed by research and development 14.4%, education 5.9%, IT/telecom 4.9% and health 3.1%. Table 2. shows the demographic profile of the respondents.

Table 2: Demographic Profile of the Respondents

Variable	Frequency	%age
Education		
Diploma	39	9.2
Bachelors	242	56.9
Masters	136	32
Ph.D.	8	1.9
Total	425	100
Geography/Working		
Balochistan	128	30.1
Sindh	61	14.4
Khyber Pakhtunkhwa	85	20
Punjab	91	21.4
Islamabad Capital Territory	60	14.1
Total	425	100
Position Held		
Project Manager	253	59.5
Program Manager	54	12.7
Portfolio Manager	23	5.4
Architect	13	3.1
Project Director	27	6.4
Team Member	51	12
others	4	0.9
Total	425	100
Project Experience		
1 to 5 years	197	46.4
6 to 10 years	91	21.4
11 to 15 years	29	6.8

Table 2 (Cont.)

Table 2 (Cont.)						
16 to 20 years	25	5.9				
20 years plus	83	19.5				
Total	425	100				
Sector						
Research and Development	61	14.4				
Engineering	268	63.1				
ITÿTelecom	21	4.9				

13

25

37

425

3.1

5.9

8.7

100

Assessing the Model Using PLS

Health

other

Total

Education

The two stage approach, using PLS, proposed by Becker, Klein, & Wetzels, (2012) is used to analyze the measurement and structural model. In the first stage, the first-order constructs are assessed for internal reliability, and validity. In the same stage, the scores for latent variables for each first-order construct are saved in the original data set. Later, in the second stage, the first order latent variable scores are used as indicators for the higher order, formatively modeled constructs. Finally, the structural model is assessed to determine the nature of relationship between the higher order constructs (Chin, 2010; Hair et al., 2017).

First Stage of Measurement Model analysis

In the first stage, the nine lower order reflective constructs that form the higher order constructs i.e. project success (project efficiency, organizational benefits, project impact, future potential and stakeholder satisfaction) and corporate reputation (Integrity, empathy, warmth & conscientiousness) are evaluated together. All the first order constructs in the model are reflective. Therefore, the measurement model in this stage is analyzed using the procedure defined for reflective measurement model (Hair et al., 2017).

Initially, the inter item consistency of the measurement items is assessed using the Cronbach's Alpha (α) coefficient (Sekaran & Bougie, 2016). Nunnally and Bernstein (1994) suggested that the threshold for Cronbach Alpha is "0.6". It is noted from the results that the minimum Cronbach alpha value is 0.687. Therefore, the measurement items adapted in this study are considered reliable. The alpha values are summarized in Table 3.

The Cronbach's Alpha (α) assumes that all indicators are equally reliable, that is, the loading of indicators on a construct are equal. However, Hair et al., (2017) stressed that in PLS-SEM, the reliability of individual indicators is the priority. This raises the issue in which Cronbach's Alpha might not be a proper measure of reliability.

Hence, Hair et al., (2017) suggested the use of an alternative measure of internal consistency, that is the Composite Reliability which measures the reliability of individual indicators. The degree to which the reflective items indicate the latent variable is understood by the composite reliability (CR) values. Hair *et al.*, (2017) recommended a threshold value of 0.7. The CR values for this study range from 0.846 to 0.932 indicating the integrity of the adapted measures (see Table 3).

After having confirmed the reliability, the instrument is put forth for testing its validity. Hair et al., (2017) suggested that the instrument should be tested for convergent and discriminant validity for reflective constructs. Convergent validity reveals the extent to which an indicator correlates with its alternate measures. Convergent validity is evaluated using two statistics namely i)Factor loadings and ii)Average Variance Extracted (AVE).

Higher factor loadings i.e. 0.7 on a construct indicate that the alternate measures have much in common. However, a loading between 0.4 and 0.7 is considered acceptable if the CR and the AVE are above the threshold. The minimum factor loading observed is 0.634, which is above the required level (Hair *et al.*, 2107). Moreover, the total variance in the indicators accounted for the latent variables is understood by the average variance extracted (AVE). The AVE values in this study are in the range of 0.530 and 0.820, surpassing the suggested value of "0.5" Hair *et al.*, (2017). Therefore, the measurement model's convergent validity is considered to be acceptable.

Table 3: Results of the Assessment of Measurement Model for First Order Constructs

Construct	Number of Items	Minimum Factor Loading	AVE	CR	Cronbach's α
Project Efficiency	8	≤ 0.634	0.530	0.900	0.873
Organizational Benefits	3	≤ 0.782	0.655	0.851	0.737
Project Impact	2	≤ 0.855	0.761	0.864	0.687
Future Potential	4	≤ 0.751	0.636	0.875	0.808
Stakeholder	2	≤ 0.874	0.782	0.878	0.722
Satisfaction					
Integrity	3	≤ 0.879	0.820	0.932	0.890
Empathy	4	\leq 0.801	0.696	0.902	0.854
Warmth	3	\leq 0.686	0.673	0.861	0.757
Conscientiousness	3	≤ 0.770	0.648	0.846	0.731

After ensuring the convergent validity of the instrument, we tested the measures for discriminant validity. Chin, (2010) stated that discriminant validity is the extent to which the construct is distinct from other constructs. The discriminant validity can be assessed using the method suggested by Fornell and Larcker, (1981). They suggested that the discriminant validity can be verified through the comparison of the square root of the AVE for each construct and the correlation of the remaining constructs. It can be observed in Table. 4, that the square root of the average variance extracted by the reflective indicators measuring the latent formative construct is greater than the squared correlations for each construct, signifying a satisfactory discriminant validity.

Table 4: Discriminant Validity of Reflective Constructs (Fornell & Larcker, 1981)

				,	,				
	1	2	3	4	5	6	7	8	9
Conscientiousness (1)	0.805								
Empathy (2)	0.639	0.834							
Future Potential (3)	0.538	0.583	0.798						
Integrity (4)	0.599	0.664	0.559	0.905					
Organizational Benefits (5)	0.446	0.578	0.678	0.498	0.809				
Project Efficiency (6)	0.543	0.635	0.624	0.632	0.580	0.728			
Project Impacts (7)	0.533	0.589	0.655	0.550	0.561	0.631	0.872		
Stakeholder Satisfaction (8)	0.474	0.616	0.601	0.529	0.583	0.591	0.622	0.884	
Warmth (9)	0.601	0.724	0.580	0.635	0.545	0.630	0.539	0.552	0.820

Note: Diagonals (bold) represent the square root of the average variance extracted while other entries represent the correlations

Second Stage of Measurement Model Analysis

In the second stage, the measurement model is further assessed by creating the second order constructs, namely i) project success and ii) corporate reputation. These constructs are conceptualized as formative in this present study. Becker *et al.*, (2012) and Hair *et al.*, (2017) suggested that the indicator weights, the significance of the weights and the multicollinearity statistic of the variables should be reported to validate the second order formative constructs.

Becker *et al.*, (2012) suggested that the outer weights of formatively modeled constructs should be significant. It is observed in Table 6 that the outer weights are significant for the formative constructs. Additionally, the Variance Inflation Factor (VIF), i.e. the collinearity statistic of the indicators for the formative constructs are below the threshold i.e. VIF < 5 indicating that there are no multicollinearity issues among the indicators.

Table 5: Results of Assessment of Measurement Model for Higher Order Constructs

Formative Constructs	Scale Type	Indicators	Weights	P Value	VIF
Project Success	Formative	Project Efficiency	0.446	0.000	2.080
		Organizational Benefits	0.142	0.026	2.091
		Project Impact	0.172	0.005	2.230
		Future Potential	0.197	0.007	2.501
		Stakeholder Satisfaction	0.234	0.000	2.017
Corporate Reputation	Formative	Integrity	0.316	0.000	2.091
		Empathy	0.385	0.000	2.665
		Warmth	0.298	0.000	2.394
		Conscientiousness	0.156	0.005	1.930

In aggregate, the measurement model demonstrates that both the sufficient convergent validity and discriminant validity for the reflective variables, and the outer weights of the higher order formative constructs are significant and there are no multicollinearity issues.

Assessing the Structural Model

The structural model can be assessed by examining the results of three different tests; namely i) collinearity among the constructs, ii) path coefficients and iii) R-square (R2) (Chin, 2010: Hair *et al.*, 2017). Collinearity among the constructs can be determined by carefully observing the Variance Inflation Factor (VIF) statistic in the model. Hair *et al.*, (2017) suggested that in order to check for collinearity the VIF statistic must be less than 5, whereas, Diamantopoulos & Siguaw (2006) recommended a more stringent criterion of VIF < 3.3. It is noted that the VIF statistic among project success, its dimensions and corporate reputation in the model is well below the threshold, indicating that there are no collinearity issues in the model.

Next, the path coefficients are examined to answer the proposed hypothesis in the study. Hair *et al.*, (2017) suggested that the path coefficients value in the model should be closer to "1" and statistically significant. However, it is observed from the results that the value of path coefficients is approaching "1" and are significant at a confidence interval of 0.05. A summary of the results is presented in Table 6.

Hypothesis	β	P-Value	T statistic	Decision
1.Project Success → Corporate Reputation	0.797	0.000	35.094	Supported
1a. Project Efficiency → Corporate Reputation	0.362	0.000	6.398	Supported
1b. Organizational Benefits → Corporate Reputation	0.110	0.028	2.201	Supported
1c. Project Impact → Corporate Reputation	0.132	0.004	2.891	Supported
1d. Future Potential → Corporate Reputation	0.165	0.003	3.032	Supported
1e. Stakeholder Satisfaction → Corporate Reputation	0.183	0.000	3.840	Supported

Table 6: Summary of the Structural Model

This result supports the hypothesis developed earlier in this study, i.e. indicating there is a positive relationship between project success, its dimensions and corporate reputation.

Lastly, the structural model is evaluated by observing the score of R-square (R^2), which is important because it determines the models predictive power (Hair *et al.*, 2017). The R^2 value in this study is 0.636 which demonstrates that, roughly 63.6% of variance in corporate reputation ($R^2 = 0.636$) is explained by project success and its dimensions. Moreover, the results indicate that, among the dimensions of project success, project efficiency has a moderate effect on corporate reputation, whereas, the other four dimensions have a smaller effect. A summary of the result of assessment of structural model is presented in Figure 2.

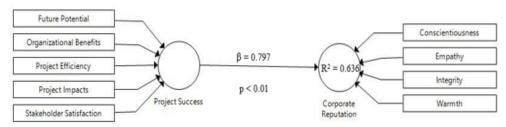


Figure 2: Structural Model

DISCUSSION

The purpose of this present study is to investigate the relationship between project success and corporate reputation in the context of the public sector organizations of Pakistan. The results have provided empirical evidence in support of the formulated hypotheses. And it has been confirmed that project success and its dimensions have a positive effect on the reputation of the public sector organizations.

The results are in coherence with the previous studies that were presented by Park et al., (2014) and Walsh, Beatty, & Shiu, (2009) who believed that the organizational success improves the reputation of the organizations. Also, the results of this study give quantitative support to the theoretical reasoning presented by Badewi, (2016) and Mir & Pinnington, (2014), who posited that project success improves the reputation of the organizations. Similarly, the results of this study reinforced the argument presented by Samset & Volden, (2016) who believed that the success of projects is reflected through the perceptions of the general public which lead to a favorable reputation.

Previously, Khan *et al.*, (2013) and Ali, Alvi, & Ali, (2012) revealed in their studies how corporate social responsibility and high quality products and services improved the reputation of the private sector organizations, whereas, based on our best knowledge, this study was the first attempt in highlighting project success as a determinant of the reputation for the public sector organizations in Pakistan.

In addition, this study confirmed that, in the light of signaling theory, project success and corporate reputation have a positive association. Signaling theory is used in this study to enlighten how the actions and results of organizations (i.e. project success) provide signals to different stakeholders to build impressions of the organizations. This theory is particularly helpful in describing and explaining how project success impacts reputation. The findings provide evidence for a generalization of the signaling theory in the context of public sector project success and their reputation. Moreover, signaling theory is recommended as theoretical lenses for the development and improvement of reputation through success on projects.

CONCLUSION

Public sector organizations can improve their reputation by directing their attention to the projects underway. If these projects are efficient, their impacts are visible, and meet the public requirements, then only will these organizations have a better reputation. On a pragmatic level, if the public sector organizations want to revive their reputational integrity, they should focus on delivering benefits to the general public through their projects. Similarly, should the managers in Pakistan intend to develop and enhance the reputation of the public sector, they must incorporate honesty, sincerity, concern towards the public, and be more transparent with information about the projects.

Additionally, we argue that projects should not only be considered successful if they are completed on time, within budget and meet specific quality standards, but they should also cater to the needs of the stakeholders at large. These projects should comply to environmental

regulations, meet safety standards, consider the cost effectiveness of the work and enable other works in future. Moreover, the projects executed should have a minimum number of agreed scope changes, and bring improvement in the overall organizational capabilities. Likewise, the reputation of these organizations should be viewed as a product of integrity, warmth, empathy and conscientiousness. Also, the public should feel more comfortable in interacting with these organizations, and be able to trust them with their money.

Thus, by achieving higher project success rates, these public sector organizations can form a positive reputation among its stakeholders. This may result in improving the overall condition of the economy and at the same time uplift the image of the country.

STRENGTHS AND LIMITATIONS

The strength of this study is a well-balanced sample that was taken across Pakistan covering all the provinces and the federal territory. Additionally, respondents who were professionals were approached, which resulted in better responses.

Whereas, there are a few limitations in this study. Initially, the questionnaires were distributed only among the project staff from the list provided by the Pakistan Engineering Council, limiting the coverage. Moreover, in future, the effect of project success on integrity, warmth, empathy and conscientiousness can be evaluated. Another limitation of the study is that, it was conducted in the context of Pakistan, whereas, in future researchers can analyze the relationship in a different setting.

REFERENCES

- Abdullah, Z., & Abdul Aziz, Y. (2013). Institutionalizing corporate social responsibility: effects on corporate reputation, culture, and legitimacy in Malaysia. *Social Responsibility Journal*, Vol. 9, No. 3, pp. 344–361.
- Abratt, R., & Kleyn, N. (2012). Corporate identity, corporate branding and corporate reputations: Reconciliation and integration. *European Journal of Marketing*, Vol. 46, No. 7/8, pp. 1048-1063.
- Ali, I., Alvi, A. K., & Ali, R. R. (2012). Corporate reputation, consumer satisfaction and loyalty. *Romanian Review of Social Scienes*, Vol. 3, pp. 13–23.
- Ali, R., Lynch, R., Melewar, T. C., & Jin, Z. (2015). The moderating influences on the relationship of corporate reputation with its antecedents and consequences: A meta-analytic review. *Journal of Business Research*, Vol. 6, No. 85, pp. 1105–1117.
- Alzahrani, J. I., & Emsley, M. W. (2013). The impact of contractors' attributes on construction project success: A post construction evaluation. *International Journal of Project Management*, Vol. 31, No.2, pp. 313–322.
- Atkinson, R. (1999). Project management: Cost, time and quality, two best guesses and a phenomenon, it's time to accept other criteria. *International Journal of Project Management*, Vol. 17, No. 6, pp. 337–342.

- Badewi, A. (2016). The impact of project management (PM) and benefits management (BM) practices on project success: Towards developing a project benefits governance framework. *International Journal of Project Management*, Vol. 34, No. 4, pp. 761–778.
- Bashir, S., Khattak, H. R., Hanif, A., & Chohan, S. N. (2011). Whistle-Blowing in Public Sector Organizations: Evidence From Pakistan. *American Review of Public Administration*, Vol. 41, No. 3, pp. 285–296.
- Becker, J. M., Klein, K., & Wetzels, M. (2012). Hierarchical latent variable models in PLS-SEM: Guidelines for Using Reflective-Formative type models. *Long Range Planning*, Vol. 45, No. 5–6, pp. 359–394.
- Chin, W, W. (2010) How to write up and report PLS analyses. In V. Esposito Vinzi, W.W. Chin, J. Henseler, & H. Wang (Eds), *Handbook of partial least squares: Concepts, methods and applications in marketing and related fields*. Berlin: Springer.
- Chun, R., & Davies, G. (2010). The effect of merger on employee views of corporate reputation: Time and space dependent theory. *Industrial Marketing Management*, Vol. 39, No. 5, pp. 721–727.
- Cooke-Davies, T. (2002). The "real" success factors on projects. *International Journal of Project Management*, Vol. 20, No.3, pp.185–190.
- Diamantopoulos, A., & Siguaw, J. A. (2006). Formative versus reflective indicators in organizational measure development: A comparison and empirical illustration. *British Journal of Management*, Vol.17, No. 4, pp. 263-282.
- Dickinson-Delaporte, S., Beverland, M., & Lindgreen, A. (2010). Building corporate reputation with stakeholders Exploring the role of message ambiguity for social marketers. *European Journal of Marketing*, Vol. 44, No. 11–12, pp. 1856–1874.
- Dvir, D., Lipovetsky, S., Shenhar, A., & Tishler, A. (1998). In search of project classification: a non-universal approach to project success factors. *Research Policy*, Vol. 27, No. 9, pp. 915–935.
- Dvir, D., Raz, T., & Shenhar, A. J. (2003). An empirical analysis of the relationship between project planning and project success. *International Journal of Project Management*, Vol. 21, No. 2, pp. 89–95.
- Fernández-gámez, M. A., Gil-corral, A. M., & Galán-valdivieso, F. (2016). Corporate reputation and market value: Evidence with generalized regression neural networks. *Expert Systems with Applications*. Vol. 46, pp. 69–76.
- Fombrun, C., & Shanley, M. (1990). What's in a name? Reputation building and corporate strategy. *Academy of Management Journal*, Vol. 33, No. 2, pp. 233–258.
- Fornell, C. and Larcker, D.F. (1981), "Evaluating structural equation models with unobservable variables and measurement error", *Journal Marketing Research*, Vol. 18, No. 1, pp. 39-50.
- Galbreath, J. (2010). How does corporate social responsibility benefit firms? Evidence from Australia. *European Business Review*, Vol. 22, No. 4, pp. 411–431.
- GlobeScan/PIPA. (2014). Country Rating Poll 2014 for BBC World Service, (June), 1–46. Retrieved from http://downloads.bbc.co.uk/mediacentre/country-rating-poll.pdf
- Hair, J. F. J., Hult, G. T. M., Ringle, C., & Sarstedt, M. (2017). A Primer on Partial Least Squares Structural Equation Modeling (PLS-SEM) 2nd ed. Sage Publications.

- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, Vol. 19, No. 2, pp. 139-152.
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2013). Partial least squares structural equation modeling: rigorous applications, better results and higher acceptance. *Long Range Planning*, Vol. 46, No. 1–2, pp. 1–12.
- Jałocha, B., Krane, H. P., Ekambaram, A., & Prawelska-Skrzypek, G. (2014). Key competences of public sector project managers. *Procedia - Social and Behavioral Sciences*, Vol. 119, pp. 247–256.
- Joslin, R., & Müller, R. (2016). The impact of project methodologies on project success in different project environments. *International Journal of Managing Projects in Business*, Vol. 9, No. 2, pp. 364-388.
- Jugdev, K., & Müller, R. (2005). A retrospective look at our evolving for project success. *Project Management Journal*, Vol. 36, No.4, pp. 19–32.
- Kealey, D. J., Protheroe, D. R., MacDonald, D., & Vulpe, T. (2005). Re-examining the role of training in contributing to international project success: A literature review and an outline of a new model training program. *International Journal of Intercultural Relations*, Vol. 29, No. 3, pp. 289–316.
- Khan, K., Turner, J. R., & Maqsood, T. (2013). Factors that influence the success of public sector projects in Pakistan. *Proceedings of IRNOP 2013 Conference*, June 17-19, 2013, (JUNE), pp. 1–25.
- Khan, M., Majid, D. A., Yasir, D. M., & Arshad, M. (2013). Corporate social responsibility and corporate reputation: A case of cement industry in Pakistan. *Interdisciplinary Journal of Contemporary Research in Business*, Vol. 5, No. 1, pp. 843–857.
- Koops, L., Coman, L., Bosch-Rekveldt, M., Hertogh, M., & Bakker, H. (2015). Public perspectives on project success – Influenced by national culture? *Procedia - Social and Behavioral Sciences*, Vol. 194 (October 2014), pp. 115–124.
- Learmount, S. (2002). Corporate Governance: what can be learned from Japan? Oxford University Press, New york.
- Lester, D. H. (1998). Critical success factors for new product development. *Research-Technology Management*, Vol. 41, No. 1, pp. 36-43.
- Levitt, T. (1965), Industrial purchasing behaviour: A Study of Communication Effects. Harvard Business School, Boston, MA.
- Luo, W., & Liberatore, M. J. (2009). Achieving it consultant objectives through client project success. *Information and Management*, Vol. 46, No. 5, pp. 259–266.
- Luoma-Aho, V. (2007). Neutral reputation and public sector organizations. Corporate Reputation Review, Vol. 10, No. 2, pp. 124-143.
- Maden, C., Arıkan, E., Telci, E. E., & Kantur, D. (2012). Linking corporate social responsibility to corporate reputation: A study on understanding behavioral consequences. *Procedia Social and Behavioral Sciences*, Vol. 58, pp. 655–664.
- Mir, F. A., & Pinnington, A. H. (2014). Exploring the value of project management: Linking Project Management Performance and Project Success. *International Journal of Project Management*, Vol. 32, No. 2, pp. 202–217.
- Müller, R., & Jugdev, K. (2012). Critical success factors in projects. *International Journal of Managing Projects in Business*, Vol. 5, No. 4, pp. 757–775.

- Nasir, M., & Bashir, A. (2012). Examining workplace deviance in public sector organizations of Pakistan. *International Journal of Social Economics*, Vol. 39, No. 4, pp. 240-253.
- Nicolò, D. (2015). Towards a theory on corporate reputation and survival of young firms. *Procedia Economics and Finance*, Vol. 22 (November 2014), pp. 296–303.
- Nunnally, J.C., Bernstein, I.H., 1994. Psychometric Theory, 3rd ed. McGraw-Hill, N.Y., US.
- Olmedo-Cifuentes, I., & Martínez-León, I. M. (2014). Influence of management style on employee views of corporate reputation. Application to audit firms. *Business Research Quarterly*, Vol. 17, No. 4, pp. 223–241.
- Ozguler, I. S. (2016). Increase the Projects' Success rate through developing multi-cultural project management process. *Procedia Social and Behavioral Sciences*, Vol. 226 (October 2015), pp. 236–242.
- Park, J., Lee, H., & Kim, C. (2014). Corporate social responsibilities, consumer trust and corporate reputation: South Korean consumers' perspectives. *Journal of Business Research*, Vol. 67, No. 3, pp. 295–302.
- Pinto, J. K., & Slevin, D. P. (1988a). Project success: Definitions and measurement techniques. *Project Management Journal*, Vol. 19, No. 1, pp. 67–72.
- Raithel, S., Wilczynski, P., Schloderer, M. P., & Schwaiger, M. (2010). The value-relevance of corporate reputation during the financial crisis. *Journal of Product & Brand Management*, Vol. 19, No. 6, pp. 389-400.
- Rasoolimanesh, S. M., Dahalan, N., & Jaafar, M. (2016). Tourists' perceived value and satisfaction in a community-based homestay in the Lenggong Valley World Heritage Site. *Journal of Hospitality and Tourism Management*, Vol. 26, pp. 72-81.
- Reputation Institute. (2016). 2016 Country RepTrak®: The Most Reputable Countries in the World. Retrieved from https://www.reputationinstitute.com/CMSPages/GetAzureFile.aspx?path=~%5Cme dia%5Cmedia%5Cdocuments%5Ccountry-reptrak 2016.pdf&hash=5a4232c6bfda0af12fca90660d5 f8d18a657ac230d062e34e0bb589c0d3c1538&ext=.pdf
- Ringle, C.M., Wende, S., Becker, J.-M., 2015. SmartPLS 3. SmartPLS GmbH, Boenningstedt (http://www.smartpls.com).
- Ruuska, I., & Teigland, R. (2009). Ensuring project success through collective competence and creative conflict in public-private partnerships A case study of Bygga Villa, a Swedish triple helix e-government initiative. *International Journal of Project Management*, Vol. 27, No. 4, pp. 323–334.
- Samset, K., & Volden, G. H. (2016). Front-end definition of projects: Ten paradoxes and some reflections regarding project management and project governance. *International Journal of Project Management*, Vol. 34, No. 2, pp. 297–313.
- Sandu, M. C. (2015). Reputation An important element for automotive industry profit? *Procedia Economics and Finance*, Vol. 32, No. 15, pp. 1035–1041.
- Sarstedt, M., Wilczynski, P., & Melewar, T. C. (2013). Measuring reputation in global markets-A comparison of reputation measures' convergent and criterion validities. *Journal of World Business*, Vol. 48, No. 3, pp. 329–339.
- Sekaran, U., & Bougie, R. (2016). Research methods for business: A skill building approach. John Wiley & Sons.

- Shamma, H. M., & Hassan, S. S. (2009). Customer and non-customer perspectives for examining corporate reputation. *Journal of Product & Brand Management*, Vol. 18, No. 5, pp. 326–337.
- Shenhar, A. J., Milosevic, D., Dvir, D., & Thamhain, H. (2007, September). *Linking project management to business strategy*. Project Management Institute, USA.
- Spence, M. (2002). Signaling in retrospect and the informational structure of markets. *American Economic Review*, Vol. 92, No. 3, pp. 434–459.
- Taghian, M., D'Souza, C., & Polonsky, M. (2015). A stakeholder approach to corporate social responsibility, reputation and business performance. *Social Responsibility Journal*, Vol. 11, No. 2, pp. 340–363.
- Turner, J.R., 2009. *The Handbook of Project-based Management*, third ed. McGraw-Hill Publishing, Glasgow.
- Wæraas, A., & Byrkjeflot, H. (2012). Public sector organizations and reputation management: five problems. *International Public Management Journal*, Vol. 15, No. 2, pp. 186–206.
- Walsh, G., Beatty, S. E., & Holloway, B. B. (2015). Measuring client-based corporate reputation in B2B professional services: scale development and validation. *Journal of Services Marketing*, Vol. 29, No. 3, pp. 173–187.
- Walsh, G., Beatty, S. E., & Shiu, E. M. K. (2009). The customer-based corporate reputation scale: Replication and short form. *Journal of Business Research*, Vol. 62, No. 10, pp. 924–930.
- Walsh, G., Dinnie, K. J., & Weidmann, K. P. (2006). How do corporate reputation and customer satisfaction impact customer defection? A study of private energy customers in Germany. *Journal of Services Marketing*, Vol. 20, No. 6, pp. 412–420.
- Weigelt, K., & Camerer, C. (1988). Reputation and corporate strategy: A review of recent theory and applications. *Strategic Management Journal*, Vol. 9, No. 5, pp. 443–454.
- Weiwei, T. (2007). Impact of corporate image and corporate reputation on customer Loyalty: a review. *Management Science and Engineering*, Vol. 1, No. 2, pp. 57-62.