The Role of Project Management Social Responsibility in Project Success: An evidence of Project Sustainability Management from Developing Regions

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Abstract
Projects have been playing a vital role in the sustainable development of organizations and society as well. The study aimed to examine the role of project management social responsibility in the enhancement of projects’ success in Pakistan. The methodological approach was survey-based research utilizing 13 items of social responsibility questionnaire, whereas project success was measured through the 25 items Project Success Assessment Questionnaire. A stratified random sampling technique was used and 300 questionnaires were distributed to project managers for cross-sectional data collection. The project managers were the respondents having work experience of social sector projects in Pakistan. The collected data was analyzed using descriptive statistics, correlation, and regression analyses. Findings highlighted that social responsibility has a positive and significant effect on the enhancement of project success. The study offered recommendations for government funding organization for sustainable project management. The study provides directions for future research.

Key Words: Project Sustainability Management, Project Success, PM Social Responsibility

Introduction
In developing countries, project sustainability management has remained a point of interest for the researchers. Projects posed a number of challenges to community and governments as well, sustainable development is not only becoming a challenge rather it is being acknowledged as a way to sustainability. Ultimately integration of sustainability in projects is getting momentum in developing countries. Social responsibility helps in managing sustainability in the projects. The project organizations purposefully utilize distinct sustainability strategies to utilize the opportunities and manage the challenges of social responsibility. Moreover, to recognize the role of social responsibility in promoting sustainability is essential. Being a signatory of “Sustainable Development Goals; United Nation’s 2030 Agenda for Sustainable Development”, the government of Pakistan has associated projects of the public sector development program with Sustainable Development Goals (SDGs) and Government of Pakistan’s Vision 2025 SDGs by allocating equitable budget allocation of Rs. 2,043 billion in 2017-18. The government of Pakistan produced planning instruments and policy reform packages for sustainable development in the public sector since the 90s after the generation of medium-term development. Due to governance and planning, social responsibility concerns and flaws in the evaluation of projects, governance, and planning for sustainability have remained primarily insignificant. It would be substantial to investigate the important role of PM social responsibility in the success of infrastructure sector projects to put the country on a sustainable and high growth trajectory.

Social responsibility (SR) is a significant feature of achieving Triple Bottom Line foundations. According to International Standard (2010), major aspects of social responsibility are pellucidity, liability, moral conduct, abiding law, and stakeholder benefits. Social responsibility covers human resources of the organization internally and externally, the participation of stakeholders and social performance at the macro-level (Labuschagne and Brent, 2005). The standards of safety management and occupational health (British Standards Institute, 2007) are

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also relevant to the project management context (Kumaraswamy and Thorpe, 1996; Carvalho and Rabechini, 2011; Kometa et al., 1995). These major aspects can be considered in PM context accordingly. It is important to notice that social responsibility is required in managing the sustainable development of projects, to transit towards sustainable project success that is ultimately beneficial for the society. For successful project management, various actors and their activities play a role in promoting sustainability. Moreover, to identify the social responsibility role in promoting sustainability in projects (Carvalho and Rabechini, 2017). The authors recommended several future directions such as examining the role of social responsibility in actual life projects for developing better insight for project success in various cultural and industrial project contexts. The present study focuses on highlighting the role of project management social responsibility in making public sector development projects sustainably successful.

The impact of this study on the prevailing knowledge is the addition of developing concepts of PM social responsibility. That is possible only because of highlighting the role of social responsibility in public sector project management. The study aims to uplift understanding of the role of social responsibility available in literature generally and specifically presented by Carvalho and Rabechini (2017). Moreover, this research addresses the PM social responsibility in the TBL context that is the planet, profit and people. The major perspective is developed on the basis of triple ‘P’ and sustainable development context. Another perspective is project organizations responsible for society and project sustainability and project success.

The majority of published research on project success is related to time, cost or quality. It is suggested by the previous researchers that such studies could be done by developing a framework of national interest. The study that is why focuses on project success and contribution of project organizations in social responsibility. This article views the sustainability of projects with the lens of stakeholders’ theory. Following this, the research design is discussed, and data analysis is done to address the research questions. Further, in the discussion part, we tried to relate the social responsibility framework to stakeholder’s theory also reflect applied repercussions and probable guidelines for future research. The study will be significant for practitioners focusing on sustainable development as the current study highlights the success related to project organizations and their role in social responsibility.

The next section of the paper presents the literature and empirical analysis of the research studies and theoretical framework. After the next section, research methodology is discussed, followed by research findings on the relationship between social responsibility and project success. The last section provides a very fruitful discussion and implications for project managers and practitioners in terms of project sustainable development.

**Research Background**

**Project Management Social Responsibility**

Social responsibility in projects is becoming crucial especially in public sector infrastructure projects (Zeng et al., 2015). Social responsibility as a vital part of sustainable development was proposed in the 1950s with the concept of CSR (Frederick, 1994; Bowen, 1953), further, the concept evolved in the last five decades (Carroll, 1991; Aguilera et al., 2007). In literature, we see that CSR is discussed with the aspect of environmental issues, stakeholder and ethical issues (Lockett et al., 2006). Nevertheless, the importance of CSR attracts the organizations but the implementation of CSR becomes constrained due to financial and economic resource limitations of the organizations (McWilliams and Siegel, 2001). CSR performance is also affected by the market situation, government laws, technological developments and nationwide attributes (Matten and Moon, 2008). It is due to the importance of the CSR construction industry had considered various indicators and assessment parameters in the last few years (Zhao et al., 2012; Tam et al., 2006). In the domain of public sector construction projects, research scholars have conducted exploratory studies by focusing on the social responsibility aspect in the construction phase (Zeng et al., 2003). Similarly, the success of infrastructure public sector projects, public social pressure and governmental regulations are noticeable (Tam et al., 2004; Qi et al., 2010) and the health care and safety issues in these projects (Oliver, 1997; Fang et al., 2004). Likewise, developed economies where social responsibility implementation attracted wide attention (Moon and Shen, 2010), now developing economies are also focusing on the social responsibility aspect in the public sector development infrastructure projects for the successful attainment of sustainability.
As the nature of infrastructure projects becomes complex, due to complexity in the public sector organizations and demographic complexities, that further poses challenges for the project’s success in terms of sustainable development (Miller and Hobbs, 2005). In literature, most of the studies focused economic aspect of social responsibility while ignoring the environmental and social aspects, limiting the generalizability of the researches. The current study aimed to focus on the stakeholders’ aspect parallel to the TBL approach. In line with the previous studies (Zeng et al., 2015; Invernizzi, Locatelli & Brookes, 2017) successful project management social responsibility is integrated with PSDP infrastructure projects of Pakistan. Thus, the major objective is to inspect the role of social responsibility in project management of public sector infrastructure projects to investigate the relationship of PM social responsibility and the success of public sector projects.

**Project Success**

Traditionally, principles of project success have evolved from a well-known iron trio to somewhat that includes numerous supplementary success criteria like stakeholder satisfaction, quality, and knowledge. (Shenhar and Dvir, 2007). To measure project success a variety of models were established like common ones Hoegl and Gemünden (2001); Turner and Müller (2006). Khan et al. (2013) made the unification of such models, by analyzing the research on success standards of four decades. This study selected this model due to it is updated on the basis of recent literary foundations. This model offers a balanced approach of 25 success parameters ordered in 5 aspects including “Project efficiency, Impact on customers, Impact on teams, Business Success, Future preparation”. In this study, project success is measured for its connection with PM social responsibility.

**PM Social Responsibility and Project Success**

The PM Social Responsibility can influence issues pertinent to sustainable development including health and safety principles, maintenance, resources, stakeholders’ commitment, and social responsibility principles (Pulaski and Horman, 2005; Carvalho and Rabechini, 2017). A model developed by Pulaski and Horman (2005) for sustainable infrastructure projects suggested four assessing attributes for project performance and four for sustainable construction (safety and health, resources, preservation and management in environmental settings). Other studies suggest that PM social responsibility reflects commitment of stakeholders (Labuschagne and Brent, 2005; Khang and Moe, 2008, Kometa et al., 1995; Kumaraswamy and Thrope, 1996 and Almahmoud et al., 2012), Social Responsibility (ISO 26000) and OHSAS 18000, these dimension of social responsibility can affect the project success in terms of sustainable development. From these arguments, the following hypothesis is derived:

**Hypothesis 1:** Project management of social responsibility influences project success.

**Conceptual Model**

In the projects of infrastructure, the construct of social responsibility could be distributed into three dimensions as proposed by Carvalho and Rabechini (2017). These dimensions include stakeholders’ commitment, health and safety principles, social responsibility principles. The project success has five dimensions as defined by Khan et al., (2013), including Project effectiveness, Impact on customers, Impact on teams, Business Success and Future preparation. In this study, project success is measured for its connection with PM social responsibility.
Theoretical Support
This study views the success of socially responsible projects with the lens of stakeholders’ theory. The research gaps and implications for research in social responsibility. Table 1 shows the research gap and implication of theory for the current study.

| Research Gap | Implications for Research in PM SR and PS |
|--------------|------------------------------------------|
| Addressing the gap | The stakeholder theory argues that |
| To what extent social responsibility of the state organizations, and commissions being considered and useful for project sustainability management. | In a traditional view, organizations mainly prefer increasing shareholders’ wealth rather at the expense of society’s and stakeholders’ interests. While stakeholder theory looks contrary to this view of the organization |
| What is the role of the social responsibility of the public sector projects on the success of sustainable projects? | Some business decision-making control and welfares should be taken away from shareholders and given to stakeholders |
| To what extent PM Social Responsibility influences project success in terms of sustainability? | Project host organizations may consider stakeholders’ interests for the successful implementation of TBL perspectives of sustainability management and increasing the rate of project success. |

The theory allows for examination of the influence of PM social responsibility on the sustainable development of projects towards success.

Research Methodology
The study has a cross-sectional research design. The study is exploratory and illustrating a quantitative method with a positivist approach. To assess the role of project management social responsibility in making project successful, the researcher selected 5 major projects of Public Sector Development Programs from infrastructure division which are being run in Punjab province. These projects are being managed by the project staff on the premises of participating in public sector organizations of Pakistan.

Data Collection Tool
The questionnaire is adapted from previous studies, which is divided into two sections, first to collect demographic information of projects and the second section is further classified in groups, including information about the last project; project management social responsibility and project success. The details of the adapted parts of the questionnaire are shown in table 2:

| Variable                  | No. of Items | Scale                          |
|---------------------------|--------------|--------------------------------|
| PM Social Responsibility  | 13           | Carvalho and Rabechini (2017)  |
| Project Success           | 25           | Shenhar and Dvir 2007          |

Data Collection
An online questionnaire was used to gather quantitative data using random sampling. The contact details of focal persons of the selected project in participating organizations were collected from the Planning and Development Division, Government of Pakistan, which is executing and funding resources for these projects nationwide. Respondents are mostly communicated via email link.

Study Sample
The population of the study is Public Sector Development Projects (PSDP) projects of public sector organizations. The study sampled 300 project team members as participants from each of the 5 projects of HEC...
for data collection. In total 232 respondents returned completed questionnaires from participating organizations. The sample was selected purposefully to ensure representation from each project. The variables were measured through scale adopted from previous research on the Likert scale “strongly disagree” (1) to “strongly agree” (5). To evaluate project social responsibility Carvalho and Rabechini (2017) developed a scale comprising 13 items, whereas, Project Success Assessment Questionnaire (PSAQ) (Shenhar and Dvir, 2007) comprising 25 items. Both questionnaires were adapted from previous studies.

Results

Demographic Profile

The demographic profile illustrated in table 3 of the respondents, including their gender, age, project experience, position, province, and team strength. In this study male respondents (73%) have greater representation than females. The respondents of age ranging from 26-35 (45%) have greater participation in the study. The respondents having 1-5 years of working experience have participated at a high rate (42%) in this research as participants. The maximum participation rate of respondents is project managers (55%). The projects sampled for this study have the highest rate of team size ranging from 5-10 team members (50%). Table 3 shows the profiles of the study respondents.

Table 3. Demographic profiles of respondents

| Factors         | Demographics                  | No. of Responses | %     |
|-----------------|-------------------------------|------------------|-------|
| Gender          | M                             | 146              | 75.3  |
|                 | F                             | 48               | 24.7  |
| Age             | 20-25                         | 30               | 15.5  |
|                 | 26-35                         | 89               | 45.9  |
|                 | 36-45                         | 36               | 18.6  |
|                 | 46-55                         | 24               | 12.4  |
|                 | 56 and above                  | 15               | 7.7   |
|                 | 1-5                           | 81               | 41.8  |
|                 | 6-10                          | 39               | 20.1  |
|                 | 11-15                         | 29               | 14.9  |
| Project Experience | 16-20                      | 19               | 9.8   |
|                 | 21-25                         | 22               | 11.3  |
|                 | 26 above                      | 4                | 2.1   |
|                 | Project Portfolio Manager     | 11               | 5.7   |
|                 | Program Manager               | 57               | 29.4  |
|                 | Project Manager               | 105              | 54.1  |
| Position Held   | Team Member                   | 15               | 7.7   |
|                 | Architect                     | 5                | 2.6   |
|                 | Other                         | 1                | 0.5   |
|                 | 5-10                          | 98               | 50.5  |
|                 | 11-20                         | 44               | 22.7  |
| Team Strength   | 21-30                         | 28               | 14.4  |
|                 | 31-40                         | 14               | 7.2   |
|                 | > 40                          | 10               | 5.2   |

Reliability Analysis

The coefficients of reliability analysis are given in Table 4. In this research, two variables PM Social Responsibility ($\alpha = 0.830$, $M = 4.11$) and project success ($\alpha = 0.855$, $M = 4.30$) have reliability coefficients within the range as suggested by Kline (2000).
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Table 4. Descriptive and Reliability analysis

| Construct              | Items | Alpha | Mean | SD  |
|------------------------|-------|-------|------|-----|
| PM Social Responsibility | 13    | 0.830 | 4.11 | .652|
| Project Success        | 25    | 0.855 | 4.30 | .645|

Regression Analysis

The strength of the relationships of the variables is shown in table 5. The value of R=0.779 shows that there is a 77.9% association between social responsibility and project success. The degree of variance in the project success due to variations in PM Social Responsibility is shown by adjusted $R^2$. The adjusted $R^2$ is 0.606 that shows social responsibility elucidates 60.6% variants in explaining project success.

Table 5. Summary

| Model            | R       | $R^2$  | Adjusted $R^2$ | Std. Error of the Estimate |
|------------------|---------|--------|----------------|-----------------------------|
| Model 1          | .779a   | .606   | .535           | .57211                      |

a. Predictors: Social responsibility, project success

In the given table 6 the statistical significance of the model (p<.05) shown by the value of F. The F value is 8.464, p=.000 (p<.05) which shows the model is statistically significant.

Table 6. ANOVA

| Model            | Sum of Sqr | Df  | Mean Sqr | F     | Sig. |
|------------------|------------|-----|----------|-------|------|
| Regression       | 16.622     | 6   | 2.770    | 8.464 | .000b|
| Residual         | 10.801     | 33  | .327     |       |      |
| Total            | 27.423     | 39  |          |       |      |

a. Predictors: social responsibility

b. Dependent Variable: project success.

The below table 7 shows the impact of PM social responsibility on project success. The variable of social responsibility is significant, which means that they have a role in enhancing project success.

Table 7. Coefficients

| Unstandardized Coefficients | Standardized Coefficients | T     | Sig. |
|-----------------------------|---------------------------|-------|------|
| B                           | Std. Error                | Beta  |      |
| Social Responsibility       | .371                      | .167  | .276 | 2.218 | .034 |
| Project Success             | .927                      | .190  | .599 | 4.872 | .000 |

Discussion

The current study aims to observe the part of social responsibility in enhancing project success in the perspective of infrastructure projects carried out under the Public Sector Development Program (PSDP) of Pakistan in Punjab province. It is revealed that a positive and significant correlation exists between the relationship of social responsibility and project success in the infrastructure projects of PSDP of Punjab province in Pakistan. The findings of the study proved the hypothesis that a significant relationship prevails between social responsibility and project success, which is unwaveringly consistent with the findings of the previous studies (Labuschagne and Brent, 2005; Almahmoud et al., 2012).

Moreover, Carvalho and Rabechini (2011), Martens and Carvalho (2017) and Kumaraswamy and Thorpe (1996), studies also similar to this research that social responsibility has a significant relationship with project success.
Conclusions

The objective of this study was to examine the impact of social responsibility on project success. To answer the research question this study provides new aspects to previous literature by validating the hypothetical framework and hypothesis of the study. Social responsibility assimilates the existing literature, that further contributes to developing a connection between social responsibility and project management.

It suggested that social responsibility is the most important strategic approach that can be embraced by the infrastructure PDSP projects of Pakistan. The public sector development projects specifically relevant to the infrastructure industry face challenges to address sustainability management in project management. Thus, the study presents a strong argument by validating the framework conceptualizing the association between social responsibility and project success. The project managers and industry practitioners can utilize the results of the study by integrating social responsibility construct in the project management practice to further address the sustainability-related issues in the infrastructure industry. The framework can also be recommended as an assessment tool to integrate the social responsibility aspect in infrastructure public sector projects. However, the results of the research recommend that PM social responsibility can contribute to enhancing project success so that public sector organizations could prioritize project activities by inculcating social responsibility perspective in the practices of project management.
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