International Journal of HR & Organizational Management Insights & Transformations
Vol. 5, Issue 1 – 2020
ISSN: 2581-642X

The Impact of Female Project Managers Competency on Project Innovation: Moderating Role of Project Context

Salman Sarwar Qureshi[1], Zubaria Shahzad[2], Sheerin Altaf[3]

[1]*Visiting Faculty Member International Islamic University Islamabad, Research Scholar and Regional Head-North The Spirit Schools and Superior Group of Colleges-Pakista.*

[2]*Ripah International University, Islamabad.*

[3]*Shaheed Zulfiqar Ali Bhutoo Institute of Science and Technology, Islamabad.*

Abstract

This paper examines Female project manager's competence more specifically; this paper tries to identify the impact of FPMC and innovation in project with moderating role of Project context. To address the purpose, data was collected from 100 Female managers from Public sector organizations. Then data was analyzed by using correlation and regression analysis. The analysis indicates that; there was significant positive relationship between Female project manager's competence and Project context. Second Project Context moderates the relationship between FPMC and innovation in project. Implication of results and limitations are also discussed in the paper.

Keywords: Female Project Managers competence, Innovation in Project, Project Context, Power Distance

The Moderating Effect of Project Context on The Relationship between Female project Manager's Leadership Competence &innovation in project.

Introduction

Women have been proved to be effective leaders in many team-based situations. However, it is also well-recognized that women are understated in project management and other technological areas, which leads to lack of variety & wasted efforts in professional organizations (Pinto, Patanakul, & Pinto, 2017). Although studies about gender and leadership are rich but research focusing on project management activities are rare(Nguyen-Duc, Khodambashi, Gulla, Krogstie, &Abrahamsson,2018).

About 30% of the global economy is based on project activities (Rodney Turner, Müller, & Dulewicz, 2009). Women are not on higher ranking position in general management. Women working in the profession of project management and they are not performing a significant role as a project manager. The results of the Us-based project management institute's "Pulse

of the Professional Survey" show that only 32 % of project management professionals are women, with 68 % men (Henderson, 2008).

Women project leader and team members are more motivated and experienced in implementing highly innovative projects and handling with more uncertainty. They embrace uncertainty as an opportunity and experience unknown solution paths as a positive challenge and use other practices, which fit to such projects. Their team members prefer a higher independence, more shared leadership and self-management, and a greater flexibility and variability of knowledge and skills (Unger, Rank, & Gemünden, 2014).

Müller and Turner (2007) have also shown that a project managers' success at managing his or her project is dependent on their competence, particularly their leadership style comprising emotional intelligence, management focus and intellect. His or her leadership style can be measured using psychometric tests & easily measured demographic factors.

The managerial process describes a set of eight core traits that they believe can lead toward success in project management: being a systems thinker, having personal integrity, being proactive, having a high emotional intelligence (EQ), having a general business perspective, using effective time management, being a skilful politician, and being an optimist (Cebamanos, Gray, Stewart, &Tenesa, 2014).

EQ skills such as self-awareness, social awareness, self-management, and relationship management can be applied to improve employees and customer's communications, appraisal and collaboration with other top management, and administrators, and the ability to manage emotions and stress in an environment teaming with stress (Gemünden, Lehner, & Kock, 2018). With years of scientific training, female leaders are often seen as a pillar of logic and rational thinking.

In the book Emotional Intelligence--New Perspectives and Applications, Fernandez, etal. (2012) argued that EQ skills strongly influence the culture of an organization, and while the skills may not be innate, they can be developed and taught. Development of EQ skills is dependent upon how the material is presented and on the willingness of the participant to learn the positive effect of EQ skills on project success & innovative capabilities (Fernandez, et al., 2012).

To react on this gap, we explored the experience of female leaders of development projects and possible context factors that influence of female leadership effectiveness on project success. The study was conducted as a longitudinal multiple case study. Data was collected from interviews, observation and project reports. We found a strong relationship between perceived team leadership and task management. We also perceived a possible relationship between human-oriented important approach in low customer involvement scenarios and task-oriented leading approach in high customer involvement situations.

In this work, some preliminary findings related to leadership competencies, team perception on leadership and project team-task context factors are being reported. Likability can be defined as a pleasant tendency known as “from projectification to programmification” (Gemünden, Lehner, & Kock, 2018). The moderator role of Power distance index in candidate's likability in leadership selection has long been overlooked (Fiedler, 2006).

Findings on this concept require knowledge on bottom-up perception and evaluation. However, very few studies have been conducted in this area. A lot of scientific researches have been conducted on the top-down selection process, which often involve specifying qualities, traits, and skills (or competencies) that ideal candidates should possess. This criterion reflects what leaders want for their subordinates (Silvester, Anderson, Haddleton, Cunningham-Snell, & Gibb, 2000). However, when people evaluate leader candidates from a bottom-up perspective, they might look for different qualities and make different choices (Cook & Emler, 1999).

In Fiedler's contingency theory is a main variable in her/his ability to lead emphasized the leader's personality, or psychological disposition and said that how the group accepts the leader, how leader involved in the task, and whether the leader can use control over the group(Fiedler, 2006). These are the three principle factors that determine how successful the leader-led arrangement will be. Thus, the values from the least preferred co-worker (LPC) are added and then averaged to produce the score (Cartwright, & Gale, 1995). A high LPC score exhibits a positive orientation towards human relations. S/he gets along with people. The nature of the task is less important and issues in doing it may be rewarded for with good human relations. When the environment is such that each group member should be independent such as in a scientific setting, tasks may not be all that well defined, and a leader must depend on her or his personality to attain goals (Gale, & Cartwright, 1995).

Literature Review

Female leadership competencies through emotional intelligence and project innovation

Leadership in organizations has been studied extensively for over a century (Yukl, 2010). But as stated in introduction that female leader competencies are necessary in order to generate a new project innovation with their emotional intelligence power so that female can achieve their goals with in time. Female leaders are performing different project task and activities that is highly visible to others on their important projects and people can easily judge their performance by their success and failure. Female leaders are accountable for different responsibilities such as different sub projects, technologies, deliverables and stakeholders and other change management decision (Henderson, 2013). Women are marginalized unpredictable which is shown in recent research of Henderson and Stackman’s (2010) found

that female leader and team members are different as compare to male counterparts are more significantly manage small projects which cost is one dollar million.

Female characteristics and demographics reveal several findings according to their age, career enhancement and certification, which relate their ability according to size, cost and project distribution in their team members. Those females who reached at 49 age they have ability to judge people and advantageous for reduce risk and get successful project outcomes. Women are more intelligent to use simple words and strategies and clarify goals which is understood by all parties and also show interest in work environment and always be show humanity and don't get personal (Henderson, Stackman's, &koh, 2013).

Female leadership with innovation in project

Innovation leader are more future oriented, and people oriented and proactive and always take work stress and use different methods and technologies and create good ideas and use different process to select the best one and always choose higher projects which have uniqueness and have innovative capability and find best opportunities for change. Arditi and Balci (2009) found that Women project manager have effective, unique contribution on project success.

Female leadership highly motivated the ability to execute innovative projects and coping with uncertainty. Females have the ability to take uncertainty as an opportunity and unknown solution as positive challenge and can apply different methods which fit in these projects and their project team members are highly motivated. Shared leadership and variability have varieties of knowledge and skills. Some organization focus on innovation in projects and are more successful to do that innovative work and some are not use innovative projects and they are not successful and these causal chain increase project intensities and get higher innovation success in projects.

Emotional Intelligence and project success through innovation in projects

A lot research shows that emotional intelligence has very effect on project success Goleman (1995) said that 80% man's life success if project manager has good emotional intelligence and team member work more effectively and their performance are high (Wong & Law, 2002).

Sy et al. (2006) found that managers intelligence had a more positive effect t work fulfilment of subordinates. Berman and West (2008) found that emotional intelligence serves as a social capability and shows interest on administrative work and their study also shows that if person have high emotional intelligence then they might have some created abilities in flexibilities and understanding. Dong, Shao, Yuan and Huang (2014) found that high emotional intelligence in team member can be lower impact on turn over aim which shows that it is helpful for project success. Wong and Law (2002) show in their research that strong

connection between emotional intelligence and work performance can result in achieving the success of the project. Patra (2004) found that emotional intelligence has a positive impact on team members working in organization and get high satisfaction which leads to organization development. Researchers found that emotional intelligence was directly connected with worker's satisfaction and bring new innovation in project success.

Innovation in projects

Innovative project factors face several uncertainties from environment (Danneels & Kleinschmidt, 2001; Poskela & Martinsuo, 2009) and along with that external risk started with market and technologies uncertainties. There are different researchers which are of the view that dynamics of multiple projects and dependency of projects on managers and subordinates shows a process to manage their action in groups (Engwall & Jerbrant, 2003). When analysing performance of subordinates, a contingency variable can be utilized affectively to deal with market uncertainty or technology disorder (Danneels& Kleinschmidt, 2001; Koufteros, Vonderembse, & Jayaram, 2005; Langerak, Hultink, & Robben, 2004; Poskela & Martinsuo, 2009).

Contingency variable used in significant work which is supported to inculcate the dynamic capabilities (Teece, Pisano, & Shuen,1997). Teece et al. (1997) found that firms have ability to build internal and external competences which help to change in internal and external environments. And firms have ability to bring change in their resources according to environment change and it's a competitive advantage for organization project's success.

Eisenhardt and Martin (2000) found that products have dynamic capabilities and different researchers show that project portfolio management establish a dynamic capability. (Killen, Jugdev, Drouin, & Petit, 2012; Martinsuo, Korhonen, & Laine, 2014; Petit & Hobbs, 2010). According to change in environment, organization have ability to bring innovation in their projects and stay in business.

Power Distance Index

The cultural play an important role in decision making and in performance of managers and subordinates which lead to innovation in projects. Husted's (2005) found worldwide research on power/distance, individualism/collectivism and masculinity/femininity. Husted (2005) and Park et al. (2007) focused on three dimensions that was individualism us collectivism and masculinity us feminity and low power distance us high power distance masculinity focuses on achievement, heroism, assertiveness and material rewards for success (Hofstede et al., 2010).

Femininity always prefer to quality of life and support and helpful for team members in organization and in other innovation projects and enhance subordinate's skills. In our societies which person have high power index that person take decision without asking with

their subordinates and participants and in organization give unequal rights between managers and subordinates.in our societies people accept the power distance in organization and never ask about any justification of unequal rights (Hofstede, 1984). Employees accept status differences and willing to fulfil decisions which is taken by who is powerful and have high power distance in societies which person have low power distance then other person perceived as partners and subordinate think that they have right to take interest in decision making and organization giving them equal rights.

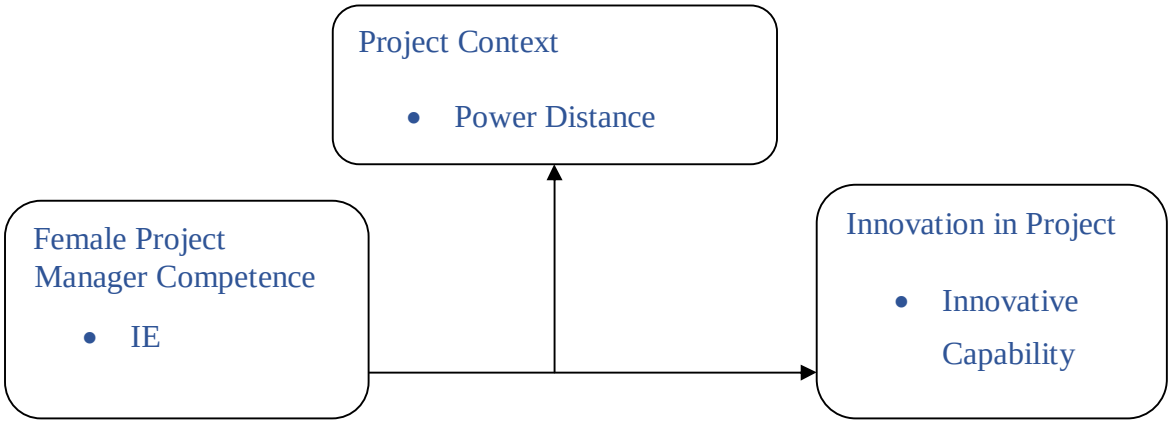
Sagie and Aycan (2003) fond that people demand to equality of power and demand for justification of inequalities between them. Manager and other person have Competences to use their expertise power rather than social status. There is always a fear in subordinates that if they do not agree with the management decision they would have to face a punishment of disagreement (Emerson, 1962).

Subordinates maintain a good relationship with project managers because managers have a high power and have control on valuable resources (Aquino et al., 2006). In our societies people accept the inequalities between high power and lower power distance. Leader who have high like ability that have high valuable resources. Chen and Aryee, (2007) ; Farhet al. (2007) found that high power distance index employees think that they have totally depend on their mangers and subordinates prefer to likable managers who have good intention and hardworking and innovative capabilities and mangers give chance to subordinates and allow them to share their knowledge of expertise and use their knowledge in decision making. As we take contingency variable in theoretical perspective, we need to test the suitable relation between female managers'competences and project context in predicting theproject innovation by building a moderator model following the suggestion of researchers (Drazin and Van de Ven, 1985; Saunders, 1956; Sharma et al., 1981) and other researchers (Carson et al., 2003).

Accordingly, we propose the following research hypotheses:

- H1. There is a significant relationship between female emotional intelligence and innovation in projects
- H2: Power distance index moderates the relation between female 'IE and innovation in project
- H3 Power distance index moderate the significant relation with female 'IE
- H3. Power distance index moderates the significant relation with innovation in project

Research Model



Methodology

Procedure and Sample:

I conducted the study in public sector organizations of Pakistan where women are widely visible and acceptable. Four public organizations (National Bank of Pakistan, Civil Services Department, and NADRA were purposively selected for the study. The total populations of the selected organizations were estimated to be 180.The respondents were asked to complete the Project Context scale developed by Nidumolu, Sarma R., and Gary W. Knotts (1998) to assess the. Scale contains 7.

I contacted respondent personally at workplace and telephonically. Data was obtained off site. Personal and professional relations were used for identifying respondents and encouraging their participation. Respondents were requested to report information on all four variables in the questionnaire and return through expeditious means including courier service. The respondents were alerted to select responses based on their actual thinking and avoid wishful thinking. I confirmed the respondents complete anonymity of information. 150 questioners were distributed out of which 75 were received back and 65 were usable. Thus the response rate was 50 %. 64% of respondents were within age bracket of 26-33 years. After collecting the questionnaires, these questionnaires were punched into SPSS sheet for further Correlation, regression analysis and also to determine the reliability of data. I controlled age, gender, qualification and experience.

Measures

Project Context

I used 7 items scale taken from project Context Scale to measure project context Nidumolu, Sarma R., and Gary W. Knotts (1998) Sample item include “Our software development

approach(es) are such that they can be used effectively for a variety of projects.". Cronbach alpha of Project context was .74.

Female Leadership Competence

I used 5 items scale to measure female leadership competence which was developed by Crepeau, Raymond G., Connie W. Crook, and Martin D. Goslar (1992). Sample item include ''being in a position of leadership and influence.".Cronbach alpha of Female leadership Competence.79.

Innovation in Project

Innovation in Project was assessed using a six-item scale developed by Anderson, N.R. (1998), Each item was answered on a 5-point scale. Sample item include "This team is always moving toward the development of new answers.". Cronbach alpha of Project context was .77.

Results

Table 1.Means, Standard Deviations and Correlations

Variables	M	S.D	1	2	3	4
1. FMC	4.78	0.55	1			
2. PC	3.82	0.67	.497**	1		
3. IIP	3.66	0.57	.234**	.372**	1	

**Correlation is significant at the 0.01 level (2-tailed).
*Correlation is significant at the 0.05 level (2-tailed).

Table 1 presents correlation among the model variable. There was significant positive relationship between Female Project Manager Competence and project context (r=.49). There was significant positive relationship between Female Project Manager Competence and innovation in project (r=.37).

Table 2.Results of Moderated Regression Analysis

Innovation in Project			
Predictor	β	R^2	ΔR^2
FPMC			
Step 1:			
Control variable		0.03	
Step 2			
FPMC × Project Context	-0.30*	0.69	0.46

***p<0.001 (two tailed); ** p< .01 (two tailed); * p<.05 (two tailed).

Table 2 shows the result of the moderating test, so according to the table Project Context moderates the relationship between FPMC and Innovation in Project in such a way that high

Project context will weaken the relationship. Because the value of β=-0.30*. So the first hypothesis is accepted which is Project Context moderates the relationship between FPMC and Innovation in Project.

Discussion

The purpose of the present study was to examine the linkage between Female Project manager competence and its impact on Innovation in Project by focusing on project context aspects as a moderator. Results indicates a number of barriers to female advancement in Public sector organizations as a project manager, including masculine organizational culture (White, 2003), inadequate networks, mentors and role-models (Quinlan, 1999), work and family imbalances (Ward and Wolf-Wendel, 2004) and gender power imbalance in the workplace (Oakley, 2000).

This study has tried to find the main career progression barriers for women managers in Pakistani society. My results show that lack of organizational support, negative stereotype and job restrictions (location, salary, promotion etc.) are the main barriers to career progression for women. This finding can be a guide for administrators that seeking to ensure equality in the work environment. Furthermore study suggests males still hold significantly more negative attitudes toward women managers than females. Attitude theory and research (Fishbein & Ajzen, 1975) suggests that male managers with negative attitudes are predisposed to act on these attitudes when dealing with women in organizations. Such actions may be particularly detrimental to women managers with respect to advances in salary and higher position. Attitude towards women managers is associated with their quality of life. Study suggest quality of life is invariably highest for those who are more engaged or more satisfied with their jobs and who don't face any stereotype and is lowest for those who are not satisfied with their jobs or stereotype they face.

First, I found that project context moderate the association of Female project women managers competence and Innovation in project leading to acceptance of my first hypothesis. Pakistan is considered to be Power distance culture. Evetts (1997) writes that in power distance culture if the woman is an efficient, competent manager she is likely to be judged unfeminine, but if she demonstrates the supposedly female qualities of care and sensitivity she is likely to be assessed either as an inappropriate and inefficient project manager or as a good female project manager.

Theoretical and Practical Implications:

My findings provide further support to existing literature of Female project women managers' competence and impacts on Innovation in project. Main theoretical contribution of my study is that many researchers have done this topic but most of them research on Female project women managers competence without discussing its impact on any other outcomes.

Moreover, prior studies have not examined the moderating effect of project context between Female project women managers competence and innovation in project.

Several practical implications can be derived from our findings. First the finding suggested that the organization should not look down on women because they are equally capable as men. If organizations are capable of providing the same support they gave to men, women surely will be equally successful as men. Second encouragement and promotion increase women managers' satisfaction level towards their jobs and quality of life so to promote greater feelings of satisfaction among female project managers top management should clearly articulate a vision that inspires female managers to take greater responsibility for their work at all organizational levels. No gender discrimination for promotion and glass ceiling may also facilitate feelings of satisfaction among female project managers.

Limitations and recommendations

As with other research, this study admittedly has certain limitations. Due to lack of resources and shortage of time a small sample size was selected to participate in the study this may be the reason for some results showing variability, and generalizability might be an issue. The sample size of 80 respondents may be insufficient to represent the total population of women project managers in Public sector of Pakistan. The sample drawn only from few public sector organizations is not generalizable to the entire country.

Secondly there are insufficient studies which are done locally if compared to the foreign countries. Therefore, foreign studies and journals are used and they may not be applicable to the local context. Furthermore, it is very difficult to gain access to certain secondary data due to limited budget since a fee is required to purchase them.

Limitations of studies make issues unclear. Hence, future researchers who intend to do further studies in Public sector of Pakistan related to Female project manager competence need to cover more locations that are not covered by me in order to increase the validity of future research. Future researcher can studied Female project manager competence with other cultural dimensions like Uncertainty avoidance as moderator. Future researchers should also consider other sectors that are not focus by our studies such as private sector.

Furthermore women should be allowed to know how they are performing and given the chance to assume responsibilities; attitudinal stereotypes can be beaten only with greater exposure of employees to female leadership and with quantitative and qualitative data on the effectiveness of women project managers. Opportunities for promotion, training and salary administration should be on an equal basis in order to offer favorable career prospects to women and enhance their self-confidence.

References

1. Authors/Task Force Members, Steg, P. G., James, S. K., Atar, D., Badano, L. P., Lundqvist, C. B., & Fernandez-Aviles, F. (2012). ESC Guidelines for the management of acute myocardial infarction in patients presenting with ST-segment elevation: The Task Force on the management of ST-segment elevation acute myocardial infarction of the European Society of Cardiology (ESC). *European heart journal*, *33*(20), 2569-2619.
2. Cartwright, S., & Gale, A. (1995). Project management: different gender, different culture? A discussion on gender and organizational culture–part 2. *Leadership & Organization Development Journal*, *16*(4), 12-16.
3. Cebamanos, L., Gray, A., Stewart, I., &Tenesa, A. (2014). Regional heritability advanced complex trait analysis for GPU and traditional parallel architectures. *Bioinformatics*, *30*(8), 1177-1179.
4. Cook, T., & Emler, N. (1999). Bottom-up versus top-down evaluations of candidates' managerial potential: An experimental study. *Journal of Occupational and Organizational Psychology*, *72*(4), 423-439.
5. Fiedler, F. E. (2006). The Contingency model: H Theory of Leadership Effectiveness. *Small Groups: Key Readings*, 369.
6. Gale, A., & Cartwright, S. (1995). Women in project management: entry into a male domain? A discussion on gender and organizational culture–part 1. *Leadership & Organization Development Journal*, *16*(2), 3-8.
7. Gemünden, H. G., Lehner, P., & Kock, A. (2018). The project-oriented organization and its contribution to innovation. *International Journal of Project Management*, *36*(1), 147-160.
8. Henderson, L. S. (2008). The impact of project managers' communication competencies: Validation and extension of a research model for virtuality, satisfaction, and productivity on project teams. *Project Management Journal*, *39*(2), 48-59.
9. Müller, R., & Turner, R. (2007). The influence of project managers on project success criteria and project success by type of project. *European management journal*, *25*(4), 298-309.
10. Nguyen-Duc, A., Khodambashi, S., Gulla, J. A., Krogstie, J., &Abrahamsson, P. (2018). Female Leadership in Software Projects-A Preliminary Result on Leadership Style and Project Context Factors. In *Towards a Synergistic Combination of Research and Practice in Software Engineering* (pp. 149-163). Springer, Cham.
11. Pinto, J. K., Patanakul, P., & Pinto, M. B. (2017). "The aura of capability": Gender bias in selection for a project manager job. *International Journal of Project Management*, *35*(3), 420-431.
12. Rodney Turner, J., Müller, R., & Dulewicz, V. (2009). Comparing the leadership styles of functional and project managers. *International Journal of Managing Projects in Business*, *2*(2), 198-216.

13. Silvester, J., Anderson, N., Haddleton, E., Cunningham-Snell, N., & Gibb, A. (2000). A Cross-Modal Comparison of Telephone and Face-to-Face Selection Interviews in Graduate Recruitment. *International Journal of Selection and Assessment*, *8*(1), 16-21.
14. Unger, B. N., Rank, J., & Gemünden, H. G. (2014). Corporate innovation culture and dimensions of project portfolio success: The moderating role of national culture. *Project Management Journal*, *45*(6), 38-57.

