

Received: 23 Apr 2021

Revised: 16 Feb 2022

Accepted: 31 Mar 2022

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Umair Aitimad Rao

The Millennium Universal College, Pakistan Muhammad Saeed Shahbaz

Department of management Sciences, Shaheed Zulfikar Ali Bhutto Institute of Science and Technology, Pakistan

ABSTRACT



NUST Business Review © NUST Business School NBR22022301 Vol. 3 (2), 1-12 01, 2022 DOI: https://doi.org/10.37435/ NBR22022301 This work is licensed

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Purpose - Human resource development (HRD) is considered one of the most important components for the success of any project. The purpose of this study is to examine the impact of HRD activities (career development and team development) on project success by inquiring into job satisfaction.

Methodology- Data were collected from 230 respondents employed in project-based organizations by selecting a probability random sample. Multiple regression analysis was performed using SPSS.

Findings- The results indicate the existence of a positive relationship between HRD interventions (career development and team development) and project success. Moreover, the study found that job satisfaction significantly mediated the relationship between antecedents and project success. This implies that HRD is essential for the success of the project.

Practical Implications- This study will sensitize project managers to the close nexus between job satisfaction and the impact of employee training and development.

Originality: This study opens new horizons for researchers to further investigate various training and development techniques to identify their efficacy.

Keywords: Human Resource Development; Job Satisfaction; Project success

Paper type: Research Paper

INTRODUCTION

It is firm understanding that the efficiently skillful and operationally ready staff management in every organizational composition is an important resource for responding to the fast-paced change in order to achieve optimal organizational outputs. Hence, it is very important for HR managers to develop and assign proficient human resource to departments in need (Top, Akdere, & Tarcan, 2015). HRD acts to connect team members working together on a project via transformational upgradation. Any project can be termed as a successful project if it is achieved within a developed incubation environment because in such situations creative HRD practices and effective organizational approaches can be implemented. It is very important now adays for organizations to polish the abilities of their personnel in order to improve task accomplishment within the organization (Hussain et al., 2019).

It is extremely important for organizations to choose the resource wisely, train them effectively, professionally and continue frequent resource development program for organizational efficiency. Training, Building, development of team along with successive development structure and proper managing system of organization can improve the operations of organizations and increase the motivation among employees. The development process in any organization can be enhanced by creating tactical relationships. Managers can perform supportive role in creating environment that is beneficial towards the lucrative projects (Robinson, 2018). At present, organizational executives are encountering a problem to find capable resource as per needs for the organizational purposes (Memon, Salleh, & Baharom 2016). This can be partly a result of the different kinds of challenges, for example, managerial vagueness, fraud, poor scheduling, low adaptation of learning practices and non-availability of able resources. These issues may cause harm to the organizations because the main methods of HRD usually are not implemented in these lines of work.

In several organizations/firms, the vital part of team development practices is to impact the standards, thoughtfulness, and developmental expectation that employees adopt (Verburg, 2019). For this very reason, organizational development regime put in a huge determination into advancement, growth and alternation in employees Skillset (Rasi et al. 2014). The team development part is of great importance for achieving any goal, as it enables the resources with great abilities and creates a skilled functioning environment to face the organizational challenges and issues collaboratively (Skinner, Smith, & Swanson, 2018).

Research suggests that job satisfaction is the widespread feeling associated with the work or a related cluster of ideas associated to the various aspects of the career in perspective of experimental investigations presented. The core reason for job satisfaction indicates that HRD is a vital variable in evolutional development which has capability of assessing the global feelings and opinions produced via resource linked to their job, team collaboration and place of job (Lo et al, 2016). Therefore, career development suggests that the expectation of the employees in reference to the level of satisfaction by their progress and role of development in their career along

with attitudes is linked to their responsibilities. Therefore, job satisfaction ensures that a person's obligations are satisfied in his/her job (Partono Prasetio, Yuniarsih, & Ahman, 2017).

Earlier studies have focused on the importance of human resource development in diverse industries in number of regions of the world. It is been globally recognized that employees in any project-based organization/firm provide the finest sources of competitive borders. Reports suggest that rate of project-based companies facing project failures has drastically increased over the time. A report published by Bloomberg in 2017 suggest that 6/10 projects face delay, financial penalties in project-based companies. In Pakistan project-based companies fail to deliver product/ services on time most of time they exhaust the buffer for time and finances towards project completion. That is why Pakistan is falling behind in the pace of projects handling and revenue generation through project-based entities (VOA Report, 2019). Adding to it, report published in 2018 also suggested that project completion in buffer is high as compared to others. It is a complex task to theorize human resource development which can vary between countries (Krumbiegel, Maertens, & Wollni, 2018).

Ling (2017) outlines six factors of project success (PS), which include employees, leadership, collaboration of team, project time plan, objectives and strategy. Team collaboration (TC) is believed to have good image on the success of project team, accomplishment of work and enlargement of employees; the greater the team collaboration, greater will be the chances of obtaining the team goals.

Hadikusumo (2017) argues that this model concentrates only on the EPC projects and procedures in areas such as Vietnam and is thus maybe constrained in applicatios to other countries or part of the world or other sectors. Much research on human resource development practices has identified five elements that include individual development, team growth, career enhancement, organizational expansion, and training expansion (Lo, 2012). It also recognizes three key elements of HRD as role players, namely resource development and training, organizational expansion, and career growth. In the analysis, HRD is measured by career development, team development, and job satisfaction as a vital player for project success (Ignatius et al., 2012).

LITERATURE REVIEW

Projects nowadays abound in today's companies and organizations which are truly based on knowledge and innovation. A number of studies concede that success is 'in the eyes of the beholder'; it has different meanings depending upon the number of aspects such as the perception of stakeholders, the type of project, country or region. However, dealing with a project is nevertheless a critical concept. There are instances when professional development can turn out to be too hypothetical and intellectual. The truths of managing and advising aides regarding career development in information administering are extremely distinct from philosophy. Owing to its very spirit as well as the emphasis, nearly all organizations might have data managing services to discover further about the emotional and professional characteristics of professional progress. The resource is subjected to substantial strain when preparing for a professional shift. The first step to career development is an assessment of where the resource has been and how he/she got there in the first place (Nijjer & Raj, 2021).

IT Sector of Pakistan

A report published by Finance ministry of Pakistan shows a steep rise in IT Sector in Pakistan. Pakistan IT industry is worth 4 billion dollars but has the potential to grow more. According to IT Industry of Pakistan's report in 2018, the numbers o IT companies in Pakistan are increasing significantly (NYC Report, 2019). Bloomberg in 2017 suggest that 6 out of 10 projects face delay, financial penalties in project-based companies. In Pakistan project-based companies fail to deliver product/ services on time; most of time they exhaust the buffer for time and finances towards project completion. This is why Pakistan is falling behind in the pace of projects handling and revenue generation through project-based entities (VOA Report, 2019)

Theoretical underpinning

Theory of performance improvement presented in International Journal of Production highlights how knowledge enhancement needs to be made a core part of the organization's tactical goals and as a way to enhance execution of organizations' daily activities. There are numerous scholars who have penned down a lot about a theory of performance, beginning with Gilbert in 1978, who wrote extensively about human competence, relating it to project success (Top, Akdere, & Tarcan, 2015).

Gilbert defined human capability as a "key to worthy performance; that human capability is directly proportional to the possibility of improvement in performance for any successful achievement". The flaws in organizational or individual execution always have its direct causes, a weakness in performance and human capabilities can be considered at a number of levels as in for most people. There are six performance indicators that can be engineered to improve individual, group and organizational performance:

- 1: Effects, enticements and bonuses
- 2: Information and data, the opinion and criteria of job execution
- 3: Resources, instruments and environmentally friendly support;
- 4: Particular capability, the abilities of a person's task execution;
- 5: Causes and expectations, inhouse opinions the employees are having;
- 6: Abilities, Skills, knowledge base and expertise.

Gilbert (1978) devised what he termed as the 'behavioral engineering model'. He indicated that this model might act as an analytical instrument for detecting performance challenges and their reasons. Though portrayed as a theory of human competency and not of performance enhancement, human competency is a key role of performance. Gilbert suggested that the expenses of enhancing human performance should be regarded as investments in human capital (economic theory),

which generate profits appreciated by both organizations as well as individuals in provision with their performance capability. Gilbert's model can be utilized as a theory of performance enhancement to HRD. This approach consisted of six elements, including

- 1. Performance requirements: guidelines, output.
- 2. Job assistance: the assets that are accessible.
- 3. Outcomes: those that are associated to sustain the required performance.
- 4. Feedback: do the players get info about their task performance?
- 5. Abilities/expertise: do the performers have the abilities and expertise to perform the job?
- 6. Individual capability: performers bodily, emotionally, and psychologically able to perform the job."

Team Development and Project Success

The triple constraints of scope, budget and time are to be considered when dealing with a project success. If these three are fulfilled, most probably the project outcome is successful. But if stake holders of the project are not satisfied then even if the project is meeting the scope, cost, and budget, the project is considered to be a failure (Groebner, Shannon, & Fry, 2018).

It is important for the team leader to make employees perform successfully and effectively for the success of project. A leader responsibility may include maintaining better understanding, the capabilities to captivate extraordinary, effective and qualified group or team. Therefore, leadership of project leader helps to develop and promote success of project. One study also shows that the project leaders who are concerned about their workers or employees are more effective and have improved results (Hirak, Peng, Carmeli, & Schaubroeck, 2012). Ling (2017) indicated six factors of project success (PS), which include employees, leadership, collaboration of team, project time plan, objectives and strategy. Achievement of specified and given project objective reflects project success.

Career Development and Project Success

The approach of career development has recently had a shift. Conventionally, it was organization's responsibility to make sure that the employees have the ability to meet the goals of the company. Nowadays, after this shift in the tradition, employees believe to be responsible for their own career development. This has totally changed the techniques of organizations handling the career development. It has some sort of become the partnership with employees. Candidates seek for a better and flourished career in an organization when it comes to employment. Career development has become an important aspect of an organization's attraction and retention tactic (Reio & Werner, 2017). Sderland, Geraldi, and Soderlund (2012) offered five important key components of success for any venture.

Human Resource Development (HRD) offer openings such as employee training and career development, management and development of performance, planning of

success, mentoring, coaching and most importantly development and prosperous organization." HRD focuses on mounting the most superior workforce so that the goals to provide better services to the costumers may be accomplished by the company and its workers. Alagaraja et al. (2015) have defined few important methodologies in inspecting the HRD for the organization, its performance and best fit relationship: model, approach, practices that fits best and blend of finest approach and finest practice model. Now, many other authors through empirical observation have established positive association with Human resource development.

Job Satisfaction and Project Success

Job satisfaction is also one of the powerful criteria for an organization's success. It is the way employees perform their work. An employer determines the employee's performance by taking into account many factors such as leadership qualities, management of time, quality of work, organizational skills etc. Few exploratory works have revealed several associations between HRD practices and organizational performance, one supposition research on planned HRD is rather having a direct effect, these practices certainly may affect performance of the organization over effect on certain organizational variables that may be counted important. "Job satisfaction along with project success has already been acknowledged several times by scholars in a substantial conduct including cooperating with unlike characteristics of person's effort which essentially includes recompense, preferments prospects and job sanctuary (Howell, Bellenger, & Wilcox, 1987).

Job satisfaction is deemed as the most influential component for project success in all perspective of study. Numerous studies are linked to individual job satisfaction in relation to organizational project success (Michaels, Cron, Dubinsky, & Thaler, 1988). Similarly, experiential study produced by Howell et al. (1987) recognized that job satisfaction is positively associated to Project Success. If job satisfaction of individual is associated with project success, then it is of more interest that what particular individual will give to business and how ultimately generate positive results for/in project/organization's success. In additional words, accomplishment may be a source of affection to satisfaction level.

It is important for the team leader to make employees perform successfully and effectively for the success of project. A leader's responsibility may include maintaining better understanding, the capabilities to captivate extraordinary, effective and qualified group or team. Therefore, leadership of project leader helps to develop and promote success of project. One study also shows that the project leaders who are concerned about their workers or employees are more effective and have improved results (Hirak, Peng, Carmeli, & Schaubroeck, 2012).

Job satisfaction mediates the Relationship between HRD and Project Success

In organization, resources work all day long and spent an ample amount of time of their lives in particular organization. Maslow theory (1956) recognized the importance of job satisfaction within the resources at organizational level date back to the 2nd half of the 20th century. Following that, many scholars have been at work

to find significance and effects of job satisfaction which might have effect of a great impact on employees along with employers.

Soltani, Al-taha, Mirhusseini, and Mortazavi (2015) analyzed the impact of environmental influences on job satisfaction in auto manufacturing industry in Kuala Lumpur, Malaysia. They collected data from 170 samples through questionnaires. A questionnaire related to job was applied as an instrument to collect the information. Their conclusion emphasized the substantial correlation between job satisfaction and project success. Another study (Hussain et al. 2019) discovered that variety of abilities have exceptional influence on job satisfaction for auto industries and automotive industries may completely benefit from the methodology as it can identify job satisfaction to maintain performance and efficiency.

Smith et al. (2018) has explored that job satisfaction motivates the individual to perform better. At The Same Time, it is inspiration for many that findings in individuals being satisfied with their job. It is not merely self-satisfaction and acknowledgment joy, but also a blend of emotional and environmental aspects which effects the joy of the people in their jobs.

A study related to work method and performance of the workforce construed that work satisfaction enhance a positive influence on the worker's performance as it enhances work engagement and the enhance performance that is required at job. It also causes outcome in the individuals being more content and loyal to the organization. According to a study undertaken, the impacts of job satisfaction on performance have been described as positive (Rasi et al, 2014).

H1: There is positive relationship between HRD and Project Success.

H2: There is positive relationship between HRD and job satisfaction

H3: There is positive relationship between Job satisfaction and Project Success.

H4: Job Satisfaction mediates the relationship between HRD and Project Success.

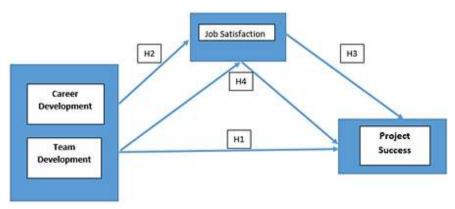


Figure 1: Proposed Framework

METHODS

This chapter includes information regarding all the methods and approaches to secure the accurate outcomes used in this research. The discussion involves facts about pattern of research, population, techniques of sampling, characteristics of sampling, instruments and reliability of all the variables and items involves in this research. The current research was aimed at identifying the impact of the HRD over project success. Therefore, correlation study has been used in this research. For this objective, different project-based organization have been targeted to obtain the appropriate data essential to achieve authentic results. At the start, 230 questionnaires were distributed, securing 200 valid responses. The present research made use of hypothetical deductive research methods to test empirically for the confirmation of the proposed hypotheses. Particular populace used in the research contains project industries/ organizations working below particularly IT project-based organizations in Pakistan (Groebner, Shannon, and Fry 2018). Data was gathered via survey method from the firms working in Islamabad and Rawalpindi. The sample of respondents were working on several sort of IT projects might that be internal or worldwide, large scale projects or small-scale projects, projects from various background in order to get broader sight impact of HRD on project success. Our population is 410 registered IT firms in Rawalpindi Islamabad (SECP DATA, 2020).

Since it was not possible to gather the information from wider population because of limited resources and other restrictions of time, therefore without wasting time and resources, often used method to collect data is sampling. With that end in view particular group of people are targeted and are chosen that are true representatives of the entire population. In general, project-based organization were approached for the collection of data. Furthermore, in project-based atmosphere, employees and project leaders interact closely with each other and high level of assistance and open up communication is needed. As a result of convenience sampling, data could be collected in a way that it can subsequently reveal and measure the existence of HRD practices in projects and impact over project success.

The sample includes management and employee level of various organizations. Data were collected by means of self-reported questionnaires. We utilized convenience sampling to collect data for the effect of HRD over project success with Job satisfaction as mediator. Participants were made confident and guaranteed regarding the information they had submitted for the research purpose. At least 320 questionnaires were circulated among the sample via Morgan table (Rasi et al. 2014).

Moreover, in the first part demographic information, namely gender, age, qualification, education, experience and income were collected. The second part included questions related to our variables. Distribution and collection of questionnaires were done online. All the data of single questionnaire was informed by a single firm. The possibility of holding common method bias was eliminated in this way that the questionnaire had no similar items (Qureshi et al., 2020).

FINDINGS

Demographic Analysis

Sector is reflected as one of the demographics in which respondents often feel reluctant to reveal the true sector or are unaware of exact sector. That is why, for the convenience of respondent wide series of choices was select to gather data about the sector of respondents. All respondents belong to IT Sector. Different series were used for gathering information regarding the experience of respondents. So that respondent can easily play out the specific grip of their experience in the related field of projects. Most of the respondents were having an experience varying between 0-5 years, which shows that 72.0% respondents were having experience between the series 0-5 years, 25% respondents were having experience ranging between 6-10 years, 3.0% respondents were having experience varying between 11-15 years.

Company Size as stated by the respondents is an important element. It is also considered as one of the demographics of study. Company size unlocks various new and distinctive ways for firm's success and help to understand the significance of keeping positive interactive relationships. Most of the respondents were company having employee range from 1-100 that is 31.5.8%, 19.5% respondents were from company size 100-200, 22% respondents were from company size 200-500, 27.0% respondents were from company size above 500.

Data Reliability Analysis

The table below shows the results of Cronbach alpha for Career Development (0.864), Team Development (0.895), Project Success (0.927) and Job Satisfaction (0.687).

Table 1: Reliability			
Variables	Cronbach's	No. Of Items	
	Alpha		
Career development	0.864	10	
Team Development	0.895	6	
Project Success	0.927	5	
Job satisfaction	0.687	5	

Relationship between Independent variable and dependent variable

DV is the New Project Success Average and Predictors are New Team Development Average and New Career Development Average. The Regression Significance is below 0.05 which is the best case scenario. The significance of constant and NTDAVG (New Team Development Average) is also below 0.05 but NCDAVG (New Career Development Average) is above 0.05.

Relationship between Mediator and independent variable

The regression applied on the IV and the mediator in which IV is NTDAVG (New Team Development Average) and NCDAVG (New Career Development Average) and Mediator is NAVG (New Job satisfaction Average). Regression significance is below 0.05 which is the best case scenario. Significance of Constant, NCDAVG and NTDAVG is also below 0.05 which states that IV has an active relationship with mediator.

Relationship between Dependent Variable and Mediator

The regression applied between DV and Mediator, in which DV is NPSAVG (New Project Success Average) and Mediator is NAVG (New Job satisfaction Average). Significance of Regression is below 0.05 which is the best-case scenario. Constant and NJPAVG also has significance below 0.05 which means it is the best-case scenario and relationship between DV and Mediator is active.

Relationship between DV, IV & Mediator

This indicates that the relationship between Human resource development and Project Success is mediated by Job Satisfaction. The indirect consequences of Human Resource Development upon project success through job creativity has upper limit 0.1260 and lower limit 0.0024 definitely describing that bootstrapped 95% confidence interval does not hold zero in it. The Results of un-standardized regression coefficient is giving strong defense for the acceptance of hypothesis.

	Hypotheses	Results	
H_1	There is positive relationship between Human Resource	Accepted	
	Development and Project Success		
H2	There is positive relationship between Human Resource	Accord	
	Development and Job Satisfaction	Accepted	
H 3	There is positive relationship between Job satisfaction and	Accorted	
	Project Success.	Accepted	
H4	Job Satisfaction mediates the relationship between Human	an Accepted	
	resource development and project success		

DISCUSSION

This section includes the discussion associated with main findings in favor of proposed model of the research. To see the effect of Human Resource development on the success of project was the objective of the research; Job satisfaction was taken as mediator in this relationship. This section clarifies outcomes of hypothesis analysis with the help of suitable references of earlier studies similar to the area of study. Discussion in this chapter trailed by practical and theoretical implications, research limitations, generally provide recommendations regarding leader traits in a deeper text and suggestions and recommendations for the future research in the end. General summary of our research is discussed in this section.

The main focus of current study was to initiate the understanding of association among Human resource development on project success in organizations. Furthermore, our study emphasized on checking the mediating approach of job satisfaction among Human resource development and project success. Theoretical framework was created on the foundation of that we hypothesized particular relationships among variables of the study. The findings of our research show that Human resource development has a positive effect on project success denoting that Human resource performs an important role in the success of project. Similarly, the results also show that job satisfaction mediates the relationship between Human resource development and project success.

Practical and Theoretical Implications

To date no prior study has studied the impact of Human resource development on project success, notably within the Pakistani context; as a result, our study has theoretical along with practical implications of utility for Project based organizations in Pakistan in many ways. Theoretically our study can facilitate the present HRD literature, especially the modern area of project management. Consequently, unlock new possibilities and unique aspects summing up to present limited information. The results of the study are practically significant and approachable because an important and positive association among human resource development and project success has been tested with mediator Job satisfaction.

This study also has practical implications. It indicates that human resource development leads to project success. Therefore, it is proposed that employee/ resource must have such traits/skills like risk optimization, Risk taker, Innovative and so on enhance employee's creativity, confidence and motivation and then with particular medium with employee's accurate engagement organization can achieve success. Successfully applying human resource development strategies permits the organization to meet the required goals like success in specific project. HRD also enhances the capacity of employees by giving them training to raise their expertise that will help to carry out their task competently, efficiently, and positively.

CONCLUSION

The current study was aimed at investigating a domain of Human resource development influence on project success, that is most wanted and vital domain in the modern era. The main purpose of study was to uncover the effect of Human resource development on project success. This study showed the role of job satisfaction as a mediator among the association connected with human resource development and success of project. The study has contributed substantially to available literature because there has been limited research on the effect that HRD has on project success along with job satisfaction as mediator.

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