



**IMPACT OF CORPORATE SOCIAL RESPONSIBILITY ON PROJECT
SUCCESS: A study based on construction projects in Punjab, Pakistan.**

By

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A thesis presented to Bahria University, (Lahore Campus) in partial fulfillment of the requirements for the degree of Master of Science in Project Management.

April 2016

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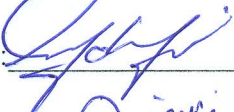
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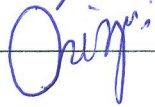
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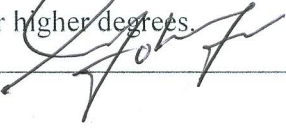
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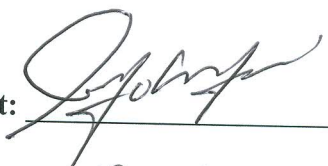
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Executive Summary

The purpose of this study is to examine the impact of Corporate Social Responsibility on Project success. This is a questionnaire based study which examined the responses of 100 respondents from Punjab who were working on construction projects.

The printed version of questionnaires was used in which respondents were asked about environmental management and working condition in their respective organizations and the impact of these variables on project success.

The result of this research provide support for the hypothesis and showed there is positive association between environmental management and working conditions (Independent variables) and project success (dependent variables). Furthermore high correlation was found between working conditions and project success than of environmental management and project success. The suggestions and findings of this study for organizations, especially which involved in construction industry are so important. Results have shown that the organizations those are adopting the environmental management and better working conditions are more likely to achieve success in their ongoing construction projects.

Keywords – Environmental Management, Working Conditions, Project Success

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1. INTRODUCTION

1.1 Background

Corporate Social Responsibility has been gaining significance since 1970's. Mostly organizations are taking keen interest as they think corporate social responsibility can be helpful to get competitive advantage in their business operations. The purpose of conducting this research is to analyze the impact of corporate social responsibility on success of a construction project. Corporate social responsibility is progressively valued and being considered as sustainable development factor in construction industry. In developed countries CSR reports have been generated by construction industries to preserve positive corporate image. To check the effectiveness of CSR, research work is growing rapidly all over the world. Though, understanding the meaning of CSR with relevant to construction industry, and how to practice it, is limited. This research is aimed to analyze the impact of two important elements of CSR, i.e. Environmental Management and Work Conditions.

(Duy Nguyen, Ogunlana, & Thi Xuan Lan, 2004) highlighted in his study that, in economy construction industry has been considered one of the most important industry due to its interaction with all type of human endeavors. He also said that uncertainty in projects, dynamics and intrinsic complexity creates difficulties for project managers. He further postulated that it's a challenge how to handle construction projects more successfully therefore a substantial research has been done in past couple of decades.

To illustrate CSR in a broader sense we have to focus on definition presented by experts of this domain. The idea of Corporate Social Responsibility (CSR) came into view in the latter half of the 20th century. Corporate social responsibility means "Management and relationship building with partners to improve the image and increase credibility of the company". For members of the "Business Leaders Forum", a voluntary dedication by organizations to environment and society in which they are operating is called corporate social responsibility.

In present global context, corporate social responsibility (CSR) has increased the demands of public regarding disclosure of information about firm's transparency to fulfill expectations of stakeholders. Organizations which are engaged in business with large public interest have been observing a large amount of benefits.

Corporate Social Responsibility has been defined by Business for Social Responsibility (BSR) as; "achieving commercial success in ways that honor ethical values and respect people, communities, and the natural environment." According to McWilliams and Siegel (2001) "beyond the interest of firm and requirements of law, the actions that appears for some social good is called corporate social responsibility"

Previous research has highlighted that the CSR has been worth counting factor in success of businesses as Friedman (2007) proposed, it is responsibility of a business that the resources must be utilized in the way profits can be enhanced and without any fraud or deception fair competition should be established. Furthermore while focusing on social problems he argued that money should not be provided to executives only, it must also be consumed for the will of minorities. This research is being focused to check the impact few aspect of corporate social responsibility i.e. environmental management and working conditions on project success.

1.2 Environmental Management:

(Shen & Tam, 2002) highlighted that according to Environmental Protection Department "Construction activity is one of the major contributions to the environmental impacts, which are typically classified as air pollution, waste pollution, noise pollution and water pollution".

Uher, (1999) as cited in Lin, Yang, and Liou (2009) Highlighted in his research that significant impact can be observed on environment in two context of; on-site and off-site operational activities. Off-site activities concerned with mining and manufacturing activities, material transportation, and acquisition of land and project design. On-site activities referred to constructing physical facility which results in air and water pollution along with traffic problems and construction wastage.

(Hendrickson & Horvath, 2000) have observed few major toxic release from construction which includes Sulfur Dioxide (SO₂), volatile organic compounds (VOC), nitric dioxide (NO₂), toxic discharge to air and harmful waste generated, So environmental management is being considered as an additional hot matter for success of any type of business concern and projects even these small or large in scope.

Environmental management has linkage to corporate social responsibility and Quality management simultaneously. As United Arab Emirate is a larger market for hundreds of construction projects, an example can be taken of "Palm Jumirah Island" it will reveal how environmental issues were addressed and resultantly it emerged as successful project. Furthermore there is a comprehensive quality standard ISO-14,000 which focuses on all the environmental issues. "The Environmental Management System (EMS) defined in the Standard ISO-14000 is promoted as a vehicle for organization to develop environmental friendly practices. This system provides a standard framework that includes environmental policy, planning, implementation and operation, checking and corrective action, and measurement review and improvement"

Frances Cairncross (1993) in his book highlighted that by implementing best practices for environmental policy a firm can get competitive position and the effects on natural environment can be minimized. Nehrt (1996) in his study found that if an organization follow best practice of environmental management then early timing of environmental investment shall make contribution to growth in profits. On the other hand investment in pollution prevention had an unexpected significant negative impact on growth of profit.

By implementing environmental management in construction projects several benefit can be obtained in shape of; reduction in production wastage, reduced uses of materials which can be harmful for environment. Contractors can also get benefits in term of cost saving due to reduction in fines due to non-compliance with environmental legislation. (Shen & Tam, 2002).

1.3 Working Conditions:

Globally, working conditions is emerging as new context of research in all sorts of industries, i.e. manufacturing, trading, services and in projects as well. All over the world countries has comprehensive “Labor Laws” to address safety and security of workers. Choudhry and Fang (2008) highlighted in his research that it has been observed that worker’s safety is a complex phenomenon and while talking about construction projects more risk is involved due to outdoor operations, working at height, operating on site plant and equipments are coupled with behavior and attitude of workers at work place.

He also argued that due to the construction industry’s nature, conditions are continuously changing due to work perils. Chan et al.(2005) as cited in Choudhry and Fang (2008) postulated in his research that accidents on work place happen due to random combination of unsafe conditions and practices. According to Abdelhamid and Everett (2000) proposed three root causes for accidents in construction; first, unable to identify any unsafe condition that may exist before or after an activity was started. Secondly to go with a work activity after the worker has identified an existing unsafe working condition. Third, ignoring initial working conditions of environment decide to act unsafely.

With reference to issue of risk and site working conditions, Shimmin, Corbett, and McHugh (1980) argued that managers have to realize that they must make efforts for safe working conditions at the design stage and avoid poor site coordination. Subjective risk model should also be developed by providing full safety training to all employees.

In this study the focus is to analyze the impact of “working conditions” on project success. Previous studies as highlighted that, the organizations which have better working conditions and labor standards can be benefited in term of increasing productivity and error rates reductions.

Moskowitz (1972) highlighted that organizations which take socially responsible actions can get benefits in shape of increased productivity and employee morale.

1.4 Problem Statement:

All project sponsors always have been enthusiastic about project success. It is usual, few facet of project success are not under consideration due to ignoring some factor and giving importance to others. Normally, lesser attention to CSR and its facets have been performed in Pakistan like developing countries. Under developed countries also pay lesser attention to environment and working conditions and some time money has more importance over employee's safety and security. The aim of this study is to explore the benefits of focusing on elements of CSR i.e. environmental management and working conditions and come up with a conclusion how these elements can impact success of a project.

1.5 Objectives of Research

There are few objectives of this study;

- To examine the impact of CSR on Success of a project.
- To increase the understanding how Corporate Social Responsibility can contribute in success of project.
- To discover the new research magnitudes in this area.

1.6 Research Questions:

Following two questions have been addressed in this study.

- Will Environmental Management drive a project to success?
- Will work conditions drive a project to success?

1.7 Significance of study:

While working on projects it is mandatory to take care of all the stakeholders of Projects. Society is also one of major stakeholders in all types of project especially in construction projects. Previously research on Corporate Social Responsibility in construction industry has not been under taken in Pakistan that is why reasons for adopting this study are to explore the new magnitude of project success because in under developed countries environmental management and working conditions are not on priority. Hopefully this study will be first step to explore dimensions in shape of CSR, for success of Construction projects being run in Punjab, Pakistan.

2. Literature review:

Even though the concept of corporate social responsibility has been discussed widely in theory and practice, but its definition has no general agreement because many researchers has defined it in their own way like; European Commission Employment (2001) postulated that it is voluntary approach where organizations decide to make contributions to a better society and clean environment. Schaltegger and Burritt (2005) argued that Corporate Social Responsibility Management is just like corporate sustainability management whose purpose is to make integration between economic, environmental and social aspects of a business management. Corporate social responsibility concerned that a businessman need to follow that directions which are required in term of objectives and which creates value for our society.

Business Council for sustainable development corporate social responsibility is not ending commitment by a business to act ethically and make contributions for economic development so that quality of life of workers and their families and whole society can be improved. (Lin et al., 2009) highlighted in his research that the firms which have make struggles and resources to corporate social responsibility can have competitive advantage.

As concerned to business perspective, researchers often argued that company's competitiveness can be improved through corporate social responsibility. For example Burke and Logsdon (1996) argued that in the long-run there is a positive relationship between corporate social responsibility involvement of an organization and its financial success. Corporate social responsibility management can be helpful for economic success but not as a critical component (Hansen & Schrader, 2005). Weber (2008) suggested that there are five types of CSR which a company can get like; Positive effect on company image and reputation, positive effects on employee motivation, retention and recruitment, cost saving, revenue increase by higher sales and market share and CSR related risk reduction measures.

Anadol, Youssef, and Thiruvattal (2015) argued in his research that socially responsible corporate performance can be linked with chain of bottom line benefits. Anyhow it seems that time frame of benefits and cost is not aligned. The costs incurred immediately but benefits may be generated after long period of time. However several benefit can be identified like; the companies which are putting efforts towards CSR have increased brand image and reputation, hence customers want to purchase products of high reputation company. The company regarded as socially responsible can also be benefited due to good reputation in community by having enhanced capability to attract more investors and trading partners.

Tsoutsoura (2004) suggested that the companies which are socially responsible may have lesser risk of negative rare events. He also suggested that while overlooking negative social and environmental issues may be equal to ignoring a momentous trail risk. Furthermore he postulated that the companies with CSR principles have lesser risk of bribery and corruption and can be more transparent. He also mentioned in his article that some Corporate Social Responsibility initiatives can have a significant impact on cost reduction. e.g., planning the optimum route for delivery trucks not only reduces the environmental impact of a company's operation but also reduce the cost. By adopting CSR principles motivate executives to re-think their business practices and seek more effective and efficient way to operate.

On the other hand some researchers are critics of investment in corporate social responsibility. Ullmann (1985) as cited in Lin et al. (2009) postulated that organizations have to incur additional cost for taking socially responsible initiatives than those organizations which are lesser socially responsible.

Van Dijken (2007) have mentioned different dimensions of corporate social responsibility, he highlighted these measures include corporate governance, environmental protection, employee protection, public relation exercise and many more. He suggested that efforts for these measures create value in sense; sustainability, cost reduction in term of legal liabilities, positive image, high caliber staff attraction, more sales, supplier and customer attraction.

2.1 Environmental Management

Sarkis, Gonzalez-Torre, and Adenso-Diaz (2010) suggested that environmental management is helpful to improve relationships with stakeholders. Hence a good relationship with stakeholders can lead to a successful project, because stakeholders are key elements for any projects. According to Brammer and Millington (2008) corporate performance can be improved by creation and development of connections with stakeholder which provide significant resource to the organization.

According to Hull and Rothenberg (2008) potential conflicts can be avoided due to relationship with stakeholders. Firm's success is dependent significantly on relationship with institutions and stakeholders (Donaldson & Preston, 1995). Porter and Van der Linde (1995) developed hypothesis known as "Porter's Hypotheses" he said that environmental investment may have a positive influence on organization's competitive advantage and performance. With context to environmental Management "Agency Theory" describes if there shareholders haven't any strict control then managers may allocate resources improperly and they may have personal benefits from these resources, hence good environmental performance can be obtained at the cost of better corporate results if these resources are devoted to minimize the environmental impacts. According to Feldman, Soyka, and Ameer (1997) argued in his research that investment in environment management results in higher stock price which ultimately resulted in higher profits. He also suggested that while investing in environment management stock price increases up to 5%.

According to (Hart, 1995; Schmidheiny, 1992) previous literature with relevant to environmental management proved, an organization can enhance its competitive position and can minimize the negative impacts on the natural environment by implementing best practices with reference to environmental management. (Kassinis & Soteriou, 2005) in his research highlighted different variables which include loyalty, customer satisfaction and competitive advantage for measuring the link between profitability and environmental strategy.

Some other researchers like (Shrivastava, 1995; Smart et al., 1992) also postulated that environmental management have identified the best practices from different cases studies.

about different organizations that have successfully gained competitive advantage like "Minnesota Mining and Manufacturing Company and Dow Chemical". Christmann (2000) described in his article that most of the research highlighted that there is a direct association between firm's performance and environmental best practices. The people don't measure organizations just on the basis of financial bottom line they concentrate on the impact it has on environment and society. So in other way we can say that organizational success is not only checked by its financial position rather it is also viewed in term of its commitment to environment and society.

With reference to corporate social responsibility; Environmental Management, Tsoutsoura (2004) argued that if an organization try to reduce its implicit cost by irresponsible social behavior by, e.g. overlooking to take particular measures to control pollution, will resultantly have to spend high explicit costs. Consequently these organizations have to face costly lawsuits against them and supposed to pay heavy fines. He further suggested that the organization focusing on environmental management may have lesser risk of defective product line and to pay heavy fines for excessive pollution. They also have lesser risk of negative social events which resultantly may harm their reputation and costs millions for information, advertisements or litigations.

Turban and Greening (1997) argued in his research that potential employees can be attracted by implementing social policies and programs with reference to working conditions. Different scholars has concluded that the applicants may not have complete information about companies, so they interpret information they received as a signal as organizations working conditions (Breaugh, 1992; Spence, 1974; Turban & Greening, 1997) .

Anadol et al. (2015) highlighted in his research that if an organization take initiatives for corporate social responsibility it can reduce operating cost for example if an organization reduce the packaging material and make planning for optimum route utilization for trucks it will reduce the environmental impact along with operating cost.

As previous research support environmental management in positive context, few researchers are critics for this concept because they think while managing the environment organization has to spend a lot of cost which ultimately reduce the profit of an entity. Jaffe, Peterson, Portney, and Stavins (1995) in his research highlighted that complying with environmental laws will cause higher cost by which firm's competing ability will be reduced. Furthermore negative relationship was observed by Walley and Whitehead (1994) in his research, between environmental management and performance of firm and its competitiveness. They also argued a firm tries to enhance their environmental performance by giving up some resources and managerial efforts from important areas due to which profits may reduce. Hull and Rothenberg (2008) argued that without investing in environment a firm can be competitive at same time.

2.2 Working conditions:

According to International Labor Organization (ILO) "Working conditions are the core of paid work and employment relationship. Generally speaking working conditions cover a broad range of topics and issues, from working time (Hours of work, rest periods and work schedule) to remuneration, as well as the physical conditions and mental demands that exist in the workplace"

Every country has Labor Laws to provide safety and security to workers. Here our point of focus is to conclude the working conditions on success of a project. Most of the researchers also focus on that corporate social responsibility is to have focused on workers as well which yield positive results in long run.

Roberts (2003) in her research quoting an example with reference to working conditions, she mentioned the organizations dealing in footwear and branded clothing has been adopting ethical source of conduct on working conditions and labor rights. She also highlighted as the brand value is higher, more the scrutiny of its activities and it has more potential to be targeted by pressure groups. Zadek (2007) in his research gave an example of Nike; he highlighted that, in 1990s, company was blindsided because some activist launched an all-out movement against its working conditions in supply chain. No doubt company has made several errors at that time from which they learnt a lot. Today company is making efforts and

also financing to improve working conditions in supply chain and promoting Corporate Responsibility more generally.

According to Kahya (2007) employee job performance can be influenced directly and indirectly by, work place conditions such as; improper lightning, smell of chemicals, noise, vibrations and dust. Resultantly employee concentration will be decreased and performance of employees will be lowered in term of productivity, compromised quality, physical and emotional distress which ultimately leads to higher cost.

Previous research also highlights that, the organizations with improved working conditions and labor standards get benefit in shape of increased productivity and reduction in error rates. Turban and Greening (1997) argued in his research that potential employees can be attracted by implementing social policies and programs with reference to working conditions. Different scholars has concluded that the applicants may not have complete information about companies, so they interpret information they received as a signal as organizations working conditions (Breaugh, 1992; Spence, 1974; Turban & Greening, 1997) .

Mostly studies in ergonomic area have concentrated on the better effect on quality, productivity, occupational health and cost effectiveness of ergonomic improvements in work station or workshop (Das & Shikdar, 1999).

Globally it is focus on control on production facilities which ensures that employees are working under better conditions and earning sufficient wages. It seems costly but positive cash flows can be can be generated due to increased productivity of employees and improved quality of products Tsoutsoura (2004). (Moskowitz, 1972; Soloman & Hansen, 1985) argued that organization may benefit from socially responsible actions in term of productivity and employee morale.

2.3 Project Success in term of Cost, Quality Schedule:

McLeod, Doolin, and MacDonell (2012) argued that in project management literature the outcome of a project is often envisioned in term of success or failure, although highlighting that, what constitute can be problematic. Generally lack of consensus prevailed for the definition of success or lack of success and failure. Although these terms are being used frequently but it seems tough to measure and considered to be vague.

Baccarini (1999) as cited in McLeod et al. (2012) project may be considered as success on varying degrees depending on which success criteria has been met. (Atkinson, 1999; Cooke-Davies, 2002; De Wit, 1988; Ika, 2009; Jugdev & Müller, 2005) have argued that attempts have been made to define suitable criteria to measure project success. "Iron Triangle" of cost, time and quality has been established and being used widely. Ika (2009) argued that the definition of quality is very extensive; in relation to "Iron Triangle" it is often limited to meeting scope or technical and functional specifications. (Agarwal & Rathod, 2006; Baccarini, 1999).

With reference to project management literature, the scope and constituency of project success has been defined by researchers progressively and they argued that success of project is more than success of project management and it required to be measured against overall purpose of the project. (Baccarini, 1999; Cooke-Davies, 2002; Ika, 2009; Jugdev & Müller, 2005). They further argued that project success is widened to encompass the attainment of broader set of organizational objectives like; stakeholder's benefits including project sponsors and senior managers.

According to Bannerman (2008); (Shenhar & Dvir, 2007) few other aspects of project success may also be include attainment of more strategic objective and benefits like; development or expansion of business, impact on markets and competitors and capability to respond to future opportunities or challenges. Researchers (Bannerman, 2008; Shenhar & Dvir, 2007; Wateridge, 1998) has argued that every project may have its own success criteria so not all criteria for success is suitable to very project.

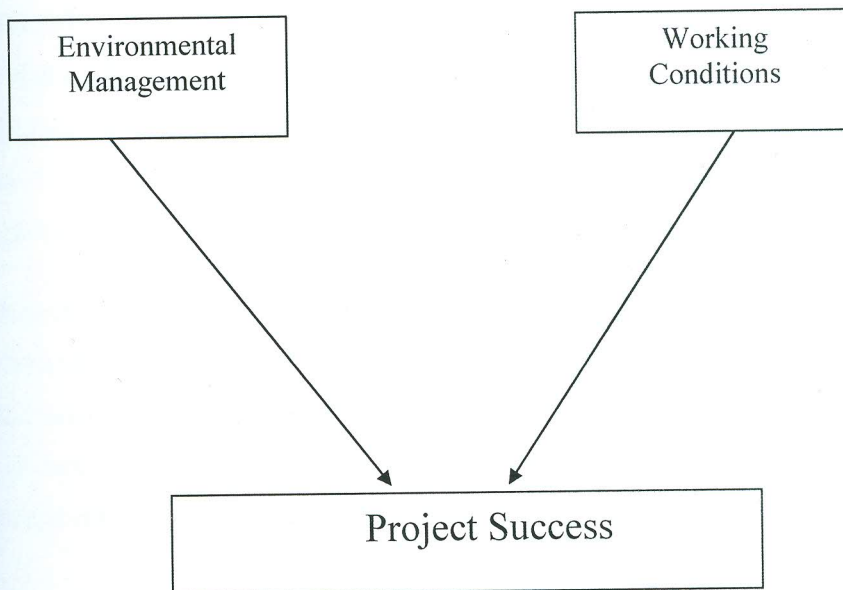
According to Lanzara (1999) it is not necessary that individual or collective opinions and evaluative assessments are not necessarily stagnant and may change over time according to circumstances. Lim and Mohamed (1999) postulated that success criteria for project is based on shareholders particular expectation and how these expectations have been met and how a project will save interests and needs of stakeholders whether these expectations are role related or personal.

Turban and Greening (1997) suggested that organizations which are committed to corporate social responsibility have extended ability to attract and retain employees, which will resulted in lesser turnover, recruitment and training cost.

3. Research Methodology and Data Specifications

3.1 Theoretical framework:

With reference to proposed research objective and above literature review, theoretical framework of this study is given below. This shows Environmental Management and Working Conditions as independent variables and Project Success as dependent variable.



3.2 Hypotheses:

Ho: There is no significant association between environmental Management and Project Success.

H1: There is a significant association between Environmental Management and Project Success.

Ho: There is no significant association between Working Conditions and Project Success.

H1: There is a significant association between Working Conditions and Project Success.

3.3 Variables identification:

Three variables have been identified for this study. Two variables are independent variables; environmental management and working conditions and one is dependent project success. In this study impact of environmental management and working conditions on project success is being examined.

3.3.1 Project Success (Dependent variable)

Project success has been a core agenda for every stakeholder. This is not a matter whether it is a construction project or any other. All the stakeholders always take keen interest so their project should be as successful as they expect. Normally there is project sponsor, project manager and his team and society which is more interested in project success.

Every sponsor has its own criteria to judge the success of a project. Normally project scope, cost, time, and quality are main indicators on which the projects are measured. Someone may interested to check whether project is within scope so it is successful, some interested on given schedule and cost, some may not compromise on quality irrespective of it how much cost and time is being used for completion.

According to Duy Nguyen et al. (2004) a construction project said to be successful it is on schedule, within planned budget and according to given specifications and stakeholders satisfaction.

Takim & Akintoye (2002) as cited in Duy Nguyen et al. (2004) highlighted that contractor's profitability, "fitness for purpose" absence of claims and litigations are also measures to judge project success. According to Sanvido, Grobler, Parfitt, Guvenis, and Coyle (1992) a project is said to be successful if certain expectations of a given participant have been met, whether this participant is owner of the project, planner of the project, engineer, contractors of the project or operator of the project.

According to Ashley, Lurie, & Jaselskis (1987) as cited in Duy Nguyen et al. (2004) project is considered successful if results are much better than expected in term of cost, schedule, quality, safety and satisfaction of participants. According to Sanvido et al. (1992) a project is considered to be successful if its goals and expectations have been met. They further added technical, financial, educational, social and professional aspects are may be part of goal and expectations.

A hierarchical model for construction project success have been proposed by Chua, Kog, and Loh (1999). He highlighted that the success of a construction project is based on budget, schedule and quality. Furthermore four main project aspects like "project characteristics" "contractual agreements" "project participants" and "Interactive processes" are also measures the success of each of three distinct objectives with relevant to a project.

Apparently, to determine whether a project is success or failure is seems so technical and difficult because every stakeholder has its own interest in project. There are three main reasons which have been identified by different researchers. Belassi and Tukel (1996) has highlighted two of them, firstly as mentioned by Pinto and Slevin (1989) and De Wit (1988) project stakeholders perceive project success differently so it is not clear how to measure project success. Secondly list of success or failure varies in several previous studies. Thirdly as mentioned by De Wit (1988) the objectives and priorities are different throughout the project life cycle and different levels in management hierarchy for each project stakeholders.

Anyhow according Goatham (2015) A project can be said a successful projects if it fulfill following conditions;

- Tier 1 – A Project said to be successful if it delivers, what was said the scope of the project.
- Tier 2 – A Project said to be successful if it delivers, what was said within agreed budget and on given schedule.
- Tier 3 – A Project said to be successful if it delivers, what it said it would, on schedule, within the agreed budget and to the expected quality standards.
- Tier 4 – A Project said to be successful if it delivers on all agreed upon objectives of the project like; scope, schedule, budget, quality.
- Tier 5 – A Project said to be successful if it delivers the product produced by the project creates significant net value for the organization after the project is completed.

Atkinson, et al., (1997) as cited in Takim and Akintoye (2002) proposed that client will be dissatisfied if the final deliverable fails to meet their price, quality, time frame, functionality and standards of delivery performance.

3.3.2 Environmental Management (Independent variable)

Environmental management encompasses all efforts which made by organization to minimize the negative impact on natural environment. In simple words environmental management means “Administrative functions that develop, implement, and monitor the environmental policy of an organization” According to Encyclopedia of environment sciences environment means “The aggregate of all external conditions and influences affecting life and development of an organization”. Each environment is a system which overlaps, influences, and influenced by other systems.

Environmental management is getting much importance in construction industry worldwide because while hurting an environment project success cannot be attained in true sense. Shen and Tam (2002) concluded in his research that there is a growing progress among contractors for implementing environmental management and results indicated that contributing to environmental protection, reducing environmental risks, improvement in environmental image and reduction in cost related to environmental convictions have been considered

important benefits to implement environmental management in construction industry. Furthermore he said that several measures are being taken in local industry, like; planning waste management, reducing and recycling of construction wastes, providing in-house environmental management training and legal measures on environmental management.

Several benefits have been attached with environmental management. Feldman et al. (1997) postulated that the environmental performance is totally compatible with higher financial performance. He said that if emerging environmental controls have been implemented then it will provide a spur for process improvement, reformulations of product and cost effectiveness in manufacturing and delivering products and services of firm. Furthermore he highlighted that the firms which are focusing on environmental management are getting better financial performance and their stock price can be increased up to 5%.

Rosewicz (1990) As cited in Klassen and McLaughlin (1996) highlighted in his research that individuals are considering importance for natural environment. It has been indicating by recent surveys that every individual out of six is interested to pay more for products that save the environment. It also has been observed that shareholders are reflecting same opinion that the firms with cleaning up environment have been larger dividends ranking at third. Several international firms are now establishing separate environmental performance reports.

3.3.3 Working Conditions (Independent variable)

Every country in the world has its own labor standards and the organization in those counties have to follow these rules and regulations without any discrimination. Researchers have highlighted in their research that fair labor practices and suitable working conditions are helpful for successful business operations and ultimately organization can get competitive advantages like an organization may benefit from socially responsible actions in term of productivity and employee morale.

Hinze (1997) as cited in Choudhry and Fang (2008) postulated that according to Occupational Safety and Health Administration (OSHA) “accident losses are attributable to five group of falls, struck by, electric shock, caught in or between and other” . Hinze,

Pedersen, and Fredley (1998) highlighted that these categories may include “falls from elevation, falls from ground level, electrocution (Power line), electrocution (building power), electrocution (faulty facility wiring), electrocution (other), struck by equipment, struck by falling material, struck by material other than falling material, caught in/between equipments, caught in/between material, cave-in, explosion, fire, explosion/fire, asphyxiation, drowning, natural causes and others”

There are three root causes for accidents in construction. Firstly, failing in identification of unsafe conditions that already exists before an activity was started or that may develop after an activity was started. Second, when a worker identifies an unsafe condition for work activity, which may exists already and then it was decided to proceed. Third, make a decision to act unsafely without considering the initial conditions of work environment. (Hinze et al., 1998).

3.4 Research design:

3.4.1 Type of Investigation:

The study is based on descriptive analysis. In this research co-relational and multiple liner regression has been used for this purpose. The purpose of this study is to check whether there is a significant association between Environmental Management and Working Condition (independent variables) and Project Success (dependent variable).

3.4.2 Study Settings

There are two type of study settings; contrived setting and non-contrived setting. In contrived setting research is conducted in artificial environment and in non-contrived setting research is conducted in natural environment. This research is based on non-contrived setting as the research is being conducted in natural environment.

3.4.3 Sampling technique:

There are two main types of sampling; probability and non-probability sampling probability sampling. Probability samplings have different type like simple random sampling, cluster sampling, systematic and stratified sampling. In the proposed study the simple random sampling has been used because data will be collected from different construction projects in

Punjab. Simple random sampling is being used because we have lesser time and in a country like Pakistan is very tough to collect data in this limited time span.

3.4.4 Sample size:

In this study data has been gathered from 100 Project Managers and team workers (1 project manager and 4 Team members). Total 100 questionnaires were distributed to respondent of different construction projects. 86 questionnaires were filled and received back and 14 respondents didn't give feedback.

3.4.5 Instrument of the study:

Structured questionnaire was used for this study and it has basically two parts. First part comprises of demographics. It has five questions;

- Position in Organization
- Gender
- Professional Experience
- Education Level
- Experience in said organization

Second part contains questions about environmental management and working conditions (Independent variables) and project success (dependent variable). Environmental Management has 30 questions and these questions have been adopted from (Molina-Azorín, Tarí, Pereira-Moliner, López-Gamero, & Pertusa-Ortega, 2015).

1. Environmental training courses are offered for all CEOs and Managers in your organization?
2. Environmental training is offered to all Employees in your organization?
3. Environmental issues are taken into account when offering the various services available at the establishment in your organization?
4. The environmental record of suppliers is assessed in your organization?
5. Environmental information/data are periodically reviewed and updated in your organization?

6. Environmental communication is fostered between the staff and the managers at the Establishment in your organization?
7. An environmental report is prepared in order to disseminate the environmental activities carried out by the establishment in your organization?
8. Financial and operational indicators are used in order to measure and inform on the establishment's environmental impact and its costs in your organization?
9. The policy of the establishment and its environmental strategy are formally communicated to all employees in your organization?
10. Procedures are defined and documented for all activities, products and processes which have, or may have if not controlled, a direct or indirect, significant impact on the environment in your organization?
11. There is an assessment of the results obtained by employees related to environmental impact reduction in your organization?
12. The necessary resources are provided in order to carry out environmental improvements in the establishment in your organization?
13. Customers' complaints and suggestions are assessed in order to improve environmental Practices in your organization?
14. Indicators are developed in order to gauge the customers' degree of satisfaction with environmental practices in your organization?
15. Low environmental impacts products are chosen in project in your organization?
16. A suitable disposal/treatment/storage of waste is performed in your organization?
17. Practices are implemented in order to reduce water consumption your organization?
18. Techniques are used to reduce energy consumption in your organization?
19. Practices are implemented towards lower resource intensity in your organization?
20. Product re-use/recycling is encouraged in your organization?
21. There is lower water consumption in your organization?
22. There is lower energy consumption in your organization?
23. There is lower use of non-renewable resources in your organization?
24. There is lower use of toxic materials in your organization?
25. There is less solid waste in your organization?
26. There are fewer discharges in your organization?

27. There are fewer emissions in your organization?
28. Efforts are made for Noise abatement in your organization?
29. There are fewer damages to landscape in your organization?
30. There is Lower risk of serious accidents in your organization?

Working conditions (Independent Variable) includes 15 questions;

1. The workload in my group is evenly and fairly distributed in your organization?
2. My job makes a positive contribution to my overall happiness in your organization?
3. I am satisfied with my specific job assignment in this organization?
4. There is cooperation amongst members within Project in your organization?
5. I have confidence in the fairness of the management in this organization?
6. Management is approachable in case of any issue in your organization?
7. I feel there is good communication between my department and other departments within Project in this organization?
8. I am comfortable with the balance between my work and personal life in your organization?
9. Performance issues or disciplinary problems are handled fairly this your organization?
10. I frequently feel overwhelmed because of the pace of technology this your organization?
11. I am familiar with my unit's goals and objectives in this organization?
12. The physical environment for working is safe and secure in this organization?
13. Accidents during work are very rare in your organization?
14. Proper heating, cooling and ventilation is available at work place in your organization?
15. Workplace standards are fairly implemented in your organization?

Project Success (Dependent Variable) includes 7 questions;

1. Projects are usually completed on given schedule in your organization?
2. Projects are usually completed within planned cost in your organization?
3. Projects are usually completed within defined scope in your organization?
4. Projects are usually completed within defined quality parameters in your organization?
5. Brand image of our firm is usually better than competing firm after completion of project?

6. Quality provided by our organization is seemed well than competing firms after completion of project?
7. Client is often satisfied with the final deliverable?

Questions related to variables was shaped on 5 point Likert Scale from strongly agree to strongly disagree.

3.4.6 Target population:

Data has been collected from Project managers and/or his team from ongoing Construction projects in Lahore region, Gujranwala and Sialkot Region.

3.5 Data collection method:

Data can be collected quantitatively and qualitatively. In this study quantitative technique has been used. Primary data is gathered by conducting primary research from different projects being run in Punjab, Pakistan.

3.6 Content/Face validity:

In this study, the instrument used is consisting of a questionnaire to gather data. To ensure a standardized survey, questionnaire was circulated to a number of practitioners and experts in academia. The questionnaires were distributed to respondents from construction projects, after approval from different experts.

3.7 Pilot Study:

For pilot study initially 20% questionnaires were distributed to respondents from total 100 questionnaires. This was done so that rephrases the questions if respondents feel any ambiguity while responding to questions. After collecting 20 questionnaires it was observed some modification is needed. So after bit modifications questionnaires were again circulated and 86 were received back.

4. Data analysis:

4.1 Reliability Analysis:

Data analyses are very important part in any sort of research because without data analysis we can't give any final verdict about study we conducted. So to check the reliability of gathered data Cronbach's alpha is calculated for all variables.

4.1.1 Environmental Management:

Case Processing Summary

		N	%
C a s e s	Valid	86	100.0
	Exclud ed ^a	0	.0
	Total	86	100.0

Reliability Statistics

Cronbach's Alpha	N of Items
.885	30

- a. List wise deletion based on all variables in the procedure.

As Cronbach's Alpha for environmental management (Independent variable) is .885 against 30 items, which represent inter items consistency. According to (Sekaran & Bougie) data is reliable if value of Cronbach's Alpha is greater than .70. As the value of Cronbach's Alpha is greater than .70 so readability is confirmed now.

4.1.2 Working Conditions:

Case Processing Summary		
	N	%
Valid	86	100.0
Exclude d ^a	0	.0
Total	86	100.0

a. List wise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.842	15

The Cronbach’s Alpha for working conditions is .842. According to (Sekaran & Bougie) data is reliable if value of Cronbach’s Alpha is greater than .70. As the value of Cronbach’s Alpha is greater than .70 so readability is confirmed now.

4.1.3 Project Success:

Case Processing Summary		
	N	%
Valid	86	100.0
Cas Exclud es ed ^a	0	.0
Total	86	100.0

a. Listwise deletion based on all variables in the procedure.

Reliability Statistics	
Cronbach's Alpha	N of Items
.762	7

As Cronbach’s Alpha is .762 so it is higher than .70 so reliability for questions related to project success is confirmed now. According to (Sekaran & Bougie) data is reliable if value of Cronbach’s Alpha is greater than .70.

4.1.4 Overall Reliability:

Case Processing Summary		
		N
		%
Case s	Valid	86
	Exclude d ^a	0
	Total	86

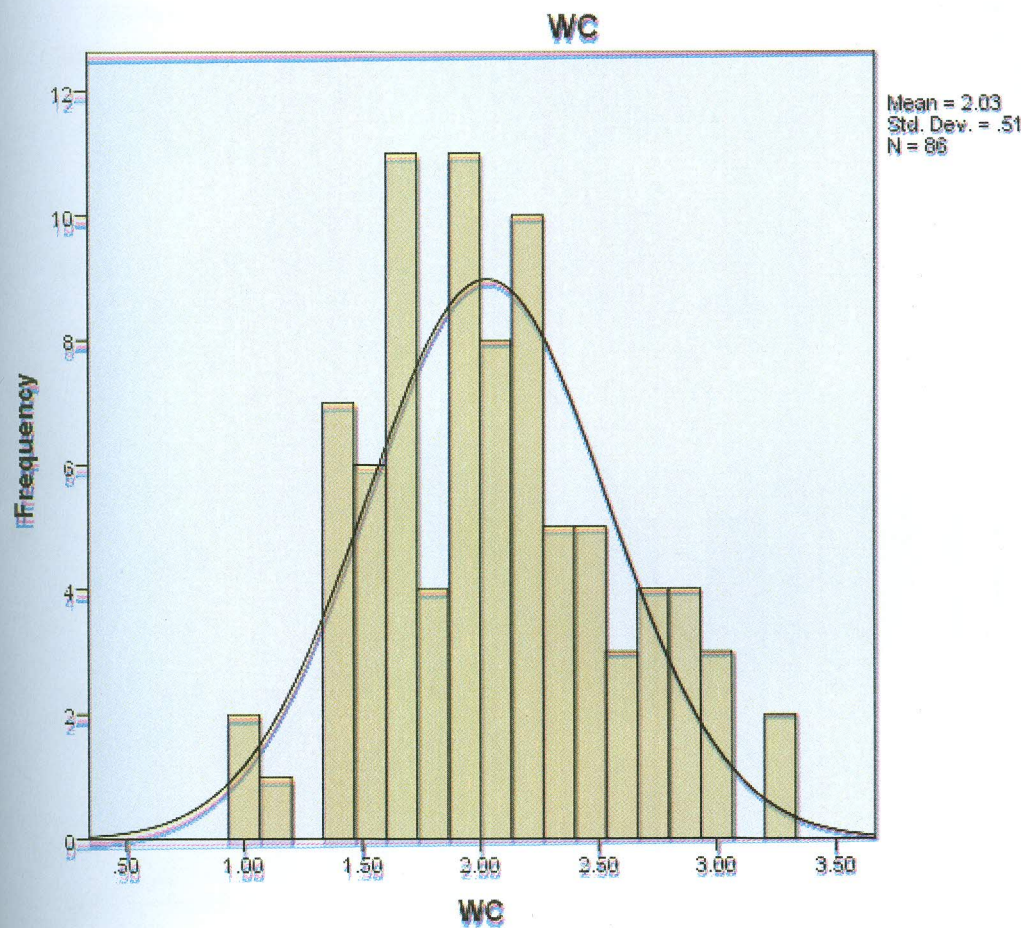
Reliability Statistics	
Cronbach's Alpha	N of Items
.920	52

a. List wise deletion based on all variables in the procedure.

Value of Cronbach’s Alpha for whole instrument is .920. According to (Sekaran & Bougie) data is reliable if value of Cronbach’s Alpha is greater than .70. As the value of Cronbach’s Alpha is greater than .920 so readability of contents and instrument is confirmed now.

4.1.5 Normality Test

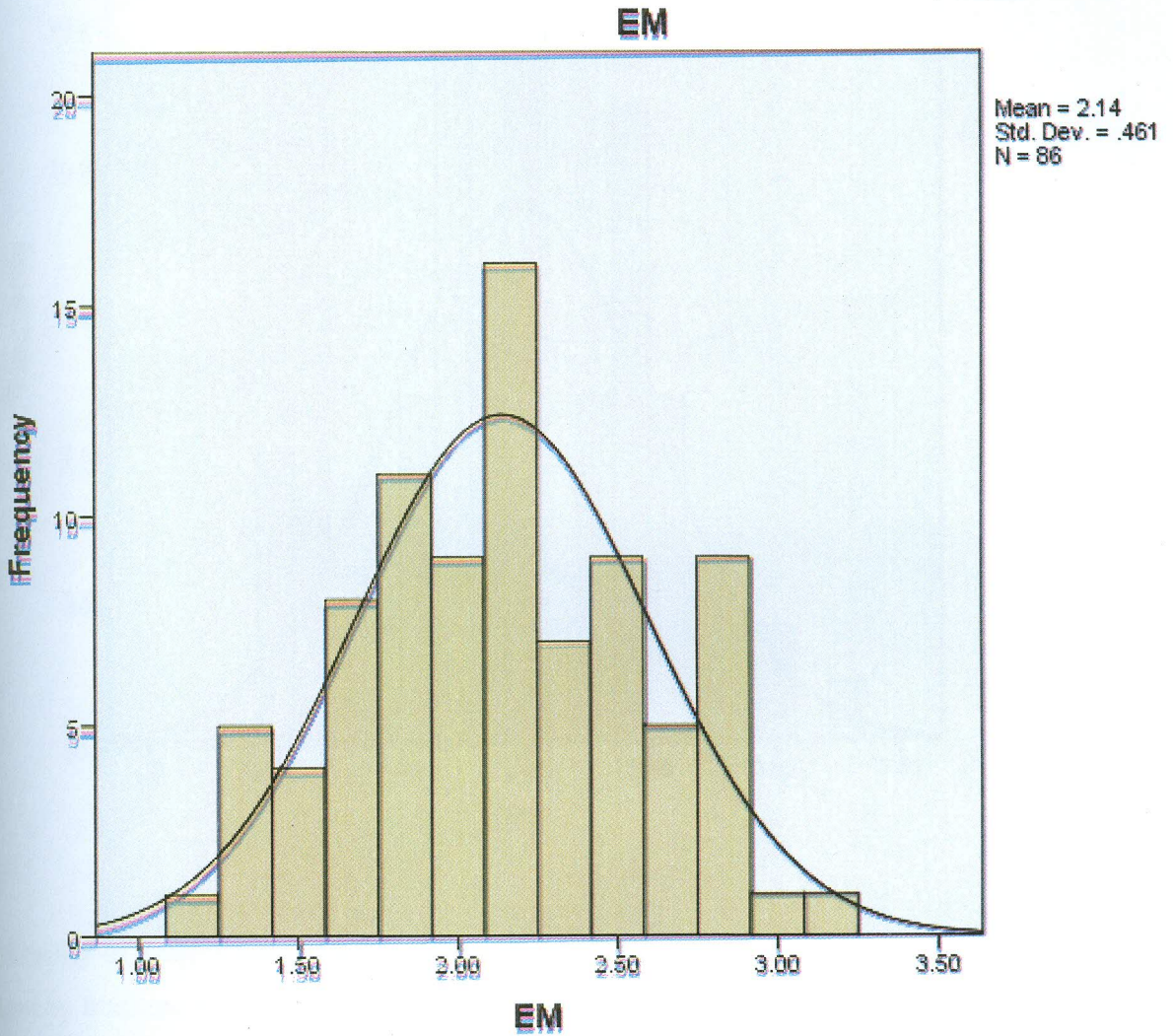
Figure 1



Normality of working conditions (Independent Variable) has been checked using histogram showing frequencies distribution along with normal curves on histogram. Figure 1 shows that data is almost normally distributed.¹

¹ Table is given in appendix as 7A.2

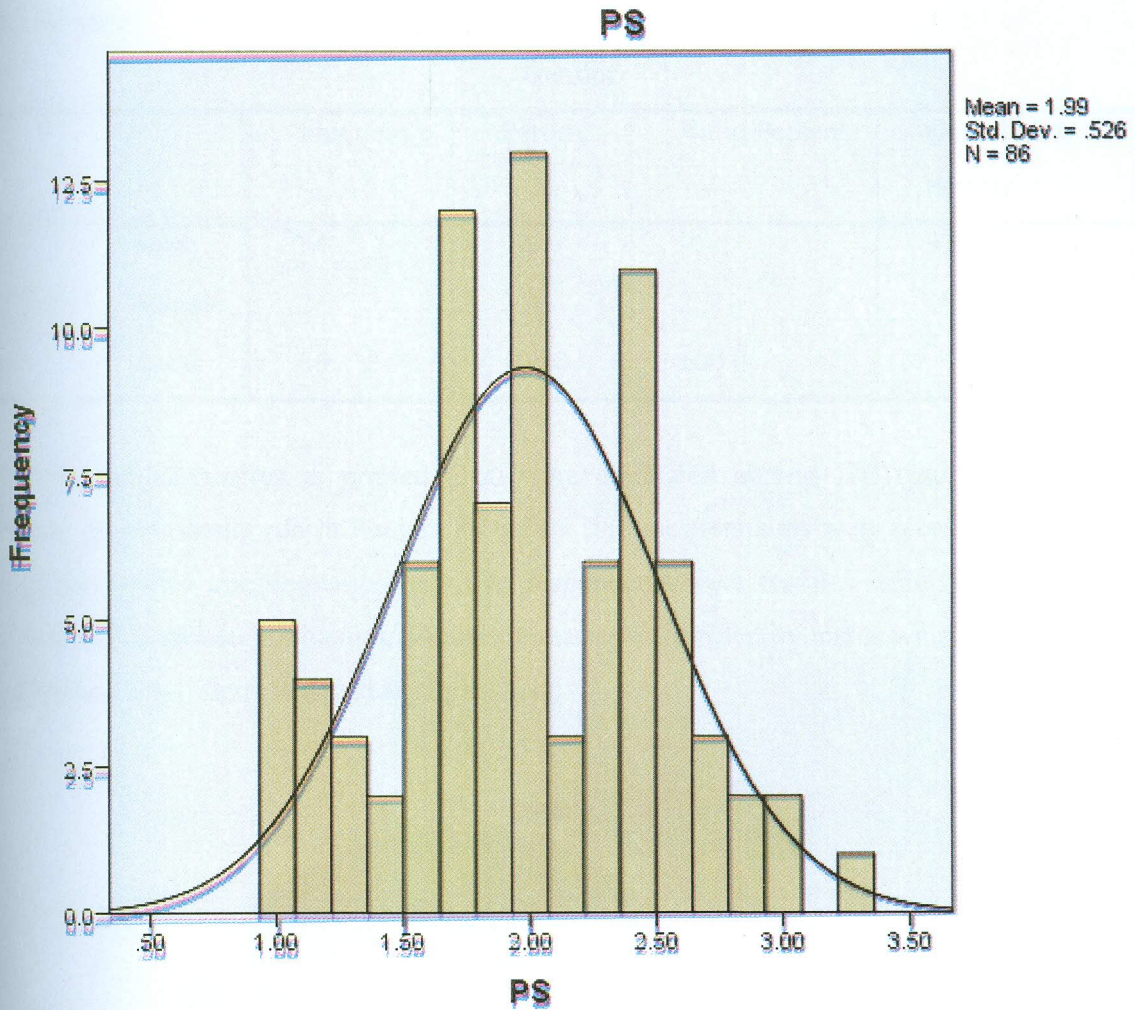
Figure 2



Normality of Environmental Management (Independent Variable) also has been checked using histogram showing frequencies distribution along with normal curves on histogram. Figure 2 depicts that data is almost normally distributed.²

² Table is given in Appendix as 7A.3

Figure 3



Normality of Project Success (Dependent Variable) also has been checked using histogram showing frequencies distribution along with normal curves on histogram. Figure 3 revealed that data is almost normally distributed.³

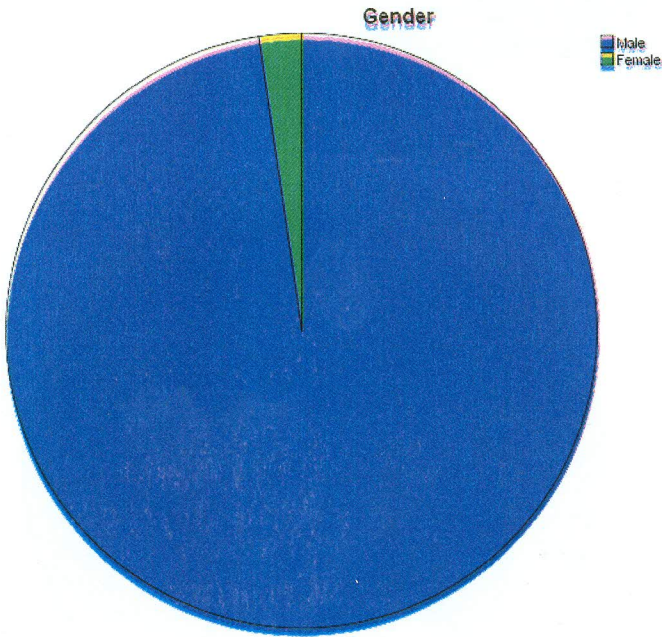
³ Table is given in Appendix as 7A.1

4.2 Demographic Analysis:

4.2.1 Gender:

Gender				
	Frequency	Percent	Valid Percent	Cumulative Percent
Valid Male	84	97.7	97.7	97.7
Female	2	2.3	2.3	100.0
Total	86	100.0	100.0	

Structured questionnaires in printed form were circulated among 100 respondents from different projects being run in Punjab. 86 out of 100 questionnaires were received back and out of these filled questionnaires only two respondents were females which comprises of 2.3% of total response. Remaining 84 questionnaires were filled by males which is 97.7% of total respondents. Same is depicted in pie chart;

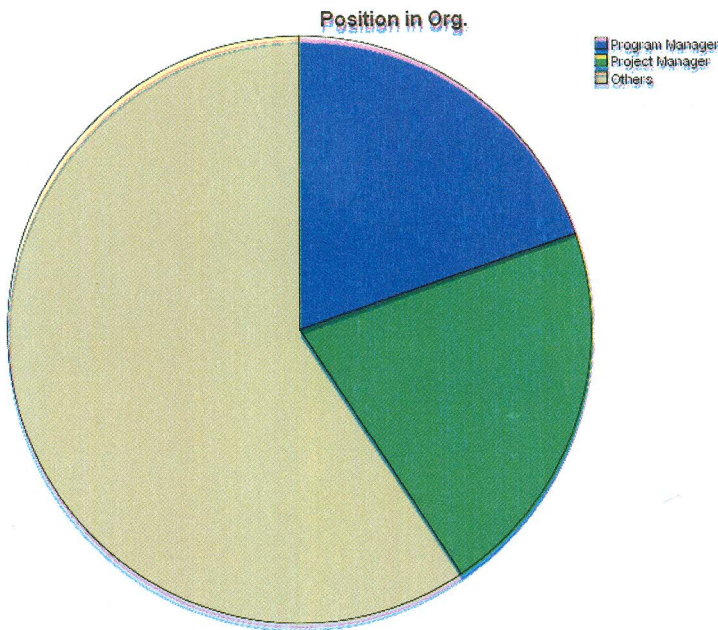


4.2.2 Position in organization:

Position in Org.

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Program Manager	17	19.8	19.8	19.8
	Project Manager	18	20.9	20.9	40.7
	Others	51	59.3	59.3	100.0
	Total	86	100.0	100.0	

In this part respondents were asked to highlight their position in organization in which they are working. Three options were available in this question; Program manager, Project Manager and others. 17 respondents were program manager which is 19.8% of total response. 18 respondents were Project Manager which is 20.9% of total response. Remaining 51 respondents fall under “others” which include; marketing manager, Admin Officer and procurement managers etc. this is major part of responses with 59.3%. Same is depicted in pie chart.

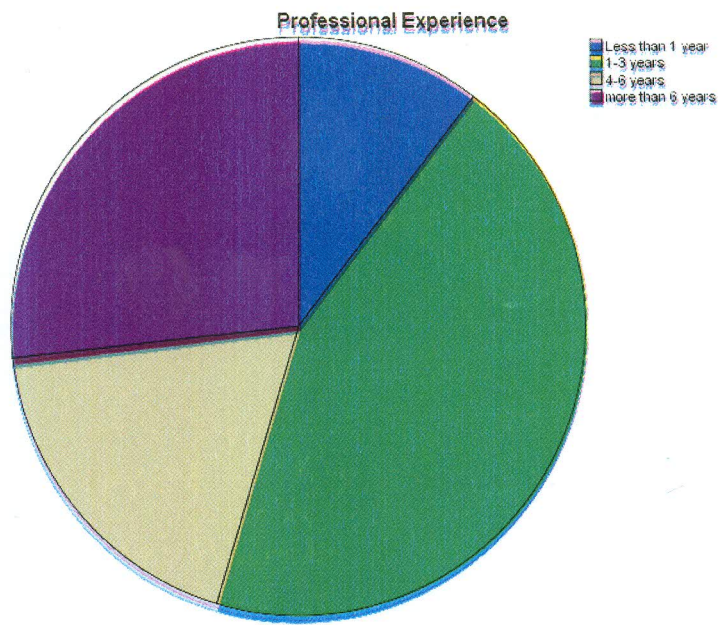


4.2.3 Professional Experience:

Professional Experience

		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Less than 1 year	9	10.5	10.5	10.5
	1-3 years	38	44.2	44.2	54.7
	4-6 years	16	18.6	18.6	73.3
	more than 6 years	23	26.7	26.7	100.0
	Total	86	100.0	100.0	

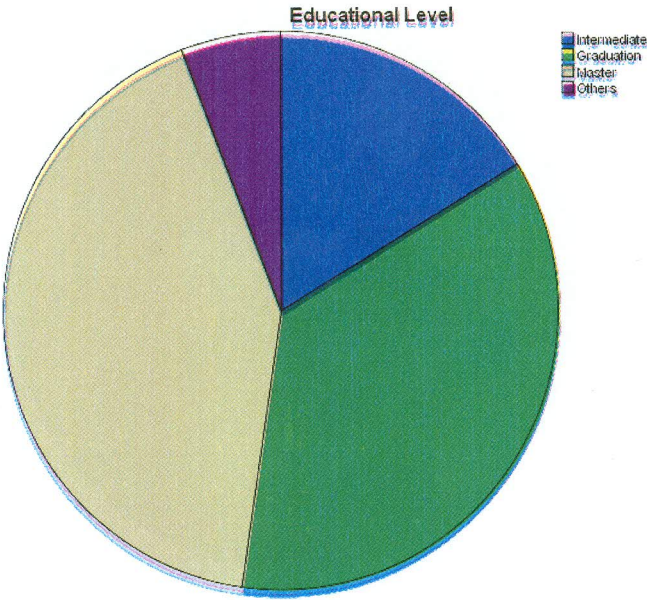
In this question respondents were asked to give answer about their professional experience with reference to construction projects. Four options were given and respondents have to select any one according to their experience. 9 respondents show their experience less than 1 year which is 10.5% of total response. 38 respondents showed experience between 1-3 years, 44.2%. 16 respondents said they have experience between 4-6 years which is 18.6% of total. Remaining 23 respondents have experience more than 6 years which is 26.7% of total response. Same is depicted in shape of pie chart;



4.2.4 Education Level:

Educational Level					
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Intermediate	14	16.3	16.3	16.3
	Graduation	31	36.0	36.0	52.3
	Master	36	41.9	41.9	94.2
	Others	5	5.8	5.8	100.0
	Total	86	100.0	100.0	

In this question was asked about their educational level. Four options were provided i.e. intermediate, graduation, masters and others which may be MS/M.phil or PHD. 14 respondents 16.3% have education up to intermediate. 31 have graduation which 36.0% is. 36 respondents has qualification as Master which is 41.9% and remaining 5 respondents fall under the option others which is only 5.8% of total respondents. Same is shown in shape of pie chart;

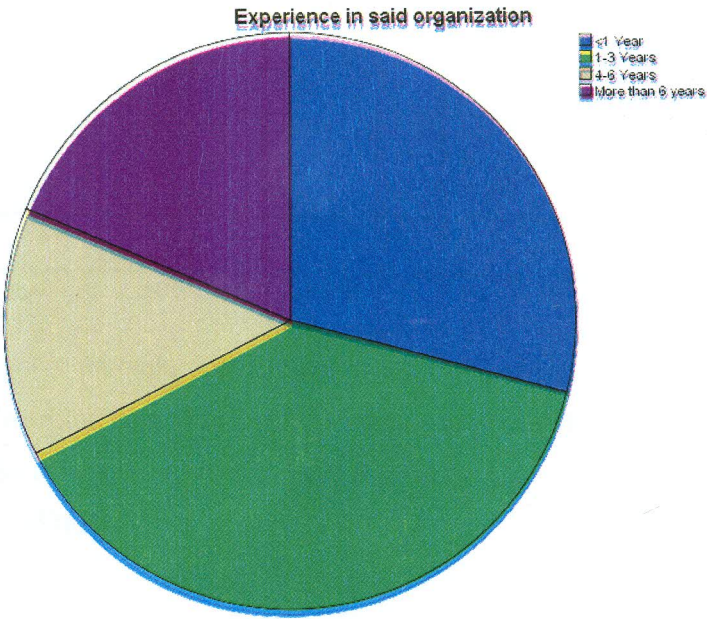


4.2.5 Experience in said organization:

Experience in said organization

	Frequency	Percent	Valid Percent	Cumulative Percent
<1 Year	25	29.1	29.1	29.1
1-3 Years	33	38.4	38.4	67.4
4-6 Years	12	14.0	14.0	81.4
More than 6 years	16	18.6	18.6	100.0
Total	86	100.0	100.0	

This question also comprises of four options for experience in said organization; less than one year, 1-3 years, 4-6 years and more than 6 years. 25 respondents said that they have less than one year experience in this organization which is 29.1% of total. 33 respondents claimed that they are working in this organization 1-3 years which is 38.4%. 12 respondents said that they have been working in said organization within 4-6 years 14.0% of total. 16 respondents replied that they have more than 6 years’ experience in said organization which is 18.6% of total respondents. Same is depicted in shape of pie chart;



4.3 Descriptive Analysis:

To test the supposition for the Regression analysis the descriptive of every item of all the variable has been tested. The descriptive analysis table is shown below stated table for every item, where the mean, standard deviation and other results are appropriate for regression analysis.

4.3.1 Correlation between working conditions and project success:

The possible values for correlations are between -1 to +1. If a correlation coefficient is near to -1 then it indicates that variables are strongly negatively associated with each other. If the value is near to +1 then we can say variables are strongly positively associated. If the value of correlation is near to 0 either on positive or negative side then it can be said there is correlation between variables positively or negatively.

Correlations

		Project Success	Working Conditions
Project Success	Pearson Correlation	1	.556**
	Sig. (2-tailed)		.000
	N	86	86
Working Conditions	Pearson Correlation	.556**	1
	Sig. (2-tailed)	.000	
	N	86	86

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

As this table shows the value of correlation is .556 between Project Success (Dependent Variable) and Working Conditions (Independent Variable) which is statistically significant at 0.01 level. So it is concluded that there is positive association between Project Success and Working Conditions.

4.3.2 Correlation between Environmental Management and Project Success:

Correlations

		Project Success	Environmental Management
Project Success	Pearson Correlation	1	.509**
	Sig. (2-tailed)		.000
	N	86	86
Environmental Management	Pearson Correlation	.509**	1
	Sig. (2-tailed)	.000	
	N	86	86

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

As this table shows the value of correlation is .509 between Project Success (Dependent Variable) and Environmental Management (Independent Variable) at 0.01significance level. So it is concluded that there is positive link between Project Success and Environmental Management.

4.3.2 Correlation between Environmental Management, Working Conditions and Project Success:

Correlations

		Project Success	Environmental Management	Working Conditions
Project Success	Pearson Correlation	1	.509**	.556**
	Sig. (2-tailed)		.000	.000
	N	86	86	86
Environmental Management	Pearson Correlation	.509**	1	.531**
	Sig. (2-tailed)	.000		.000
	N	86	86	86
Working Conditions	Pearson Correlation	.556**	.531**	1
	Sig. (2-tailed)	.000	.000	
	N	86	86	86

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

This test showed that there is positive association between dependent variable (Project Success) and independent variables (Environmental management and Working conditions). As the value of correlation between two independent variables; Environmental management and working conditions is .509 and .556 which is lesser than 1 so the relationship between two independent variables is not significant and hence proved there is not any multi-co linearity between these independent variables.

4.4 Regression Analysis:

To understand the association between environmental management and working conditions (independent variables) and project success (dependent Variable), a simple linear regression model has been used which was retrieved from SPSS. The results are given below in the table;

Model Summary

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Durbin-Watson
1	.610 ^a	.372	.357	2.952	1.823

a. Predictors: (Constant), Working Conditions, Environmental Management

b. Dependent Variable: Project Success

This model summary expressed that R=0.610, R square is=0.372 and Adjusted R square=0.357 at 0.01 significance level. In other words we can say that 35.7% variations in project success (dependent variable) is explained by two independent variables; environmental management.

The value of Durbin Watson is 1.823 which is closer to 2.00 which indicates that there is no auto correlation between variables. Hence based on statistical proofs it is concluded that there is significant association between environmental management and working conditions and project success.

ANOVA^a

Model		Sum of Squares	Df	Mean Square	F	Sig.
1	Regression	428.943	2	214.471	24.617	.000 ^b
	Residual	723.115	83	8.712		
	Total	1152.058	85			

a. Dependent Variable: Project Success

b. Predictors: (Constant), Working Conditions, Environmental Management

This table shows that the F-test is significance at .000 significance level. Its means that two variables environmental management and working conditions (independent variables) jointly have a significant relation with project success (dependent variable).

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.	Collinearity Statistics	
		B	Std. Error	Beta			Tolerance	VI F
1	(Constant)	2.985	1.623		1.839	.070		
	Environmental Management	.079	.027	.298	2.900	.005	.718	1.392
	Working Conditions	.192	.049	.398	3.875	.000	.718	1.392

a. Dependent Variable: Project Success

This table shows that on the average 1 unit change in environmental management there will be 0.079 unit change in project success which is significant at 0.01 level of significance. Furthermore if there is 1 unit change in working conditions (Independent variable) it will

result in .192 unit changes in project success (dependent variable) which is significant at 0.01 level of significance. The t-value is less than $p < 0.01$ so there is positive relationship between environmental management and working conditions (Independent variables) and project success (dependent variable). It also concluded that working conditions has more impact on project success than of environmental management.

4.4 Hypothesis Testing:

To investigate the hypothesis stated in the literature review, also to study the Correlation between the independent variables (Environmental Management and working Conditions), dependent variable (Project Success) in this study simple linear regression has been applied to test the H1. After applying simple linear regression it was concluded that there is positive association between environmental management and working conditions (independent variables) and project success (dependent variable). Furthermore it has been prove that working conditions have more impact on project success than environmental management.

5. Discussion:

This research was conducted to investigate the impact of variables such as Environmental Management and Working Conditions (Independent variables) on Project Success (Dependent Variable). Literature review used in this study has highlighted that organizations focusing on corporate social responsibility get advantages in different forms which ultimately make contributions to success of an organization. This study is unique in its nature because it will explore new dimensions for project success. This study was conducting on construction projects in Punjab. According to findings environmental management and working conditions are positively associated with project success.

As two independent variables were taken for testing these variables showed a positive response toward project success. It is pretty sure that sponsors of construction projects will have a positive attitude toward environment so that they can secure themselves from different type of complexities and litigations if their project is harmful to environment.

Another thing which is proved in this study is that better working conditions have positive impact on employees and ultimately this will result in project success because if employees are provided with better working conditions they will work hard without any fear of accidents or damages to their emotional and physical health. Resultantly project will be on schedule/time due to lesser turnover and absenteeism and it is natural if project go beyond schedule it will result in more cost. Furthermore additional cost for issues related to employee's health can also be avoided.

5.1 Implications

5.1.1 Academic Implication

Generally speaking people and researchers believe that the organizations which focus on corporate social responsibility have more likely to succeed in their operations, although this is costly. In trying to investigate the impact of environmental management and working conditions (independent variables) and project success, it was concluded that these two independent variables have positive impact on project success. This study has been conducted in developing country (Pakistan) where still there is not a proper mechanism of to

address environmental management and working conditions. Although this study showed there is positive association between independent and dependent variables but it could have more significant results if proper arrangements are made for CSR dimensions. This study is much better and helpful for those organizations which are ready to take imitative for environmental management and working conditions.

5.1.2 Managerial Implication

This paper has constantly showed there is positive association between environmental management and working conditions (independent variables) and project success (dependent variable). Following benefits can be reaped by addressing o environmental management and working conditions;

- Completion of project within scope normally.
- Completion of project within allocated time normally.
- Completion of project within allocated budget normally.
- Quality of work may be upgrade.
- Productivity increases to great extent if better working conditions have been provided.
- Employee retention for a longer period of time.
- Employee's interest in work higher and cause decrease in boredom.
- Maximum profitability.
- Satisfaction level of customers may be higher.
- Employees and customer faithfulness.
- Creation of organizational goodwill.

5.2 Conclusion:

To conclude this study, the major part of above literature review it shows that environmental management and working conditions (independent variables) have positive relationship with project success (dependent variable). It also revealed that working conditions have more impact than environmental management on project success.

5.3 Future Recommendations

Particularly this study work has been done in construction industry of Punjab, Pakistan. In this study only two dimensions of corporate social responsibility were observed. In future some other aspects of corporate social responsibility can also be taken like; community involvement, ant-corruption measures, fair labor practices. Furthermore due to time constraint data was collected only from construction industry, in future other industries may also be observed especially IT based projects. Data was collected only from Punjab in future pan Pakistan study can be done.

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7. Appendix

7A Questionnaire

Part One: Demographics

Please provide your answer by using the tick (□) mark.

2. Your Position in Organization	☐ Program Manager ☐ Project Manager ☐ Other (Please Specify)
3. Gender	☐ Male ☐ Female
4. Your Professional Experience	☐ Less than 1 Year ☐ 1-3 Years ☐ 4-6 Years ☐ More than 6 years
5. Your Education Level	☐ Intermediate ☐ Graduation ☐ Master ☐ Other _____
6. From How many years of working in this organization?	☐ Less than 1 Year ☐ 1-3 Years ☐ 4-6 Years ☐ More than 6 years

Part Two: Environmental Management, Working Conditions and Project Success

Tick (□) your answer according to given rating scale in boxes given below;

The Scale	Strongly Agree	Agree	Neutral	Disagree	Strongly Disagree
Weight	1	2	3	4	5

Questions		(2)	(3)	(4)	(5)
<u>Environmental Management</u>					
1. Environmental training courses are offered for all CEOs and Managers in your organization?					
2. Environmental training is offered to all Employees in your organization?					

3. Environmental issues are taken into account when offering the various services available at the					
4. The environmental record of suppliers is assessed in your organization?					
5. Environmental information/data are periodically reviewed and updated in your organization?					
6. Environmental communication is fostered between the staff and the managers at the Establishment in your					
7. An environmental report is prepared in order to disseminate the environmental activities carried out by					
8. Financial and operational indicators are used in order to measure and inform on the establishment's					
9. The policy of the establishment and its environmental strategy are formally communicated to all employees in					
10. Procedures are defined and documented for all activities, products and processes which have, or may have if not controlled, a direct or indirect, significant impact on the environment in your organization?					
11. There is an assessment of the results obtained by employees related to environmental impact reduction in					
12. The necessary resources are provided in order to carry out environmental improvements in the					
13. Customers' complaints and suggestions are assessed in order to improve environmental Practices in your					
14. Indicators are developed in order to gauge the customers' degree of satisfaction with environmental					
15. Low environmental impacts products are chosen in project in your organization?					
16. A suitable disposal/treatment/storage of waste is performed in your organization?					

17. Practices are implemented in order to reduce water consumption your organization?					
18. Techniques are used to reduce energy consumption in your organization?					
19. Practices are implemented towards lower resource intensity in your organization?					
20. Product re-use/recycling is encouraged in your organization?					
21. There is Lower water consumption in your organization?					
22. There is Lower energy consumption in your organization?					
23. There is Lower use of non-renewable resources in your organization?					
24. There is Lower use of toxic materials in your organization?					
25. There is Less solid waste in your organization?					
26. There are Fewer discharges in your organization?					
27. There are Fewer emissions in your organization?					
28. Efforts are made for Noise abatement in your organization?					
29. There are fewer damages to landscape in your organization?					
30. There is Lower risk of serious accidents in your organization?					
<u>Working Conditions</u>					
1. The workload in my group is evenly and fairly distributed in your organization?					
2. My job makes a positive contribution to my overall happiness in your organization?					

3. I am satisfied with my specific job assignment in this organization?					
2. There is cooperation amongst members within Project in your organization?					
5. I have confidence in the fairness of the management in this organization?					
6. Management is approachable in case of any issue in your organization?					
7. I feel there is good communication between my department and other departments within Project in					
8. I am comfortable with the balance between my work and personal life in your organization?					
9. Performance issues or disciplinary problems are handled fairly this your organization?					
10. I frequently feel overwhelmed because of the pace of technology this your organization?					
11. I am familiar with my unit's goals and objectives in this organization?					
12. The physical environment for working is safe and secure in this organization?					
13. Accidents during work are very rare in your organization?					
14. Proper heating, cooling and ventilation is available at work place in your organization?					
15. Workplace standards are fairly implemented in your organization?					
<u>Project Success</u>					
1. Projects are usually completed on given schedule in your organization?					
2. Projects are usually completed within planned cost in your organization?					

3. Projects are usually completed within defined scope in your organization?					
4. Projects are usually completed within defined quality parameters in your organization?					
5. Brand image of our firm is usually better than competing firm after completion of project?					
6. Quality provided by our organization is seemed well than competing firms after completion of project?					
7. Client is often satisfied with the final deliverable?					

Comments: _____

Your Name: _____

Organization: _____

Contact# _____

7A.3

Environmental Management

	Frequency	Percent	Valid Percent	Cumulative Percent
1	1	1.2	1.2	1.2
1	1	1.2	1.2	2.3
1	1	1.2	1.2	3.5
1	1	1.2	1.2	4.7
1	2	2.3	2.3	7.0
1	1	1.2	1.2	8.1
1	1	1.2	1.2	9.3
2	1	1.2	1.2	10.5
2	1	1.2	1.2	11.6
2	2	2.3	2.3	14.0
2	1	1.2	1.2	15.1
Valid 2	1	1.2	1.2	16.3
2	4	4.7	4.7	20.9
2	2	2.3	2.3	23.3
2	1	1.2	1.2	24.4
2	4	4.7	4.7	29.1
2	2	2.3	2.3	31.4
2	2	2.3	2.3	33.7
2	3	3.5	3.5	37.2
2	1	1.2	1.2	38.4
2	2	2.3	2.3	40.7
2	1	1.2	1.2	41.9
2	2	2.3	2.3	44.2

2	4	4.7	4.7	48.8
2	3	3.5	3.5	52.3
2	4	4.7	4.7	57.0
2	3	3.5	3.5	60.5
2	2	2.3	2.3	62.8
2	1	1.2	1.2	64.0
2	1	1.2	1.2	65.1
2	2	2.3	2.3	67.4
2	3	3.5	3.5	70.9
2	2	2.3	2.3	73.3
3	4	4.7	4.7	77.9
3	1	1.2	1.2	79.1
3	2	2.3	2.3	81.4
3	2	2.3	2.3	83.7
3	1	1.2	1.2	84.9
3	2	2.3	2.3	87.2
3	1	1.2	1.2	88.4
3	2	2.3	2.3	90.7
3	2	2.3	2.3	93.0
3	1	1.2	1.2	94.2
3	3	3.5	3.5	97.7
3	1	1.2	1.2	98.8
3	1	1.2	1.2	100.0
Total	86	100.0	100.0	

7A.2

Working Conditions

	Frequency	Percent	Valid Percent	Cumulative Percent
1	2	2.3	2.3	2.3
1	1	1.2	1.2	3.5
1	4	4.7	4.7	8.1
1	3	3.5	3.5	11.6
1	3	3.5	3.5	15.1
2	3	3.5	3.5	18.6
2	3	3.5	3.5	22.1
2	8	9.3	9.3	31.4
2	2	2.3	2.3	33.7
2	2	2.3	2.3	36.0
2	6	7.0	7.0	43.0
Valid 2	5	5.8	5.8	48.8
2	4	4.7	4.7	53.5
2	4	4.7	4.7	58.1
2	4	4.7	4.7	62.8
2	6	7.0	7.0	69.8
2	3	3.5	3.5	73.3
2	2	2.3	2.3	75.6
2	3	3.5	3.5	79.1
2	2	2.3	2.3	81.4
3	1	1.2	1.2	82.6
3	2	2.3	2.3	84.9
3	2	2.3	2.3	87.2

3	2	2.3	2.3	89.5
3	2	2.3	2.3	91.9
3	2	2.3	2.3	94.2
3	1	1.2	1.2	95.3
3	2	2.3	2.3	97.7
3	2	2.3	2.3	100.0
Total	86	100.0	100.0	

7A.1

Project Success

	Frequency	Percent	Valid Percent	Cumulative Percent
Valid	1	5	5.8	5.8
	1	4	4.7	10.5
	1	3	3.5	14.0
	1	2	2.3	16.3
	2	6	7.0	23.3
	2	12	14.0	37.2
	2	7	8.1	45.3
	2	13	15.1	60.5
	2	3	3.5	64.0
	2	6	7.0	70.9
	2	11	12.8	83.7
	3	6	7.0	90.7
	3	3	3.5	94.2
	3	2	2.3	96.5
	3	2	2.3	98.8
	3	1	1.2	100.0

7A.4 Summary of Articles used in this Study

Sr No.	Author(s) (Year)	key Variables Used in Study	Data Collection Technique used	Methodology / Analysis Tech. Used	Main Findings / Conclusion	Gap (potential for research)	How is it related to Your Study?
1	Corporate social responsibility and financial performance by Tsoutsoura, Margarita, Haas, University of California, Berkeley 2004	CSR and Financial Performance	Data collected from websites of companies	KLD Data Rating, Domini 400 Social Index Cross sectional Analysis	Positive Linkage between CSR and Financial Performance	Extended data can be used to explore further research	CSR is main concern for my research work, Environmental Context and Working conditions also prevailing in this article.
2	The impact of corporate social responsibility on Financial performance: Evidence from business in Taiwan by Chin-Huang Lin, Ho-Li Yang, Dian- Yan Liou	CSR, Financial Performance	Data Collected from Top 1000 companies websites in Taiwan	Calculation of Rate of Return, Return on Investment, Jensen Measure, Treyner Measure, Sharpe measure, MCV Measure	No positive linkage between CSR and Financial Performance in short Run but can reduce the risk to brand evaluations in long run	The consideration of environmental complexity and dynamism as moderators is an important start	Impact of CSR is discussed in this article

3	JEAN B. McGUIRE, ALISON SUNDGREN	CSR, Financial Performance	Data Collected from Fortune magazine annual survey	Regression Analysis	Positive link between cost reduction by reducing risk of litigation, penalties etc and CSR	Prior Firm performance was not calculated	Impact of CSR is discussed in this article
4	PETRA CHRISTMAN N Aug 2000	EM, Cost Advantage	Questionnaire Based	Ordinary Least Square Analysis	Best Practices for Environmental Management Doesn't lead to cost advantage for every firm		Literature Review for Environmental Management was presented
5	Chad Nehrt 1996	Timing and Intensity effect of Environmental Investment	Questionnaire Based	Ordinary Least Square Analysis			Literature Review for Environmental Management was presented
6	L. Y. Shen*, Vivian W. Y. Tam	Environmental Management					Literature Review for Environmental Management was presented
7	Tariq S. Abdelhamid 2000	Unsafe Conditions and Construction Accidents					Literature about working conditions is discussed

8	The effects of quality and environmental management on competitive advantage; Jose F. Molina-Azorín, Juan Jose Tarí, Jorge Pereira Moliner Eva M. Pertusa-Ortega*, María D. Lopez-Gamero,	Quality Management, Environmental Management, Competitive Advantage	Mixed Method Approach, Qualitative and Quantitative Study Semi-Structured Interviews + Questionnaire based data collection	OLS Regression Analysis	Quality Management and Environmental Management has significant positive effects on quality performance which ultimately results in competitive advantages.	Culture or other resources may play a vital role but in this study this has been ignored.	This paper is most relevant to my study because Environmental management is discussed in detail which is attributed as independent variable In my study and Questionnaire used in my research work has been adopted from this study.
9	Environmental Regulation and Competitiveness of U.S Manufacturing : Adam B. Jaffe, Steven R. Portney, Robert N. Stavins 1995	Environmental Regulation. Firm's Cost of Production, International Trade	Just literature review	Not given	Little influence of Environmental regulations on Competitiveness		Literature Review for Environmental Management was presented

1 0	Critical Success factors in R&D Projects , Jeffery K. Pinto and Dennis P. Slevin						
1 1	Project Management Research- The Challenge and Opportunity						
1 2	Defining Success for Software Projects, Nitin Agarwal, Urwashi Rathod 2005	Project Success Dimension Scope, Cost, Time and Quality	Questionnaires through emails	Chi-Square Test	Accomplishment of Scope Quality and Functionality most important criteria for success, Between Functionality and quality, Functionality has is considered to be most important criteria for project success etc.	Study is only based on Indian software industry; two success criteria's mentioned by respondents were missing; customer satisfaction and project criteria.	Literature with reference to dependent variable project success was presented.
1 3	Consumer Reaction toward corporate social responsibility; Yaprak Anadol Mohamed A. Yousef Eappen Thiruvattal 2015	CSR Awareness of consumer, Work Preference, Social Activism Variable,	Consumer survey	Pearson Chi-Square Test	it has been found that consumer's boycotting behavior complaining to company, and complaining to government		Corporate Social Responsibility Literature has been discussed

						are significantly related.		
14	Performance Indicators for successful construction project performance by Roshana Takim and Akintola Akintoye	Success factors, project performance and project success	based on Previous Literature	Correlations	Different key players of project will be helpful for success of project	Literature with reference to dependent variable project success was presented.		
15	Project management: cost, time and quality, two best guesses and a phenomenon, its time to accept other success criteria by Roger Atkinson 1999	The Iron Triangle; Cost, Time and Quality	based on Previous Literature	Based on Previous Literature		Literature with reference to dependent variable project success was presented.		
16	The Logical Framework Method for Defining Project Success by David Baccarini	Project Management Success, Product Success and Customer Satisfaction	based on Previous Literature	based on Previous Literature	Three components of project success has been concluded; meeting the project goal,	Literature with reference to dependent variable project success was presented.		

	1999					project purpose and stakeholders expectation		
17	"Does it pay to be different; Analysis of relationship between CS and financial performance" by Stephen Brammer 2008	Charitable Donations = f (Size, Industry, Labor Intensity, Resources)	Longitudinal data samples extracted from annual reports	Regression Analysis	Higher Financial Performance by investing in corporate social responsibility.	Literature Review regarding CSR is presented in this study.		
18	How corporate social responsibility pay off by Lee Burke and Jeanne M. Logsdon 1996	Strategy definition, Strategy dimensions and strategic outcome	based on Previous Literature	based on Previous Literature	customer loyalty in term of future purchases, gaining productivity, New product or market development, advantage in meeting urgent needs	Corporate Social Responsibility Literature has been discussed		
19	Why operatives engage in unsafe work behavior: Investigating factors on construction sites by Rafiq M. Choudhry	Management, Safety Procedures, Psychological features, economic features, self esteem, experience, performance	Qualitative Research, Interview + questionnaires	Literature based study	It has been observed that unsafe behavior is combination of many factors; which may include human and situational or	Literature about Working conditions		

	and Dongping Fang 2008	measure, perceived risk, working environment, job security and education and orientation and training			environmental aspects.		
20	Effects of best practices of environmental management on cost advantage, the role of complementary assets by Petra Christmann 2000	Environmental Management and cost advantage	Questionnaire Based	Ordinary Least Square Regression Analysis	Environmental management has positive impact on cost advantage	Broad spectrum of environmental strategy should be used in future research	Literature with reference to environmental management is used
21	Critical Success factors for different project objectives by D. K. H. Chua 1999	Project Characteristics, Contractual Agreement, Project Participants, Interactive Processes. Critical Success factors for project	Questionnaire Based	Chi-Square distribution Test	Several Critical Success factors have been identified in this study	CSF factors may also be limited in this study	Literature with reference to project success has been identified in this study
22	The real success factors on Project by Terry Coke-Davies	Critical Success factors for project	based on Previous Literature		Several Critical Success factors have been identified in this study		Literature with reference to project success has been identified in this study

2 3	The stakeholder theory of corporation: Concepts, evidence, and implications by Thomas Donaldson	Aspects of stakeholder theory, Normative, Instrumental, Descriptive	based on Previous Literature			Literature with reference to corporate social responsibility has been identified in this study
2 4	Participative versus assigned production standard setting in a repetitive Industrial Task: A strategy for improving worker's productivity by Biman Das and Ashraf A. Shikdar 2015	Assigned working standards vs participative working standards	Survey based	Analysis of variance, Analysis of covariance student Newman-Kuel's (SNK) range test	Participation in decision making has been motivating factor in management, performance has been improved by participative standard setting	Literature about Working conditions has been discussed
2 5	Environmental Management system and environmental performance results in a higher stock price? By Stanely J.Feldman, Peter A.	Environmental Management system, Environmental Performance, Environmental Signaling, Firm Risk, Firm Value	Conceptual Model based on previous studies have been used	Regression Analysis	EMS may contribute positively on environmental performance	Literature with reverence to environmental management is presented.

	Soyka and Paul G. Ameer 1997	Environmental emissions	Survey based		input-output model of US economy	several types of emissions to environment highlighted form construction projects		Literature with reference to environmental management is presented.
26	Resource use and Environmental emissions of U.S construction sectors by Chris Hendrikson 2000	Environmental emissions	Survey based		input-output model of US economy	several types of emissions to environment highlighted form construction projects		Literature with reference to environmental management is presented.
27	Firm Performance by CLYDE EIR'IKUR HULL* and SANDRA ROTHENBERG 2008	Corporate Social Performance, Performance, Innovation			Multi-Variate Regression Analysis	Corporate social performance positively impact firm's financial performance	Study is based on secondary data only and ignored subjective factors that may influence managerial decisions.	Literature with reference to environmental management is presented.
28	Project Success as a topic in Project Management Journals by Lavagnon A. Ika 2009	Project Success and Critical Success Factors (Time, Cost, Quality)	Questionnaire Based		Multiple Linear regression analysis	Difference between Project Success and Project management success has been identified		Literature with reference to project success is presented.
29	The effect of job characteristics	Job Characterizes, working	Questionnaire Based		Multiple regression analysis	Better working conditions		Literature about Working

	and working conditions on job Performance by Emin Kahya 2007	conditions and job performance			lead to better performance	conditions has been discussed
30	The impact of Environmental Management on Firm Performance	Environmental Management, Environmental Performance, Financial Performance		Ordinary Least Square	Positive impact of environmental management on firm's performance	Literature with reference to environmental management is presented.
31	Between transient constructs and persistent structures: designing systems in action by G.F. LANZARA 1999					Literature about Working conditions
32	Criteria of Project Success: an exploratory re-examination by CS Lim and M Zain Mohamed	Project Success framework Micro and Macro view	Survey based		Project Success is dependent on perspectives	Literature with reference to dependent variable project success was presented.
33	A perspective based understanding of Project	Multidimensionality, Scope, Temporality, Perspective,	Longitudinal case study		Project outcomes are perceived differently by	Literature with reference to dependent

	Success by Laurie Mcleod, Bill Doolin, Stephen G. Macdonell	context			different stakeholders		variable project success was presented.
3 4	Corporate Social Responsibility: A theory of the Firm Perspective by Abigail McWilliams, Donald Siegel						Literature about CSR is presented in this study