CAPITAL UNIVERSITY OF SCIENCE AND TECHNOLOGY, ISLAMABAD

Impact of safety leadership on project safety compliance, with mediating role of attitude towards safety and moderation of safety consciousness

by

Mariam Ashraf

A thesis submitted in partial fulfillment for the degree of Master of Science

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Dedicated to my uncle Mr. Amir Husain for his never ending support and unconditional love

CAPITAL UNIVERSITY OF SCIENCE & TECHNOLOGY
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CERTIFICATE OF APPROVAL

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Abstract

The purpose of the study is to investigate the impact of safety leadership on project safety compliance in project-based organizations. Safety in the projects is significantly increased when project leader express a high degree of involvement in every task and activity of the project by supporting the safety ideas for employees through giving them training for safety measure and precautions.

Data were collected from a sample of 248 respondents from the project based organizations of Islamabad and Rawalpindi. Findings of this study show that safety leadership on project safety compliance has a positive and significant effect on attitude towards safety in project. Results of the study also show that safety leadership on project safety compliance has a positive relation with the attitude towards safety, as sharing of safety ideas is enhanced by the proactive participation of the project leader. Along with safety consciousness also has a significant relation with the safety in project. Findings of the study also show that attitude towards safety acts as a mediator between the safety leadership and project safety compliance. Whereas safety consciousness was tested as a moderator in this study, however this hypothesis was accepted as well.

Key words: Safety leadership, project safety compliance, attitude towards safety, safety consciousness.

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Chapter 1

Introduction

1.1 Background

The vast majority of workers in developing countries take for granted that going to work on a daily basis is an activity that does not compromise their physical safety. Safety has much been observed as how much accident prone a worker is at his workplace, the ergonomic aspect has been dominating the concept of safety at workplace. Safety has been associated with equipment's, machines emanating from the increasingly complex nature of sociotechnical systems (Martin and Lewis, 2014). More specifically, safety has remained a concept held by managers and it is not fully disseminated to its subordinates, and managerial measures cannot be fully implemented to take effect on workplace sites (DeArmond, Bass, Cigularov, Chen & Moore, 2018). Despite the extensive array of outcomes associated with leadership (e.g., Avolio, 1999; Bass, 1998), there is limited research on its possible effects on occupational safety. We suggest that this is a critical omission for two reasons. First, there are indications that leadership is associated with safety (Hammer et al., 2016; Butler & Jones, 1979; Dunbar, 1975; Pilbeam, Doherty, Davidson & Denyer, 2016); organizations in which leaders take an active role in promoting occupational safety enjoy better safety records (Petitta, Probst, Barbaranelli & Ghezzi, 2017; Drach & Somech, 2015), and supportive supervision in general is associated with safety at work (see Dunbar, 1975).

According to Mullen, Kelloway, & Teed, (2017) employer safety obligations, role of leadership and their interactive effects on employee safety performance should be taken into consideration by the management. Ostrom (1993), argues there must be a best safety environment because of the work-related injuries happen on the daily bases on and off it may be on a construction site, the organization, or factories any kind of working area employee do face the problem. When employees are working in a safe environment their behavior towards safety (Katz-Navon, Naveh, & Stern, 2005; Lucian Leape Institute, 2013) will be totally different they measure their safety every time, as the employees may ask for help when they are facing any kind of unaware difficulties. Worthy organizations always heir those people who can identify the problem and sort it out for the employees those who are working there, they are innovative and have the plan for the workplace problems.

Viable administration assumes a vital job in guaranteeing the accomplishment of impermanent associations confronting a high level of weakness, which compares to the attributes of development ventures (Tyssen et al., 2014). The role of leader for safety concerns has been highlighted by Jaussi & Dionne (2003) and Carmeli, Gelbard, & Gefen (2010). They have argued that leader is the one whose provide the time, capital and necessary arrangement for the safety issues at workplace (Reiter & Illies, 2004).

Human misfortune is inexplicable, any injury or death at worksite can change life forever for families, companions, networks, and collaborators as well (Donovan, Salmon, Horberry & Lenn,2018). Body related wounds and illnesses can provoke important difficulties for the families in which they happen. Occupation safety is a collaboration and can be accomplished via preparing and training (Koehn et al., 1995). As most labors in established states assume their companies will take care of them at the finish of the day they return home safely but still all the injuries and death rate is remain the same at the alarming stage, for the creative outcome the good leader always inspire their followers and as we know the leader is a person who have that qualities to get work done in a mean time because he delegates and influence other to act. He make the workers to follow him and obey the safety measures while doing the work did he force them to were the caps, boots, gulfs etc

(Zhang et al., 2018).These problems cannot be completely ruled out, but any safety measures can definitely reduce or minimize the chances of occurrences. These problems are in turn attributed to construction managers' lack of safety leadership (Tam et al., 2004; who is responsible for safety performance in highly hazardous and complex working environments (Flin and Yule, 2004). Safety is the major issue in the organizations so everyone is concerned and participate to speak out their problems (Chemers, 1997). Safety leadership is a process of influence to achieve the organizational safety goals through which leader interact with the followers and provides necessary aid and support (Mumford & Hunter, 2005; Shalley & Gilson, 2004; Woodman, Sawyer & Griffin, 1993). An organization's safety environment is focused through the supervisory leadership group that makes, helps and bears a company's life to the best quality (HSE, 2008). Some supervisor fixe the goals and vision through the strategy which direct them and they constantly emphasize them to do the safety measures for the employees and the organization misfortunes occur because of hazardous conduct and human mistakes.

Safety consciousness is an individual level contribution that reflects employees' perceptions of the organization's policies, procedures, and practices concerning occupational safety and helps employees to make sense of the priority accorded to occupational safety within the organization. Although previous research has shown that Safety conscious predict safety knowledge and motivation (Griffin & Neal, 2000) and safety behaviors (Hofmann & Stetzer, 1996; Neal, Griffin, & Hart, in press), much less research has addressed Safety conscious as a moderator. When individual safety consciousness is raised and management actions result in favorable perceptions of the safety climate, safety-related events are minimized. In turn, these safety-related events directly predict occupational injuries such as lacerations, strains, sprains, or burns. This notion is supported by the estimate that for every injury, there are significantly more more close calls or near misses (Wu, Zou, & Fang, 2016).

The foundation of clear and exact duty and expert will encourage every last individual at different levels to play out his/her task unambiguously. The organizational culture might help to explain the organizational behavior for safety which is

implemented by the safety leaders, and that the management and organizational factors could influence safety performance as suggested by Sorensen (2002). An appropriate structure will enhance the proficiency of correspondence between aggregate individuals, according to Chenge et al., (2003). Individuals are not safety conscious in Pakistan in view of their reckless conduct and the instruction issues and are seen to act carelessly. Lessening injuries reduce cost to business. If a worker is harmed at work, it costs the organization in lost work hours, absenteeism and reduced productivity (Veltri, Pagel, Behm, et al., 2007). Security initiatives decidedly influences workers' safety conduct and dispositions, lessens damage rates and protection premiums, and adds to expanded profitability by reducing accident incidents. Operational and safety talent go as an inseparable unit. Organizations that are great at overseeing safety additionally oversee tasks well (Fernnde, Montes &Vzquez-Ords, 2009). Absence of confidentiality is among the most essential factors that come up short safety progress designs at working environment. Because of the safety for the employees the organization always measure the dimension of the strategic structure which is in the organization (Blewett et al., 2012).

To give the instruction to every one of the laborers of their safety and security so their mentality is change from unsafe conduct to safe conduct, (Cooper, 2015). With the goal that they watch safety directions keeping in mind the end goal to create safe conduct while making a culture that backings and elevates safety and security to wind up a decent innovator in the field of development creator need to know the safety measure in development field the promised worker is playing out a pioneer part (Wright, 2018)

Then again, various safety mishaps and experiences are accounted for every once in a while in the daily paper, including, for instance, understudies being struck by vehicles, roof tiles falling, work out/sports wounds, lab injuries, and so forth., all of which raise the alert for the significance of security culture in foundations and schools; in this way showing the requirement for more consideration (Judge and Bono, 2000). The need to comprehend institutional security culture as for chance administration, mischance counteractive action and crisis conventions provoked the creators to lead overviews at two organizations. Our fundamental goal was to

distinguish a level of comprehension for influential positions in reinforcing well-being measure and to give recommendations to change (Schein, 2004).Ostrom et al. (1993) concurred that remunerating people who point out security issues and are sufficiently creative to find safety risks as an impression of good security culture. This is additionally bolstered by Weigmann (2002) and Vredenburgh (2002). Stringer (2002) utilized "acknowledgment" rather as one of the climatic measurements where high acknowledgment atmospheres are described by a suitable adjust of reward and feedback. In this examination, we create, test, and duplicate a model connecting security particular authority and word related wounds. Security administration influences basic subordinate mentalities and business related results. These incorporate trust in administration (Jung and Avolio, 2000; Pillai, Schriesheim, and Williams, 1999), authoritative responsibility (Barling, Weber, and Kelloway, 1996), fulfillment with initiative (Hater and Bass, 1988), work execution (Barling et al., 1996; Howell and Hall-Merenda, 1999; Judge and Bono, 2000), solidified specialty unit execution (Howell and Avolio, 1993), and the adequacy of shop stewards (Kelloway and Barling, 1993). The typical form of injuries that the workers face breaks, disengagements, sprains, and strains, wounding and pounding, shallow injuries (i.e., scratches and scraped spots); open injuries (i.e. cuts, gashes, and punctures) burns; eye wounds; and blackouts and other head wounds (Eisenberg and McDonald, 1988; Pransky et al., 1999).Work conditions, age, instructive status and safety preparing, background, smoking, psychosocial factors, move of work, speed of work, are altogether assigned as consciousness components. Asfahl (1999) expressed with a specific end goal to avert gear disappointment from abuse and over-burden examination of framework, gear and instruments must be completed before the beginning of work by Safety Manager. Abdelhamid and Everett (2000) included that consistent observing of security wears compliance what's more, confining extensive buy approach are obligation of safety division. The arrangement and viable utilization of safety wears is huge component as far as mishap avoidance what's more, control on building locales.

The term safety compliance is utilized to portray the center exercises that should

be done by people to keep up working environment safety. These practices incorporate sticking to standard work practice and wearing individual defensive hardware.The safety and security conduct has various ramifications for training. One of the significant ramifications identifies with the manner by which specialists consider the determinants of security. Previously, security mediations have tended to center around expanding compliance with safety controls. A verifiable suspicion which is frequently made is that compliance issues are caused by poor safety environment. Hence, a considerable lot of the security programs that are actualized in industry have utilized methods, for example, criticism and motivating forces to change the compliance and training. Our model proposes that supervisors should consider interest well as compliance, and recognize the signs and bases of these practices. On the off chance that an association has an issue with poor compliance or support, at that point it is vital to understand why, what's more, center on the intervention to the particular game plan of indications and determinants that are keeping up the issue (Neal and Griffin, in press). For example, if the issue is caused by a nonappearance of data or bent, by then this prescribes the director should focus on getting ready, and maybe decision. If the issue is caused by motivation, by then there is a wide extent of individual and normal parts that could be the purpose behind the issue, including expert, air and work setup, and also particular perspectives or character. In addition, if an executive is trying to change one particular direct, by then she or he needs to consider how that intervention will impact other safety hones.

Research shows that if anyone is undertaking to make delegates more pushed to take after safety enhance, by then it is basic to evaluate whether the intervention will badly impact inspiration to take part in participatory security exercises. Safety is the initial part of any organization to take the measures first and the construction industry is the most dangerous part of it Criticism and motivation outlines that emphasis on compliance risk decreasing. Safety information system was one of Reason (1997) critical subcomponents of safety culture, as applied to limiting organizational accidents.

1.2 Problem Statement

Organizations have a duty to present near steps in the working environment to shield their employees from parts of the workplace that are difficult to safety. The dangers postured by our working conditions whether it is a manufacturing or building site is huge. Especially, when we talk about Pakistan we are socially exceptionally fearless and are not security conscious. Along these lines, Safety is an important concern for organizations, as it is a source of considerable immediate and indirect expenses. Development is constantly unsafe in light of open air activities, work-at statures, entangled nearby and gear task joined with workers mindsets and practices towards safety.

The mediating role of attitude towards safety is still unexplored in order to define the impact of safety leadership on project safety compliance in construction organization. Also safety consciousness has not been used as a moderator between attitude towards safety and project safety compliance in to measure the safety compliance of workers, so this is the novel domain which has not been studied yet along with all the variables (safety leadership, attitude towards safety, safety consciousness, project safety compliance)

1.3 Gap analysis

The present study is addressing several theoretical and contextual gaps in the literature of Safety Leadership, attitude towards safety and Safety compliance and safety consciousness as a moderator. Safety compliance is an area of concern for all styles of leadership. Organizations are also playing their role in enhancing safety compliance and reducing workplace mishaps. But for successful implementation the role of leader as well as worker, both is important.

The present study is response to call by Kunle et al., (2018) to improve channels of safety on site, and ensure that safety needs for each construction projects are well communicated with site operatives in order to avert current challenges experienced on Project sites. The study responds to call for research on engagement of Safety

measures on construction site and suggests that one Safety Manager should be employ on every construction sites leaders (Khan, Ahmad & Ilyas, 2018). Finally the study proposes safety consciousness as one potential moderator to diminish mishaps' and push our insight into how to make more secure work environments. (Lucian Leape Institute, 2013).

There is a still more room to study these variables in the context of Pakistan by using these variables together to become more secure environment for the workers. Furthermore, Clarke (2010) demonstrated that representatives' view of administration (extensively characterized) indirectly affected wellbeing practices (counting both cooperation and consistence) incompletely interceded by apparent state of mind towards security. Given that administration impacts workers through the molding of condition observations, it is normal that apparent security atmosphere will somewhat intervene the impacts of authority style on safety practices.

1.4 Research Question

In view of the above expressed issue articulation, the present examination intends to look for answers for the accompanying inquiries:

Question 1: What is the relationship between safety leadership and project safety compliance?

Question 2: Does attitude towards safety mediated the relationship between safety leadership and project safety compliance?

Question 3: Does safety consciousness plays a role of moderator on the relationship of attitude towards safety and project safety compliance?

Question 4: Does the safety leadership will decrease the injuries in the construction sites?

1.5 Research Objectives

The general target of the examination is to create and test a coordinated model to discover the connection between safety leadership and project safety compliance. Likewise attitude towards safety is proposed a critical mediator to improve the connection of safety leadership and project safety compliance. The proposed connection between the independent, mediating, moderating and dependent is appeared in the exploration model of the investigation.

Specific objectives of the study are as follows:

- To find out the relationship between safety leadership and project safety compliance.
- To discover the mediating relationship of attitude towards safety between safety leadership and project safety compliance.
- To find out the moderating role of safety consciousness between attitude towards safety and project safety compliance.

1.6 Significance of the study

Safety issues at site has always been a dominant area of concern for researchers. In order to ensure safety measures in projects through effective presence of the leader, this research will hold significance for the organizations to develop safety measures in Pakistan. The individuals who are associated with the construction tasks and projects that will portray more realistic image of how lack of safety measures has influenced our work practices. Research on safety leadership's impact on project safety compliance is much needed area to be researched in our culture where the workers don't have access do the basic safety kits. This study introduces attitude towards safety as a mediator and moderation of individual safety consciousness. Hence developing of a model including determinants and outcomes will hold great significance in theoretical literature of safety leadership and related variables.

This study is very significant because the life of labor is very important of the construction companies and their families because he's the only working hand for his family the poverty ratio is very high in Pakistan labor cannot spend on their own for safety they are the backbone for the construction companies it is the responsibility to leader (contactor) to take the safety measures for the labor he have to impose them to care for their skillful mind and body Due to the positive relation trust in leader (contractor) is developed In country like Pakistan but also it is a high power distance culture where safety of labor is not important and appreciated, contractor need more money and make more money so he have that hard mind and heart for money to spend on labor so this will be a very interesting and strengthen study.

1.7 Supporting Theory

1.7.1 Theory of Planned Behavior

The theory expresses that state of attitude towards behavior, together shape a person's social practices. The idea was proposed by Icek Ajzen. This theory depicts the behavior of the person that is determined by our attitude. The theory does not completely encompass all postulates, but we borrow the environmental influence in the form of influence of safety Leadership.

Attitudinal aspect of theory refers to the degree to which a person has a favorable or unfavorable evaluation of the behavior of interest. It entails a consideration of the outcomes of performing the behavior. Our Model adapts Safety towards attitude in this domain of the theory. The Project Safety Compliance is the Behavioral intention. This refers to the motivational factors that influence a given behavior where the stronger the intention to perform the behavior, the ore likely the behavior will be performed. The influence of Subjective norms cannot be ignored as it is the belief about whether most people approve or disapprove of the behavior. The belief makes us more or less conscious about our act or behavior. It relates to a person's beliefs about whether peers and people of importance to

the person think he or she should engage in the behavior. Being safety conscious where everyone around is less aware of it, will influence the individual disposition of being Conscious towards safety.

Perceived behavioral control was not taken into account in out framework, which adds to our limitation of complete support of theory. This construct of the theory was added later, and created the shift from the Theory of Reasoned Action to the Theory of Planned Behavior.

Chapter 2

Literature Review

2.1 Safety leadership and project safety compliance

Safety leadership is defined as the process of interaction between leader and followers through which leader can exert their influence on followers to achieve organizational safety goal. Safety leadership is broadly perceived as a basic element of business achievement. Ineffective safety Leadership slowdown the capacity of some companies to accomplish business activities because of not using safety measures swear mishaps and injuries happen or may be it lead to death Organizations that are great at addressing safety also address activities well. Some portion of culture in unsafe organization identifies with security, which was dewed by Reason (2000) that is "capacity that people associate to manage dangers and security issues in order to stay away from harm or misfortunes yet still accomplish their objectives". The convictions and qualities that suggest uncommonly to safety and security frame some division hierarchical environment suggested to security environment (Clarke, 1999)

That is seen by the administration apparently offers broad preparing on the grounds that it is focused on worker safety, as opposed to just to agree to outside gauges, saw safety leadership is improved. Correspondingly, view of safety leadership will be more favorable when more work is viewed as proper by workers

(Zohar, 1980) Every time there are safety issues with employees and the company have to bare the problems the company advantages of a fruitful agenda have been found to add in benefits, enhance character and picture, and diminish protection premiums. In particular, the advantages will diminish mishaps at work locales (Koehn et al., 1995). That expansion for the attention to security through development organizations, as indicated by Wilson et al. (2000), that credited for numerous variables. All the development business must perceive the connection among chance administration and the degree of profitability (Davis, 1998, as referred to in Wilson et al., 2000). The regularly expanding expense for treatment, recovering consideration, and that is possible for claims such signify higher protection amount, thus have a tendency to negatively affect an organization's benefit (Heinz et al., 1998). What's more, the noteworthy of safety program is additionally featured the International Labor Office (ILO) will considers security culture and administration framework way to deal with be fundamental components for the change of execution (Mandorf, 2000).

Representatives view of administration's sense of duty regarding safety, of kindred workers' cooperation in security, and of the adequacy of instruction and preparing deeds on the part of administration have shown a positive effect on security results. The writing recommends that workers' impression of these elements impact their probability to agree with safety and security approaches and manages (Bailey, 1997).

That we have to under mind the relationship of singular leadership side and security is critical for both hypothetical and down to earth reasons. To start with, the hidden instruments by which administration may impact security are not yet surely knew (Zohar, 2011). But we have to plan for our work life safety and security for our family at the back. As authority is frequently conceptualized as a multidimensional build (Bass, 1985), it is very conceivable that distinctive parts of initiative may influence safety in various courses and for various reasons. At the end of the day, there might be different ways between pioneers' conduct and workers' security results, which are darkened when initiative is dealt with as a

unitary build. Without a doubt, there is conditional proof in the exploration writing to recommend a few such ways (e.g., Bruch and Walter, 2007), which we will examine in more detail underneath. Building up whether one, a few, or all features of initiative have special impacts on safety can give helpful knowledge about the many-sided quality of the connection between these factors and give a system to future hypothesis improvement. Further, from a practical point of view, deciding the relative commitments of individual initiative features to wellbeing can help analysts and professionals in growing better intercessions. In the event that a few features are considerably more imperative than others in foreseeing results, it is coherent to target assets toward building up the most critical aspects. Assuming, in any case, all features make one of a kind commitments, a far reaching advancement approach is required.

Leader always measure the organizational dimension for the assignment or any kind of business.

Temporary worker or manager governs on open security can be taken after to King Hammurabi of Babylon in 1800 BC. The Hammurabi Code of Law (Regulations 229– 238) is engraved on stone tablets. They express that any house producer who is dependable of causing the expiry of another person is meriting demise (King, 2008). Safety and security bearings have since created and most of the favorable authoritative changes were made after the post-present day change, to fuse the Safety and Health Act, Factory and Machinery Act etc . In any case, these still ought to be upheld and better, in mechanical divisions and also pushed out to various workplaces, for instance, associations and schools. The security part is a long ways behind in the examination of modern due to the absence of care factor. These segments and planed action give effects and always emphasize the need to strengthen the status of security. So, useless leadership of security culture is at the foundation of disappointment (Cooper, 2015).

Despite the fact that examination on the connection amongst administration and security has advanced significantly finished the most recent 30 years, the larger part of studies have concentrated because of general compelling authority or general initiative styles on an assortment of wellbeing results (Christian et al., 2009;

Nahrgang et al., 2011). For instance, transformational authority that underscores security has been connected to expanded worker wellbeing practices (e.g., Barling et al., 2002; Conchie and Donald, 2009). This exploration has set up the expansive impact of initiative on security; be that as it may, it has not yet analyzed the part of more particular features of authority inside these general administration models (Inness et al., 2010). All these things have to supervise by the institutes to all the labors and the employees

In the United States, a standout amongst the most well-known strategies for preparing chiefs is the Occupational Safety and Health Administration (OSHA) two days preparation. The OSHA two days development exceed lecture is a deliberate dangers underpinning class planned for staff with supervisory/leaders/managers specialist over work environment safety and security (OSHA, 2011). This effort course takeover OSHA strategies, methods, and norms, and also development safety and security standards (OSHA, 2011). That must be shown in some studies which are the Safety approach and the Safety environment Change approach that has pulled in study which picked up consideration for addressing work environment security (Dejoy, 2005). A preparatory investigation on the Malaysian Society of Occupational Safety and Health (OSH) disclose that, not at all like safety environment change approach, BBS is just drilled in the oil and gas organization in Malaysia. Further, preparing for BBS is offered by few preparing suppliers.

But still there are some accidents which happens because of the labor is not conscious about their life's that is scene in 1998, more than 9 out of 100 laborers in the assembling area encountered damage at work that required consideration (National Safety Council [NSC], 1999). Later information propose that it is the administration framework that has the most huge effect on damage rates (Petersen, 2000) In March 1998, upper administration started various changes to their conventional way to deal with wellbeing. The administration group set up an objective to move the organization's safety society from one driven by consistence to one driven by making the best choice to counteract mischances and wounds to workers. Safety

society is frequently observed as a subset of hierarchical culture, where the convictions and qualities indicate particularly to issues of safety and security (Clarke, 1999). The others, an examination has been led by McDonald (2003) to 18 development locales in Ireland with the principle intend to explore the variables related to impact safety conduct and security consistence on development destinations towards security necessity. Safety conduct portrays the conduct that help security practices and exercises, for example, giving security preparing and security consistence clarifies the center exercises that should be conveyed by representatives as indicated by word related, wellbeing and wellbeing necessities to counteract working environment mischances (Mahmood, 2010) As anticipated, we found that when businesses are seen to have satisfied security related commitments, representatives have a tendency to respond with positive wellbeing execution practices. Moreover, we add to the surviving exploration showing that transformational administration predicts representative security conduct (Clarke, 2013)

Most writing is consistent in recognizing administration duty as a pre-imperative for security, the general reason being that administration is in charge of building up targets, creating procedures, allotting assets, advancement and executing frameworks and by uprightness of its part setting an illustration (Levitt and Samelson,1993). The manners by which the administration commitment's reflected, as per Faridah et al. (2011); cooperation, deceivability, steady, show authority, inspirational state of mind towards security, responsible for the exercises, and the presence of qualities, conviction and the recognized noteworthy safety programs. We evaluated three parts of security occurrences, to be specific, micro accidents—those wounds that require a visit to the clinic however don't require time off of work (e.g., Zohar, 2000, 2002), close misses—episodes at work that include wellbeing infractions yet don't bring about damage—and, lost-time wounds—the quantity of long periods of work lost as a result of wounds. We additionally got information on individual security introduction, a variable that contained safety learning, security inspiration, consistence with security standards and controls, and safety activity. Reason, Parker, and Lawton (1998) proposed that these more extensive

measures are especially critical on the grounds that they give the association persistent input—wounds requiring time far from work and fatalities are uncommon occasions though the individual safety introductions of representatives and the less serious security episodes they encounter are constantly present, and they give helpful data with respect to the real condition of safety in the association.

The more particularly, every one of the four segments of transformational administration is significant to upgrading word related security. With its accentuation on administrators getting to be good examples by doing what is good or right instead of what is convenient, admired impact urges chiefs to move their concentration toward word related security and far from the fleeting concentration that outcomes from the efficiency weights they should bear. Pioneers who are high in glorified impact pass on word related wellbeing as a center an incentive through their very own dedication, in this manner encouraging larger amounts of devotees' trust in administration and hierarchical steadfastness, all of them for basic consequent execution (Barling et al., 1996; Pillai et al., 1999). Pioneers show rousing inspiration to dispute subordinates against past some of their singular requirements for the aggregate great. They must do as persuading all of their adherents that they can accomplish wellbeing levels already accepted to be unattainable, utilizing images and telling to clear up such main goal.

From this concise depiction of some key examinations and ideas, unmistakably an 'alluring' security culture does not simply rise, full grown, inside an association. Given the size and unpredictability of numerous advanced associations, inside one unique association it is likely that there are territories in which the security culture is less very much created than in others. In addition an 'alluring' wellbeing society would set aside opportunity to build up, and improvement may continue more rapidly in a few regions than in some others. That can be the situation which contended that general asses of security environment yielding one general list or score, give, well case scenario an unrefined sign of this mind boggling wonder. A more valuable method for conceptualizing the security culture must recognize that it is probably going to shift inside a solitary association.

In spite of the fact that writing underpins the significance of the manager to development site security and wellbeing execution, the vital chief abilities must not be clear. We question the act of defaulting to the OSHA two days preparing for chiefs. In this examination we communicate this hole by distinguishing the essential knowledge based wellbeing skills that are most vital for the cutting edge development chief and organizing them out of the blue. This is our commitment to the assortment of learning. A complete rundown of information based wellbeing abilities was produced from a writing survey. Utilizing a Delphi procedure with a board of development wellbeing specialists, we review our outcomes to the best fifteen (15) learning based capabilities. This paper gives understanding to administration of development associations by characterizing the fundamental information that a line-level administrator must have to viably oversee security on development ventures.

Utilizing scholarly incitement, pioneers challenge their adherents to face long-held presumptions and rouse them to think in imaginative ways that improve word related security. In doing as such, pioneers urge their workers to address word related security issues and upgrade data sharing about word related wellbeing and dangers. Finally, pioneers exhibit individualized thought with regards to the subordinate–director relationship by demonstrating a dynamic enthusiasm for their devotees' prosperity, including their physical security. Thusly, pioneers' genuine worry with their representatives' wellbeing is apparent, as they are not happy with accomplishing insignificant outside necessities (e.g., government gauges). Also, word related mischances was intervened by wellbeing correspondence and security responsibility. This is steady with exact information that demonstrate that the impacts of transformational administration on execution are intervened by various parts of worker confidence, for example, duty, trust, and reasonableness (Barling et al., 1996; Jung and Avolio, 2000; Pillai et al., 1999).Thus it is hypothesize

H1: Safety leadership is positively and significantly associated with project safety compliance

2.2 Attitude towards safety mediates the relationship between safety leadership and projects safety compliance

Employees and labor are not use to take care of their safety their attitude towards safety is weak and very careless Shown that the supervisor's action towards security programs and the mental condition they make decidedly impacts damage rates. As of late, inquire about amid the London 2012 Olympics development ventures uncovered that director skill upgraded successful site security hones and is a principal to more extensive development organization affect (Finneran et al., 2012).that early work on security leadership incorporates Zohar (1980) think about surveying the common discernments managing suitable and versatile safety related conduct in view of signs in the culture, and a thereafter suggested by Cox and Cox (1991) considering such attitude which representatives distributing in connection to security. Affecting development site security is a troublesome and multidimensional errand. Impacts on possible site security create from various sources. Regularly, the duty regarding development site wellbeing is appointed by the heigher-level administration to the one-level or site supervisor (Swuste et al., 2012; McVittie et al., 2009; Mohamed, 2002).

A work location director who is characterized as an organizer, coordinator, and facilitator of every day development administration frameworks (Shohet and Laufer, 1991). That sence which is use to development administrator for appropriate usage of wellbeing and safety agenda on development locales has for some time been given consideration (Huang et al., 2004; Hofmann and Morgeson, 1999; Peterson, 1999; Hinze and Gordon, 1979; Hinze and Parker, 1978). Hinze and Gordon (1979) uncovered that, if safety agenda are to be successful conducted, the mental condition of laborers must be regard. That must be underline the requirement for administrator preparing to build up an administrative style consistent with improving the mental condition. Hinze (1981) likewise found that chiefs that transparently demonstrated regard for laborers and consolidated their proposals

additionally had more secure work teams. Expanding of some work work, Shohet and Laufer (1991) get that upgraded arranging through the development administrator prompts enhanced profitability and wellbeing at the development locations and Lingard et al. (2012) get that chiefs will probably have a noteworthy effect upon wellbeing, contrasted with top administrators and security directors.

Regardless of the confirmation which recommended that the construction business has an unenviable security record, there seem, by all accounts, to be few stamped activities with respect to the scientists or wellbeing specialists towards the assistance of an inside and out examination into the attitudinal part of safety in the United Kingdom development industry. Absence of appropriate preparing is one of the underlying drivers of development mishaps (Toole, 2002)

Somehow the attitude towards safety is change because of the supervisor and the awareness as far as the problem to the mishap decrease in more hazard organizations, the security environment way to deal with mischance lessening stresses the pretended by social powers inside an association that follow up on its individuals as for wellbeing (Clarke, 1999). Safety environment comes to similarly into all parts of the hierarchical framework and applies a reliable exact (for best or sick). Consequently its change is more executive than expanded supervision or more thorough methodology in improving wellbeing execution (Reason, 1998). Reason (2000) suggested that an association's safety environment goes up against to significant, it will give a sense to reach at such point where mischance rates come to "level", i.e. where low result information scrape the bottom at some asymptotic esteem. With a specific end goal to go past this " low yet (apparently) unassailable" level and to proceed with change in security execution, that is surely very important to the supervisor and employee to address all levels of the security issues will discuss (Lee, 1998). Such level of safety is frequently come to after necessities for wellbeing "equipment or programming" (i.e. hindrances or strategies) must met (Cox and Cox, 1991).

A safety leadership exact exhibition of this came in Zohar's (2000) investigation of 53 work bunches in a solitary assembling organization, showing both inside

gathering homogeneity and between-aggregate variety in wellbeing related observations inside the association. These gatherings, working at the level of supervisory units, redirected as far as their impression of wellbeing over a scope of features, or perspectives, of the association. Additionally, wellbeing related recognitions were prescient of conduct, regarding mischances at work requiring help or more finished a month time span. In the meantime, examine has shown that wellbeing society is best considered as a multidimensional idea. For instance, investigations of wellbeing society constantly stretch the significance of security related demeanors and activities among administration (e.g. Clarke, 1998). Zohar (1980) also, Cox and Cox (1991) they all talk about of all responsibility regarding security and significance by upper level administration. It is critical to the workforce who can sees the chiefs with in the states of mind, authorize the practices that help wellbeing. Impression of the upper level directors' states of mind and practices in connection to wellbeing will frame the reason for the security conduct of specialists, and subsequently the security execution of the association (Clarke, 1999). Negative impression of administration responsibility regarding wellbeing can dissolve workers' protected practices (Clarke, 1998). While positive security states of mind at the upper administration scale are basic for such good wellbeing society (GriYths, 1985), that can't be accepted to such mentalities will be course to the association. That must be need to direct how such states of mind are omitted to employees who guarantee that administrative sense of duty regarding security is precisely seen (Clarke, 1999).

Levels of security were explain by Westrum (1993), security leadership that incorporated and described in the accompanying expressions:

- Pathological; employees are not getting the safe environment so they think no one is thinking about their safety
- Reactive; security is imperative: we complete a considerable measure each measure of a mischance.
- Calculative; structure of work in projects is made in such a way to deal with mishaps and danger.

- Proactive; All the issues regarding to security we try to resolve them before they emerge.

The significance of correspondence, including the revealing of dangers, episodes and mishaps, because of the advancement in security environment is settled. In his exemplary examination, Zohar (1980) we reached to the point that incessant and openly talk about the security amongst chiefs and laborers was identified with great wellbeing execution. All the more as of late, Clarke (1999) has informed that the part with respect to chiefs in stay-administration correspondences needs more cautious consideration, as directors are regularly the middle people amongst administration and labor/employees. Clarke proposed that negative stereotyping of senior administration dispositions and activities might be official of an absence of direct contact, as well as of a more crucial absence of consolidate in administration sense of duty regarding security. At the core of a wellbeing society is the manner by which hierarchical insight and aggregate creative energy with respect to security problems are sent (Pidgeon and O'Leary, 1994), that is security data arrangement to the association, which is a basic part of an educated environment (Reason, 1997).

Investigations of significant mischances/injuries and calamity (e.g., Reason, 1990) give a premise to creating expectations in regards to the point at which the connection amongst mishaps that compliance or environment might be watched and the lag slacks included. Mishaps are low frequency occasions and are normally activated by inadvertent mistakes, for example, slips, passes, or slip-ups. They are for the most part made conceivable by previous perils or pathogens that have made the framework defenseless against disappointment (Reason, 1990). These dangerous conditions are regularly caused by dangerous practices did by other individuals. Resistance with security techniques and refusal to take part in exercises that upgrade the wellbeing of other individuals, in this way, may not straightforwardly influence the individual who neglects to complete these practices yet can make the situation more likely which may cause another person might be harmed later on. Gatherings must have a more noteworthy extent of individuals

who neglect to complete security practices ought to subsequently collect a more noteworthy number of pathogens after some time.

Attitude towards on addressing safety leadership have called attention to that upgrades in execution are related with "great authority" Stringer (2002, p. 100). Faridah et al. (2011), uncovered that the things estimating initiative must be a good example, deceivability to work area, worker's contribution in target setting, participative fundamental initiative, setting clear obligation and offering organization to OSH works out. The smooth running of security exercises likewise requests adequate assets to be dispensed for wellbeing purposes. The arrangement of spending designs is another method that reveals the organization assumption and feelings (Schein, 2004). Ostrom et al. (1993) concurred that compensating people who point out wellbeing issues and are sufficiently inventive to find security risks as an impression of good security culture.

The security environment writing has analyzed the connection between security and safety results, for example, compliance with safety working exercise and mishaps. Countless have shown that view of safe environment are emphatically connected with self-detailed security practices and these factors are contrarily corresponded to mischances (Griffin and Neal, 2000; Hayes et al., 1998; Hofmann and Stetzer, 1996; Neal, Griffin, and Hart, 2000; Rundmo, 1992). These discoveries are normally taken to propose that a poor security delivers diminish in compliance with security methodology and which in turn, causes an expansion in mischances. Nonetheless, the vast majority of exploration has been sampling. Invert causality is, in this manner, a Conceivable clarification for a portion of these connections. For instance, mishap contribution may predisposition a person's view of wellbeing (Rundmo, 1997). Employee who have mischances will feel less protected and, along these lines, report a low safety leadership. That must expansion to the issue of invert causality, moderately little is thought the instruments included or the point of investigation at which such impacts work. In March 1998, upper administration started various changes to their conventional way to deal with wellbeing. The administration group built up an objective to move the organization's wellbeing society from one driven by compliance to one driven by making the best choice to

avoid mishaps and wounds to workers. Administration's point was to incorporate security as an organization center esteem, one that each administrator and boss was relied upon to grasp. A key focal point of this new accentuation on wellbeing was administration's responsibility for security and their sense of duty regarding exhibiting their initiative and support for security.

These contentions recommend that a connection between safeties of supervisor conduct also, mishaps/accidents ought to be seen at the gathering level instead of the singular level. Besides, this impact is probably going to a future slacked. A modified in the general points of consistence that support in a gathering would set aside opportunity to deliver modified in the mishap amount for that gathering, on account of the previous agenda that have aggregated after some lags. At last, in spite of the fact that gathering safety leadership may additionally be an indicator of mischances (Hofmann and Stetzer, 1996; Zohar, 2000), Neal and Griffin (2004) have contended that this association is intervened by security conduct. The impacts of wellbeing conduct must be, in this way, be more grounded that will give the impacts of security atmosphere, as wellbeing conduct is the more imminent indicator. That is normally the case in different many research, the ability to distinguish impacts at the gathering point is weaker than at the singular point in our investigation. This is exacerbated by the issue that impact level diminish as the connection between factors turns out to be more distal, due to the amount of connections in the informal chain, contending causes, and other irregular variables (Shrout and Bolger, 2002). Therefore, that is the reason our hypothesis is more inclined towards the safety measures.

H2: attitude towards safety mediates the relationship between safety leadership and projects safety compliance.

2.3 Safety consciousness as a moderator

We as a whole realize that safety consciousness is the strongest factor in the anticipation of mishaps. Safety consciousness might be characterized as consciousness

of risks and sharpness to peril. This affects the activities of an individual as a result of his want to stay alive and uninjured. We have to create security awareness and Make Safety a Value. most injuries can be followed to somebody's absence of security awareness. Typically, yet not generally, the harmed individual's absence of Making Safety a Value might be the reason. The recurrence of wounds is a decent pointer of the safety awareness of the laborers included. What number of wounds have you had? What is your Safety Consciousness?

At the point when singular security cognizance is raised and administration activities result in positive impression of the wellbeing atmosphere, wellbeing related occasions are limited. Thus, these security related occasions specifically anticipate word related wounds, for example, gashes, strains, sprains, or consumes. This thought is bolstered by the gauge that for each damage, there are altogether more wellbeing related occasions (i.e., all the more narrow escapes or close misses).

Some of us are conscious about our healthy and prevent our self's from danger to test some patrons and follow some rules to be the part of safe environment (Novak et al.) portrayed new patterns in the development business identified with building computerization and control frameworks for example, remote access by means of the Internet and shared utilization of systems for propelled control tasks, for example, wellbeing, security, warming, ventilation what's more, aerating and cooling and different capacities. "These patterns separate the disengaged structure of existing systems and in this way acquaint new dangers and dangers with working frameworks"

And as well we look towards the top administration to give the secure environment Hakkinen (1995) supported some programs for the security and safety for administration and top administration this program is called the one hour. The operation of this program was very effective in attracting administration's regard for safety and security problems. One of the examination shows that 83% of activities accomplish the zero mishap objectives in the wake of pertain the Zero mishap Program (Center to Protect Workers' Rights, 1993; Hinze and Wilson, 2000). All the reactors (all authorize with ISO 9000) were asked which one they had understand the (Occupational Health and Safety Assessment Series) 18000 framework,

another worldwide standard for safety and security. Albeit half of the respondents guaranteed that they would embrace the framework, they were in reality receiving a keep a watch out state of mind. The rest had not thought about embracing it. It lead the demeanor to safety towards the security consistence. Safety awareness must be far reaching. It must achieve each activity, it must be apparent at all gatherings; and, the vast majority of all, it must be instilled to the point that all work force in supervisory positions will set great cases in security to the faculty under them. Setting a decent case is an intense factor in decreasing mischances and is evidence of the safety awareness of the administrator.

The recurrence of mischances has an unequivocal and exact relationship to the security awareness of administration also. This relationship frames an example that influences the prosperity of all laborers. The factor of fortunes may appear to misshape the example on occasion, however finished a drawn out stretch of time the example stays unaltered. Safety consciousness relate to a "person's own familiarity with security issues" (Barling et al., 2002).Safety and security are winding up progressively critical, both in the public arena and in addition for organizations. For example, in a little nation like the Netherlands the quantity of word related mishaps prompting damage and nonappearance of work totaled 219,000 out of 2007 (TNO, 2006; Venema et al., 2009) Literature on authority demonstrates to us that self-detailed security occasions and wounds are essentially impacted by a supervisor's administration manner and by representatives' security awareness (Barling et al., 2002; Kelloway et al., 2006) Authoritative security investigate has not by and large centered around an integrative structure that incorporates both formal safety administration frameworks, and the safety related conduct of people, including administrators and bleeding edge laborers. For instance, the events of the substance of safety administration frameworks on security execution have to a great extent been overlooked (Cooper, 2000). Mearns et al. (2000) expressed the reviewing is a key prerequisite in some safety administration framework, and Isla Daz and Daz Cabrera (1997) observed organization approaches as far as security is basic, e.g. consistence with security models, feedback on execution, meet of benefits and resources for prosperity domains, essentialness of prosperity planning.

Distinctive structure on prosperity society that must be proposed are the circumstance inside the relationship of that security (Zohar, 1980), the degree and nature of thriving preparing and the certifiable effect of safe direct on progress (Cooper and Phillips, 1994). The motivation behind this exploratory examination was to make a theory based system that could be utilized by relationship to comprehend their own specific thriving society. The structure was relied upon to reject the multidimensional, dynamic nature of flourishing society by equipping portrayals of an association as for a degree of key parts of security culture, at every last one of we have levels of success society advance produced using Westrum's central thoughts (1993). The parts of flourishing society included were expelled the key highlights of security recognized in the different leveled security culture forming. It was typical that the following structure would be tremendous and huge to those working in the petrochemical business who are worried to overhaul the flourishing society of their association.

Word relate'd security preparing is likely the most looked into issue and prepared method in safety administration, and representatives who get safety preparing bear less business related wounds than their untrained partners (Colligan and Cohen, 2003). As supported by Barling et al. (2003), preparing enables representatives to procure more prominent abilities to control their work, prompting them playing out their occupations all the more securely. This view is predictable with Osterman (1995), who contended from a human-capital viewpoint that preparation builds the critical thinking aptitudes of workers. Preparing additionally applies roundabout consequences for safety, as outlined by an investigation of students that found that the degree to which preparing was seen to have lived up to learners' underlying desires, how fulfilled students were with the preparation, and the learning of educational substance all anticipated consequent authoritative responsibility (Tannenbaum, Mathieu, Salas, and Cannon-Bowers, 1991). These outcomes are essential on the grounds that hierarchical duty predicts work execution when all is said in done (Meyer and Allen, 1997) and safe working specifically (Parker, Axtell, and Turner, 2001). To be maximally compelling, preparing must stretch out past

the minor arrangement of learning identified with how to carry out one's employment securely. Representatives should likewise be enabled to utilize new abilities following preparing (Parker, Wall, and Jackson, 1997).

In light of the acknowledgment that it's building a structure has constraints that holds associations all together like a glue, much administration thoroughly considering the most recent two decades has concentrated on the abstraction of professional environment in the organization. A portion of the compositions on the subject (e.g. Dwindles and Waterman, 1982; Ouchi, 1981; Pascale and Athos, 1981; Deal and Kennedy, 1982; Hofstede, 1990) that have to be a great degree among rehearsing directors, primarily by means of its accepted association with hierarchical execution. It is for the most part believed that a very much created and business-exceptional culture into which supervisors and workers are completely mingled will prompt more grounded authoritative duty, more execution and by and large higher profitability (Deal and Kennedy, 1982; Graves, 1986; Hamden-Turner, 1990). Generally in view of a mix of idealist thoughts, professional organization environment seems to distribute practices, convictions, dispositions and qualities with respect to authoritative objectives, capacities and strategies which are believed to describe specific associations (Furnham and Gunter, 1993). The upkeep of the ruling corporate culture inside any association, in this manner, is bolstered by progressing investigations of authoritative frameworks, objective coordinated conduct, demeanors and execution results (Fry and Killing, 1989).

Be that as it may, because of some data absence on how environment operates, or the formation of safety culture, changed or generally overseen by and by (Furnham and Gunter, 1993), there is no reliable meaning of what professional culture may be in safe environment (Williams et al., 1989). The principle distinction between such definitions seem to dwell in their emphasis in transit individuals think, or in transit individuals act (Williams et al., 1989), albeit some attention on both the way individuals think and act (e.g. Margulies and Raia, 1978; Uttal, 1983).

The security framework, chose among the rundown of elective security frameworks that meet the general target, must confirm the entire rundown of least adequate

necessities (i.e., "musts") and ought to fulfill the same number of attractive quality criteria (i.e., "needs") as could be expected under the circumstances. It ought not just fulfill security needs, yet additionally consider qualities, for example, operational proficiency, cost and safety. The safety and security suggestions of the chose security framework are talked about. Security suggestions incorporate dissecting office perils and incidental or unintentional releases caused by human blunder, broken security framework plan, what's more, inward or outer risks that may prompt risky material discharges, fires, atomic criticality, holes, or harm to security structures, frameworks and parts or process frameworks. The suggestions of safety changes to security are likewise talked about, as security updates may affect security, and on the other hand, another or redesigned safety framework may have suggestions in the security area. The entire procedure ought to incorporate partners from the safety and security fields to think about effects of the new or overhauled security module overall framework and whether it makes clashing necessities. At last, security and safety procedures ought to be composed to guarantee safe also, secure task.

In one of only a handful couple of exact investigations concentrating on administration practices and safety, Hofmann and Morgeson (1999) demonstrated to the connection in 49 couples in leader– part trades the word related mischances to intercede that security correspondence to security duty. That might be steady to exact information which demonstrate to the impacts on safety leadership initiative to execution which intervened some various parts of representative confidence, for example, responsibility, confidence, and decency (Barling et al., 1996; Jung and Avolio, 2000; Pillai et al., 1999). Correspondingly, individual's association responsibility intervened that impacts of safety consciousness initiative on majority individuals' association cooperation (Kelloway and Barling, 1993). Thus, we anticipate that a transformational administration style that accentuates word related safety will be related in the principal occurrence with security cognizance and saw a great secure environment because of the safety consciousness of the employee.

Without a doubt in the event that something may could lessen some of odd mischances, it would be workers' attention to problem that debilitate security, their

insight into how to forestall them, and their practices situated of counteracting them (i.e. security cognizance; cf. Kelloway et al., 2006). This prompts the following hypothesis.

H3: Safety consciousness moderate the relationship between the attitude towards safety and project safety compliance, such that if safety consciousness is high than relationship between attitude towards safety and project safety compliance would be stronger.

2.4 Research Model

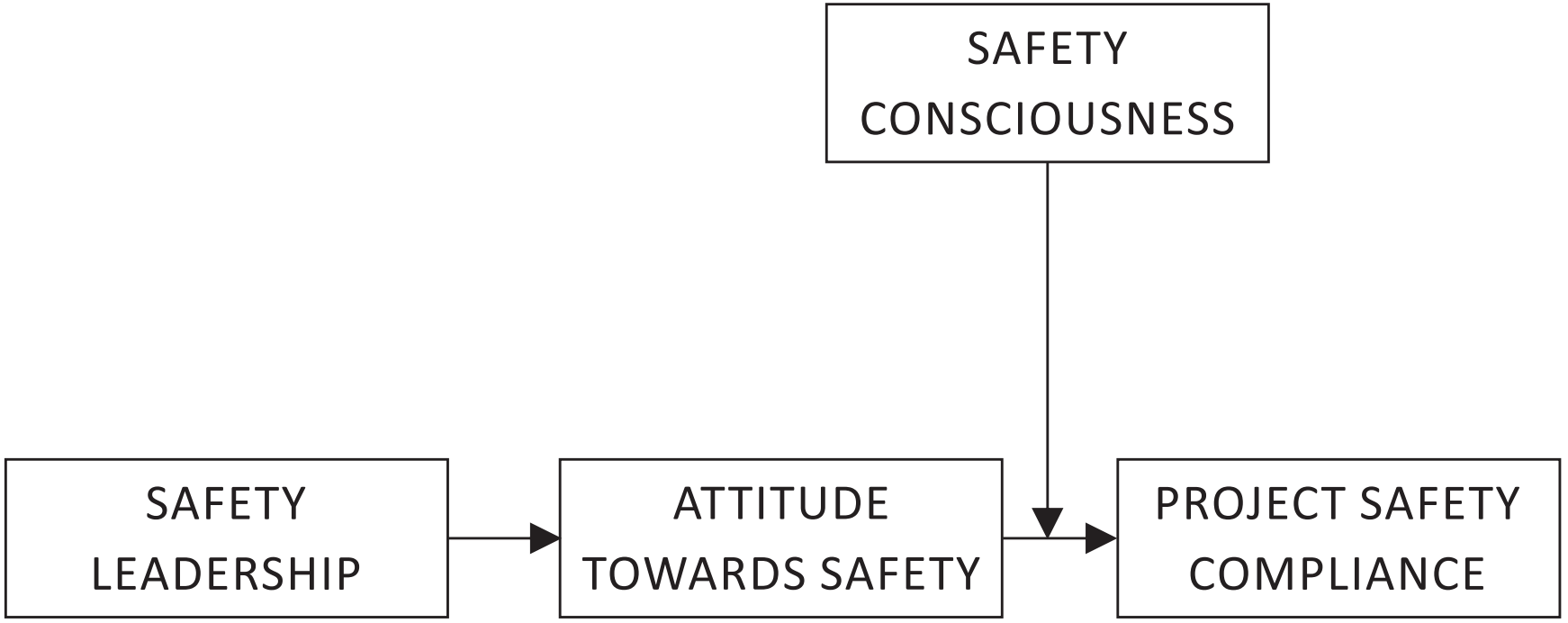

FIGURE 2.1: Impact of safety leadership on project safety compliance; with the mediating role of attitude towards safety and moderating role of safety consciousness.

2.5 Research Hypothesis

H1: Safety leadership is positively and significantly associated with project safety compliance.

H2: Attitude towards safety mediates the relationship between safety leadership and projects safety compliance.

H3: Safety consciousness moderate the relationship between the attitude towards safety and project safety compliance, such that if safety consciousness is high than relationship between attitude towards safety and project safety compliance would be stronger.

Chapter 3

Research Methodology

This part contains insights with respect to Type of study, unit of analysis, Sample and population, instruments and Hypothesis Testing.

3.1 Type of study

The current study was explanatory in nature, focusing on the hypothesis testing based on hypothetic deductive methods. Method of investigation was causal, by testing the cause and effect relationship between safety leadership, attitude towards safety, and safety compliance. While the interactive effect of attitude towards safety and safety consciousness on safety compliance was tested.

3.2 Unit of analysis

The unit of examination can run from and individual to various gatherings, associations, societies and so on. In this study the unit of analysis were Individuals. 600 questionnaires were distributed 247 genuine responses were collected.

3.3 Population and sample

The population utilized in this study includes project managers/supervisors and employees working under them in different project based organizations in Pakistan. Each questionnaire has an attached cover letter explaining the purpose of the study to the respondents. Questionnaires were fillled by the willingness to participate by the employees. Cover letter also explains that the present data will be used for academic purposes without highlighting any particular organization or employee. Further-more,confidentiality of information to employees was also ensured in order to drive out their hesitation in filling the questionnaire. And the questionnaire were translated in Urdu translation and back translation procedure.

Table 3.1: Number of Samples Collected from Organizations

Sr. No	**Organizations**	**sample received**
1	Tashfeen Abbasi and brothers pvt Ltd.	41
2	Raja Muhammad Haroon &Co pvt Ltd.	38
3	Zakir Abbasi & Brothers pvt Ltd.	15
4	ANNAABEL (PVT) Ltd.	43
5	Zeta Technologies p	31
6	Montage Designbuild Islamabad	26
7	Artcon pvt Ltd.	21
8	Habib Rafiq	32

3.4 Sampling technique

As it is difficult to gather information from the whole populace because of asset imperatives and different impediments of time, Sampling is the generally utilized method to gather information. For that reason a particular gathering of individuals are picked that are the genuine delegates of the entire populace The respondents in the investigation is the supervisors and subordinates of the development, mechanical units and formative segment extends particularly in Rawalpindi and Islamabad. For the present study convenience sampling was used for collecting data in three time lags. Convenience sampling technique is based on the ease of researchers and data collection in Pakistan is very difficult due lack of research culture.

The first lag includes 35 questions having only 2 section i-e. Demographics and safety leadership in project questionnaire. Second lag questionnaire include mediation that is attitude towards safety includes 17 questions in total. 3rd lag include moderation and dependent variable total 10 questions. 600 questionnaires were distributed in total but only 292 were received. But the actual numbers of questionnaires used for the analysis of data for demonstrating the results were 247. The discarded questionnaires out of questionnaires were those which were not having the complete information or many of the questions were unfilled in those questionnaires hence making them not appropriate for the study.

Table 3.2

TIME LAG	DISTRIBUTED	RECEIVED
1	600	530
2	480	320
3	292	247

3.5 Sample Characteristics

The demographics considered in this study are; workers age and employees age, worker dynamic experience in the construction organizations and employees dynamic experience in construction organizations, worker gender and employees gender and, project managers qualification and employees qualification. Sample characteristics details are following.

3.5.1 Age

Age is considered as one of the demographics, to which respondents sometimes feel uncomfortable to disclose openly. So, for the convenience of respondent range basis was used to collect information regarding the ages of the respondents.

TABLE 3.3: Frequency by Age

Age	Frequency	Percent
18 to 27	**55**	**22.3**
28 to 37	**98**	**39.7**
38 to 47	**68**	**27.5**
48 to 57	**26**	**10.5**
Total	**247**	**100.0**

It has been shown in Table 3.3 that most of the respondents were having age between the range of 28 to 37, that means 39.7% of majority respondent were having age ranging between 28 to 37, 22.3% of respondents were having age ranging between 18-27, 27.5% respondents were having age ranging between 38-47 and only 10.5% of the employees were having age range of 48 to 57

3.5.2 Experience

Again to collect information regarding the experience of the respondents, different ranges of experience time period were developed so that every respondent can easily sport out the specific tenure of their experience in the relevant field of projects.

TABLE 3.4: Frequency by Experience

Experience	Frequency	Percent
1-5	**106**	**42.9**
5-10	**83**	**33.6**
10-15	**51**	**20.6**
More then 15	**7**	**2.8**
Total	**247**	**100.0**

It can be seen from the Table 3.4 that most of the respondents were having an experience ranging between 1-5 years, which depicts that 42.9% respondents were having experience between the range 1-5 years, 33.6% respondents were having experience ranging between 5-10 years, 20.6% respondents were having experience ranging between 10-15 years, 2.8% respondents were having experience ranging more than 15 years.

3.5.3 Gender

Gender is an element which remains in highlights for the purpose to maintain gender equality, so it is also considered as the important element of the demographics because it differentiates between male and female in a given population sample. In this study, it has been tried to make sure the privilege of gender equality but

still it has been observed that ratio of male mangers is considerably greater than the ratio of female mangers.

TABLE 3.5: Frequency by Gender

Gender	**Frequency**	**Percent**
Male	178	72.1
Female	69	27.9
Total	247	100.0

Table 3.5 depicts the ratio of male and female respondents. As we can see majority of the respondents were male, which shows that 72.1% of the respondents were male and 27.9% respondents were female.

3.5.4 Qualification

Education is the major element which contributes towards the prosperity of the whole Nation and it is also the basic need of the hour to compete globally. Hence after gender, qualification/education is another vital dimension of the demographics. Education opens up many new and unique paths for success and creativity in order to gain competitive advantage amongst all the other countries around the globe. Probably education plays an important role in demonstrating creativity and innovation in project tasks by facilitating the effective knowledge management.

TABLE 3.6: Frequency by Qualification

Qualification	**Frequency**	**Percent**
primary	7	2.8
inter	65	26.3
Bachelors/ diploma	100	40.5
Other	75	30.4
Total	247	100.0

It has been shown in Table 3.6 that most of the respondents were having qualification of Bachelor/diploma, which comprises 40.5% of the total respondents chosen as the true representative sample of the whole population. 2.8% respondents were having qualification of primary and inter were having qualification 26.3%, 30.4% of the respondents were having other qualification or may be dont have any.

3.6 Instrumentation

3.6.1 Measures

The data was collected through the questionnaires selected from different authentic sources through adoption of those questionnaires. Questionnaires were distributed in English but were translated to Urdu where it was needed. Almost 50-60 questionnaires were distributed in each construction based organization that has been visited during questionnaire distribution period.

All the items safety leadership, attitude towards safety, safety consciousness, and project safety compliance is filled project leader and employees/subordinated/labour. All the items of the questionnaire are to be filled on a 5-points Likert-scale where 1

represents (strongly disagree), 2 represents (disagree), 3 represents (Neither agree nor disagree), 4 represents (Agree) and 5 represents (strongly agree)

3.6.2 Safety leadership

A 35- items scale having three dimension safety caring, safety coaching, safety controlling was used in the research paper A correlation among safety leadership, safety climate and safety performance (Tsung-Chih Wu, Chi-Hsiang Chen, Chin-Chung Li, year 2018) three of the sample questions were He/she handles safety business honestly., He/she shows a model to obey safety rules., He/she deals with the results of accidents in workplace. Responses were made using a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). The internal consistency of the instrument was 0.99

3.6.3 Attitude towards safety

A 17 items scale to measure the attitude towards safety developed by (Cox & Cox,1991) Sample items include. Most accidents are preventable., I believe primary care groups can be effective in preventing accidents., Other agencies have greater responsibility for accident prevention than the primary care group. Responses were made using a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree)

3.6.4 Safety consciousness

A seven items scale will be used to measure safety consciousness developed by Barling et al. (2002), Example item includes I know what protective equipment and/or clothing is required for my job,I am well aware of the safety risks involved in my job, I know where the fire extinguishers are located in my workplace Responses were made using a 5-point scale ranging from 1 (strongly disagree) to 5 (strongly agree). Job the internal consistency of the instrument was 0.91

3.6.5 Project safety compliance

3-item of project safety compliance questionnaire was adapted from (Andrew Neal, Mark A. Griffin 2006) Three of the sample questions were : I use all the necessary safety equipment to do my job. , I use the correct safety procedures for carrying out my job ,I ensure the highest levels of safety when I carry out my job the internal consistency (cron bach alpha) of the instrument was 0.94.

Table 3.7: Instruments

Variables	**Source**	**Items**
Safety leadership (IV)	(Tsung-Chih Wu, Chi-Hsiang Chen, Chin-Chung Li, year 2018)	35
Attitude towards safety (Med)	(Cox & Cox,1991)	17
Project safety compliance (DV)	(Andrew Neal, Mark A. Griffin 2006)	3
Safety consciousness (Mod)	Barling et al. (2002),	7

3.7 Statistical Tool

Firstly Regression was carried out in other to study the casual relationship between the Independent variable safety leadership and Dependent variable project safety compliance. Regression analysis is generally used when we have to study the impact of multiple factors on the dependent variable under the study. Regression analysis will make it assure that the previous study regarding the variables is still supporting the acceptance or rejection of the proposed hypothesis or not.

Then for further analysis three steps of Preacher and Hayes (2004) were used. In these three steps, first we have to put our dependent variable i-e safety leadership

in the outcome column, then our independent variable i-e project safety compliance in the IV column and after that we have to put all the demographics in covariant column. Along with all these steps we have to choose our Model number, as we have to perform both mediation and moderation through Preacher and Hayes we have to separately perform the analysis both for mediation and moderation by selecting model 1 for moderation and model 4 for mediation respectively for both analyses.

3.8 Reliability analysis of scales used

Dependability is referred to a procedure of giving same steady outcomes again and again when the particular thing is being tried over number of time, same is for the scales. Unwavering quality of scale portrays the capacity of the scale to give steady outcomes when it is being tried for number of times. Cronbach alpha have a range from 0 to 1. The higher the esteem, the higher is the dependability of the scale to gauge the build it is intended to quantify. Estimation of alpha over 0.7 is thought to be solid and underneath 0.7 is thought to be less dependable in estimating the chose set of build.

Table 3.8: Scale Reliabilities

Variables	**Cronbach's Alpha**	**Items**
Safety leadership	0.78	35
Attitude towards safety	0.84	17
Safety consciousness	0.82	7
Project safety compliance	0.74	3

In Table 3.8, the Cronbach alpha of all the scales used in the data collection are shown. All the values of Cronbach alpha for the items used under the study are above 0.7.

Chapter 4

Results

This study focus at finding the impact of safety leadership on project safety compliance with mediating role of attitude towards safety and moderating role of safety consciousness. This chapter shows the relationships of study variables through descriptive statistics, correlation and regression analysis of the data.

4.1 Descriptive Statistics

These statistics provides the concise summary of standardized values of the variables. This analysis reflects the sample size, minimum and maximum values, mean values and standard deviation values of the data. The first column of Table 4.1 shows the details of study variables, second column shows the number of respondents, third and fourth show minimum and maximum values of data reported by the respondents whereas fifth and sixth columns show the mean and standard deviation of data.

TABLE 4.1

	Min	**Max**	**Mean**	**Std. Dev.**
Safety Leadership	1.00	5.00	2.64	.57
Attitude Towards Safety	1.00	5.00	2.79	.54
Safety Consciousness	1.00	5.00	3.84	.48
Project Safety Compliance	1.00	5.00	3.10	.49

Table 4.1 shows variables used in the study with their respective statistics. First column of the table gives the details of the variables of this study. Second informs about sample size. Third, fourth, fifth and sixth columns inform about minimum value, maximum value, mean and standard deviation respectively. The sample size is 247. The scale used for measurement was 'Likert' scale which was ranging from 1 to 5. Safety Leadership (independent variable) shows mean = 2.14 and S.D = 0.57. Attitude towards safety (mediating variable) shows mean = 3.39 and S.D = 0.54. Safety consciousness (moderating variable) shows mean= 3.84 and S.D= .48. And finally the project safety compliance (dependent variable) shows mean= 2.93 and S.D= .49.

4.2 Control Variables

Gender, age, qualification and experience Therefore, the demographics had been included in the study. To check whether these demographics variables influence in this study, we ran one way ANOVA. Result of one way ANOVA for demographic variables is presented below in Table 4.2.

TABLE 4.2: Control Variables Across Attitude towards Safety

Control Variables	F	Sig
Gender	4.65	.032
Age	.715	.544
Qualification	1.80	.147
Experience	1.50	.208

Significant difference was found in ATS across, gender (*F= 0.923, P< 0.05)* and Insignificant difference was found in ATS across, age (*F= .715, P> 0.05*), qualification (*F= 1.80, P> 0.05*), experience (*F= 1.50, P> 0.05*).

TABLE 4.3: Control variables across Project safety Compliance

Control Variables	F	Sig.
Gender	1.33	.25
Age	3.54	.78
Qualification	1.92	.11
Experience	.05	.99

Sig. level p<0.05

Table 4.3 reflects that all four demographics variables i.e. Gender, Age, Qualification and Experience are not significantly related to project safety compliance in present study, such as Gender (F=1.33, p>0.05), Age (F=3.54, p>0.05), Qualification (F=1.92, p>0.05) and Experience (F=.05, p>0.05). So all demographics were not controlled during the analysis.

4.3 Correlation Analysis

The analysis shows relation between two variables (indicated by level of significance) and the direction of the relation (indicated by positive or negative signs). Positive sign indicates that both the variables are moving in the same direction and negative sign claims that variables have opposite movements. Pearson correction analysis is used to calculate correlation coefficient. The value of coefficient lies between +1.00 to -1.00. Zero value indicates no correlation between variables.

TABLE 4.4: Correlations

	1	2	3	4
Safety Leadership	1			
Attitude Towards Safety	.397**	1		
Safety Consciousness	.097	.565**	1	
Project Safety Compliance	.309**	.539**	.374**	1

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

Table 4.4 reflects the analysis of correlation among the study variables i.e. Safety Leadership, Attitude Towards Safety, Safety Consciousness and Project Safety Compliance According to correlation table, Safety Leadership is positively and significantly correlated with the Attitude towards Safety (r =.397, p< 0.01), positively and insignificantly correlated with Safety Consciousness (r =.097, p> 0.01) while it is positively and significantly correlated with Project Safety Compliance (r = .309, p<0.01). Attitude towards Safety is positively and significantly correlated with Safety Consciousness (r = .565, p< 0.01) and Project Safety Compliance (r = .539, p< 0.01). Whereas Safety Consciousness is positively and significantly correlated with Project Safety Compliance (r = .374, p<0 .01).

4.4 4.4 Regression Analysis

Regression analysis is a technique that predicts to what degree a predicting variable affects outcome variable. It helps to give understanding of the fact that how value of criterion variable changes when a variation occurs in one or more independent variables. So it explains the causal relationship between the variables while correlation analysis just explains the relationship between variables. The regression process is carried on by different tools (for example, Baron & Kenny, 1986) but here for the convenience and suitability of the study, Hayes (2012) process method is used for analysis.

According to Hayes (2008), Baron and Kenny (1986) method is outdated because it imposes a condition of total effect of causation for mediation while in some researchers' point of view, it is not necessary and even a hindrance in the way of gauging true impact (Preacher & Hayes, 2008). These researchers suggested that the effect of independent variable through mediation is also possible even if no clues of direct effect between predictor and outcome variables are found. Moreover, as the data in social sciences is always problematic due to the situation, nature and context of respondents so the bootstrapping technique for mediation in Hayes (2012) process method increases the likeability of realistic results because the sample is divided into many small bits and pieces and analysis is run on those smaller sized sub samples.

Tables 4.3 – 4.4 inform the results of regression analysis performed by using Hayes (2012) process method.

H1: Safety Leadership is positively and significantly associated with on Project Safety Compliance.

Table 4.3 reflects that Safety Leadership is positively and significantly related with Project Safety Compliance ($B = .12$, $t = 2.41$, $p < .05$), accepting the first hypothesis. It means that safety leadership increases project safety compliances. P value indicates the significant level of t values which provides strong grounds to accept the hypothesis.

*p < .05, **p < .01, ***p < .001

TABLE 4.5: Regression analysis for direct effect of Safety Leadership on Project Safety Compliance

Variables	B	SE	T	P
Safety Leadership Project Safety Compliance	.12	.05	2.41	.016

H2: Attitude towards Safety mediates the relationships between Safety Leadership and Project Safety Compliance.

Table 4.4, shows the mean indirect effect of Safety Leadership on Project Safety Compliance through the mediation of Attitude towards Safety is significant. The bootstrapping values are .0172 to .1754 with a 95 % confidence Interval excluding zero. These results suggest sufficient support that Attitude towards Safety mediates the relationship between Safety Leadership and Project Safety Compliance. Hence the second hypothesis is also accepted.

TABLE 4.6: Regression analysis for mediation

	Index	SE	LL 95% CI	UL 95% CI
Bootstrap results for indirect effect of Safety Leadership	.0851	.0402	.0172	.1754

H3: Safety Consciousness moderates the relationship between Attitude towards Safety is and Project Safety Compliance, such that if Safety Consciousness is high than relationship between Attitude towards Safety and Project Safety Compliance would be stronger.

Finally Table 4.6 supported Hypothesis 3 which claimed that Safety Consciousness moderates the relationship between Attitude towards Safety and Project Safety

Compliance in a way that higher the Safety Consciousness, Stronger the relationship or lower the Safety Consciousness, weaker the relationship (B = .22, t = 2.57, p <.001). So the hypothesis 3 is also accepted.

TABLE 4.7: Regression Analysis for Moderation

Predictors	B	SE	T	P
Attitude towards Safety × Safety Consciousness → Project Safety Compliance	.22	.08	2.57	.006

**p < .05, **p < .01, ***p < .001*

The result of moderation is also supported through moderation graph shown in Figure 4.1.

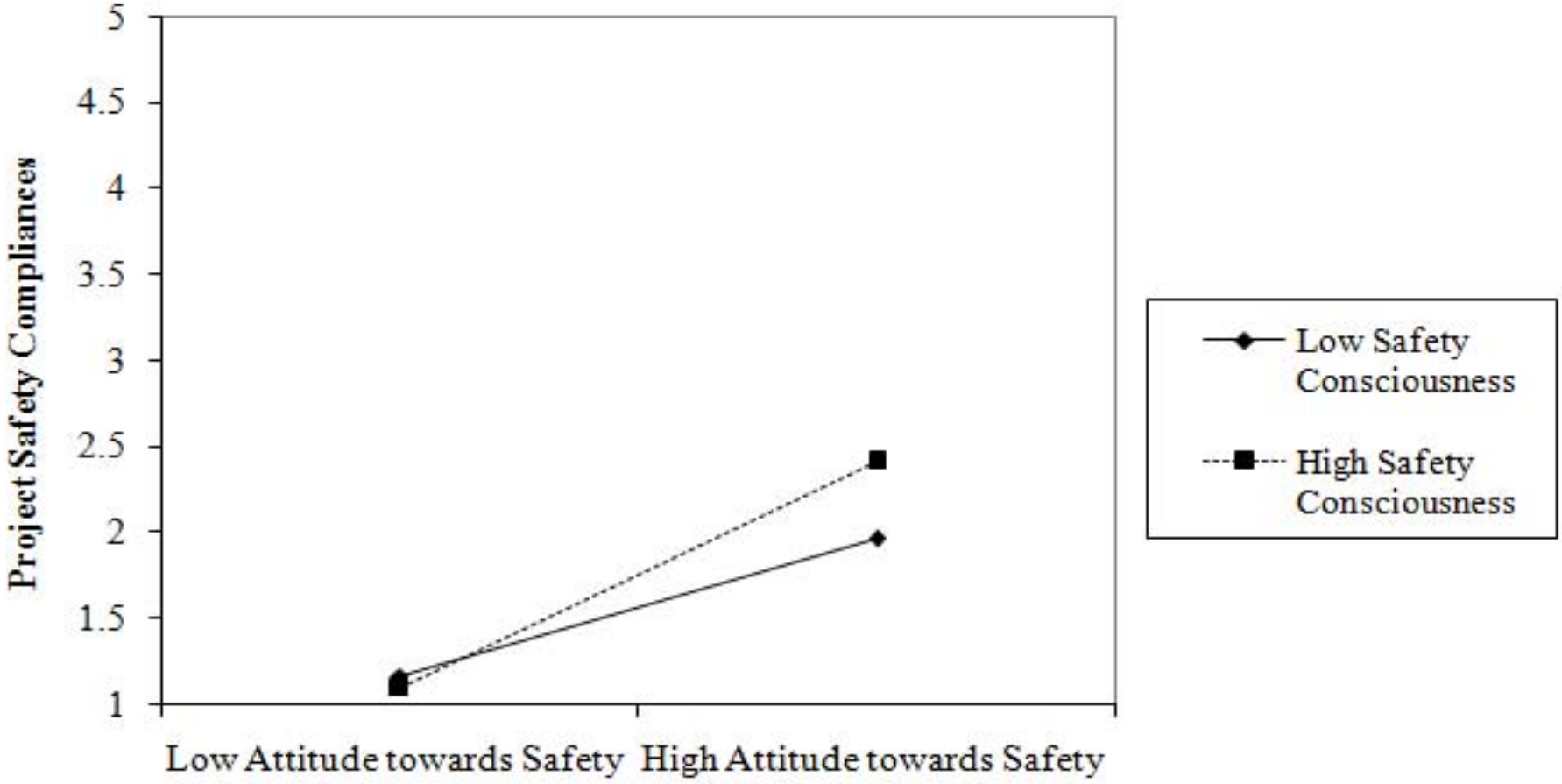

FIGURE 4.1: Moderation Graphs

Upward slope of the lines indicates a positive association between Attitude towards Safety and project safety compliance. The dotted line represents high safety consciousness situation whereas bold line reflects low safety consciousness. Position of the lines represents the relationship between attitude towards safety and project safety compliance. As dotted line lies above the bold line with a less steeper slope, it represents that in case of high safety consciousness, the association between attitude towards safety and project safety compliance is stronger, while the bold line lies above the dotted line with more steeper slope which shows that in case of low safety consciousness situation, the association between attitude towards safety and project safety compliance is weaker. The graph clarifies the buffering role and direction of safety consciousness between attitude towards safety and project safety compliance which gives additional support for the acceptance of hypothesis 3.

4.5 Summary of Hypothesis

No.	Hypothesis Statement	Status
H1	Safety Leadership is positively and significantly associated with on Project Safety Compliance.	Accepted
H2	Attitude towards Safety mediates the relationships between Safety Leadership and Project Safety Compliance.	Accepted
H3	Safety consciousness moderate the relationship between the attitude towards safety and project safety compliance, such that if safety consciousness is high than relationship between attitude towards safety and project safety compliance would be stronger.	Accepted

Chapter 5

Discussion, Conclusion, Limitations & Future Directions

5.1 Discussion

The main purpose of conducting this study is to assess the answers of many questions which were unanswered regarding the relationship of safety leadership and project safety compliance in project specifically in the context of Pakistan. Along with other variables i-e attitude towards safety which is assessed as mediator and safety consciousness which is assessed as a moderator between safety leadership and project safety compliance.

Data for the understudied proposed hypothesis is collected from the construction based organizations of Pakistan. As the first hypothesis H1, which depicts that safety leadership of project leader or construction manager in organizations plays an important role of safety in any organization and projects approves to be accepted. As knowledge of safety is the integral part of spreading awareness throughout the organization in almost every level of department through participation in projects leader in order to bring safety rules in projects, so the H4 are also accepted which shows a significant relation of safety leadership to attitude towards safety and, H3 attitude towards safety to project safety compliance is rejected.

Moreover, attitude towards safety as a mediator between the relationship of safety leadership and project safety compliance, hence the second hypothesis H2 is accepted. After conducted analysis it was concluded that safety consciousness acting as a moderator, so H5 was accepted. That means the moderator safety consciousness do affect the relationship between attitude towards safety and project safety compliance.

The detailed discussion on each hypothesis is as following:

5.1.1 Hypothesis H1:

5.1.1.1 Safety Leadership is positively and significantly associated with on Project Safety Compliance.

As leader plays a vital role in leading every task and activity towards success, safety leadership and project safety compliance in the organization will automatically boost up the moral of the employees because of the safety measures to work more effectively to lead the project towards success by promoting safety ideas for employees. This hypothesis is accepted because the leader of the project can emphasize the employee to take the safety measures in the projects, that inadequate compliance with health and safety rules on project sites were due to low level of supervision of construction workers. It is noticed that health and safety practices in Pakistan is ineffective and lacks proper documentation when compared with the international standards. Therefore, in an organization where safety of an employee acts as a main parameter in order to appreciate safety and security ideas and training for employees, training itself is generated in the project. So, safety of a project employees generates high level of project safety compliance in project through teaching safety role for increasing training employee's tasks.

The most important aspect of project based organization is meeting their competitive market in order to survive as a successful organization, which involves two main dimensions i-e attitude towards safety and project safety compliance which

are having a strong link between them because high level of project safety compliance make their attitude change towards safety and Safety practice of original companies remained an issue of concern in the Pakistan construction industry.

Hence the above mention results are on the bases on the past literature (Reason 2000, Clarke, 2013, Mahmood, 2010, Cooper, 2015, Zohar, 2011,) also provide the evidence for the positive relationship od safety leadership and project safety compliance.

5.1.2 Hypothesis H2:

5.1.2.1 Attitude towards Safety mediates the relationships between Safety Leadership and Project Safety Compliance

safety is considered as it is initial measure of employee it is mostly stored in the minds of people, Leader in the projects make the safety measures the attitude towards safety of employees make them safe the guideline of safety is given by the leader of the project depending on a person who is more conscious by the mutual corporation of employee and the leader of a project safety compliance make easer way to be more considered the safety equipment's Hence, project leader's affective participation and presence fosters safety compliance in project through safety training sharing techniques for employees through potential safety management within the organization to enhance employee secure environment in project.

For instance, despite the fact that there has been a decrease in the yearly number of safety compliance to depict the center security exercises that should be completed by people to keep up work environment safety. These practices incorporate holding fast to tag out and lockout methods and wearing individual defensive hardware.

All these result come out the past literature which support the significant role attitude towards safety as a mediator between the safety leadership and project safety compliance (Hofmann and Stetzer, 1996; Zohar, 2000, Finneran et al., 2012, Swuste et al., 2012; McVittie et al., 2009; Mohamed, 2002, Huang et al., 2004; Hofmann and Morgeson, 1999; Peterson, 1999; Hinze and Gordon, 1979; Hinze and Parker, 1978)

5.1.3 Hypothesis H3:

5.1.3.1 Safety consciousness moderate the relationship between the attitude towards safety and project safety compliance, such that if safety consciousness is high than relationship between attitude towards safety and project safety compliance would be stronger.

Established high level of awareness on the importance of Occupational Safety but there was inadequate investment made towards enhancing workers capacity development on safety programs in majority of the construction companies. However, the safety awareness and compliance among the sites operatives was at infant level and this has caused low project performance. The study stressed that, knowledge and compliance with health and safety practices alone could not achieve optimum project performance, it would require safety culture which encompassed other factors such as: management commitment, workers involvement and strict enforcement of safety regulation.

While relating it with the cultural context of Pakistan, this study is very important in order to illuminate the fact that still there exists a large status gap between managers/subordinates/supervisors and the employees and generally this distance is maintained by the two authority reigns where formalities prevail strictly in the high power distant culture of Pakistan (Hofstede, 2007) which also supports the acceptance of the proposed hypothesis H5 However it has been seen through results that creativity expectation alone has a direct impact on creativity in project, hence future research on this relation is recommended in this context to know future reasoning behind the acceptance of this hypothesis as well as its direct relation with the safety of project.

This model recommends that safety atmosphere is one of numerous potential signs of security conduct. Different components that are probably going to be essential incorporate strong initiative and cognizance. Barling and Zacharatos (1999) have contended that authority is one of the basic authoritative determinants of safety.

Inventers are contended to assume an imperative part in molding the safety atmosphere inside an association, and propelling workers to play out their assignments securely (see additionally Hofmann and Morgeson 1999; Zohar 2000). Knowledge has been observed to be an imperative indicator of an extensive variety of representative practices, including both assignment and relevant execution (e.g. Barrick, Stewart and Piotrowski 2002; Borman, Penner, Allen and Motowidlo 2001). Therefore, we would expect that scruples would likewise foresee wellbeing consistence and investment.

5.2 Implications

5.2.1 Theoretical Implications

This study has contributed towards a new domain in the previous literature where the relation of safety is tested and analyzed with other variables such as leaders and project compliance (Madrid et al., 2016). This study has added very significant aspects of safety leadership of project employee towards the past literature by analyzing its impact with compliance in the projects. As safety is the most popular demand of this age, hence this study has illustrated new concept of bringing safety training in the project by the leader in organization through project safety compliance. practically organization will get benefit from my research to implementing the safety rules at the work place so the employees will feel safety in the organization at focuses on the work and managers get their work done more quickly. In this study, new relations have been analyzed which are very significant for achieving the competitive advantage in this diverse changing and safety environment of emerging organizations. This study has contributed in a significant way in the literature by demonstrating the role of attitude towards safety as a mediator between the safety leadership and project safety compliance, along with demonstrating the role of safety consciousness as a moderator between attitude towards safety and project safety compliance. As safety is one of the vital and

unique variables, so analyzing this variable comes out as the unique research which has contributed significantly in the literature for future results.

5.2.2 Practical Implications

This study is equally important for managers, subordinates, supervisors and employees, as Pakistan is facing a highly power distance culture which needs a lot of new researches to overcome such dimension of Pakistani culture that will illustrate the concepts of safety leadership, subordinates and supervisors in order to enhance the relationship between leader and employees by using effective knowledge management channels by giving training and procedures to entail safety in the projects which is the most demanding need of this century.

5.3 Conclusion

In this investigation I have built up an area of safety leadership and project safety compliance which is the most prevalent and essential space in the ongoing period keeping in mind the end goal to contend internationally among all the developing security measure the world over. The fundamental point of this examination is to discover the effect of safety administration on venture. Likewise this examination has shown the part of disposition towards safety as a middle person between the relationship of safety leadership and project safety compliance. Alongside that, this examination has inspected a one of a kind part of safety consciousness as a moderator between the relationship of disposition towards attitude towards safety and project safety compliance.

Information for the investigation of this examination were gathered through polls, which were disseminated to the venture based associations of Pakistan. This examination and the proposed speculations are being upheld through arranged conduct hypothesis. Altogether 600 surveys were dispersed yet just 248 were utilized for the examination reason on the grounds that those 248 polls were having the most suitable and full data required for the investigation of the examination.

The primary commitment of this examination is that this investigation has contributed a considerable measure in the current writing on the grounds that there has been a constrained work on investigation of the effect of safety leadership on project safety compliance in ventures alongside state attitude towards safety as a mediator and safety consciousness as a moderator. In this investigation, there are 5 theories which are being broke down and tried by the setting of Pakistan. Also, H1, H2, H3 are being acknowledged by the Pakistani setting.

5.4 Limitations of Research

- As each examination has a few reservations, this investigation likewise has a few impediments which happened for the most part because of restricted assets and time limitations.
- As information were gathered from the Project based organizations of Pakistan, consequently the outcomes may be different if the information will be gathered from different spaces of organizations in Pakistan.
- Secondly, In this study, there is small sample size as data were collected from only three cities of Pakistan. This study threatens the generalizability of results due to its small sample size, limited geographical and sector-wise sampling procedure.
- Thirdly, the study was conducted only in Pakistan that could raise the question of cultural influence. So, future researchers can test these relationships in other cultures or countries.

5.5 Future Research Directions

In this investigation the model is being tried for the effect of security of representatives in venture, however for future research headings these factors can be examined with different measurements of compliance alongside improvement in

the administrator worker relationship through different elements like group safety and mental physical wellbeing.

There is still a lot of room for further research, as the hypothesis were accepted but with other variables and domain of project management. Moreover, the study on safety of employee and attitude towards safety in project needs more attention of researchers, because these variables can further be studied in other sectors where safety is required i-e telecommunication sector, marketing sector by relating these sectors with such domain where safety is highly required in jobs. Hence, this study could be further enhanced and elaborated by following many future research guidelines.

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Appendix

CAPITAL UNIVERSITY OF SCIENCE AND TECHNOLOGY

ISLAMABAD

Department of Management Sciences

Annexure I

Demographic

Gender	Male	Female		
Age	18-27 Years	28-37 Years	38-47 Years	48-57 years
Qualification	primary	inter	Bachelors/ diploma	other
Experience	1-5 Years	5-10 Years	10-15 Years	More than 15 Years

Please tick the relevant choices:

1=Strongly disagree, 2= Disagree, 3= Neutral, 4= Agree, 5= Strongly Agree

Safety Leadership						
1	Leader/Manager handles safety business honestly	1	2	3	4	5
2	Leader/Manager shows a model to obey safety rules	1	2	3	4	5
3	Leader/Manager deals with the results of accidents in workplace	1	2	3	4	5
4	Leader/Manager manages safety business persistently	1	2	3	4	5
5	Leader/Manager manages safety business flexibly.	1	2	3	4	5
6	Leader/Manager helps employees to recognize the importance of safety.	1	2	3	4	5
7	Leader/Manager encourages employees to participate safety activities	1	2	3	4	5
8	Leader/Manager studies new knowledge regarding safety continuously	1	2	3	4	5
9	Leader/Manager explains the concept of safety clearly.	1	2	3	4	5
10	Leader/Manager draws a picture to describe a safety vision	1	2	3	4	5
11	Leader/Manager illustrates a safety model for employees to imitate	1	2	3	4	5
12	Leader/Manager treats employees kindly when dealing with safety business	1	2	3	4	5
13	Leader/Manager sets up a harmonious atmosphere to improve relationship among employees	1	2	3	4	5
14	Leader/Manager is trying to solve the conflicts among employees	1	2	3	4	5
15	Leader/Manager allocates safety resources fairly	1	2	3	4	5
16	Leader/Manager is trying to maintain the harmony between different departments when dealing with safety business	1	2	3	4	5
17	Leader/Manager modestly accepts employees advice to improve safety.	1	2	3	4	5
18	Leader/Manager trusts that employees can work safely.	1	2	3	4	5
19	Leader/Manager is confident of employees competence to complete safety goals.	1	2	3	4	5
20	Leader/Manager actively cares about employees everyday life	1	2	3	4	5
21	Leader/Manager is trying to satisfy employees need for safety	1	2	3	4	5
22	Leader/Manager gives employees another chance to rectify when they disobey safety rules.	1	2	3	4	5
23	Leader/Manager shows his/her appreciation when employees accomplish their safety business	1	2	3	4	5

24	Leader/Manager firmly orders employees to accomplish safety goals.	1	2	3	4	5
25	Leader/Manager punishes those departments with poor safety performance.	1	2	3	4	5
26	Leader/Manager requests employees to be responsible for their own work safety	1	2	3	4	5
27	Leader/Manager requests employees to accomplish their safety missions duly	1	2	3	4	5
28	Leader/Manager supports to establish regulations of safety and health management.	1	2	3	4	5
29	leader/Manager requests employees to obey safety rules	1	2	3	4	5
30	Leader/Manager fairly deals with safety business.	1	2	3	4	5
31	Leader/Manager asks employees to enforce regulations of safety and health management thoroughly.	1	2	3	4	5
32	Leader/Manager amends regulations of safety and health management timely.	1	2	3	4	5
33	Leader/Manager asks the Department of Safety and Health Management to set up safety programs	1	2	3	4	5
34	Leader/Manager requests employees to improve safety defects continuously	1	2	3	4	5
35	Leader/Manager audits employees safety performance regularly	1	2	3	4	5
Attitude towards safety						
1	Safety works until we are busy.	1	2	3	4	5
2	If I worried about safety I would not get my job done.	1	2	3	4	5
3	There is no point in reporting a near-miss.	1	2	3	4	5
4	Not all accidents are preventable.	1	2	3	4	5
5	Safety equipment requirements are unrealistic	1	2	3	4	5
6	Individual should encourage colleagues to work safety	1	2	3	4	5
7	Individual shares responsibility for safety.	1	2	3	4	5
8	Less chance of having an accident at work than when working at home.	1	2	3	4	5
9	The company is a safer place to work than other companies	1	2	3	4	5
10	People with minor injuries that have been treated should be asked to come to work.	1	2	3	4	5
11	Depot Safety Committee is effective.	1	2	3	4	5
12	*Safety equipment should always be worn.*					

13	Company should be as concerned for safety as for profits.	1	2	3	4	5
14	Safety audits are a valuable exercise.	1	2	3	4	5
15	People understand companys operating procedures.	1	2	3	4	5
16	People who work to procedures will always be safe.	1	2	3	4	5
17	Accidents only happen to other people.	1	2	3	4	5
Safety consciousness						
1	I know what protective equipment and/or clothing is required for my job	1	2	3	4	5
2	I am well aware of the safety risks involved in my job	1	2	3	4	5
3	I know where the fire extinguishers are located in my workplace	1	2	3	4	5
4	I know what equipment is safe to use for my particular job(s)	1	2	3	4	5
5	I know how to inform management about any potential hazards I notice on the job	1	2	3	4	5
6	I know what procedures to follow if injured on my shift	1	2	3	4	5
7	I would know what to do if an emergency occurred on my shift (e.g. fire)	1	2	3	4	5
Project safety compliance						
1	I use all the necessary safety equipment to do my job	1	2	3	4	5
2	I use the correct safety procedures for carrying out my job	1	2	3	4	5
3	I ensure the highest levels of safety when I carry out my job	1	2	3	4	5

سوالنامہ

پیارے شرکا کیپٹل یونیورسٹی آف سائنس اینڈ ٹیکنالوجی اسلام آباد میں ایم ایس (پی ایم) مینجمنٹ سائنسز کی طالبہ ہوں۔ میں ایک ریسرچ کے موضوع "سیفٹی لیڈرشپ کے پراجیکٹ سیفٹی کی تعمیل بشمول سیفٹی کے شعور کی حفاظت اور اعتدال پسندی کی طرف رویہ ثالثی کردار کے ساتھ" پر تحقیق کا آغاز کر رہی ہوں۔ آپ اِس منسلک سوالنامے کو مکمل کر کے میری مدد کر سکتے ہیں۔ آپ اسے تب دلچسپ محسوس کریں گے۔ میں اپنے مطالعے میں آپ کی شرکت کی تعریف کرتی ہوں اور میں یقین دلاتی ہوں کہ میں آپ کے جوابات کو راز میں رکھوں گی۔ جو کہ صرف تعلیمی مقاصد کی حد تک استعمال کئے جائیں گے۔

مخلص

مریم اشرف

آخری سوالنامہ
آبادیاتی کوائف

جنس	مرد	عورت		
عمر	18-27 سال	28-37 سال	38-47 سال	48-57 سال
تعلیم	پرائمری	انٹرمیڈیٹ	بی اے، ڈپلومہ	مزید (اضافی)
تجربہ	1-5 سال	5-10 سال	10-15 سال	15 سال سے زائد

متعلقہ انتخاب پر نشان لگائیں۔ زیادہ اختلاف (1)۔ اختلاف (2) غیر جانبدار (3) متفق (4) زیادہ متفق (5)

1	لیڈر/ منیجر سیفٹی امور کو ایمانداری سے چلاتا ہے۔	1	2	3	4	5
2	لیڈر/ منیجر سیفٹی قوانین پر عملدرآمد کے سلسلہ میں ایک ماڈل پیش کرتا ہے۔	1	2	3	4	5
3	لیڈر/ منیجر کام کرنے کی جگہ سے حادثات کے نتائج کی نگرانی کرتا ہے۔	1	2	3	4	5
4	لیڈر/ منیجر سیفٹی امور کی مسلسل نگرانی کرتا ہے۔	1	2	3	4	5
5	لیڈر/ منیجر سیفٹی امور کی انجام دہی میں لچکدار رویہ رکھتا ہے۔	1	2	3	4	5
6	لیڈر/ منیجر عملے کو سیفٹی کی اہمیت کی آگاہی میں مدد دیتا ہے۔	1	2	3	4	5
7	لیڈر/ منیجر عملے میں سیفٹی سرگرمیوں میں شمولیت کے لئے حوصلہ افزائی کرتا ہے۔	1	2	3	4	5
8	لیڈر/ منیجر سیفٹی امور کے بارے میں نئی معلومات کا مسلسل مطالعہ کرتا رہتا ہے۔	1	2	3	4	5
9	لیڈر/ منیجر سیفٹی امور کے تصور کو اچھے طریقے سے بیان کرتا ہے۔	1	2	3	4	5
10	لیڈر/ منیجر ایک خاکے کے ذریعے سیفٹی وژن کو اجاگر کرتا ہے۔	1	2	3	4	5
11	لیڈر/ منیجر ایک سیفٹی ماڈل پیش کر کے عملے کو اس پر عمل کرنے کی ترغیب دیتا ہے۔	1	2	3	4	5
12	لیڈر/ منیجر سیفٹی امور کے عملدرآمد کے دوران عملے سے شفقت سے پیش آتا ہے۔	1	2	3	4	5
13	لیڈر/ منیجر عملے کے ارکان کے مابین تعلقات کی بہتری کے لئے ایک ہم آہنگ ماحول قائم کرتا ہے۔	1	2	3	4	5
14	لیڈر/ منیجر عملے کے ارکان کے مابین تنازعات کو حل کرنے کے لئے کوشاں رہتا ہے۔	1	2	3	4	5
15	لیڈر/ منیجر سیفٹی امور میں وسائل کی منصفانہ طریقے سے تقسیم کرتا ہے۔	1	2	3	4	5
16	لیڈر/ منیجر سیفٹی امور کی سرانجام دہی کے لئے مختلف ڈیپارٹمنٹ کے مابین ہم آہنگی برقرار رکھتا ہے۔	1	2	3	4	5

17	لیڈر/ منیجر عملے کی جانب سے سیفٹی امور میں بہتری کے لئے پیش کردہ مشوروں کو خوش اسلوبی سے قبول کرتا ہے۔	1	2	3	4	5
18	لیڈر/ منیجر پر اعتماد رہتا ہے کہ عملہ حفاظتی ماحول میں کام سرانجام دے رہا ہے۔	1	2	3	4	5
19	لیڈر/ منیجر + عملے کی اہلیت کے بارے میں پُر اعتماد ہے کہ وہ سیفٹی ہدف کو پورا کر لینگے۔	1	2	3	4	5
20	لیڈر/ منیجر سٹاف کی روزمرہ زندگی کا بھرپور خیال رکھتا ہے۔	1	2	3	4	5
21	لیڈر/ منیجر عملے کی سیفٹی کی ضروریات کا خیال رکھتا ہے۔	1	2	3	4	5
22	لیڈر/ منیجر عملے کو مکمل طور سے سیفٹی امور پر عملدرآمد کے سلسلے میں کسی بھی خلاف ورزی پر دوسرا موقع فراہم کر دیتا ہے۔	1	2	3	4	5
23	لیڈر/ منیجر اپنی پسندیدگی کا اظہار کرتا ہے جب عملہ سیفٹی امور کی انجام دہی کو پورا کرتا ہے۔	1	2	3	4	5
24	لیڈر/ منیجر عملے کو سیفٹی امور پر عملدرآمد ہونے کی سختی سے ہدایت دیتا ہے۔	1	2	3	4	5
25	لیڈر/ منیجر اُن محکموں کو سزا دیتا ہے جو سیفٹی کے سلسلے میں ناقص کارکردگی دیکھاتے ہیں۔	1	2	3	4	5
26	لیڈر/ منیجر عملے کو ہدایت کرتا ہے وہ ڈیوٹی کے دوران سیفٹی کو قائم کرنے کے ذمہ دار ہونگے۔	1	2	3	4	5
27	لیڈر/ منیجر ملازمین کو درخواست کرتا ہے کہ وہ سیفٹی سے متعلق اپنے مشن کو بخوبی پورا کریں۔	1	2	3	4	5
28	لیڈر/ منیجر سیفٹی اور صحت کے نظم ونسق کے لئے نئے قوانین قائم کرنے کی حمایت کرتا ہے۔	1	2	3	4	5
29	لیڈر/ منیجر عملے کو سیفٹی کے قوانین پر عملدرآمد کی تلقین کرتا ہے۔	1	2	3	4	5
30	لیڈر/ منیجر سیفٹی امور پر عمل کرنے کے لئے احسن طریقہ اختیار کرتا ہے۔	1	2	3	4	5
31	لیڈر/ منیجر عملے کو تلقین کرتا ہے وہ سیفٹی اور صحت کے نظم ونسق پر مکمل طور پر عمل کریں۔	1	2	3	4	5
32	لیڈر/ منیجر وقتاً فوقتاً سیفٹی اور صحت کے قوانین تبدیل کرتا رہتا ہے۔	1	2	3	4	5
33	لیڈر/ منیجر سیفٹی اور صحت کے انتظامات سے متعلق محکمہ جات کو سیفٹی پروگرام نافذ کرنے کی ہدایت دیتا ہے۔	1	2	3	4	5
34	لیڈر/ منیجر عملے کو ہدایت کرتا ہے کہ وہ مسلسل سیفٹی تدابیر کو بہتر بنائیں۔	1	2	3	4	5
35	لیڈر/ منیجر عملے کی سیفٹی سے متعلق کارکردگی کی باقاعدہ جانچ پڑتال کرتا ہے۔	1	2	3	4	5
	سیفٹی کے رجحانات					
1	سیفٹی پر عملدرآمد ہماری مصروفیات پر منحصر ہے۔	1	2	3	4	5
2	اگر میں اپنی سیفٹی کے بارے میں پریشان رہوں تو میں اپنی ڈیوٹی سرانجام نہیں دے سکوں گا۔	1	2	3	4	5
3	کسی بھی طرح نقصان سے بچت کے سلسلے میں کسی بھی رپورٹنگ کا کوئی فائدہ نہیں۔	1	2	3	4	5
4	ہر قسم کے حادثات سے نہیں بچا جا سکتا۔	1	2	3	4	5
5	سیفٹی کے آلات سے متعلق شرائط غیر حقیقت پسندانہ ہے۔	1	2	3	4	5
6	سیفٹی کے آلات کو ہمیشہ پہنا جائے۔	1	2	3	4	5
7	ملازمین کو اپنے ساتھیوں کی حفاظتی ماحول میں کام کرنے کی حوصلہ افزائی کرنی چاہئے۔	1	2	3	4	5
8	افراد کو سیفٹی کے لئے اپنی ذمہ داری دیکھانی چاہئے۔	1	2	3	4	5
9	کمپنی میں کام کرنے کے دوران حادثے کا چانس گھر میں ہونے والے حادثے سے کم ہوتا ہے۔	1	2	3	4	5
10	اپنی کمپنی میں کام کرنا دوسری کمپنی میں کام کرنے کے برعکس زیادہ محفوظ ہے۔	1	2	3	4	5
11	وہ تمام لوگ جو حادثے میں زخمی ہونے کے باعث طبی امداد وصول کرتے ہیں ان کو ڈیوٹی پر حاضر ہو جانا چاہئے۔	1	2	3	4	5

12	ڈپو کی سیفٹی موثر ہے۔	1	2	3	4	5
13	سیفٹی کے آلات ہمیشہ پہن کر رکھنے چاہئے۔	1	2	3	4	5
14	کمپنی کو سیفٹی کا اتنا ہی خیال رکھنا چاہے جتنا کہ وہ منافع کے حصول کے لئے کوشاں رہتی ہے۔	1	2	3	4	5
15	سیفٹی کی جانچ پڑتال کافی مفید مشق ہے۔	1	2	3	4	5
16	ملازمین کمپنی کے انتظامی نظم ونسق کو سمجھتے ہیں۔	1	2	3	4	5
17	ڈپو کی سیفٹی کمیٹی کافی موثر ہے۔	1	2	3	4	5
18	وہ ملازمین جو نظم ونسق کے مطابق کام کرتے ہیں ہمیشہ محفوظ رہتے ہیں۔	1	2	3	4	5
19	حادثات کا شکار صرف دوسرے لوگ ہوتے ہیں۔	1	2	3	4	5
	سیفٹی کی آگہی					
1	مجھے معلوم ہے کہ مجھے اپنے جاب کے لئے سیفٹی آلات اور لباس کی ضرورت ہے۔	1	2	3	4	5
2	مجھے اپنی جاب کے دوران سیفٹی خطرات کا علم ہے۔	1	2	3	4	5
3	مجھے معلوم ہے کہ میرے کام کی جگہ پر آگ بجھانے والے آلات کہاں پڑے ہیں۔	1	2	3	4	5
4	مجھے معلوم ہے کہ اپنے مخصوص جاب کے سلسلے میں کونسے سیفٹی آلات کی ضرورت ہے۔	1	2	3	4	5
5	مجھے معلوم ہے کہ انتظامیہ کو کیسے بتانا ہے کہ کونسے محکمانہ خطرات مجھے کام میں لاحق ہیں۔	1	2	3	4	5
6	مجھے معلوم ہے کہ کونسے طریقے پر جاب میں زخمی ہونے پر عمل کرنا ہے۔	1	2	3	4	5
7	مجھے معلوم ہے کہ مہیا کرتا ہے اگر مجھے شفٹ کے دوران ایمرجنسی کا سامنا کرنا پڑتا ہے۔	1	2	3	4	5
	پراجیکٹ سیفٹی پر عملدرآمد					
1	میں اپنی جاب کی انجام دہی کے لئے تمام ضروری سیفٹی آلات استعمال کرتا ہوں۔	1	2	3	4	5
2	میں اپنی جاب کے لئے درست سیفٹی آلات کے طریقہ کار پر عمل کرتا ہوں۔	1	2	3	4	5
3	جب میں جاب پر ہوتا ہوں تو سیفٹی کے اعلیٰ درجے کے اصولوں کو یقینی بناتا ہوں۔	1	2	3	4	5