

**The Role of Team Diversity & Work Cognition Inventory on Team  
Performance in Healthcare Sector of Pakistan**



By

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## **DEDICATION**

It's my pleasure to dedicate my thesis to all the people who really are the cause of my success. These are none other than my Family Members, specially my mother Syeda Ishrat Babar, who is the backbone of my career; without whom I feel myself nothing. For me she is one of nature's masterpieces and living under her shed is an earlier heaven.

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Syeda Urooj Babar

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## ABSTRACT

In this competitive environment, hospitals are striving with their best to get maximum output from the diversified workforce they have. Team diversity and work cognition are considered as tactics for gaining edge over competitors by the hospitals. This study, investigated influence of team diversity and work cognition inventory on team performance in healthcare sector of Pakistan. Quantitative methodological paradigm was selected, following positivist approach. Non probability sampling was done in which respondents were picked through purposive sampling and survey based questionnaires were used as an instrument for research. Sample was taken from all eleven class-A Combined Military Hospitals (CMH) throughout in Pakistan. Team satisfaction and social capital were taken as mediators while individual team member creativity was taken as a moderator between the link of team diversity and work cognition inventory with team performance. Structural equation modeling (SEM) and Preacher and Hayes' regression approach were applied for measuring effects of mediators and moderator. This research explained that diversified teams performed better than homogenous teams if team members were satisfied while working with each other. It also concluded employees' individual creativity to be significantly moderating team diversity and work cognition inventory link with team performance. While it rejected the idea that employees cognitive features are directly linked with their performance, but its social capital that may increase or decrease employees performance in association with work cognition inventory.

**Keywords:** *team diversity, work cognition inventory, team satisfaction, team performance, social capital, individual team member creativity*



## **PUBLICATIONS FROM RESEARCH**

During the PhD program, the researcher published the following research articles in the W-category journals recognized by the Higher Education Commission (HEC) of Pakistan

- 1. Babar S. U., Ahmad H. M. (2020). Impact of Diversity & Work Cognition Inventory on Team Satisfaction. *International Journal of Innovation, Creativity and Change*, 14 (9), 533-552**
- 2. Babar S. U., Zaidi I.B., Ilyas M. (2021). Impact of Work Cognition Inventory & Team Diversity on Team Performance. *International Journal of Innovation, Creativity and Change*, 15 (3), 706-723**

In addition to these, the scholar published the following articles in HEC recognized X-Category Journals:

- 3. Babar S. U., Shah. H.A., Shah S., Khan F. (2022). Impact of Multi-Generational Team Conflict, Coordination and Personality Types on their Team Performance. *Multicultural Education*, 8 (1), 138-146**
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### LIST OF ABBREVIATIONS

<b>Sr. No</b>	<b>Word</b>	<b>Abbreviation</b>
1	<b>WCI</b>	Work cognition inventory
2	<b>WCI-R</b>	Work cognition inventory revised
3	<b>AU</b>	Autonomy
4	<b>CC</b>	Connectedness with colleagues
5	<b>CL</b>	Connectedness with leader
6	<b>CO</b>	Collaboration
7	<b>DJ</b>	Distributive justice
8	<b>FB</b>	Feedback
9	<b>GR</b>	Growth
10	<b>MW</b>	Meaningful work
11	<b>PE</b>	Performance expectation
12	<b>PJ</b>	Procedural justice
13	<b>TV</b>	Task variety
14	<b>WB</b>	Workload balance
15	<b>BoD</b>	Burden of diseases
16	<b>WHO</b>	World health organization
17	<b>UNAID</b>	Joint United Nations program on acquired immunodeficiency syndrome
18	<b>HDI</b>	Human development index
19	<b>PPP</b>	Public private partnership
20	<b>BHUs</b>	Basic health units
21	<b>RHCs</b>	Rural health centers
22	<b>IDCRP</b>	Informational diversity-cognitive resource perspective
23	<b>CMHs</b>	Combined Military Hospitals
24	<b>ECG</b>	Electrocardiogram
25	<b>GDMO</b>	General Duty Medical Officers
26	<b>TP</b>	Team performance
27	<b>TD</b>	Team diversity



28	<b>IC</b>	Individual Creativity
29	<b>TS</b>	Team Satisfaction
30	<b>SC</b>	Social Capital
31	<b>SPSS</b>	Statistical Package for Social Science
32	<b>SEM</b>	Structural equation modelling
33	<b>LISREL</b>	Linear structural relations
34	<b>CFA</b>	Confirmatory Factor Analysis
35	<b>OIC</b>	Officer in Command
36	<b>KMO</b>	Kaiser Meyer-Olkin
37	<b>TLI</b>	Trucker Lewis index
38	<b>CFI</b>	Comparative fit index
39	<b>RMSEA</b>	Root mean square error of approximation

# **The Role of Team Diversity & Work Cognition Inventory on Team Performance in Healthcare Sector of Pakistan**

## **CHAPTER 1 INTRODUCTION**

### **1.1. Background of Study**

Continuous-wave of change at the end of 20<sup>th</sup> century has stimulated the society and altered the elementary settings of organizations throughout the world. High ups of various organizations accepted the advantages of team diversity however they lack the proficiencies to revolutionize their organizations. In this competitive environment, organizations are striving with their best to get maximum output from their workforce. Team diversity and work cognition are the approaches administrations are focusing to take competitive advantages and achieve organizational objectives (Srikanth K et al. 2016; Nimon et al., 2015). So, attention has turned from stagnant organizational bodies to constantly renovating methods, with growing prominence of diversified workforce for meeting the needs of altering organizations (Srikanth K et al. 2016). Therefore numerous models have been designed for understanding team performance, and team diversity is a crucial component in those models (Tasheva and Hillman, 2018). Team diversity has gained significant consideration for its sterling effect on team performance (Hjerto and Kuvaas, 2017; Ng et al., 2017).

A meta-investigation of team's viability has indicated that uniqueness and similarity both can increase a team's performance (Stahl, Maznevski, Voigt & Jonsen, 2010). Past researches concluded that coordination among diversified team members helps in creating inventive ideas and information that results in enhancing team performance (Maqsoom et al., 2020). Differences present dissimilar concepts (Cramton & Hinds, 2014), while similarities among group-associates lead the group around mutual targets. Diversity pressures are vibrant and likely include persuasive procedures (Cramton & Hinds, 2014), they are not effortlessly uncovered without questioning teams working in organizations. Few investigators (Liet al., 2016; Qu, 2017) claimed that diversified employees may have dissimilar perspectives for tackling different situation. However, focus and firmness in some teams created sense of struggle as an unintended outcome of corporate standards, coordinated crosswise in teams (Hajro A. Cristina B. Gibson, Pudelko M. 2017). Bamel et al. (2018) suggested that difference of opinions can be avoided by using knowledge, skills, and

abilities of diversified teams in a systematic manner. Therefore greater social connections among team members result in high competence of team tasks.

Diversity is a cumulative variable that comprises of differences between inter-reliant participants of a work team for their particular features and demographic differences, i.e. gender, caste, religion, or civilization, that in combination possibly subsidize to ethnic uniqueness, rooted in association with distinctive demographic teams (Hajro et al., 2017). In teams, it represents multiple characteristics or perceptions, such diversity is beneficial for assembling greater information, boosting creativity and reducing clashes among members in few teams while inversely affect performance in other teams. Meta-analytical review of diversified teams (Horwitz et al., 2007; van Knippenberg et al., 2007), expose different kinds of diversity which effect within team practices, (i.e. communication), different facets of attitudes, (i.e. satisfaction and obligation) and consequences (i.e. performance and effectiveness), (Joon et al., 2010). Furthermore diversity among team members rises the likelihood of tension among members (Mayo et al., 2017) as opposite to trust as in similar teams.

Existing studies crosswise over 500 firms from different ventures and nations uncovered that while most diversified teams concentrated on pulling in and holding broadly different representatives, they neglected fundamental analysis of their organizational diverse environments (Preveden, Schwarzinger, Jelicic & Strobach-Budway, 2013). Moreover, as per social identity theory, (Tajfel & Turner, 1994), similar teams function more efficiently than diversified teams (Van Knippenberg et al., 2007) as among diversified teams, members are not dependable, less capable and helpful than homogenous team participants (Choi, 2009). While in value diversity theory Williams and O'Reilly (1998) presented, flip side of the coin by arguing diversified teams to be more productive due to members from different backgrounds, knowledge and skills.

Team performance is also found to be affected by work cognition inventory (WCI), “(Nimon, K., Zigarmi, D., Houson, D., Witt, D., and Diehl, J., 2015)” that denotes workforce personal satisfaction and obligation with their workplace. Nimon, K., Zigarmi, D., Houson, D., Witt, D., and Diehl, J., (2011) established work cognition inventory-revised (WCI-R), to evaluate twelve intellectual features of team members’ workplace practices that immensely affect their performance, both individually as well as collectively. The work cognition inventory-revised

(WCI-R) includes autonomy (AU), connectedness with colleagues (CC), connectedness with leader (CL), collaboration (CO), distributive justice (DJ), feedback (FB), growth (GR), meaningful work (MW), performance expectations (PE), procedural justice (PJ), task variety (TV) and workload balance (WB). These constructs are linked with employees' work passion model (Nimon et al., 2015) thus affect workers eagerness for achieving set goals and thus influences their team satisfaction and performance. Work cognition inventory means individuals are capable of regulating themselves, their choices and their imminent expectations.

Prior researches have examined creativity as a resultant variable of a team or individualized work, individual team member's creativity enhances their performance in the teams (Anderson, Potočnik, & Zhou 2014). If the chance of being creative is provided to individuals, i.e. doing the allocated work in the way they like, they will be more gratified and execute more well and vice versa. Likewise, diversified teams empower development, they additionally require team members' strong social affiliations with their colleagues and leader to help them in performing at their best (Hajro et al., 2017). Social capital means sharing of information in which individuals' viewpoints, knowledge, and experience go into team collaborations (Gibson, 2001). Past writings have accentuated the requirement for research on information sharing forms in diverse teams (Gibson & McDaniel, 2010; Hajro & Pudelko, 2010; Hinds et al., 2011). Investigating similar procedures is vital as they might mediate employees perspective regarding their organization, (Jackson, Joshi & Erhardt, 2003), which is most significant, yet additionally most argumentative procedures of diversified teams (Gibbs, Grushina & Gibson, 2013; Harvey & Kou, 2013). Thus social capital can mediate the link among work cognition inventory and team performance. The current study is therefore intended to inspect the mediating role of team satisfaction on the performance of employees of healthcare sector in Pakistan when assigned some group task.

## **1.2.Contextual Analysis**

Pakistan Health Care system is currently facing many challenges. Although, from face of it healthcare facilities are flourishing in Pakistan. However, if we look deep inside, we will see poor management, low quality services, shortage of resources i.e. drugs, un-trained staff and scarcity of female staff. Moreover, it is seen as a 'New Normal' that doctors give more time to their private clinics, to make more money, in comparison to their primary assignments (Kurji, Z., Premani, Z.S., & Mithani, Y., 2016). This research is carried out to find diversified team's performance in

healthcare sector in Pakistan and therefore Combined Military Hospitals (CMHs) working all over in Pakistan have been selected as population for the research. Due to transfer of employees after every 2 to 3 years in CMHs, it was suitable to get diversified team members working together in CMHs and investigating whether the team members share the information (social capital) regarding new researches in the field, i.e. corona virus vaccine. It is to analyse, whether working in newly made teams the employees have the right to work in their own preferred style or not?

Quality of Service (QoS) of hospitals can be determined from patient satisfaction, physical and psychological comfort of patient's attendants and improved outcomes of healthcare. Hospital staff including doctors, nurses, paramedics, pharmacists, laboratory technicians, admin teams, patients / attendants' feedback, policy makers and Govt agencies all play vital role in maintaining and improving QoS of hospitals, (Khalid & Abbasi, 2018).

### **1.3.Gap Analysis**

#### **1.3.1. Theoretical Gap**

Main focus of researchers while investigating diverse teams remain constrained to gender or racial differences and concentrated solely on local organizations, mostly to one particular firm only (Hajro et al., 2017). Past researchers have given more attention to make a model for enhancing diversified team performance (Rego et al., 2019) their focus remained on effective performance only Selzer et al., 2021). This research validated and extended the value in diversity theory by giving recommendations for taking optimum performance from diversified workforce. Certainly, not only team diversity is required for creating a supportive work environment, but valuing diversity is also mandatory for organizational success (Hopkins, Hopkins & Mallette, 2001; Ng & Sears, 2018). Least researches are found on diversified team performance with respect to coordination gap and satisfaction of diversified team members. Most of the researchers focus on performance only rather than on affecting elements i.e. team members' satisfaction (Pang, Tong & Wong, 2011). Nishii, L. H., Khattab, J., Shemla, M., & Paluch, R. (2018) targeted training of diversified teams after their recruitment along with their work life balance issues i.e. diversified team members satisfaction with their workload to influence their affirmative actions regarding equal opportunity programs. Diversified team members satisfaction might be affected due to employees cognitive features regarding their workplace, i.e. work cognition inventory, that

represents level of satisfaction and commitment of employees with their workplace (Nimon et al., 2015). Moreover, Srikanth et al. (2016) argued social categorization process to be a cause of low satisfaction and performance of diversified team members. Furthermore, “Shung J., Tae-Y.K., Jeong-Y. L., Lin B., (2012)” concluded in their research that individual team member’s creativity is one of the key element affecting employees performance while working in diversified teams. This research therefore tried to fulfill all these possible gaps that need to be addressed for taking optimum performance from diversified workforce.

With respect to changing healthcare requirements, a change is required for raising the services of healthcare workers, predominantly, in diversified teams for quantifying improvement in the area of healthcare; as the gap identified by (Hofmarcher et al., 2016). Therefore healthcare sector has been chosen as the area of this research. All in all, this study focused on the influence of diversified teams and work cognition inventory on performance of team members in the healthcare sector; while taking team satisfaction and social capital as a mediator. So as to find out the ways for the betterment of Pakistan’s healthcare sector and provide improved facilities to the patients.

### **1.3.2. Contextual Gap**

QoS, patient safety and satisfaction are ‘inversely proportional’ to workload on doctors and nursing staff in Pakistan. As the work load increases, QoS and patient safety / satisfaction decreases, (Khalid et al., 2018). According to Unicef, “despite significant improvements over the past two decades, Pakistan ranks towards the bottom among other countries when it comes to infant and neonatal mortality” (Dawn's special coverage of the Sustainable Development Goals 2015-2030 continues). In healthcare sector environment, people have specific but dissimilar set of knowledge, skills and abilities in the same team which makes it diversified. Although employees’ responsibilities and duties are vastly inter-dependent, therefore they may face critical contests in emergencies, which causes a stressful working environment for patient care (Baker et al., 2017; Löhr et al., 2017). Least research is done on managing such situation in healthcare sector of Pakistan. This research will try to fulfill the gap of least considering diversified team performance as the area of research in healthcare sector of Pakistan. Thus it will help in increasing quality of services of Combined Military Hospitals staff including administration, doctors, nurses etc and hence will help in improving performance of healthcare sector of Pakistan.

### **1.3.3. Methodological Gap**

Diversity in today's workforce is not only in terms of age, sexual category, ethnic group & education, but also in the form of different practices, abilities, skills, perceptions and opinions about what is correct and incorrect (Otaye-Ebede, 2019). Least research has been done on measuring diversified team design and analysis for sharing information with each other (Hajro et al. 2017). Srikanth et al. (2017) suggested to work on dynamics of diversified teams in relation with social categorization process, also for fulfilling the gap identified by Hajro et al. (2017) to take quantitative data from a bigger sample size and measuring mediation models linked via social capital that impacts performance of diversified teams. This study aims to investigate the evolving effects of team diversity with the mediating character of social capital among work cognitive inventory and team performance, for calculating viability in the healthcare sector (Hofmarcher, Festl & Bishop-Tarver, 2016).

### **1.4. Problem Statement**

With the increase of globalization, competition among hospitals has increased, therefore hospitals are trying various methods and techniques to improve their performance. HR professionals adopted different processes and methods, then concluded team diversity and work cognitive inventory to be helpful in improving performance, (Srikanth et al., 2016; Zigarmi et al., 2015). Now a days, many organizations are opting diversified teams for enhancing their performance. Organizations are focusing all their potential to improve performance by making diversified teams for research and development purposes i.e. task oriented diversified teams are made in order to make vaccine against the pandemic. But unfortunately, this area of making diversified teams for research and development purposes with respect to time has not got as consideration of the researchers as needed and health sector is the most neglected in this regard. In Borgen project, Raza A. (2020) has claimed that in children immunization, Pakistan has overall vaccination coverage of only 60% and among the lowest countries in this regard. As a result, country bears 69.3 deaths per 1000 live births. This is mentioned for representing the actual picture of healthcare sector of Pakistan, as an evidence for showing the need to select this sector to research on.

Cooperation-based practice failure has got considerably fewer research considerations than participation-based practice failure. For coping with changing healthcare requirements, a change is required to enhance the performance of healthcare workers, specially, in light of differences, so to measure the enhancement in this area; as the gap identified by (Hofmarcher et al., 2016). Quality of service, (QoS), patient safety and satisfaction are ‘inversely proportional’ to workload on doctors and nursing staff. As the work load increases, QoS and patient safety / satisfaction decreases, (Khalid, et al., 2018). Undoubtedly, resource constraint is also one of the major hinderance in the effectiveness of healthcare system of Pakistan, but mal-governance, injustice, negligence, and un-accountability are the deadly poisons that are not only hampering further allocation of resources but also harming the existing ones (Khalid et al., 2018). Thus quality of service can play a vital role in satisfying not only the patients and their attendants but also the diversified team members and enhancing their performance.

Research scholars are giving more time and effort for making a comprehensive model for enhancing diversified team performance (Scott et al., 2017; Rego et al., 2019; Selzer et al., 2021) but least research is done on its relation with work cognition inventory. Work cognition inventory has found to effect diversified team performance by satisfying employees cognitive features (Nimon et al., 2011, Zigarmi et al., 2015). This research will help in finding out an ideal solution for improvement in healthcare sector of Pakistan by viewing the effect of these two variables on team performance of employess working in Combined Military Hospitals. Since 2000s Pakistan has shown an overall increase of 14% in its healthcare frame work as per (Gallup Pakistan, 2016). But this increase is not very satisfactory in comparison to the population increase in the country. Health Care system lacks structural, organizational and administrative quality checks. A lot of work has to be done at higher pace with sincerity and dedication in terms of QoS, (Khalid & Abbasi, 2018). This gives rise to the following problem statement;

*“Diversified teams are unable to work together, due to non-recognition of employees cognitive features, which hampers employees freedom to work creatively, resulting in decreased satisfaction & performance of healthcare sector employees of Pakistan”.*



### **1.5. Research Questions**

- i. Does any relation exist between team diversity and team performance?
- ii. Do team satisfaction mediates the relation among team diversity and team performance?
- iii. Does any relation exist between work cognition inventory and team performance?
- iv. Do the relation between work cognition inventory and team performance is mediated by social capital?
- v. Does individual team member creativity moderates the relation of team diversity and team performance?
- vi. Do the relation among work cognition inventory and team performance is moderated by individual team member creativity?

### **1.6. Research Objectives**

- i. To examine the link between team diversity and team performance.
- ii. To investigate the mediating role of team satisfaction between team diversity and team performance.
- iii. To find out the link between work cognition inventory and team performance.
- iv. To determine the mediating role of social capital between work cognition inventory and team performance.
- v. To inspect the moderating role of individual team member creativity on the role of team diversity and team performance.
- vi. To study the effects of individual team members' creativity as a moderator on the relationship between work cognition inventory and team performance.

### **1.7. Significance of Research**

In response to Srikanth et al. (2016) recent call for investigation, this study aids in comprehending team diversity and taking finest enactment from doctors, nurses, practitioners, surgeons, general physicians, and all administrative staff members while working as teams in different wards and departments of Combined Military Hospitals (CMHs) i.e. gynaecology, neurology, radiology, cardiology, officers family ward and intensive therapy care unit. This work contributes to fulfilling literature gap on many precursors of team satisfaction and team

performance i.e. individual creativity and social capital taken as the gap by Shung J. et al., 2012). It assists in comprehending work cognition inventory and its impact on performance of diversified teams. Thus it helps in increasing teamwork, harmonization, and collaboration among team members, this consequently results in improved enactment of the healthcare sector.

This study focuses on dissecting the effect of work cognition inventory and teamwork on team members' satisfaction with the team. Teamwork is the quintessence of a workplace; therefore social capital is required at each progression for accomplishing both long term as well as short term goals. Social capital allows both organization investigators and managers in molding studies on an inventive ideas (Narayan & Cassidy, 2001). The link of social capital with WCI encourages access to more extensive origins of data, enhances data's quality, pertinence and creates more opportunities for increasing performance standards of overall team and individual team members' satisfaction in hospitals. This research uncovers the dynamics of societal categorization between healthcare sector diversified team members and its workforce individual creativeness effect on their satisfaction level while functioning in diversified teams. This novel perspective of diversified teams recommend that the disputes related to diversity may be more diligent than described in prevailing literature.

This examination proposes choice to oversee assorted variety in work teams of the healthcare sector i.e. task-oriented diversity can make an upper hand if colleagues have the correct qualities of judging and understanding each other's perspective, thus it fulfills the gap identified by (Srikanth K., et al., 2016). It is anticipated that social relation oriented diversity among colleagues can either enhance or bring down the performance of diversified teams. Accepting different impacts of diversified characteristics on execution may enable instructors to make viable teams, prepare the colleagues to adapt to dissimilarities and show them the aptitudes important to encounter the advantages of collaboration, as was proposed to be studied by (Hajro et al., 2017). Thus, it can be predicted that if diversified teams of doctors, nurses, physicians, surgeons, radiologists and administrative staff of hospitals, coordinate positively with each other will result in team members' satisfaction with teams as well as in the improved performance of healthcare sector. All of them will be more gratified when they are given freedom to work in their own style within the team.

It is important to work in all dimensions of QoS, in order to achieve sustainable quality in healthcare sector of Pakistan. This research will help in enhancing the QoS by satisfying employees while working in different departmental teams. Each department may work for improving its QoS and satisfying its patients i.e. surgical, gynae, radiology, neurology, cardiology departments etc. Reference can be taken from international forums like NICE, IHI and few more. This is likely to help in formulating the implementable, well grounded and sustainable policies for improving the healthcare sector of Pakistan (Khalid & Abbasi, 2018).

### **1.7.1. Methodological Significance**

This study will help practitioners to avoid repeating the same mistakes; if diversified or similar teams are not performing well in some operations then practitioners should not make such teams again or try to make them satisfied for saving the lives of people and ring improvements in working environment of Combined Military Hospitals. Moreover, this view point contributes at a new methodological dimension in comparison to that originating from the double edged sword viewpoint. Specifically, it proposes the necessity to keep on identifying ways for overseeing misunderstanding of collaboration failures as a lack of cooperation, particularly by healthcare sector staff members who are research oriented. Notwithstanding settled methods for containing misattribution, for example; intra-team reliance, as mentioned by (Simons & Peterson, 2000), innovative methodologies are required i.e. finding new ways for making corona virus all layers and other pandemic vaccines.

This research reported that diversified teams enhances performance due to enlarged team learning and team efficacy, as argued by (Van Veelen and Ufkes, 2019). Literature on conflict determination in teams helps in understanding, how teams can function even in such contrasts (i.e. task-oriented diversity). Current writing features the requirement of a procedure for overseeing conflict that may accomplish practice adequacy and asset effectiveness (i.e. coordination) and additionally strengthen working connections and fulfillment of gathering individuals (i.e. collaboration) (Thomas, 1992). Likewise, Behfar et al. (2008) took into consideration gender diversity and found teams that performed better in collaboration (facilitate successfully) with greater fulfillment and participated in particular practices.

### **1.7.2. Practical Significance**

Additionally, the study practically contributes to the possibility that social arrangement causes relationship issues in diversified teams and proposes that every now and then, relational issues emerge soon after the team formation. Or may be, enlightening procedures, which are broadly observed as a solely positive influence on diversity, may really fuel or significantly prompt the harmful outcomes of social classification forms. This attracts consideration regarding the developing examination of circumstances in which statistic contrasts can truly benefit teams, as proposed to be studied by (Phillips & Loyd, 2006). With the increasing need to oversee a socially-oriented diversity of numerous kinds, the study displays an energizing conceivable demand to be taken into consideration. This study helped the CMH administration to provide the doctors right of being innovative in their own capacities while working in teams i.e. if a junior doctor prefers manual stiches instead of dissolvable stiches after the operation, he/ she will be allowed to do so without asking from senior doctors. Thus this study argued that positive effect of team diversity are linked to team characteristics with respect to sustainability, similar was reported by (Holmes et al., 2021). Moreover, it benefited practitioners in not repeating the same mistakes i.e. if diversified or similar teams of helping staff during operations are not performing well then not making such teams again or trying to make them satisfied for improved performance. Thus the study will help the policy makers of Combined Military Hospitals in making policies regarding balanced team composition.

### **1.7.3. Theoretical Significance**

Diversified teams can rise above social order forms by identifying mediators that assist them to limit social classification forms while permitting for data trade for better performance. The current study bridges the gap between existing literature by explaining collaboration is the pith of a work output; employees perform better when their cognitive features are satisfied. Social capital is required at every moment for achieving team's long and short term objectives. This study suggests to create competitive environment for flourishing creativity among employees, similar was suggested by (Inegbedion et al., 2020). De la Torre Ruiz et al., (2019), further suggested that if team diversity is not properly managed, it may results in conflict, non creative environment and employee turnover. Thus a comparative execution change is required when the team is diversified

with respect to individual team member creativity, as every team member may possess a kind of quality that can be fruitful for the team.

This research is based on three basic team functioning theories, i.e. Bruce Tuckman team building theory along with Alex Jones LSI model, secondly the value in diversity theory and finally social identity theory. The first theory was presented by Bruce Tuckman (1977) who has explained five stages of group development, including forming, storming, norming, performing and adjourning. Later on Alex Jones (2019) has summed up the five stages of group development given by Tuckman into three stages i.e. leading, structuring and implementing. Moreover Value in Diversity Theory was given by Cox & Blake (1991). They recommended that associations must esteem diversity to upgrade hierarchical viability. Furthermore Byrne (1971) presented social identity theory, according to which people endeavor to build up a self-idea which is, to some degree, got from enrollment in social groups. Details about these theories will be further discussed in the literature section.

### **1.8. Delimitations of Current Study**

The researcher was not able to work on every dimension of the selected variables, therefore, this research comprises of the following delimitations.

Background factors like power dynamics, corporate strategies, and control mechanisms may affect team diversity link with team performance. This direction has not been investigated in the current study.

Exploration of time perspective is seen promising in relevance with the collaboration of diverse members of an organization (Gibson, Waller, Carpenter, & Conte, 2007). As the data is collected at one period of time due to transferrance policy of Combined Military Hospitals after every 2 years, therefore data is not collected longitudinally after analyzing it for the first time.

This research has excluded some good areas like, large stream of diversity management practices, but it will give a direction for the future research to be more focused upon different management programs like ; diversity training, practices, policies, initiatives, cognitive team diversity, knowledge integration, team creativity and absorption capacity.

Finally for creativity, one of the most critical factor can be intrinsic motivation (Shung et, al, 2012). Researcher didn't include it as moderator in the relationship between team diversity and creativity.

## **1.9. Chapter Summary**

This chapter explains the diversity impact on performance along with its two dimensions i.e. social relation oriented and task-oriented diversity in teams. It describes past literature on team performance and compares with current century studies. It also expounds an important phenomenon of work cognition inventory to have an influence on team performance, along with team satisfaction and social capital effect on the performance of diversified teams. Furthermore, it highlights the need of taking optimum performance from diversified teams with the help of individual team members' creativity in the healthcare sector for the improvement in this zone. Moreover, it presents the problem statement, significance, research questions and research objectives of the current study and concludes with the enlightening contribution of this research with an explanation of how this study bridges the gap in the literature.

## **1.10. Organization of Thesis**

The current study comprises of chapter 1 that contains the background of research followed by problem statement, the contribution of research, objectives of the research, questions of research and research significance.

It further consists of chapter 2, which comprises of review of the literature regarding diversified team performance, work cognition inventory, social capital, individual team member creativity and satisfaction with the team. Moreover, it consists of theoretical underpinning and hypotheses of the research.

The next chapter 3 in the thesis is methodology which explains about research paradigm, research philosophy, population, sampling technique, research instrument i.e. questionnaire, its validity and reliability.

The 4<sup>th</sup> chapter consists of an analysis of the data assembled through questionnaires and applying statistical techniques to find out answers of research questions and acceptance or rejection

of hypotheses. It mainly consists of correlation analysis, Preacher and Hayes's regression approach and structural equation modeling.

Finally chapter 5 consists of conclusion and recommendations made after fulfillment of research. It explains the contribution of this study in literature, methodology and for practitioners. Moreover, it explains the study limitations and future avenues for conduction of research on diversified teams.

## **CHAPTER 2**

### **LITERATURE REVIEW**

#### **Introduction**

This section consists of the theoretical underpinning of the current research, followed by a definition of all the variables of the current study. It further contains a literature review regarding the variables with both positive and negative opinions of various researchers about the association of those variables. The chapter presents a comprehensive view of team diversity models and the deficiencies in these models and concludes with a theoretical model of the current research along with the development of research hypotheses.

#### **2.1. Definitions of Variables**

##### **2.1.1. Team Performance**

Team performance is usually estimated by the degree upto which the team achieves its valued objectives (Salas et al., 2009, cited in De Church & Mesmer-Magnus, 2010 p.34). It shows how commendably team members cooperate with each other for attaining organizational goals (Plaut, 2010; Schullery & Schullery, 2006).

##### **2.1.2. Individual Team Member Creativity**

It is described as the emergence of inventive concepts, solution of complications and intuitions that are novel and correct for improving team performance (De Dreu et al. 2011). Shalley, E., Litchfield C. & Gilson, L. (2018) defined individual creativity as a process by producing novel ideas and as outcome by engaging in processes for making innovative solutions for problems. Furthermore, Triparna de Vreede, Imed Boughzala, Gert-Jan de Vreede, Roni Reiter-Palmon (2017) defined it as the extent to which the newly produced idea is able of solving the problem at hand.

##### **2.1.3. Team Satisfaction**

Spector (1997) explained satisfaction as the degree to which individuals are pleased with their job. In terms of the team, Costa et al. (2001) argued that forming helpful relationships and trust among members are the foundation of satisfaction within teams. Moreover Abuhashesh et al. (2019) argued that team satisfaction is about team output, enthusiasm and performance.



#### **2.1.4. Social Capital**

Lin (2001) describes social capital as an asset derived from the links between individuals, teams, work-groups or societal ranks. While Siegler (2014) argued that social capital is related to tenets like patience, harmony & trust that are essential for people to collaborate with each other.

#### **2.1.5. Team diversity**

Diversity is an aggregate variable that consist of differences among inter-dependent members of a workforce on the basis of their specific features (Jackson et al., 2003). Diversity in teams represents dissimilar team members having various abilities, information, ideas and experience (Akgün, 2020). Diversity also represents multiple characteristics i.e. work styles or perceptions. This is beneficial for gathering more information, enhancing innovation and minimizing clashes between members in few teams while inversely affect performance in other teams (Horwitz & Horwitz, 2007). According to van Dijk et al. (2012) team diversity refers to dissimilar objective and subjective features held by similar team members due to which they distinguish others from themselves.

#### **2.1.6. Work Cognition Inventory**

It evaluates twelve cognitive features of employees' workplace practices that immensely affect their performance, both individually as well as teams (Nimon, Zigarmi, Houson, Witt & Diehl, 2011). It includes autonomy (AU), connectedness with colleagues (CC), connectedness with leader (CL), collaboration (CO), distributive justice (DJ), feedback (FB), growth (GR), meaningful work (MW), performance expectations (PE), procedural justice (PJ), task variety (TV) and workload balance (WB). Past researches revealed that employees psychological cognition is the most acute element influencing his/her performance (Zhou F. 2017).

Diversity can expand the open door for imagination and advancement. Yet, in addition, the likelihood of disappointment among assembled individuals and an inability to relate to the gathering (Milliken & Martins, 1996). There has been a continuous level-headed discussion about the connection amongst diversity and performance. However, so far there is no steady contention. Some of the basic theories of diversity and their link to the current study are as under:

## **2.2. Theoretical Underpinning**

Theoretical underpinning is necessary for building an argument in research. This research is based on three basic team functioning theories, i.e. Bruce Tuckman team building theory, the value in diversity theory and social identity theory. The three theories and their links with the current study are as under.

### **2.2.1. Bruce Tuckman Theory**

Bruce Tuckman (1965) presented his theory of team building by claiming his suggested four stages to be the necessary part of every team. According to his theory, every team faces four basic stages of team development while working together. These include; Forming, in which all team members feel anxiety due to uncertainty about each other's role and seek outside guidance to direct the path. The next stage is Storming, in which team members resist the tasks demanded from them and deny the hierarchy if made in the team, and believe in their own individual decisions. The other stage is Norming in which even after having differences, team members concern to be a part of the team by starting their own procedures to start working and have open discussions regarding team problems and possible solutions for overcoming them. The subsequent stage is Performing in which team members try to complete the given task by cooperating with each other and ignoring individual differences. In this stage, they efficiently locate the resources among all members, communicate effectively by focusing on the achievement of a common goal. Later on, in 1977, Bruce added a fifth phase to his team development model and called it Adjourning. He explained this stage as the final stage of disengagement of the working relationship between the team members who have worked together for a longer time.

Recently Bruce Tuckman theory is replaced by Jones LSI model presented by Dr. Alex Jones in 2019. This model is based on three necessary features: leading (L), structuring (S) and implementing (I). The leading section focuses on negotiation of leader with group/ team members for convincing them to work together effectively in a specified period of time. Secondly the structuring phase focuses on proper introduction of the group members by interacting with each other and socializing. In the final implementing stage the actual work is done i.e. whatever the task has been assigned to the team, the members will actually perform that task. In this phase various conflicts emerges between members due to difference of opinions, resistance to change and

personality issues. But they have to overcome all the issues for completing the task given to them in a timely manner (Jones A. 2019).

Both of these theories i.e. Bruce Tuckman theory and Jones LSI model are related to the existing research as they gave the basic phenomena of team building, by explaining the ups and downs incurred while performing together. These theories also explained the time taken by every team, to perform well by overcoming their differences and valuing each other's opinions by self-managing all the growing issues with the help of social capital even without proper leadership (Bonebright, D. A. 2010, Jones A. 2019).

### **2.2.2. Value in Diversity Theory**

Past researchers who argued diversity leads to increased performance had based their arguments on the value of diversity theory, as suggested by (Miroshnik, 2002; Richard, Orlando & Barnett, Tim & Dwyer, Sean & Chadwick, Ken., 2004). Globalization with respect to diversity has increased the need of diversified teams in making organizational policies and procedures (Cole & Salimath, 2013).

The value in diversity theory is taken as over-arching theory in this research as it ties together team building theory of Bruce Tuckman as well as the social identity theory. Certainly, not only team diversity is required for creating a supportive work environment, but valuing diversity is also mandatory for organizational success (Hopkins, Hopkins & Mallette, 2001; Ng & Sears, 2018). This theory can be linked with the current study, as it explains that diversity among team members helps in enhancing team's performance due to multiple ideas, information, and experiences of workers (Swann, William & Ko, Sei, 2004).

The value in diversity theory (Cox and Blake, 1991: 46) recommends that associations must esteem diversity to upgrade hierarchical viability. Despite the fact that outcomes have not been reliable over crosswise investigations (Williams & O'Reilly, 1998). This theory has great name for legitimacy due to hypothetical argumentation, and is by all accounts advanced and very conceivable (Ely & Thomas, 2001; Swann et al., 2004). Though there are two perspectives amongst analysts: advocates of "value in diversity" speculation (e.g., Jehn, Northcraft & Neale, 1999) contend that intra-group diversity enhances execution as it conveys more information to a group

(Nemeth, 1986), while adversaries contend that diversity weakens execution as it disturbs social mixes (Tsui et al., 1992).

The value in diversity theory recommends that a decent variety of work gatherings will upgrade adequacy (Cox & Blake, 1991). Advocates of this speculation (e.g., Jehn et al., 1999; Watson et al., 1993) contend that interaction among representatives of different foundations will prompt improvement of innovative answers for their errands. Which in turn, empower them to beat workers of identical foundations. It looks into spotlight to some degree on including an incentive by upgrading authoritative viability and execution. It recommends that socially variant gatherings, for example, multicultural venture groups in transnational firms will create more extraordinary perspectives and conclusions (Shaw & Barret-Power, 1998).

The opponents of this theory suggest that diversity is identified with poorer execution results (Richard et al., 2004). It contends that workers' social relations oriented diversity will prompt correspondence issues and clashes, with destructive ramifications for execution (e.g., Pelled L. H., Kathleen M. Eisenhardt, Katherine R. Xin., 1999). Past researches claim that contrasted with social identical groups, individuals from different groups demonstrate low connection with one another, have low obligation regarding their particular associations, show additional correspondence issues (Miroshnik, 2002), undo tasks all the more regularly (Tsui, Egan, & O'Reilly, 1992), experience greater clashes (Jehn et al., 1999; Pelled et al., 1999) and set a side greater opportunity to achieve choices. In any case, there is additionally some confirmation that assorted variety is in any event as liable to help execution as it is to debilitate it (e.g., Pelled et al., 1999; Williams & O'Reilly, 1998). The necessity for organizations to promote a more diverse workplace and to resolve the issues related with diversified teams continues to propagate. This has increased the need of management researches on the impact of diversity on individuals, dyads, groups and organizations (Cole, Jones & Russell, 2016; Dwertmann & Boehm, 2016).

In their meta-examine, Cox and Blake (1991) discovered that associations that can draw in, hold, and propel individuals with different social foundations can make an upper hand in cost structures and through keeping up the most astounding quality of HR. Besides, they may pick up an upper hand because of enhanced critical thinking (prompting a higher nature of choices), expanded imagination and development, expanded authoritative adaptability, enhanced aptitude

assortment in the workforce, and enhanced promoting (e.g., expanded client construct) while promoting with respect to the potential advantages of socially assorted variety in work gatherings (Cox & Blake, 1991). The stability of group similarity and assorted variety is integral for the abuse of the esteem in variety.

van Knippenberg, D., Haslam, S. A., & Platow, M. J. (2007) focuses on unity through diversity by taken into consideration the value in diversity beliefs, work group diversity and diversity identification. Up to this point, most research focuses on the favorable circumstances and inconveniences of diversified teams, yet do not unequivocally give careful consideration to the particular qualities of team-building for diversified workers. Be that as it may, there are quirks in team working of different constellations. Therefore research on this dimension is highly needed.

### **2.2.3. Social Identity Theory**

Another theoretical base of this study is embedded in the “social identity perspective” (Cooper et al., 2013; Mols et al., 2015; Hogg, 2016). “Van Knippenberg and Schippers (2007)” linked this theory in opposition of diversified teams; according to them, groups perform more efficiently when are similar rather than diverse members. Similarly, Choi (2009) related this theory to adverseness of diversified team performance, as he argued that in diversified teams, participants consider each other as less trustworthy, less skillful, and less helpful than homogenous team participants.

According to this theory, people endeavor to build up a self-idea which is, to some degree, got from enrollment in social groups (Byrne, 1971). It is accepted that, as individuals from a gathering, people are propelled to consider themselves to be unmistakable as compared to other bunches to a reasonable social character. Social homogeneity in administration gatherings may subsequently expand fulfillment, participation and diminishing passionate clash (Williams & O'Reilly, 1998). Since similar teams don't possess huge societal boundaries to community interaction, constructive societal associations and societal interactions are already cultivated among them. Negative depictions are examined in terms of generally insulting interpretations, and specifically stereotypical interpretations (e.g., Dixon, 2017). Social identity clarifies such depictions as a function of intergroup distinctiveness processes.

As social relation oriented diversity increments, societal relationships and order forms occur. At the same time within-gatherings/out-gatherings and intellectual tendencies might rise, making hindrances to societal interactions (Smith, Smith, Olian, Sims, O'Bannon & Scully, 1994). In this way, dissimilarity in administration bunches achieves direct levels and mental procedures related to social personality hypothesis and self-classification processes may happen. Such processes produce unusual rehearses, e.g., solidarity with others in a caste or sexual orientation centered gathering and suppression of out-gatherings (Tajfel & Turner, 1979). The extent to which different subcultures occur in decently heterogeneous teams, conflict is conceivably expanded (Earley & Mosakowski, 2000), and intergroup cooperation and correspondence might be blocked (Alexander, Nuchols, Bloom & Lee, 1995).

Inter-group Similarity in their own particular gathering might be traded off (Brown, 1979). Various researchers have given back handed help to "similarity differentiation" (Diehl, 1988; Moghaddam & Stringer, 1988). The ideas of "similarity-attraction" and "similarity differentiation" contain critical ramifications of strategies for overseeing social oriented diversity. They point to various results of underlining and praising contrasts between gatherings. A focal mental supposition, fundamental digestion has been the similarity-attraction speculation which recommends that apparent comparability prompts fascination. A ramification of this theory is that people will be emphatically arranged towards others whom they see as more comparable.

An amazing cluster of observational research offers provision regarding similarity-attraction theory at the relational and intergroup levels (Roccas & Schwartz, 1993). Likewise, an impressive assemblage of culturally diverse writing recommends that individuals in various societies by and large demonstrate an inclination for their own particular gathering, and are adversely arranged toward different others (Levine & Campbell, 1972). Conversely, a typical topic in different understandings of multiculturalism is the maintenance and festivity of social contrasts (Taylor, 1991). This accentuation on contrasts or "difference" represents a test to the old comparability fascination custom. As indicated by the "similarity differentiation" thought (Grant, 1993) it is normal that people of a common caste might be propelled to consider themselves to be unmistakable from different gatherings for their social personality. This theory is linked with current research as adverse illustrations among teams can be inspected generally by derogatory portrayals and precisely by stereotypical representations (e.g., Dixon, 2017). Social identity theory

explains such illustrations as a feature of intergroup distinctiveness processes. Besides that social-categorization and similarity attraction approach proposes that the more homogenous a team is the better it performs (Carter & Phillips 2017; Trinh 2017). Diversity can be a separator variable when differences between team members result in inadequacies in comprehending and interaction between team members.

### **2.3. Healthcare Sector of Pakistan**

The human capital of a country is mainly determined by the healthcare conditions of people living in it. Better healthcare sector leads to better performance and output that escorts to the growth of economy, skillful workforce and stability of a country. Therefore, better healthcare services and facilities are part and parcel for attaining experienced and skilled workforce in this area. Regardless of a few social, financial, political and cross-cultural challenges aggravated by progressive characteristic disasters, the policymakers of Pakistan have indicated alarming situation over the past 25 years. Despite being among developing countries, it falls behind some under developed nations in the availability of healthcare facilities specifically in its rural areas (National Nutrition Survey, 2018). Pakistan is confronting a twofold burden of diseases (BoD), this pressure is greater among poor people, and a large number of these conditions can be controlled generally with ease medications through essential and optional care levels. Transmittable maladies, maternal medical problems, and under-nourishment command constitute a huge portion of the BoD, (National Nutrition Survey, 2018).

Pakistan is one of the three remaining nations where Polio is still endemic. Additionally, Pakistan has an excessive rate of hepatitis B and C in the all-inclusive community with 7.6% influenced individuals (Qureshi H.& Bile K. M, et al., 2013). Pakistan has central land zone of intestinal sickness endemicity, and a built-up HIV focus among high hazard groups (UNAID, 2021). Other immunization-preventable ailments and new developing diseases call for fortifying illness reconnaissance and reaction framework all over the nation. Pakistan has one of the most astounding number of under-weight kids in South Asia (National Nutrition Survey, 2018).

Non-Communicable diseases alongside Injuries and Mental medical problems now constitute other portion of the BoD, that causes much more in capacities and unexpected losses among a monetarily gainful grown-up age group. Pakistan is positioned seventh-most elevated on

the planet for diabetes prevalence (World Health Organization 2016). One of every four grown-ups more than 18 years old is hypertensive, and smoking levels are high (38% among men and 7% among ladies). A noteworthy gap in healthcare sector literature has been consensus on style of work for saving lives rather than remaining isolated with own styles (National Health Vision Pakistan 2016-2025) thus diverse team research is needed to be implemented in this sector for its betterment.

According to the Human Development Report (2018) the health pointers of Pakistan demonstrate a high populace development rate, high newborn child with maternal mortality, and high occurrence of low birth weight babies. Pakistan positions 125<sup>th</sup> out of 180 nations in the UNDP's Human Development Index (HDI) that quantify the prosperity of individuals by noticing their future, proficiency, education and way of life. As per the UNDP's 2020 report, Pakistan is confronting colossal difficulties including neediness, lack of education and a consistently rising figure of population. In the said report, Pasha (2020) emphasized that the level of human development is low in Pakistan. Furthermore he stated "that the privileges of the elite in Pakistan add up to PKR 2,660 billion, equivalent to 8% of the GDP" (NDP, 2020).

The greater part of our population does not use general area hospitals in view of inhygienic conditions and quality of services. Due to the deficiency of the general area hospitals, people use private healthcare sector unmistakably in order to give satisfactory and favorable health facility to deprived individuals. The boundless gap of the poor healthcare sector and hardships furthermore worsened due to improper planning and low funding of the healthcare sector. Subsequently, 73.6% of people breathing beneath the poverty line (US\$2) are deprived of their basic rights of health and social insurance (Shumaila A., Javed I., Hira W., Maria I., & Ayesha N., 2016).

In order to improve social insurance conveyance framework in Pakistan in the presence of constrained assets accessibility to the medicinal services division, it is fundamental for the different provinces to plan and cooperate to enhance the strength of Pakistanis. Therefore, it is imperative to comprehend the healthcare sector conditions for betterment of the populace and the components which can improve this condition (Shumaila et al., 2016). Neediness not only rejects individuals from the advantages of medicinal services framework but in addition, it also limits them from taking an interest in choices that influence their wellbeing, and bringing about more



prominent healthcare balance. Entry to a general human services hospital is expected as an essential societal right. Dissatisfaction from vital care in either part leads several people to move towards a larger number of private hospitals for their vital care, stimulating wide extravagance and distrust over the viability and nature of governments.

The healthcare sector of Pakistan all-around has been underused due to an inadequate focus on development of healthcare sector by the top executives of government, political hindrance, the absence of transparency, incapability human assets, lack of connection and deficiency of open arrangements. The lower consumption of MCH emphasizes, dispensaries and BHUs in Pakistan is depressing. This is due to less healthcare instructions, medicines and lesser education rate in provincial regions (Shaikh BT, Hatcher J. 2005).

A positive side of the picture, in any case, is that the private division has quickly developed in Pakistan, connecting the holes in remedial and preventive administration conveyance to poor people. In any case, since the vast majority of the private division works are revenue-driven, it has its negative results as well, for example making disparities in medicinal services access in the general public. Therefore, numerous individuals would sidestep the government hospitals on account of inaccessibility of good quality administrations, improper conduct of the staff or deficiency of fundamental medicines, (Shaikh, Kadir & Pappas, 2007). Pakistani medicinal services agenda is advancing and about a year before, Pakistan has attempted to make huge changes in its social insurance transportation structure and has carried out numerous reforms, (Manzoor I, Hashmi NR, Mukhtar F. 2009).

In any case, all of the above projects are remarkably constrained in their extent and due to this Pakistan's medicinal services framework is not very effective yet. Some of the inadequacies include; bad management, lack of access and uneven assets, lower quality of Health Information Management System, debasement in healthcare structure and lack of prepared staff. There are numerous cases in which open private association was exceptionally fruitful like National TB control program, family arranging project and school nourishment platform that was actualized in 29 of the poorest areas of the country. In addition, all these projects made awesome progress and gained the trust of the network individuals as well. (Shaikh BT, Rabbani F, Safi N, Dawar Z. 2010). There are numerous shortcomings and difficulties which are right now taken seriously by the

Pakistani medicinal services framework. Healthcare management workplaces in Pakistan have prospered but the majority of these have bad supervision, bad quality of hygiene, lack of assets, absence of medications, unprepared staff, less female staff, truancy of workers, the greater part of the allocated specialists are found busy in their private clinics mainly because there is lack of motivations to enhance execution (Kurji et al., 2016). Pakistan is progressing slowly in the healthcare sector for last five decades as it is extremely obvious by its welfare indicators along with its proficiencies and deficiencies. Therefore, the Government is supposed to take initiative for changing the existing human services structure.

## 2.4. Indepth Review of Variables

### 2.4.1. Team Performance

Amanuel G. Tekleab, Ayse Karaca, Narda R. Quigley, and Eric W.K. Tsang (2016) presented a functional diversity team performance model. Their model shown an association among functional diversity and team cohesion which was found to be affected by behavioral integration and a chain of relations including team learning, both finally lead to team performance.

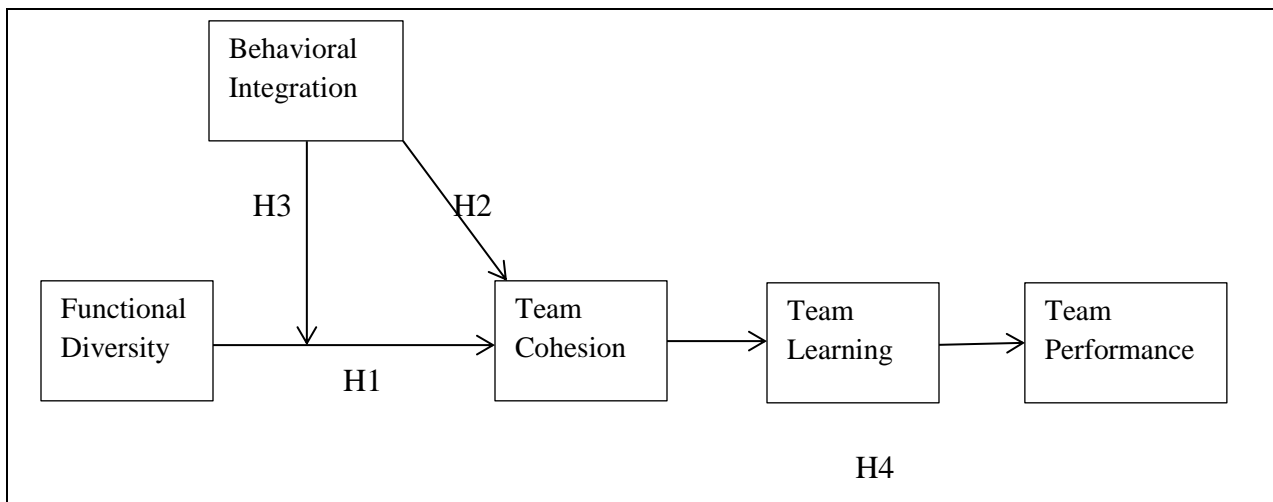


Figure 2.1: Functional diversity-Team performance model.

[Source: Amanuel G. Tekleab, Ayse Karaca, Narda R. Quigley, Eric W.K. Tsang, (2016)]

This study is linked with current research in a way that functional diversity among team members will result in better team performance if team members share their knowledge cohesively and make a learning environment. While its team members behavior which may play moderating

role on the positive relation among functional diversity and team performance. So its indicating functionally diverse team members in combined military hospitals may perform better if a learning environment is provided to them.

However, the drawback of their model was instead of taking employees working in an organization the reseachers have taken individuals attending a graduate program as a sample for their research and have presented self-reported results of functional diversity which are ought to be biased. Another problem was taking maximum seven number of individuals working in a team that can be greater in functionally diverse teams.

Moreover Thijs Bosselaar (2015) has presented a gender diversity team performance model, showing link among team’s gender diversity and performance that was moderated by perceived inclusion and diversity beliefs. The model confirms an affirmative association among team’s gender diversity and team’s performance and explained the moderating and mediating factors that affect this relationship. After an online survey from 10 service sector organizations, they concluded perceived inclusion to be a partial mediator affecting performance, as presented in the following figure;

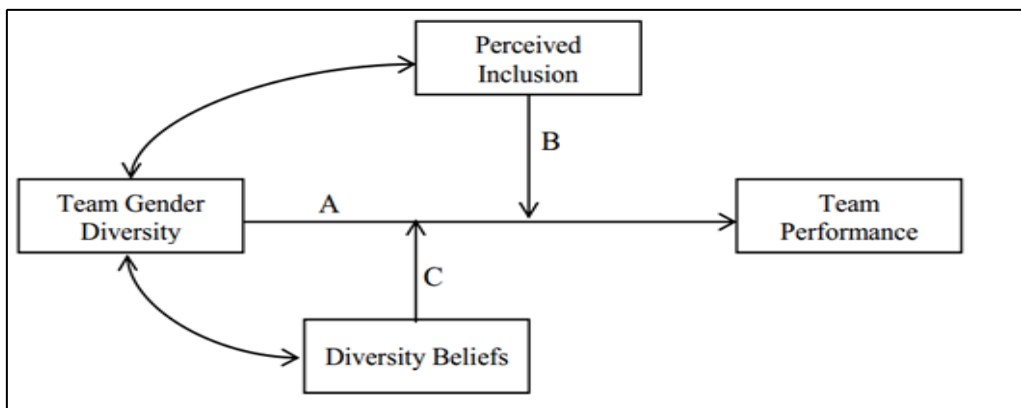


Figure 2.2: Gender diversity-Team performance model.

[Source: Thijs Bosselaar, (2015)]

This model was not supported up to the extent it was expected, as perceived inclusion and diversity beliefs were not confirmed to have a moderating impact on the association among team gender diversity and team performance. Also, the performance wasn’t measured through any set

standard but was judged by the perception of one team member on other’s decision quality without consulting supervisors. Thus results based on individual diversity beliefs cannot be generalized. Another identified problem was the low rate of internal reliability of diversity belief scale and insignificant results.

### 2.4.2. Team Diversity

Kannan Srikanth, Sarah Harvey and Randall Peterson (2016) presented a conceptual model, connecting group diversity with group performance with mediating effect of deep i.e. task-oriented diversity and surface i.e. social relation oriented diversity, along with access to information and social categorization. They argued in their research that group diversity has altering trends with the passage of time in the formation of the group and rejected the idea of considering diversified groups to the double-edged sword of giving both progressive and deleterious performances. Their model is shown in the figure as follows;

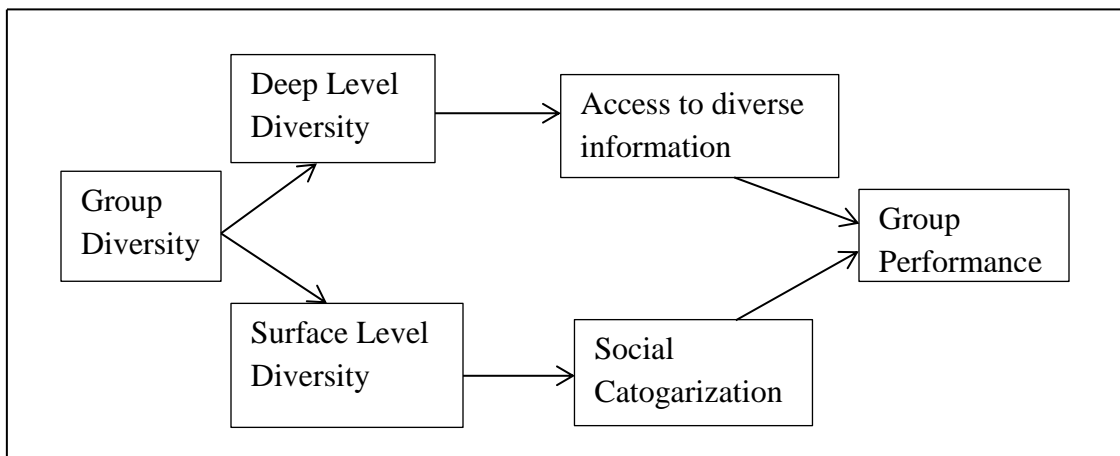


Figure 2.3: The mediating model.

[Source: Kannan Srikanth, Sarah Harvey and Randall Peterson, (2016)]

This model can be linked with current research as it explains group performance increases if group members have access to diverse information without taking social categorization into consideration. Thus CMH employees may perform better by making a knowledge sharing environment while working in diverse groups without felling in differences issues.

The basic flaw of this research was that its results were contrary to the group formation literature i.e. they have argued that newly formed groups are more functional and performance-oriented than groups formed from a longer period of time. While group formation literature by Tuckman, B. and Jensen M. (1977) and Alex Jones (2019) recommended that the preliminary stages of team development results in increasing clashes and conflicts among group members and they need time to understand each other's differences in nature and way of work.

#### ***2.4.2.1. Linking Team Diversity and Team Performance***

Despite the fact that team diversity can possibly make a positive hierarchical cooperative relation, the same can likewise cause critical challenges coming about because of coordination, strain, and intra/inter-team struggle (Jehn, Northcraft & Neale, 1999). Undoubtedly, team diversity is frequently depicted as a "twofold edged sword" in an existing hierarchical hypothesis. On one side, defenders of team diversity stretch beneficial outcomes on team performance while the other side stands on the hostile sections between dissimilar individuals prompt broken group cooperation and imperfect execution. In the domain of administrative research, these contending appraisals of team diversity have likewise been shown with blended experimental discoveries, subsequently sustaining an absence of accord on how individuals' compositional factors impact team procedures and performance ("Sujin K. Horwitz and Irwin B. Horwitz, 2007").

In spite of the fact that teams are usually amassed from people with fluctuating amounts of statistic and psychological dimensions, it is vague whether these dissimilar structures stimulate groups which beat similar teams. Especially, the heading and greatness of influences of team diversity on team performance have been a vigorous inquiry that has yet not been completely comprehended. This investigation likewise fills in as procedural and applied expansion of past meta-analyses on team diversity. The study begins with the effect of team diversity on amassed level results as shown in team execution and social reconciliation (Sujin et al., 2007). Likewise, the essential point of this study is to increase and develop prevailing simulations of team diversity both hypothetically and procedurally to give more noteworthy exactness in appraisals of the connections among team diversity and team performance.

Jackson et al. (2003) centers around better performance as an outcome of team diversity since this result has got the most research consideration and speaks to a region in which the blended

discoveries have been the most common. Existing literature on diversified teams suggests that team diversity is beneficial to teams in data accessibility and destroying teams in minimizing gathering and information sharing. Subsequently, the contrasting point of view commends that diversity in teams is a twofold edged sword that stimulates both constructive and destructive impacts concurrently (Srikanth et al., 2016). Anyhow, there have been counter arguments against the influence of team diversity as proposed by the subjective viewpoint. Nonetheless, Aggarwal and Woolley (2018) concluded that dissimilarity in psychological styles (for spatial and protest representation) expanded the number of blunders by means of a diminished absence of key agreement.

The idea of a team's task can affect the degree to which colleagues are reliant, hence effect objectives and assignment results (Ilgen, Hollenbeck, Johnson & Jundt, 2005). As the survey above recommends that team level relevant factors have got maximum consideration in previous studies. Social classification hypothesis would recommend that parts of a team's assignment can limit the striking nature of team diversity characteristics by fortifying a typical gathering personality or by putting requests on the team's different psychological asset base (Gaertner & Dovidio, 2000). In another analysis, in spite of the fact that coworkers' dissimilarity increases team's actualization of inventive thoughts, dissimilar teams did not beat similar gatherings (Diehl, 1988).

Team diversity has gained significant attention from scholars who constantly account for its influence on team outcomes (Hjerto and Kuvaas, 2017; Ng et al., 2017). Existing research infers that team diversity is a twofold edged sword: it appears to enhance the nature of group choice making, however, it additionally improves the probability of process issues (Karlien et al., 2015; Horwitz & Horwitz, 2007). Two extraordinary ideal models are utilized to clarify these evidently opposing outcomes; the supplemental opinion and the integral opinion. The supplemental view involves that social relations oriented diversity negatively affects an assortment of results since individuals like to work with others like themselves (their 'supplements'). This view expands on the attraction–selection–attrition hypothesis (Schneider, Goldstein & Smith, 2000) and self-classification hypothesis (Turner, 2012). The corresponding perspective view argued task-oriented diversity as an asset instead of a weight. This view expands on subjective asset assorted variety hypothesis (Horwitz, 2007) and data preparing point of view (van Knippenberg & Schippers, 2007) or the correlative theory (Harrison et al., 2002), likewise named esteem in-decent variety

speculation (Nakui, Paulus & Van der Zee, 2011). Thus confirming team performance to be linked with team diversity as indicated by value in diversity theory (Hopkins, Hopkins & Mallette, 2001; Ng & Sears, 2018) that the more diverse a team, the more better its performance will be, so it can be proposed that;

*H<sub>1</sub>. There is a positive relationship between team diversity and team performance.*

### 2.4.3. Team Satisfaction

Karlien Vanderheyden and Shari De Baets (2015) has presented a model that presented diversified team link with team’s performance with the mediation effect of team’s satisfaction. According to their findings diversified teams’ good or bad relationships depend on their cognitive style i.e. diversified knowledge results in minimized team satisfaction while diversified planning results in greater team satisfaction while diversified creation has no influence on team satisfaction. Their findings can be utilized in the current study as if planning is done by diversified team of CMH, their multiple knowledge and satisfied team members may give better outcomes i.e. making a vaccine against newly incurring variant of corona virus in Pakistan. Moreover, satisfaction among team members directly affects the performance of the diversified team. Their mediation model has presented a link between deep level and surface-level types of diversified teams, as presented in the subsequent model;

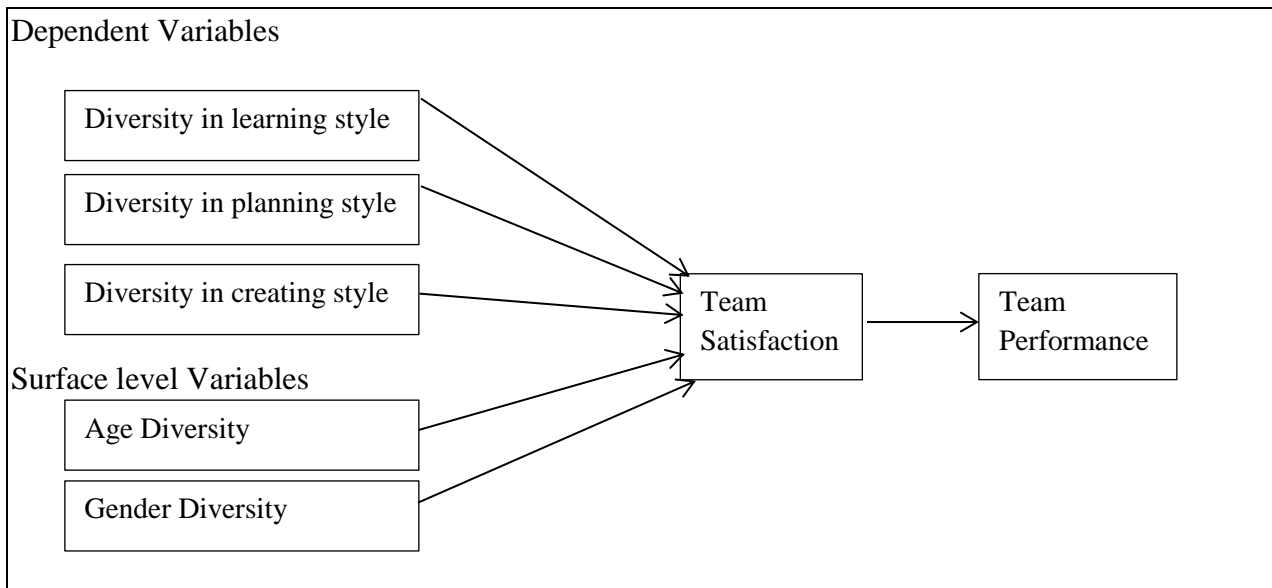


Figure 2. 1: Team satisfaction mediation model. [Source: Karlien Vanderheyden, Shari De Baets, (2015)]

But the problem with this model was it has shown no noteworthy association among diversity in creating a style and team satisfaction and performance while individual team members' creativity during work in diversified teams have a greater effect on team performance (Shung J. Shin et al., 2012). Another problem with the measurement of the model was that the data on cognitive style diversity was taken in the start of the academic year while the task was rated at the completion of the academic year, therefore there is a difference in projection and consequence, that is variable with respect to time.

Moreover Karlien Vanderheyden, Ben Lommelen & Eva Cools, (2010), presented a composite input outcome model covering team diversity constructs and its outcome on satisfaction and performance. They have manipulated team composition by variations in students' cognitive profiles by using cognitive style indicator in terms of homogenous, semi-homogenous and heterogeneous teams. Their result showed that homogenous teams took more time in completing the same task as taken by semi-homogenous and heterogeneous teams and team composition didn't affect team performance and satisfaction. Heterogeneous teams were found to be more task-oriented, therefore no relationship has been found among team composition & team process variables as perceived relational orientation & group think, though homogenous teams vary with these variables. Thus it showed an association among team diversity as input & its outcome in the form of team satisfaction and performance as displayed in the given framework;

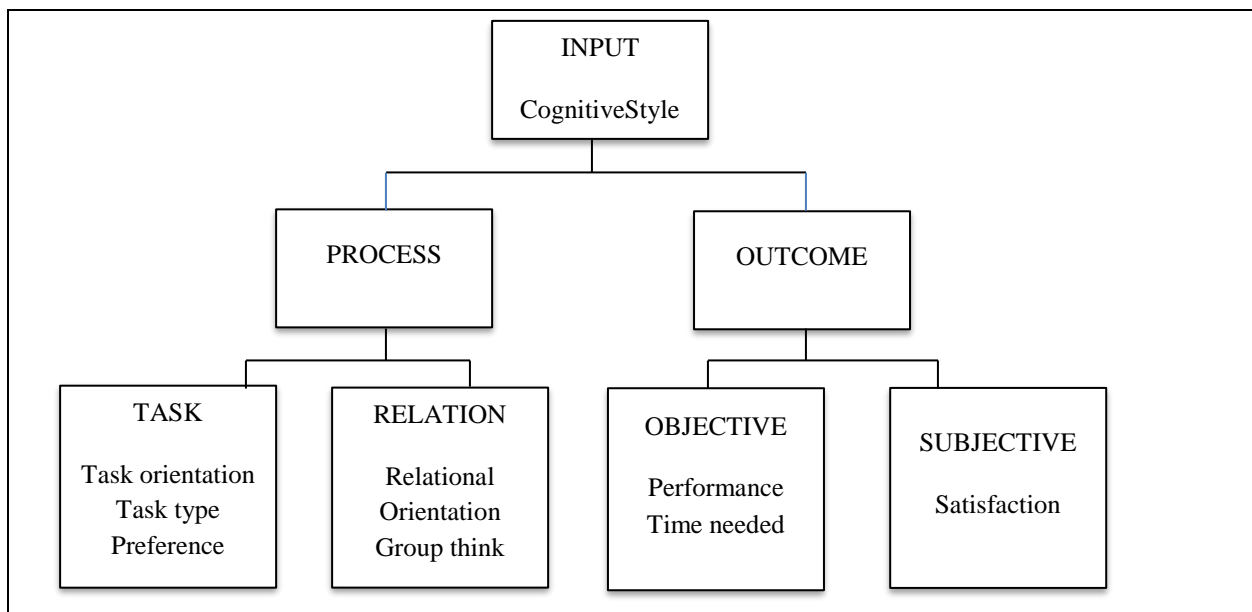




Figure 2.5: Input- outcome framework. [Source: Karlien Vanderheyden, Ben Lommelen & Eva Cools, (2010)]

The basic issue with this model was the results had no influence of team type on team satisfaction and performance, so non-significant relationship was found between homogenous, semi homogenous and heterogeneous teams with team satisfaction and team performance that is not supported by theory.

#### ***2.4.3.1. Linking Team Diversity and Team Satisfaction***

Despite the fact that there is an overall thought that team adequacy can be incredibly enhanced by diversified individuals as conjectured by the psychological diversity worldview, firm deductions cannot be made from the present writing. One conceivable explanation behind these irregularities is that there might be a variety of connection among team diversity and team satisfaction (Sujin et al., 2007). Though teams are considered regularly as a solitary unit, any individual who has encountered life in a team can bear witness to the truth that individual colleagues can vary in incalculable ways. Thus if the team members value and respect the diverse qualities of other team members, as indicated by value in diversity theory; they will turn satisfied with their work styles and their satisfaction in team work will results in their better performance (Hopkins, Hopkins & Mallette, 2001; Ng & Sears, 2018). This literature leads to the development of the following hypotheses;

*H<sub>2</sub>. There is a positive relationship between team diversity and team satisfaction.*

As indicated by social-character and self-order speculations, heterogeneity makes it more troublesome for singular individuals to recognize and incorporate with a team (Turner, 1982). Yet colleagues are often connected by a typical reason, they may all the while hold varying, and may be contending, singular objectives (Brett & VandeWalle, 1999). These objective contrasts can possibly influence people's collaborations with their colleagues, at last forming their encounters and affecting team performance.

Gevers and Peeters (2009) guarantee that "because of a general spotlight on team performance factors in team diversity (heterogeneity), little is thought about the impact of (heterogeneity) on singular level satisfaction results, for example, colleague satisfaction" (p. 379).

Given predominance of work teams, colleague satisfaction is an essential thought since cooperation encounters will increasingly affect singular employee's satisfaction and other business-related behaviors and practices e.g., responsibility, turnover, and relevant execution (Gevers & Peeters, 2009). Disappointed colleagues may limit their exertion, pull back from the team or turn into a source of interruption for other colleagues (de la Torre-Ruiz, Ferron-Vilchez & Ortiz-de Manojana, 2014). Furthermore, colleague satisfaction can be viewed as a critical individual result in its own particular right and a vital supporter of general prosperity. Thus, it can be assumed as,

*H<sub>3</sub>. There is a positive relationship between team satisfaction and team performance.*

Presently, very few researches investigated the reasons that underlie the impact of diversity on performance (Srikanth et al., 2016). Researches are done on direct link but not on the basic reasons for better or performance i.e. team satisfaction. As, Van der Vegt and Bunderson (2005) include learning and Kearney, Gebert, and Voelpel (2009) include information enlargement to be the mediator among team diversity and performance relationship.

Although constructive outcomes of team diversity on team satisfaction have been illustrated, more elevated amounts of variety in particular part attributes have likewise been observed to be adversely effecting such results. The alteration in tenure, boldness, and practicemay diminish associations among individuals and thus negatively influenced critical thinking forms (Horwitz et al., 2007). Moreover, it is confirmed that dissimilar teams may encounter more clash and low trust prompting greater turnover, absenteeism, and disappointment in comparison to similar teams (Ng & Sears, 2018). Thus the relationship of team diversity and critical thinking is mind-boggling and can possibly muddle team performance and hinder team satisfaction.

At the point when replacements comprehend these distinctions, they ought to have the capacity to utilize a normal dialect to talk about clashes and to adjust inclinations in team assignments (Culp & Smith, 2001) prompting enhanced team performance (Amato & Amato, 2005). Team synthesis can be an intense lever for enhancing team procedures and execution (Bell, 2007). It can likewise be a device for adjusting colleagues' satisfaction (Gevers & Peeters, 2009). In the event when individuals with a low and a high knowing style regard each other's contribution, their contentment with assigned task may heighten their satisfaction and performances (Srikanth

et al., 2016). Team members satisfaction emotionally gives relief to workers during work, it further enhances their productivity at the job. Thus it can be hypothesized as;

*H<sub>3a</sub>. Team satisfaction mediates the link between team diversity and team performance.*

#### **2.4.4. Work Cognition Inventory**

Past researches have revealed that an employee's psychological cognition is the most critical factor affecting performance (Zhou F. 2017). Nimon, K., Zigarmi, D., Houson, D., Witt, D., and Diehl, J. (2011) presented work cognition inventory model that represents employees' workplace features, both about work and organizational aspects. These include *autonomy*; the extent to which workers can work as per their choices (Hackman & Oldham, 1975) *connectedness with colleagues*; the extent to which workers give regard and respect to each other (Parker et al., 2003) *connectedness with leader*; the extent to which staff is close with their leader (Eby et al., 1999) *collaboration*; the extent to which workforce cooperate with each other (Roschelle & Teasley, 1995) *distributive justice*; the extent to which opportunities are equally distributed among workers (Colquitt, Conlon, Wesson, Porter & Ng, 2001) *feedback*; the extent to which employees give opinion about satisfaction with their job (Hackman & Oldham, 1975) *growth*; the extent to which rise in position can be given to employees (Marsick & Watkins, 2003) *meaningful work*; the extent to which employees have knowledge about their work (Pava, 1999) *performance expectations*; the extent to which employees work in accordance with what is expected from them (Locke, 1966) *procedural justice*; the extent to which work is equally distributed among employees (Colquitt et al., 2001) *task variety*; the extent to which variation is given in tasks to the employess (Hackman & Oldham, 1975) and *workload balance*; the extent to which employees are not over burdened with the work given to them (Katz & Kahn, 1978).

But the problem with this model was that the sample explained in the above research contains similar selection bias as mentioned by Nimon et al. (2009). Moreover, the 12-constructs were difficult to analyze, somewhat repetitive and much time-consuming.

For overcoming this problem, Nimon et al. (2015) merged these twelve constructs into three main categories, i.e. (a) constructs that emphasize on employment experiences and is called as *Organization cognition*; comprise of autonomy, meaningful work, task variety, and workload balance. (b) emphasis on organization dealings which is called *Job cognition*; consists of

distributive justice, growth, performance expectations, and procedural justice constructs and finally (c) that emphasize on dealing with people, termed as *People cognition*; comprises of cooperation, relatedness with colleagues, relatedness with leader and feedback constructs of work cognition inventory. As a resulting variable of work cognition, the notion of workers' job passion and commitment can be utilized interchangeably with job involvement and organizational engagement (Saks, 2006) work contentment, and exhaustion (Schaufeli & Bakker, 2004). Generally, these notions describe the extent of effective and cognitive perspectives of employees about their work area that analytically relates to their performance in diverse teams (Zhang & Bartol 2010). The merged model is shown in the following figure;

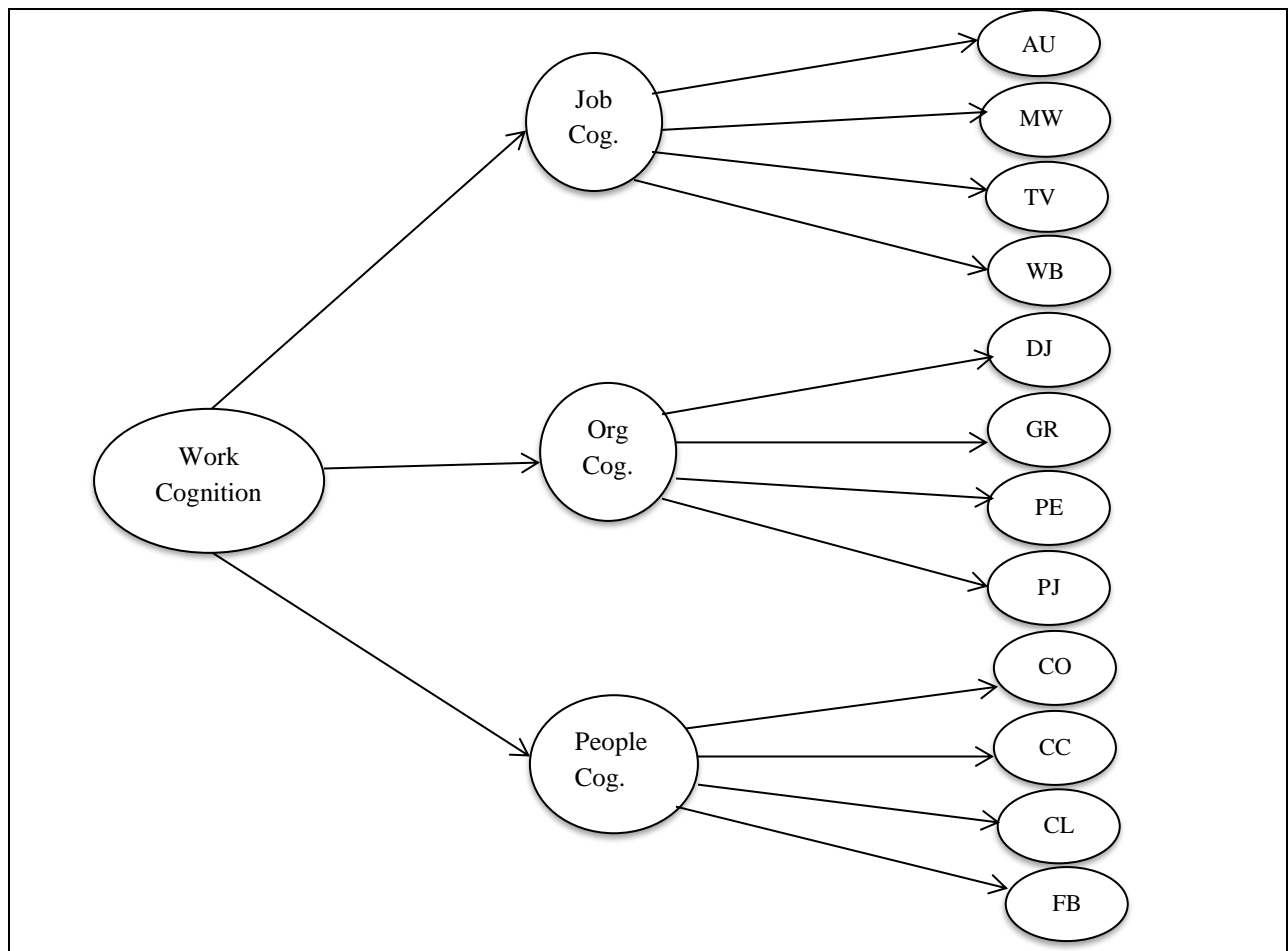


Figure 2.6: Work cognition inventory model.

[Source: Nimon, K., Zigarmi, D., Houson, D., Witt, D., and Diehl, J. (2011)]

The WCI-R model greatly explains the 12 constructs of work cognition inventory but is based on convenient sampling; moreover, the model was based on limited reliability measures of internal consistency and low nomological validity.

#### ***2.4.4.1. Linking Work Cognition Inventory and Team Performance***

WCI is taken as a composite variable instead of dividing into the above three facets, i.e. organization cognition, people cognition and job cognition, as explained by Kim Nimon and Drea Zigarmi (2015). Due to least work on this variable and for making the readers familiar with the full name of this variable that may accurately represents employee's perspective of their workplace features, both about work and organizational aspects, grounded on an intellectual assessment of the place of work (Zigarmi, Nimon, Houson, Witt & Diehl, 2009) this variable is taken as a composite variable in the current study.

It is rooted in "social cognitive theory that human behavior to be agentic (Deci & Ryan, 2002)" as they can control their actions, their choices and their upcoming expectations. Nimon et al. (2015) presented a revised form of their own primary work on WCI in the form of work cognition inventory revised (WCI-R). WCI-R concretely evaluates twelve cognitive features of employees' workplace practices that hugely affect their performance, both individually as well as collectively.

Nimon et al. (2015) merged the twelve constructs of work cognition inventory into three main categories i.e. (a) constructs that emphasis on employment experiences called as *Organization cognition*, comprises of autonomy, meaningful work, task variety, and workload balance. (b) it emphasis on organization dealings called as *Job cognition* it consists of distributive justice, growth, performance expectations, and procedural justice constructs and finally (c) that emphasize on dealing with people, termed as *People cognition*, it comprises of cooperation, relatedness with colleagues, relatedness with leader and feedback constructs of work cognition inventory. As resulting variables of work cognition, the notion of workers job passion and commitment has been used interchangeably with job involvement, organizational engagement (Saks, 2006) work contentment, and exhaustion (Schaufeli & Bakker 2004). Generally, these notions refer to the level of effective and cognitive perspective of employees about the place of work that analytically relates to their performance in diverse teams (Zhang & Bartol 2010).

A team that is more diversified as far as statistic factors are concerned, might be more effective than a homogeneous team on the grounds that the previous group can draw on a more prominent pool of information and alternate points of view. In light of this idea, team diversity of traits that are "exceptionally work-related" (e.g., instructive foundation, practical foundation) are believed to be emphatically identified with team execution, while those that are "less occupation-related" (i.e. age, gender, caste) are not (Pelled, 1999). These constructs are also linked with features of social identity theory (Cooper et al., 2013; Mols et al., 2015; Hogg, 2016) in which the person needs autonomy to do work in own style, cooperating, collaborating and connecting him/herself with the people similar to him/ her. Thus it can be assumed that;

*H4. There is a positive relationship between work cognition inventory and team performance.*

#### **2.4.5. Social Capital**

Siegler (2014) explained that social capital is related to tenets like patience, harmony & trust that are essential for people to collaborate with each other. Similarly, Putnam defines social capital and their associated principles of correspondence in his book, *Bowling Alone* (2000) as informal communities. It has increased its worthiness as a productive hypothetical viewpoint for comprehension and foreseeing the standards. These examples of societal relationships empower individuals to facilitate activity to accomplish the desired objectives (Putnam, 1993). Social capital exists just when it is shared, its impact is beneficial when connections are between dissimilar gatherings.

Hajro A. Cristina B. Gibson, Pudelko M. (2017) have presented a detailed model arguing knowledge sharing to be the basic pillar for enhancing diversified team effectiveness. They concluded that diversified teams which undergo assertive or cooperative knowledge exchange process prove to be more effective. They have presented a model regarding knowledge sharing i.e. social capital among awareness focused i.e. autonomous, engagement-focused, i.e. connect with colleagues and leader, and policy-focused, i.e. meaningful task, workload balance and growth opportunities in an organization and its impact on team effectiveness. Thus indicating WCI-R constructs link with team effectiveness that is mediated by knowledge sharing. Their model can be linked with current research as diversified teams of Combined Military Hospitals if share their knowledge with each other, they may deal with emergencies and patients care more well.

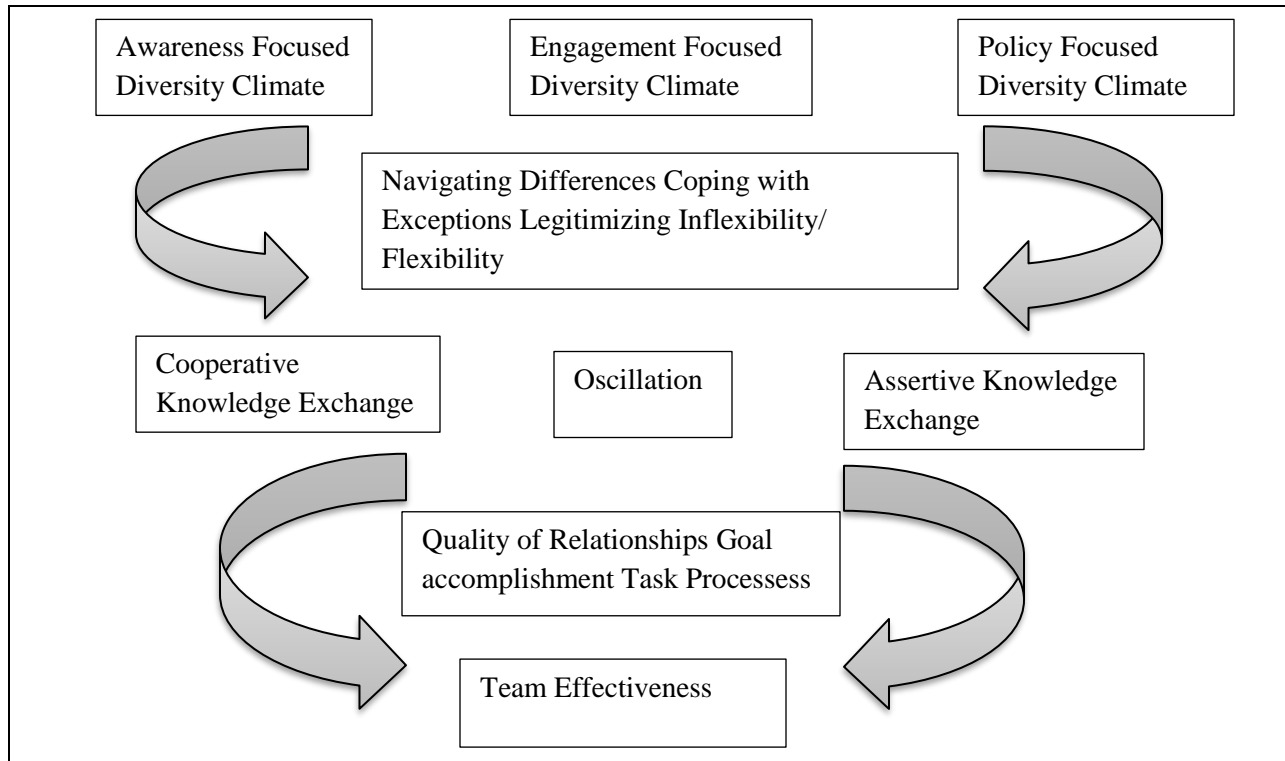


Figure 2.8: Knowledge sharing model.

[Source: Hajro A. Cristina B. Gibson, Pudelko M., (2017)]

But the problem with the model was the researchers have collected disproportionate sample by taking data from Austrians only, therefore this model cannot be generalized. Moreover, their conclusions were based on interviews only while quantitative analysis may give a different result. Other contextual factors that may affect team effectiveness were neglected i.e. authority dynamics, control tools, and corporate policies.

#### 2.4.5.1. Linking Social Capital with Work Cognition Inventory and Team Performance

A remarkable objective of the social capital is to accomplish a very coordinated team to viably achieve an assignment. Along these lines, abnormal amounts of the social mix have been inspected as a marker of effective team foundation (Gully, Devine & Whitney, 1995). Lin (2001) describes social capital as an asset derived from the links between individuals, teams, clusters, or societal ranks. Academics have associated social capital with team capability, as the extent upto which a team attains its goals “(Mathieu, Maynard, Rapp & Gilson, 2008)”. In particular, investigators concluded that the basic differentiator in this procedure is whether the

team has built up a relaxed correspondence atmosphere that is characterized as an environment set apart by open and strong correspondence (Gibson & Gibbs, 2006; Metiu & Rothbard, 2013).

A few examinations inspecting the effect of team diversity on societal mix have for sure detailed that it negatively affects collaboration (Sujin et al., 2007). There is, in any case, some confirmation in spite of such destructive discoveries among team diversity and social capital. Smith et al. (1994) for instance, didn't locate an immediate connection between team diversity and union. In like manner, Jehn (2004) discovered neither individual nor aggregate execution was contrarily connected with the social clash which originated from individual contrasts. For making a further conclusive determination on the connection among team diversity and social capital, the team variable of societal coordination was analyzed as the proximal result of collaboration and moreover found by two constructs in that investigation: employee involvement and team union (Goodman, Ravlin & Schminke, 1987) with employee involvement mirroring how much individuals from a team make the most of their working connections.

Furthermore, Leana and Van Buren (1999) proposed that social capital is acknowledged by a group capability to provoke the devotion of its participants to work with their coworkers and leader for better growth opportunities and to enhance their intellectual capital so they will coordinate well with team members thus enhancing team performance, this is in-line with WCI-R constructs presented by Nimon et al. (2015). Similarly social identity theory pinpoint the fact that team members collaborate more with those with whom the found social fondness which results in their better performance (Cooper et al., 2013; Mols et al., 2015; Hogg, 2016). This literature give rise to the hypothesis as follows;

*H<sub>5</sub>. There is a positive relationship between work cognition inventory and social capital.*

Colleagues with comparative statistic properties, rather than contrasting statistic characteristics, might be more pulled into and may coordinate more with each other, which recommends that homogeneous teams ought to beat heterogeneous teams (Suzanne T. & Bell, Anton J. et al., 2011). Research scholars recommend that social capital is important on the grounds that it tackles issues of coordination, diminishes exchange costs, encourages the stream of data between and among people, hence enhances their performance (Lazega & Pattison, 2001; Lin,



2001). Past studies suggested that social capital adds fundamentally to firm advantage in terms of increased performance (Adler & Kwon, 2002).

Teams increasingly depends on associations for better information and speedy progressions “(Wuchty, Jones & Uzzi, 2007)”. For understanding complicated and logical issues it is required to build up a common learning base. For this it is needed to reduce the coordination misfortunes that grows with diversified teams in knowledge, capabilities, and expertise (Kotha et al., 2012). This literature lead to the development of following hypothesis;

*H<sub>6a</sub>. There is a positive relationship between social capital and team performance.*

Past researchers have proposed that individual statistical characteristics i.e. gender, race, civilization, educational background, and citizenship act as status markers that flag skill over a diversified backgrounds (York & Cornwell, 2006) and forecast the outcome that individuals receives from other individuals (Bunderson, 2005) thus connecting social capital with work cognition inventory constructs. Intriguingly, few investigations look at understudy teams taking a shot at progressing class to extend, while very few propose that task-oriented diversity may experience the ill effects of poor execution in view of the absence of coordination, as opposed to the view of social relations order forms.

An overarching supposition in existing hypotheses of status in groups is that the essential component by which statistic contrasts convert into status progressions, which is through the view of assignment capability that people create around each other, that is, statistic traits fill in as signs of skill or ability (Barton & Bunderson, 2013). Yet, as we noted above, statistic qualities are definitely not just flags of ability but these are additionally a reason for social liking. Van Knippenberg, De Dreu, and Homan (2004) propose that striking nature will rely upon a cooperation between the intellectual availability of people, the comparability of individuals inside a class or team with respect to the distinction between individuals from different status, and the coherence among their status convictions and qualities, that can be changed with time completely or gathering residency.

Social order hypothesis would foresee that higher result and objective relationship is probably going to join colleagues to progress in the direction of a shared objective and spur them

to throw away contrasts (Gaertner & Dovidio, 2000). The creators noticed that in long-standing, various teams colleagues may ascribe clashes to social contrasts, and the inspiration and readiness to determine contrasts through more prominent correspondence may disintegrate after some time. Temporarily, the individuals from exceedingly various groups will probably impart crosswise over contrasts to achieve the teams' undertakings (Schippers et al., 2007). The investigations on the enlightening advantages of team diversity did not identify the data sharing problems faced by diversified teams since they concentrate on errands in which no collaboration among bunch of individuals is essential (Harvey, 2013) so, it can be proposed that;

*H<sub>6b</sub>. Social capital mediates the relation among work cognition inventory and team performance.*

#### 2.4.6. Individual Team member Creativity

Past researches inspected the association among team diversity and individual team members' creativity that was affected by various moderators i.e. Shung J. Shin et al. (2012) who has presented a link among cognitive team diversity and individual team member creativity that was moderated by team members' creative self-efficacy and transformational leadership. Their research indicated that the moderating relationships were only positive when moderators are taken high, as shown in the figure as follows.

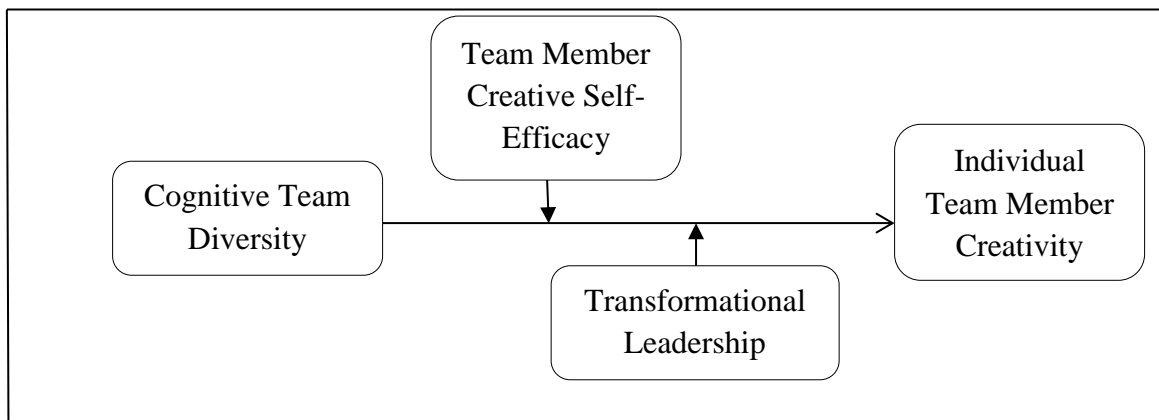


Figure 2. 2: The moderating model.

[Source: Shung J. Shin, Tae-Yeol Kim, Jeong-Yeon Lee, Lin Bian, (2012)]

Due to cross-sectional data, the research cannot specify the direction of causality clearly. Moreover, there was no objective measure for creativity, as a comparison between teams taken from different industries was not done; therefore supervisor biasness in rating creativity remained unanswerable. Another problem was the results, which were based on examination of perceived cognitive diversity instead of measuring actual cognitive diversity among team members, therefore results based on individuals perception regarding others than actual performance cannot be realized due to biasness (Harrison & Klein, 2007). Finally, the results were based on data from one context of China only, hence there is a fair possibility of having different outcomes on collective cultural contexts.

#### ***2.4.6.1. Linking Individual Team Member Creativity with Team Diversity, Work Cognition Inventory and Team Performance***

Academics generally inspected creativity as a resulting variable of individual or fellowship, as it improves team performance (Anderson, Potočnik & Zhou 2014). It is conceived as the origination of inventive ideas, resolution of complications and visions which are exact for improving team performance (De Dreu et al. 2011). Nevertheless many models did not provide any explanation of the processes that incurred in a team for enhancing individual team member creativity. This can be done if team members are provided with safety, appreciative culture for being inventive and hiring after recognition of specific skills. The inner communication system in groups can lesser or boost the capability to be inventive (Barczak, Lask & Mulki 2010). Therefore internal communication and coordination of diversified team members helps in creating a inventive atmosphere in any organization, i.e. hospitals.

In light of the present globalized learning economy organizations need to think about various mechanical and demographical powers to sustain and be effective in such testing and vibrant workplace, so they have to present more advancements in their occupational procedures, items, and administrations than past (Solmaz M & Indra D, 2013). Be that as it may, not every one of them could really lead this procedure effectively. Employees' inventiveness is a standout amongst the most essential administration standards which has pulled in the consideration of investigators of business administration as one of basic patrons of authoritative achievement (Jong & Hartog, 2007).

Numerous associations have found a way to upgrade advancement and inventiveness by focusing on workers' sentiments and including them in basic leadership process or enlisting and staffing faculty with innovative qualities. Yet, significantly more exertion is expected to accomplish authoritative inventiveness and advancement. Teams are utilized in regular work configuration to upgrade the development of innovativeness in organizations, since the aggregate of learning, encounters, viewpoints, and thoughts of a group are considered to be bigger and wealthier than that of an individual labourer. In any case, past research on conceptualizing demonstrate that with regards to delivering thoughts, bunches are not generally as effective in creating thoughts as the same measure of people are (Mumford et al., 2002). However, in spite of the fact that people do create generally more thoughts, the thoughts delivered by groups have a tendency to be more imaginative (Mumford et al., 2002). One reason for this might be that group individuals can, on the whole, prevail upon, assemble and encourage on a common thought and, in doing this they think novel ideas which are profoundly unique (Paulus & Brown 2007).

Past research contains an extensive variety of particular developments that are thought to be 'group inventive procedures' e.g., conceptualizing, successful correspondence (Bissola & Imperatori 2011); learning sharing (Kessel, Kratzer & Schultz 2012); point of view taking, data elaboration (Hoever et al., 2012); group reflexivity (West 2012); and errand struggle (Fairchild & Hunter 2014). Similarly Alex Jones (2019) suggested while explaining his LSI model of team building that if the team member is provided right to lead and implement his/her plans in a structural way, he/ she will perform more well within the team. So it can be anticipated that;

*H<sub>7a</sub>. Individual team member creativity moderates the association among team diversity and team performance.*

Representatives' innovativeness and advancement is the key to enhancement for future organizations (Gumusluoglu & Ilsev, 2009). As per George and Zhou, "inventive conduct is the generation of novel and valuable thoughts by representatives which can be the beginning stages of advancement" (2001, pp. 513). The investigation of Slatten, Svenssenand Svaeri (2011) about interactional methodologies and George and Zhou's (2001) for comprehending innovativeness, guessed that forefront workers in benefit ventures who are insufficiently inventive in their

connections with clients create thoughts and arrangements that are more common and routinized, however, imaginative bleeding-edge representatives will convey more original thoughts.

Hanke (2006) for instance, explores four group practices that could prompt innovativeness, in particular, parallel considering, specific encoding and correlation, analogical considering, and struggle. Others, for example, Goh, Goodman, and Weingart (2013) concentrate more on the 'experimentation' practices of thought era and examine the practices of 'arranging, authorizing and checking on. Moreover, Gilson and Shalley (2004) explore group imaginative practices i.e. recognizing issues, proposing speculations, examining thoughts, not dithering to misuse logical inconsistencies, and so forth.

Zhou and Shalley (2003) characterized creativity as the emergence of innovative and valued concepts regarding matters, organizations, practices, and processes by a worker. These thoughts can be totally new in one place or new just for a specific hospital. Shung J. et al. (2012) concluded that inventiveness is the method of commitment in innovative acts which occurs in a repetitive style amongst persons and groups. The intelligent nature of team creativity requires people to participate in individual-level creativity. As per Lipman et al. (2012) teams can be a source of its every member's creativity that permits individuals to gather data and points of view from people with various information, abilities, thinking styles, and perspectives. So it can be supposed that;

*H<sub>7b</sub>. Individual team member creativity moderates the association among work cognition inventory and team performance*

## **2.6. Theoretical Model**

This whole review of literature on the link among team diversity and team performance suggested the need of making a comprehensive model that may overcome the flaws of all the previous models in presence of independent variables, mediators and moderators. After reading the literature given by various researchers and going through the models having current study variables, a theoretical framework is proposed before starting the methodology section to be considered in the current study.

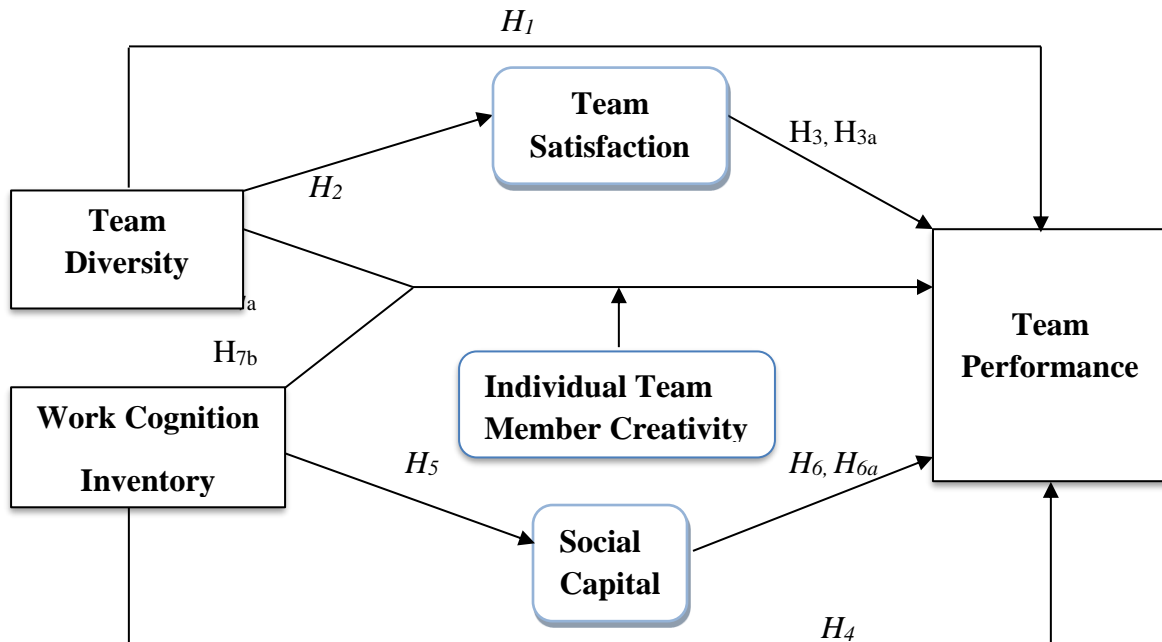


Figure 2.9: Theoretical framework of the current study.

The theoretical model is showing the association of team diversity and work cognition inventory with team performance, where individual team member creativity moderates the relationship of team diversity and work cognition inventory with team performance, whereas team satisfaction mediates the link among team diversity and team performance while social capital mediates the association between work cognition inventory and team performance.

## 2.7. Chapter Summary

This chapter is based on review of literature about how to take optimum performance from diversified teams by taken into consideration their satisfaction level by providing the opportunities to be creative while working in teams. This research fulfills the gap identified in various literatures as diversified teams can rise above social order forms by distinguishing mediators that assist them to limit social classification forms while as yet permitting for data trade for better performance.

Employees perform better when their cognitive features are satisfied. Social capital is required at every moment for attaining long and short term goals. The study regarding inventive style commends a relative implementation modification when the team is diversified, as each member must possess a quality that might be fruitful for the team.

## **CHAPTER 3**

### **METHODOLOGY**

#### **Introduction**

The motivation behind this section is to show the arrangement or plan of how the scholar-led the investigation to accomplish its expressed targets. Parts of the examination procedure that were tended to incorporate the examination configuration are: the brief portrayal of the populace took after by a conversation of the specimen and the assurance of a legitimate test estimate is presented in this chapter. Moreover it comprises of instrumentation, reliability, and validity of the instrument. The procedure of information gathering is expected to exactly test the theoretical system, techniques for factual examination and restrictions of the investigation.

#### **3.1. Research Method**

##### **3.1.1 Research Paradigm**

Mackenzie & Knipe (2006) characterized paradigm as researchers view about the world. This study comes under epistemological philosophy (Norris C., 2005) in which under objectivism there was an outer perspective point from which it was conceivable to see the association and performance of the reliably genuine process and structures. Therefore, positivist philosophy was selected, as selected by Shung J. et al. (2012) in a similar research, in which hypotheses were generated and tested for obtaining answers to the research questions. Cross-sectional data were collected at one period of time due to the short time span for completing the research, as collected by Anne Boon et al. (2016) in a similar kind of research. Questionnaires technique was followed for data collection and analysis, in which questionnaires were distributed among participants by purposive sampling because the data was supposed to be collected from departmental heads or senior most employee of the department only, as they may give accurate data about their team members, same procedure was followed by Shung J. Shin et al. (2012) who opted positivist paradigm and distributed questionnaires among 68 teams from a Chinese company for concluding their research. Similarly, the research performed by Anne Boon, Katrien Vangrieken and Filip Dochy (2016) also adopted the questionnaire technique and distributed the questionnaires among 540 employees for concluding their work.

### **3.1.2 Research Design**

A research design explains how data is to be assembled, what instruments will be used, how the instruments need to be utilized and the means arranged for investigating data gathered. It is a distinct structure of how an examination will happen.

### **3.1.3 Cross-sectional Research Design**

This study is based on cross-sectional research design for getting a clear picture of the outcomes at a specific point of time. The researcher has chosen this design, as it commonly uses survey technique, as suggested by Sapsford R. (2007). Therefore, it is considered less expensive and less time consuming because of data collection at one period of time. The cross-sectional design has previously been used by various researchers while studying diversified teams i.e. Sexton, Thomas & Helmreich (2000) and Shung J. et al. (2012), who also selected cross-sectional design for completing their research on 316 diversified team members of a Chinese company.

This examination concentrated on cross-sectional research design in light of the fact that in this investigation the researcher needs to investigate the connection between team performance, team diversity and work cognition inventory of the CMH staff working in Pakistan, as due to the transference policy within 2 years of time the respondent may not remain available in the same hospital for giving responses in the later period of time. Therefore it was wiser to conduct analysis on the responses gathered at one period of time.

### **3.1.3. Research Approach**

In view of the idea of the examination and to investigate the issue inside and outside, a deductive approach has been selected in pursuance of Shung J. et al. (2012). The deductive approach is followed by a survey technique in which data has been collected via mono-method approach of using quantitative methodology.

### **3.1.4. Quantitative Method**

Data was collected through mono-method approach in which quantitative method was selected as the research was based on measurements. A qualitative methodology was rejected as interpreter translates the information irrespective of reality but on their own perceptions, it may create biasness in the results. Quantitative research endeavors to quantify something unequivocally



and replies to the queries identified with; how much, how frequently, what number of, when and who (Cooper & Schindler, 2003). Quantitative techniques are utilized to decide connections of factors, which can be demonstrated through testing theories.

### **3.1.5. Research Strategy**

The research strategy is grounded on epistemology as suggested by Norris C., (2005) to opt the acceptable knowledge in the field of research by asking the facts from respondents, in which under positivism, the deductive approach has been selected. Data is further collected through survey technique as proposed by Sapsford R. (2007) for obtaining rich statistical data, in which mono-method and cross-sectional design have been used by distributing questionnaires among respondents.

## **3.2. Data Collection**

After guaranteeing the validity and reliability of finalized questionnaire, data collection began in March 2018 and finished in October 2018. Information gathered through review was cross-sectional in nature. Members were informed about the motivation behind the examination. After the readiness of members, the research instrument was distributed among CMH staff members.

### **3.2.1 Instrument**

Questionnaires was used that consists of 35 items. Suitable scales were chosen after checking reliability and validity issues for all the variables of research & summed up in questionnaire format. see (Annexure-A).

### **3.2.2. Questionnaires**

This is a regularly used system for collecting primary data in which data is accumulated through a survey. First of all the reviews are sent to the sources with a formal request to answer the inquiry and received back. The accomplishment of this strategy massively depends on the way in which the review is drafted. In this way, the specialist must be remarkably mindful while circling the inquiries.

### **3.2.2.1. Questionnaire format**

In this exploration five-point Likert scales are utilized on the grounds that these are respondent inviting and give dependable data. These begin from 1) strongly disagree to 2) disagree, 3) neutral, 4) agree, and 5) strongly agree.

### **3.2.3. Unit of Analysis**

Sekaran (2006) indicated that "unit of examination refers to the level of the total information gathered amid resulting information investigation arrange" (p. 132). In a particular investigation, a unit of investigation could be people, gatherings, associations, organizations or nations. In this examination, the unit of investigation is professionals from different departments working in Combined Military Hospitals, i.e. gynae, surgical, dental, neurology, radiology, cardiology, dermatology, urology, gastrology, pulmonology, pathology, orthopedic, pedes, emergency, physiotherapy, eye, operation theater, administration, ear nose & throat (ENT), Blood department, out patient department (OPD), family wing, intensive therapy care (ITC), surgical ITC, nutritionist, anesthetist, psychaterist, laproscopy, officers ward and officers family ward. These professionals preferably includes head or the senior most representative of these departments, who can give accurate data regarding the teams working in that department.

### **3.2.4. Target Population**

As indicated by Sekaran (2006) population refers to "the whole gathering of individuals, occasions, or things of premium that a specialist wishes to research" (p. 265). The population of this study comprised of professionals from 39 Combined Military Hospitals (CMH) all over in Pakistan, so to have generalized findings from all provinces of Pakistan. The populace under consideration has incorporated every single operating CMH's staff all over in Pakistan.

These are not specific to army personnel but civilians, i.e. the general public may also get standardized treatment in any CMH all over in Pakistan. The target population of this study comprises of eleven class- A CMHs, having standardized treatment and technologies with a professional staff of 2739.

### 3.2.5. Data Collection

Primary data is what is accumulated directly by the researcher for the first time. It is original in nature and is specific to an investigation issue under thought. It is a basic data that some person assembles from a social occasion of people aggregated especially for the examination. The most generally perceived procedures for collecting primary data are questionnaires, reviews, interviews, observations, contextual investigations, and focus groups. Data collection is a path towards gathering data from different sources. Primary data is collected for completing this research by visiting all eleven CMHs of Pakistan. The questionnaires were then given to the respondents after taking approval from the officer in command (OIC) of that specific CMH. Common method bias has been removed by taking employees of every department of CMHs as a separate team while collecting the data, i.e. gynae, surgical, dental, neurology, radiology, cardiology, dermatology, urology, gastrology, pulmonology, pathology, orthopedic, pedes, emergency, physiotherapy, eye, operation theater, administration, ear nose & throat (ENT), Blood department, out patient department (OPD), family wing, intensive therapy care (ITC), surgical ITC, nutritionist, anesthetist, psychiatrist, laparoscopy, officers ward and officers family ward. The professionals included head or the senior most representative of these departments, who can give accurate data regarding the teams working in that department. As they were supposed to give data about their specific team only, there was negligible margin of common method bias. Moreover Harman's single factor test was also performed for testing common method bias (Harman, 1967; Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Shah et al., 2021). The test revealed that no single factor explained most covariance of independent and dependent variables this further confirms the absence of common method bias in the current research.

A sum of 40 questionnaires were distributed in every Class-A Combined Military Hospital other than CMH Rawalpindi in which 50 questionnaires were distributed. Initially two days time was given to the respondents for fulfilling the questionnaire but later on the time was extended to a week as most of the respondents did not fill the questionnaires after two days due to their busy schedule. Most of the responses were collected after a week by hand while few responses were received via email and google docs. All the responses were then summed up in printed form and checked for outliers if any.

### **3.2.6. Sample Size**

As per Sekaran (2003) “in the multivariate investigation (counting different relapse examination), the sample size ought to be a few times (ideally 10 times or more) as huge as the number of factors in the investigation (p. 296)”. As the total number of Class-A CMH staff is 2739, consulting to the table given by Krejcie and Morgan (1970) it was chosen to take a specimen of 450 CMH staff members, constituting a team of doctors, nurses and administrative staff working during operations, including radiologists, Electrocardiogram (ECG) and X-ray staff. Out of the 450 questionnaires, 40-questionnaires were distributed among each eleven Class-A Combined Military Hospitals, other than CMH Rawalpindi 50-questionnaires were distributed. Non probability sampling was performed under which purposive sampling was done so that specific staff members working in teams in different departments i.e. gynae, surgery, neurology, radiology, child ward, officers family ward and intensive care unit in CMHs may fill the questionnaire. After taking approval from the (OIC) officer in command of each CMH, the researcher visited all the above mentioned departments and distributed the questionnaires by telling the respondents background of this research and requested them to fill the questionnaires.

### **3.3. Combined Military Hospitals (CMH)**

CMHs are specialized Armed Forces hospitals, working in several cantonments all over in Pakistan. Besides medical treatment, CMHs provide training and healthcare surveillance to the army and civilian people. These hospitals’ system is run by General Duty Medical Officers (GDMO), whereas patients’ care is done by doctors of Pakistan Army Medical Corps, CMH-Lahore. The doctors are transferred after every three years’ time duration, sometimes less or more; depending on the nature of their job, the transfer practice to other units is to ensure a diverse environment in the workplace. Newly transferred doctors, as well as nurses and other supporting staff, need to work with new team of employees within no time for assuring patient satisfaction and maintaining hospital performance. Thus this research can be adequately applied on Combined Military Hospitals working in Pakistan. Moreover, due to transfer of employees after every 2 to 3 years in CMHs, it was suitable to investigate whether the team members share the information i.e. (social capital) regarding new researches in the field e.g., corona virus vaccine. It is to analyse that while working in newly made teams, do the employees have the right to work in their own preferred style or not? According to CMH-Lahore (2018) total number of Combined Military

Hospitals operating in Pakistan is 39, these are classified into class A, B and C on the basis of technologies and level of treatment provided by the respective hospital i.e. class-A hospitals provide the most advanced technologies and complex treatments, as presented in table 3.1.

*Table 3. 1: Population Table; Categorization of CMHs in Pakistan*

<b>Class A</b>	<b>Class B</b>	<b>Class C</b>
CMH Abbottabad	CMH Attock	CMH Badin
CMH Kharian	CMH Gujranwala	CMH Bannu
CMH Lahore	CMH Hyderabad	CMH Chitral
CMH Rawalpindi	CMH Jehlum	CMH Chunian
CMH Bahawalpur	CMH Muzaffarabad	CMH Chor
CMH Malir Cantonment Karachi	CMH Nowshera	CMH D I Khan
CMH Multan	CMH Okara	CMH Gilgit
CMH Pano Aqil	CMH Sargodha	CMH Khuzdar
CMH Peshawar		CMH Kohat
CMH Quetta		CMH Landi Kotal
CMH Sialkot		CMH Mangla
		CMH Mardan
		CMH Murree
		CMH Rawlakot
		CMH Risalpur
		CMH Sibi
		CMH Skardu
		CMH Tarbela
		CMH Thall
		CMH Zhob

*Table: 3.1 [Source: (CMH-Lahore, 2018)]*

### **3.4. Measurement of Variables**

Principal component analysis (PCA) has been run and after item deduction from the software and looking at the screeplots the following items were selected from the scales used by given researchers.

#### **3.4.1. Team Diversity**

Team diversity was taken as an independent variable that was calculated by using 4-items from the scale used by Downey, Van der Werff, Thomas & Plaut(2015). A sample item was “Everyone in my team, regardless of background and perspective, is encouraged to share his/her ideas openly”

#### **3.4.2. Work Cognition Inventory**

Work cognition inventory was taken as another independent variable. It was measured through 8-items scale selected after reliability test from the original scale given by Kim Nimon and Drea Zigarmi (2015). These include:

*Autonomy*; “ I have the authority I need to make decisions about my job”. *Collaboration*; “People in this organization support me on projects and tasks”. *Distributive justice*; “I think there is an equal exchange between my effort and my compensation”. *Procedural justice*; “Management of this hospital use procedures that reduce bias in decision making as much as possible”. *Feedback*; “I receive appropriate feedback on my job performance to know how well I am doing.”. *Growth*; “I have opportunities to develop new skills to do my present job”. *Workload balance*; “My workload is just right most days” and *Performance expectations*; “My expected level of performance is clearly defined”.

#### **3.4.3. Individual Team Member Creativity**

It moderates the relation of team diversity and work cognition inventory with team performance. It was calculated by adapting 4 items from the scale given by George & Zhou (2001). A sample item was “Team members are encouraged to come up with new and practical ideas to improve performance”

### 3.4.4. Social Capital

Social capital was taken as a mediator among work cognition inventory and team performance and was measured by using 4 items from the scale used by Narayan & Cassidy (2001). For example; “To what extent do you participate in the team decision-making?”

### 3.4.5. Team Satisfaction

Team satisfaction was taken as a mediator among team diversity and team performance and was calculated by adapting 5 items from the scale presented by Kyle A. Cameron (2014). A sample item was “I am pleased with the way my team members and I work together”.

### 3.4.6. Team Performance

Team performance was taken as a dependent variable and was calculated by using 4 items from the scale used by Thompson BM, Levine RE, Kennedy F, et al. (2009). A sample item was “My team resolved many conflicts by compromising between team members, with each one giving in a little”.

*Table 3. 2 showing variables along with scales used for their measurement*

S No	Variable	No of items	The scale applied/used
1	Team diversity	4	Downey, Van der Werff, Thomas and Plaut (2015)
2	Work cognition inventory	8	Kim Nimon and Drea Zigarmi (2015)
3	Team satisfaction	5	Kyle A. Cameron (2014)
4	Social Capital	4	Narayan and Cassidy (2001)
5	Individual team member creativity	4	George and Zhou (2001)
6	Team performance	4	Thompson BM, Levine RE, Kennedy F, et al. (2009)

### 3.5. Item Parceling

These are usually framed to lessen the number of indicators of extensive scales (Bandalos & Finney, 2001). Researchers have characterize item parceling as "a procedure by which crude item reactions are consolidated into sub-scales earlier to the investigation. Bandalos and Finney (2001) announced that experts have referred to three regular explanations behind utilizing item

parceling, firstly, it builds the security of the parameters evaluated, secondly, it makes strides variable to test the measured proportion and thirdly, it is a solution for little example estimate.

The usage of item parceling is not deprived of opposition, may be most imperative is deciding the dimensionality of the items to be divided. Since the dimensional nature of a measured construct can seriously affect the precision, therefore the legitimacy of different parceling methods are used (Little et al., 2002). Bandalos and Finney (2001) suggested that experts must utilize it when distributed items are entirely uni-dimensional. Hair et al. (2006) contend that uni-dimensionality is like the idea of unwavering quality and characterize uni-dimensionality as “a normal for an arrangement of indicators that has just a single basic characteristic or idea in like manner (p. 584)”. Item bundles work powerfully when developed on uni-dimensional structures. In total, the measure of arguments for the side of the favorable circumstances far exceeds the burden side of item parceling (Little et al., 2002), and analysts will keep on viewing item parceling as an appealing choice. Therefore, instead of 36-items in the scale of WCI, only 8 parcels have been made that covers all aspects of the instrument. This was done by selecting only those dimensions which were suitable with this research (Williams, L. J., & O'Boyle Jr, E. H. 2008). So out of 12 main dimensions, eight dimensions were selected and 1 item has been further selected from every shortlisted dimension. Similarly, 4 parcels were made for team diversity, team performance and individual team member creativity instead of 7-items of the scales used. Likewise, 5 parcels were made for team satisfaction instead of 7-items of the scale and 4 parcels were made for social capital instead of 8-items of the scale used.

### **3.5.1. Uni-Dimensionality of Estimation Instrument**

The estimation instrument utilized as a part of the present investigation depends on broad writing survey. Principal component factor analysis was performed to test for unidimensionality as recommended by Droge and Daugherty (Hoe, 2008, p. 80). Further reliability estimates for all constructs were calculated.

### **3.6. Principal Component Analysis**

It was done to compute the eigen values. As per Hoe (2008) eigenvalues more than 1 provides support for the unidimensionality of these scales (p. 80). All constructs in the present



investigation were independently subject to principal component analysis and the eigenvalues are displayed in Table 3.3.

*Table 3.3 Uni Dimensionality of Scales*

Construct	Component	Initial Eigenvalues		
		Total	% of Variance	Cumulative %
Work Cognition Inventory	1	2.91	36.45	36.45
	2	1.00	12.52	48.98
	3	.97	12.13	61.11
	4	.78	9.75	70.87
	5	.76	9.55	80.43
	6	.67	8.44	88.87
	7	.49	6.16	95.04
	8	.39	4.95	100
Team Diversity	1	2.11	52.84	52.84
	2	.73	18.43	71.27
	3	.69	17.42	88.70
	4	.45	11.29	100
Individual TM Creativity	1	2.45	61.23	61.23
	2	.70	17.51	78.75
	3	.55	13.78	92.53
	4	.29	7.46	100
Team Satisfaction	1	22.66	53.28	53.28
	2	.85	17.15	70.43
	3	.60	12.13	82.57
	4	.59	10.35	92.93
	5	.35	7.07	100
Social Capital	1	2.43	60.84	60.84
	2	.71	17.64	78.49
	3	.59	14.91	93.40
	4	.26	6.59	100.0
Team performance	1	2.60	52.00	52.00
	2	.99	19.92	71.92
	3	.49	9.83	94.79
	4	.26	5.20	100

Table 3.3 portrays that excluding work cognition inventory rest of the constructs had only the first eigenvalue above 1, thus supporting the unidimensionality of these scales. For work cognition inventory, two eigenvalues were above 1 but the second eigenvalue was only 1.00. Since

the second eigenvalue is equal to 1 and this is a measure that has been used in research by D’Netto et al. (2008) so it is reasonable to accept the unidimensionality of the scale.

*Table 1.4 Principle Component Analysis Results*

Construct	No. of items	Kaiser-Meyer-Olkin	Bartlett’s Test of Sphericity	Eigen Value	Total Variance	No. of Factors
Work Cognition Inventory	8	0.761	584.528	2.916	36.454	2
Team Diversity	4	0.707	278.742	2.114	52.840	1
Individual TM Creativity	4	0.744	495.335	2.450	61.238	1
Team Satisfaction	5	0.771	536.901	2.664	53.288	1
Social Capital	4	0.692	512.498	2.434	60.844	1
Team Performance	4	0.761	599.961	2.600	52.003	1

Table-3.4 reveals that the first construct; work cognition inventory was measured by eight items formed into two reliable factors. The “KMO (Kaiser Meyer-Olkin), Bartlett’s test of sphericity” and Eigenvalues are greater than standard, thus, acceptable. Moreover, team diversity was measured by four items shaped into a single factor. Since the values were superior to standard, therefore positive and accepted. Similarly, individual team member creativity was measured by four items and merged into a single factor. The “KMO, Bartlett’s test of sphericity”, and Eigenvalues are above standard, therefore, positively accepted. Likewise, team satisfaction was computed by five items united into a single factor. The “KMO, Bartlett’s test of sphericity”, and Eigenvalues are higher than standard, thus acceptable. Similarly, social capital was measured by four items and merged into a single factor. The “KMO, Bartlett’s test of sphericity”, and Eigenvalues are superior to standard, therefore positive and accepted. Likewise, team performance was computed by four items united into a single factor. The “KMO, Bartlett’s test of sphericity”,

and Eigenvalues are higher than standard, thus acceptable. “The KMO, Bartlett’s test of sphericity and Eigenvalues” for all six constructs are higher than standard, therefore these values are accepted as positive.

### **3.7. Pilot Testing**

A feature of valid estimation instrument is that it should be a culminating pointer of what a specialist is keen on evaluating or calculating. The pilot test helps in checking the reliability and validity of a questionnaire. It’s essential for any observational study to inspect the reliability and validity of the estimation instrument. Questionnaire having greatest validity will bring more exact outcomes that uncover genuine attributes of the populace. Reliability is the prerequisite that the use of the legitimate estimation to the diverse people and bunches under various conditions may bring about a similar conclusion. To affirm the reliability and validity of the questionnaire, a pilot test was performed by the researcher. In March 2018, a specimen of 50 CMH staff members working in diversified teams was taken, among which 10 respondents belonged to CMH Abbotabad, 20 to CMH Peshawar and 20 to CMH Rawalpindi respectively. The researcher visited the respondents at their workplace and asked them to round out the poll. An aggregate number of 40 staff members filled the survey; the response rate of 89 percent. The responses were then analyzed for checking the validity and reliability of the questionnaire.

#### **3.7.1. The Validity of the Quantitative Research Instrument**

The pilot test helped in investigating the validity of the questionnaire.

##### ***3.7.1.1 Construct Validity***

As per Cooper and Schindler (2003) and Sekaran (2006) specialists show construct validity utilizing relationship coefficients, factor investigation or basic observations. The current investigation used a broad writing survey in the pertinent space that gives robust validity to the constructs which were to be measured. Furthermore, relationship examination was led to additionally affirm the construct validity. Sekaran (2006) states that a relationship lattice shows nature, course, quality, and centrality of the connections of the considerable number of factors in the investigation.

Table 3.5 represents the correlation between all latent constructs. Investigation of the inter-correlation matrix reveals that each construct is significantly correlated with other construct and none of the correlations are above 0.443. So, no multicollinearity and discriminant validity problem has been found. As Hair, Anderson, Tatham, and Black (2006) express that outcomes can be influenced by multicollinearity and values surpassing 0.80 can be characteristic of issues. However, values surpassing 0.90 ought to be analyzed dependably. The lower the values of correlation, the lesser will be the multicollinearity. Thus satisfying discriminant validity that the constructs under observation are unrelated.

*Table 3.5 Correlation Matrix*

	WCI	TP	TD	IC	TS	SC
WCI	1					
TP	.293**	1				
TD	.216**	.256**	1			
IC	.369**	.402**	.336**	1		
TS	.443**	.380**	.177**	.420**	1	
SC	.372**	.448**	.260**	.343**	.378**	1

\*\* . Correlation is significant at the 0.01 level

\*\* . Correlation is significant at the 0.05 level

### **3.7.1.2. Content Validity**

It can be measured by board assessment or essentially by judgment (Cooper & Schindler, 2003; Sekaran, 2006). It entails the ideas of renowned subject specialists to estimate whether the research instrument measure defined the content and further severe statistical tests than through face to face questioning. It is furthermost considered in academic and professional testing, where research instrument is required to mirror the information actually essential for a particular topic area, (e.g., history) or skills, (e.g., management).

Procedurally during the pilot study, the questionnaire was exhibited for audit to three HRD specialists. Input obtained from three HRD specialists was utilized for improving the validity of the questionnaire.

### 3.7.1.3. Reliability of the Quantitative Research Instrument

Reliability of a measure means the accuracy and consistency. As indicated by Sekaran (2006) analyst can quantify the “reliability of the investigating instrument through internal consistency by processing the Cronbach's alpha”. Reliability affirms the constancy of respondents' response to each of the things in a measure. Cronbach's alpha coefficient estimate of the whole questionnaire was 0.746. In Table 2 it is explained that the Cronbach's alpha coefficient esteems to develop ranges from 0.694 to 0.788. Sekaran (2006) states, the reliability coefficient nearer to 1.0 is considered the better (p. 307). Although estimation of 0.60 valued the lesser from furthest reaches of adequacy “(Hair at al., 2006)”. Cronbach's alpha estimations of this pilot contemplate affirmed that the scales utilized as a part of the quantitative research instrument are suitable for the real investigation.

*Table 3.6 : Internal Reliability of Scales*

Scales	Cronbach alpha	Number of items
Team Performance	0.729	5
Team Diversity	0.694	4
Work Cognition Inventory	0.746	8
Social Capital	0.784	4
Team Satisfaction	0.771	5
Individual Creativity	0.788	4

### 3.8. Procedure

For gathering consistent data, the scholar visited and disseminated the research instrument amongst respondents by hand, as well as through email and social media. Networks and other references were also utilized for filling the questionnaires.

During the personal visit to CMHs, the researcher firstly met the Officer in Command (OIC) of every CMH, took his approval and then visited various departments of CMHs i.e. gynae, surgical, dental, neurology, radiology, cardiology, dermatology, urology, gastrology, pulmonology, pathology, orthopedic, pedes, emergency, physiotherapy, eye, operation theater, administration, ear nose & throat (ENT), Blood department, out patient department (OPD), family wing, intensive therapy care (ITC), surgical ITC, nutritionist, anesthetist, psychaterist, laproscopy, officers ward and officers family ward. The respondents were requested to give data regarding their team members respectively for incorporating their views in the betterment of their own hospital specifically and healthcare sector of Pakistan on a broader scale. For taking the responses, the researcher went again to the CMHs after 2 days and took the filled questionnaires, some of the doctors asked for a day more for giving their responses, therefore the researcher visited the specific department on the other day too. Once the questionnaires were taken back, they were further checked for completion before the coding process.

After personal visits, all the responses received through email and social media were analyzed and checked for appropriateness.

### **3.8.1. Response Rate**

A sum of 450 questionnaires was dispersed by personal visits to some hospitals; others were floated through email, Google docs and by using social media. A total of 405 questionnaires were reverted, though seven staff members did not fill the questionnaire completely and three were outliers, as their answers were completely different from rest of the responses received according to recommendations by Hair et al. (2006). So those 10 responses were dropped and 395 responses were selected for statistical tests.

*Table 3. 7 Showing Sample Size of Current Study*

S. No	Combined Military Hospitals	Diversified Team Members	Questionnaires Distributed	Received Responses	Discarded Questionnaires
1	Abbotabad	259	40	36	0
2	Kharian	216	40	34	1
3	Lahore	356	40	37	1
4	Rawalpindi	385	50	46	2
5	Bahawalpur	216	40	32	1
6	Malir Cantt Karachi	390	40	45	1
7	Multan	238	40	35	0
8	Pano Aqil	134	40	33	2
9	Peshawar	221	40	38	1
10	Quetta	138	40	37	1
11	Sialkot	186	40	32	0
Total	11	2739	450	405	10

### **3.8.2. Demographics**

Demographics of this research are based on employees working in eleven Class-A Combined Military Hospitals of Pakistan. The characteristics of respondents are based on 405 responses which are collected from thirty departments of each of the eleven hospitals. The respondents taken for this study were the head or the senior most person of the department who can represent his/her team.

Table 3.8 showing the demographics of the sample

Characteristics	Quantity	%	Characteristics	Quantity	%
<i>Gender</i>			<i>Age</i>		
Male	332	82	20-30	79	19.5
Female	73	18	31-40	145	35.8
			41-50	180	44.4
			Above 50 Years	1	.20

Table 3.9 showing sample Characteristics

Characteristics	Quantity	%	Characteristics	Quantity	%
<i>Designation</i>			<i>Experience</i>		
HOD	291	71.8	0-5 Years	29	7.2
Senior Most	109	26.9	6-10 Years	51	12.6
Other	5	1.3	11-15 Years	260	64.2
			Above 15 Years	65	16
<i>Departments</i>	30				
<i>CMHs</i>	11				

Table 3.8 shows that data has been collected from 332 males while 73 female participants, among which maximum participants belongs to age group between 31 to 50 years. While table 3.9 shows that maximum data has been taken from HODs and senior most representatives of the departments.

### 3.8.3. Methods of Analysis

Methods of analysis like; confirmatory factor analysis, arithmetic mean, standard deviation and frequency distribution were performed. Moreover assumptions of mediation analysis and structural equation modeling (SEM) like normality test, multicollinearity, linearity and homoscedasticity along with descriptive statistics and correlations have also been performed.



#### **3.8.4. Ethical Considerations**

As indicated by Sekaran (2009) "ethics in business refers to a code of administrator expected to a societal standard of conduct while leading exploration" (p. 17). While gathering information, a few ethical issues tended to be incorporated with dealing the information received from respondent as entirely classified and protecting respondent's security. Individual or apparently nosy data ought not be requested, sense of pride of the member in all angles and evasion of implementing the member on the off chance that he or she sets aside opportunity to react. The genuineness and honesty of the researcher is the most imperative angle and should be measured morally (Sekaran, 2009). Cooper and Schindler (2006) express "the objective of morals in investigating is to guarantee that nobody is hurt or experiences unfriendly results inquire about exercises" (p. 116). Clarifying examination target and advantages, clarifying member rights, insurances and getting educated are rules to protect against any mischief amid look into.

In this investigation, it was guaranteed to give due contemplations in the outlining of survey and information accumulation. In this manner, a covering letter with the survey was likewise sent indicating the reason for the examination and clarifying the essential terms and ideas that were utilized as a part of the principle poll. Administrators were guaranteed of secrecy of information by specifying in the arrangement of review records. Endeavors were made not to scrutinize anyone that could uncover touchy data.

#### **3.8.5. Chapter Summary**

This chapter explained the details of the methodological procedure performed during the completion of this research. It starts with explanation of the research paradigm followed by the use of cross-sectional research design, deductive approach, quantitative methodology and epistemology as a research strategy. It further explicated the measurement of variables and three dimensions of validity, i.e. construct, content and face validity. It also explained the reliability of the research instrument by performing a pilot test. Furthermore, it elucidated about data collection process from professionals of class-A, Combined Military Hospitals all over in Pakistan. Moreover, it explained about the measurement of variables i.e. the scales used for measuring variables. Finally, it described statistical softwares used in the research along with ethical consideration of the study.

## **CHAPTER 4**

### **ANALYSIS AND RESULTS**

#### **Introduction**

The preliminary intention of this empirical part of the research was to give an explanation that could reply to the research queries mentioned in chapter 1 of current research. The basic purpose of this research was to minimize the waning performance of diversified teams in healthcare sector i.e. Combined Military Hospitals of Pakistan. This chapter comprises of statistical techniques, i.e. normality tests, descriptive statistics, correlations and Structural Equation Modeling (SEM), analysis of questionnaire results, starting from descriptive statistics, correlations for each variable, factor analysis, and structural equation modeling. PC programming "Statistical Package for Social Sciences" (SPSS) twenty-two version was utilized for measuring the results.

#### **4.1. Descriptive Statistics**

Descriptive statistics show the mean, median, least and most extreme esteems. In addition, it is utilized for reason showing the normality of information utilizing skewness, kurtosis and jarque bera. Mean and median will demonstrate that the pattern of information is going toward unequivocally concur or firmly differ according to normality of results. Least and most extreme esteem will clarify two extremes of information. Skewness is a measure of symmetry or more unequivocally and non attendance of symmetry. A data set is symmetric if it gives off an impression of being indistinguishable to the other side and right of within point. Skewness deduces about the positive and negative spread of information while kurtosis bargains about the evenness of information spread. Kurtosis is a measure of whether the data is left or right favor regard to a normal scattering. Illustrative insight procedures, for example, recurrence conveyance, arithmetic mean, standard deviation were utilized to uncover the general example of reactions. These methods are utilized ahead of schedule in the investigation procedure and move toward becoming bases for later examination (Sekaran, 2009).

#### **4.2. Correlation**

Pearson correlation has been used for depiction of the connection between independent, dependent and control factors. It gives the level of connection between factors. Correlation

structure is useful in light of the way that it can demonstrate the explanatory relationship among factors. This framework deals with the quality and course of the connection between the elements. Correlation is a delicate strategy since it just considers the quality and heading of a relationship and does not clear up the lead need relationship. It just perceives that variables either have no relationship or have a negative or positive relationship.

### **4.3. Statistical Techniques Used**

Different measurable procedures were utilized to inspect the data through Structural Equation Modeling (SEM) and mediation analysis.

#### **4.3.1. Structural Equation Modeling (SEM)**

For testing the projected model of team performance in the present examination SEM strategy had been utilized. Reisinger and Mavondo (2007) depicted SEM, “an imperative multivariate system which at the same time gauges and tests a progression of conjectured between related reliance connections among an arrangement of inactive develops, each deliberated by at least one show factors” (Reisinger and Mavondo, 2007, pp. 42). It has been broadly utilized as a part of a number of controls, including cognitive research, social science, financial analysis, natural investigations, advertising, tourism studies and administration (Reisinger & Mavondo, 2007). Humanistic and attitude related issues in administration are more convoluted and one variable might be an autonomous variable in another reliance relationship, thus SEM is favored system. As Cheng (2001) contended "SEM looks at a progression of reliance connections at the same time and addresses confused administrative and behavioral issues" (Cheng, 2001).

SEM has procured administration between multivariate systems, that turns into the transcendent multivariate technique for information investigation and among all the multivariate strategies that SEM has been using for the system that is experiencing maximum modification and expansion (Hershberger, 2003). The main role of SEM is to check and break down inter relationships between dormant variables and their deliberate factors. SEM permits to model and examine multifaceted examples of connections, including a large number of theories all the while overall. It permits investigating multifaceted models for their similarity with the information completely and permits testing particular suppositions about parameters for their similarity with the information. (Reisinger & Mavondo, 2007). The exact connections among all watched factors

are contrasted with the connections inferred by the arrangement of the hypothetical demonstrate which permits to evaluate; either the model fits the information or not, the demonstrate is or cannot accurately duplicate connections between specific factors furthermore, give recommendations to potential model changes and these proposals can at that point be assessed for interpretability and similarity with a hidden hypothesis.

#### 4.4. Descriptive Analysis of Constructs

*Table 4. 2 Means and Standard Deviation of all Constructs*

Construct	Mean	Std. Deviation
Work Cognition Inventory	3.808	.559
Team Diversity	3.758	.714
Individual Creativity	3.650	.671
Team Satisfaction	3.788	.581
Social Capital	3.884	.686
Team Performance	3.886	.455

Table 4.1 demonstrates the mean and standard deviation of the builds. The information in this table demonstrates that none of the variable (develop) had higher mean scores. The dependent variable ‘Team performance’ had a mean score of 3.88 with std. deviation of 0.4554 on a 5 point Likert scale. This indicates that the team performance of the healthcare sector of Pakistan is just at a satisfactory level. Rest of the variables had standard deviation slightly above the mid-point of scale.

Table 4.1 further portrays that there is an absence of genuine endeavors by upper administration to connect team performance with authoritative objectives. Mean score of individual team member creativity and team satisfaction (3.65., SD 0.67 and 3.78., SD 0.581) demonstrate that healthcare sector does not give much significance to screen the smooth running of diversified teams and to give right of being innovative in treatment style to the employees.

Team diversity and work cognition inventory had a second-most astounding mean score of 3.75 and 3.80 showing the expanding part that healthcare sector management needs to play in their own improvement and significance of giving the best open doors by the administration to use the recently learned aptitudes on genuine occupation settings of saving lives instead of exploiting differences. The mean for social capital and team performance is 3.88 showing the healthcare sector of Pakistan performance at a base level only.

#### **4.5. Model Estimation with Structural Equation Modeling**

Hair et al. (2006) suggested that in SEM, a substantial example is required if the model is excessively huge or complex. He propose the least proportion of no less than five respondents for each evaluated parameter ought to be there (p. 604). Reisinger and Mavondo (2007) concluded that example measure affects the multifaceted nature of a demonstrate, a straight forward model is preferred if test measure is little. The complex models can be inspected if the vast example is available. There were two conceivable approaches to handle this issue; either to expand the test estimate or to utilize the thing allocating so as to diminish the number of parameters assessed (Bagozzi & Edwards, 2000). Because of restrictions of time and assets, it was impractical to build the example measure so it was chosen to apply item dividing to diminish the number of assessed parameters.

##### **4.5.1. Item Parceling**

These are usually framed to lessen the number of indicators of extensive scales (Bandalos & Finney, 2001). Meade and Kroustalis (2005) expressed that on account of invaluable possessions, parcels have been pushed by numerous creators. These incorporate more prominent dependability than singular items, a more ideal indicator to proportion; a more prominent probability of accomplishing a legitimate model arrangement and improved model fit. Bandalos and Finney (2001) announced that experts have referred to three regular explanations behind utilizing item parceling, firstly, it builds the security of the parameters evaluated, secondly, it makes strides variable to test the measured proportion and thirdly, it is a solution for little example estimate.

The usage of item parceling is not deprived of opposition, may be most imperative is deciding the dimensionality of the items to be divided. Since the dimensional nature of a measured

construct can seriously affect the precision, therefore the legitimacy of different parceling methods are used (Little et al., 2002). Bandalos and Finney (2001) suggested that experts must utilize it when distributed items are entirely uni-dimensional. Hair et al. (2006) contend that uni-dimensionality is like the idea of unwavering quality and characterize uni-dimensionality as “a normal for an arrangement of indicators that has just a single basic characteristic or idea in like manner (p. 584)”. Item bundles work powerfully when developed on uni-dimensional structures. In total, the measure of arguments for the side of the favorable circumstances far exceeds the burden side of item parceling (Little et al., 2002), and analysts will keep on viewing item parceling as an appealing choice. Therefore, instead of 36-items in the scale of WCI, only 8 parcels have been made that covers all aspects of the instrument. Similarly, 4 parcels were made for team diversity, team performance and individual team member creativity instead of 7-items of the scales used. Likewise, 5 parcels were made for team satisfaction instead of 7-items of the scale and 4 parcels were made for social capital instead of 8-items of the scale used.

#### **4.6. Confirmatory Factor Analysis**

First order confirmatory factor analysis was performed for examining the best fit of the structural model. All the factors of the structural model have shown statistical significance of regression weights. Assessment of overall the measurement models is as under:

##### **4.6.1. Assessment of Overall Structural Model Fitness**

Multiple squared correlation coefficients ( $R^2$ ) indicated strong internal consistency and uni-dimensionality of the scale. First order CFA indicated that values of Chi-square and normed chi-square are showing relevancy. Value of chi-square is 683.45 and normed chi-square is 2.55, which is small preferred and better to be less than 5 respectively (Schumacker & Lomax, 2004). Overall it is presumed that there exist no issues in the data which could possibly create issues in measurement model goodness and fitness. The estimations of Chi-square, normed chi-square, CFI, GFI, NFI, and RMSEA are meeting criteria of their cut-off or threshold level which demonstrated that the current study model is properly good and fit.

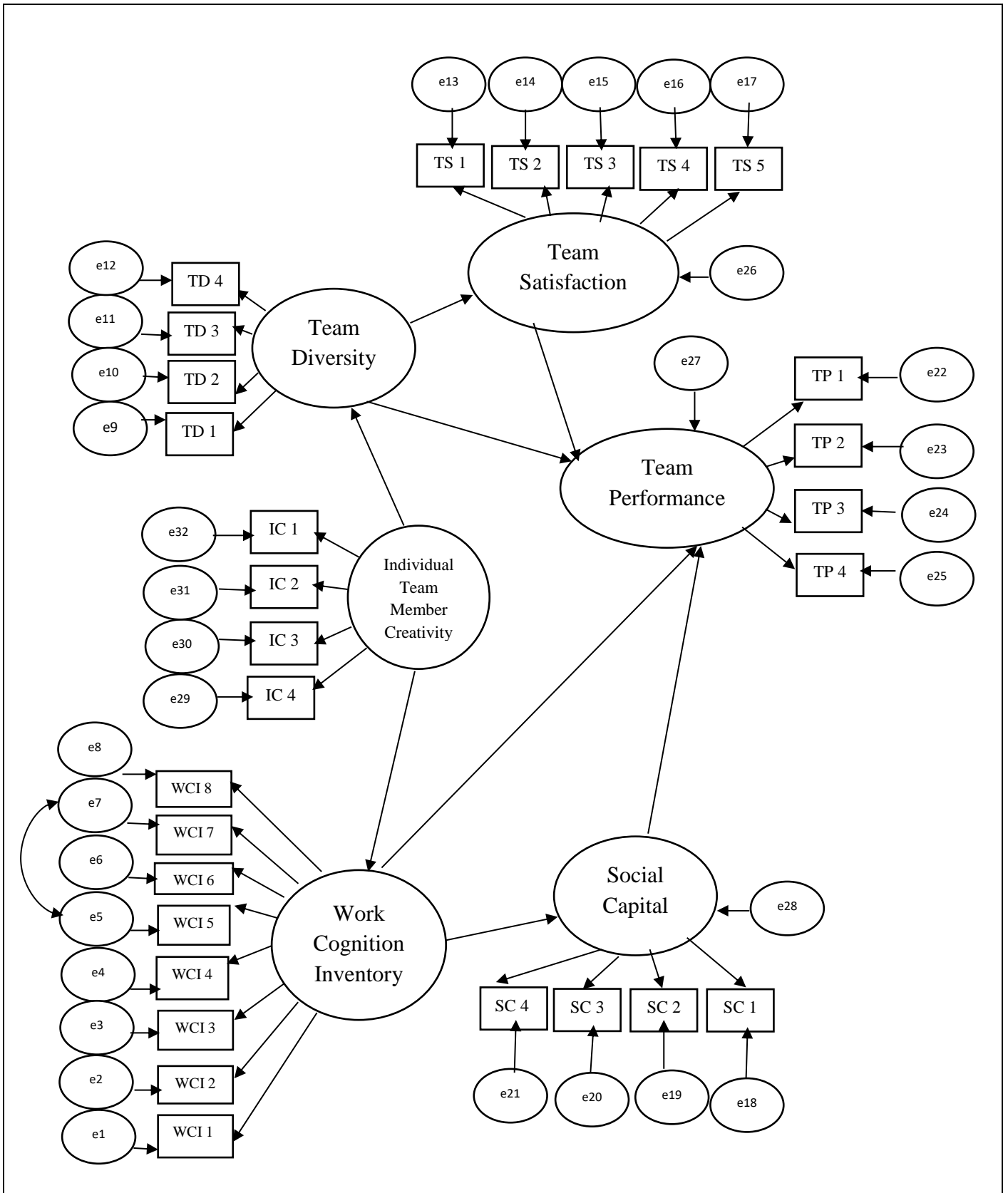


Figure 4. 1 shows the final structural model of the current study

Table 4. 8 Model Fit indices

	Model $\chi^2$	Df	$\chi^2/df$	TLI	CFI	RMSEA
Model	683.45	267	2.55	0.845	0.862	0.063

The “results of confirmatory factor analysis (CFA)” explained an upright fit for a latent single factor model ( $\chi^2/df$ ) = 2.55, “Trucker Lewis index (TLI)” = 0.845, “comparative fit index (CFI)” = 0.862, and “root mean square error of approximation [RMSEA]” = 0.063). Hair et al. (2010), “Forza and Filippini (1998), Greenspoon and Saklofske (1998)” and Awang (2012).

#### 4.7. Correlation Analysis

Table 4. 9: Correlation Matrix

	WCI	TP	TD	IC	TS	SC
WCI	1					
TP	.293**	1				
TD	.096	.256**	1			
IC	.369**	.402**	.336**	1		
TS	.443**	.380**	.177**	.420**	1	
SC	.372**	.448**	.260**	.343**	.378**	1

\*\* . Correlation is significant at the 0.01 level

Table 4.9 represents that WCI is positively and significantly correlated with team performance as the value of the correlation coefficient for team performance is 0.293 at 5% level of significance. Further it reveals that WCI is positively and significantly correlated with individual team member creativity, team satisfaction and social capital as the values of correlation coefficient for individual team member creativity (0.396 at 5%), team satisfaction (0.443 at 5%), and social capital (0.372 at 5%) level of significance.

Likewise, table 4.9 reveals that team performance is positively and significantly correlated with work cognition inventory as the value of the correlation coefficient for work cognition



inventory is 0.293 at 5% level of significance. Furthermore, it portrays that team performance is positively and significantly correlated with team diversity, individual team member creativity, team satisfaction and social capital as the values of correlation coefficient for team diversity (0.256 at 5%), individual team member creativity (0.402 at 5%), team satisfaction (0.380 at 5%), and social capital (0.448 at 5%) level of significance.

Moreover, table 4.9 reveals that team diversity is positively and significantly correlated with team performance as the value of the correlation coefficient for team performance is 0.256 at 5% level of significance. Furthermore, it portrays that team diversity is positively and significantly correlated with individual team member creativity, team satisfaction, and social capital as the values of correlation coefficient for individual team member creativity (0.336 at 5%), team satisfaction (0.177 at 5%), and social capital (0.260 at 5%) level of significance.

Furthermore, table 4.9 reveals that individual team member creativity is positively and significantly correlated with work cognition inventory as the value of the correlation coefficient for individual team member creativity is 0.402 at 5% level of significance. Further it portrays that individual team member creativity is positively and significantly correlated with team performance, team diversity, team satisfaction and social capital as the values of correlation coefficient for team performance (0.396 at 5%), team diversity (0.336 at 5%), team satisfaction (0.420 at 5%), and social capital is (0.343 at 5%) level of significance.

Similarly, table 4.9 shows that team satisfaction is positively and significantly correlated with work cognition inventory, as the value of the correlation coefficient for team satisfaction is 0.443 at 5% level of significance. Moreover it reveals that team satisfaction is positively and significantly correlated with team performance, team diversity and individual team member creativity, as the values of correlation coefficient for team performance (0.380 at 5%), team diversity (0.177 at 5%) and individual team member creativity (0.420 at 5%) level of significance.

Lastly, table 4.9 reveals that social capital is positively and significantly correlated with work cognition inventory, as the value of the correlation coefficient for social capital is 0.372 at 5% level of significance. Moreover it reveals that team satisfaction is positively and significantly correlated with team performance, team diversity, individual team member's creativity and team satisfaction, as the values of correlation coefficient for team performance (0.448 at 5%), team

diversity (0.260 at 5%), individual team member creativity (0.343 at 5%) and team satisfaction is (0.378 at 5%) level of significance.

#### 4.8. Mediation Effect of the Scales by Sample

Mediation is a supposition regarding casual network. The mediation effect was measured through Regression-Based Approach of (Hayes, 2013). Its analysis takes into account all the standard assumptions of the general linear model i.e. linearity, normality, homogeneity of error variance and independence of errors.

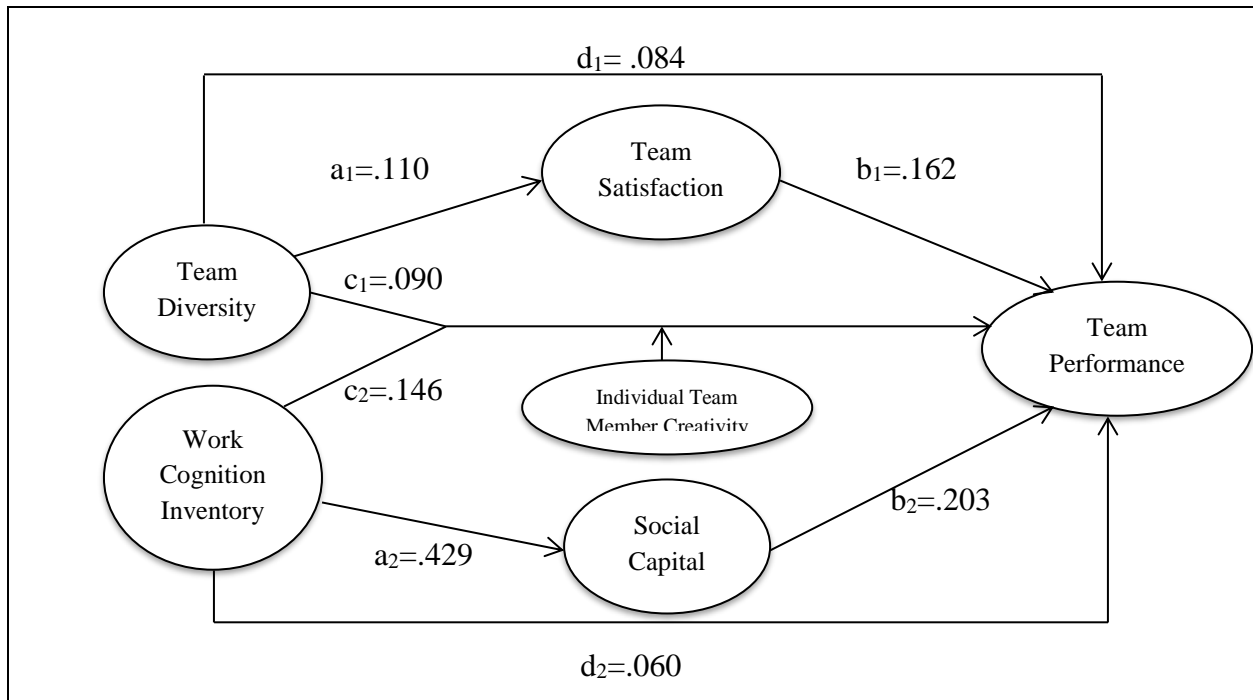


Figure 4. 2 shows the coefficient values

Where  $TD$  and  $WCI = X$ ,  $TP = Y$ ,  $TS = M1$ ,  $SC = M2$ . Indirect effect of  $X$  on  $Y$  through  $M1 = a_1 b_1$ , Indirect effect of  $X$  on  $Y$  through  $M2 = a_2 b_2$ , Indirect effect of  $IC$  on  $TP$  through  $M3 = c_1 c_2$ , Direct effect of  $TD$  and  $WCI$  on  $TP = d_1 d_2$ .

Table 4. 10 Results of Mediation of Scale by Sample

Independent Variable	Dependent Variable	Coeff	Se	T	P	Remarks
TD	TP	.084	.028	2.93	.003	H <sub>1</sub> = Accepted
TD	TS	.110	.036	3.02	.002	H <sub>2</sub> = Accepted
TS	TP	.162	.039	4.15	.000	H <sub>3</sub> = Accepted
WCI	TP	.060	.040	1.48	.138	H <sub>4</sub> = Rejected
WCI	SC	.429	.056	7.66	.000	H <sub>5</sub> = Accepted
SC	TP	.203	.032	6.23	.000	H <sub>6</sub> = Accepted

Regression-Based Approach of Hayes (2013) is used for measuring the mediation effect. Table 4.10 represents a positive association among TD and TP, (coeff= 0.0841, t= 2.9337, p= 0.0035), thus accepting H<sub>1</sub>. Moreover team diversity is a significant predictor of team satisfaction, i.e. there is a significant relationship among team diversity and team satisfaction (coeff= 0.1108, t= 3.02, p= 0.002), thus confirming the acceptance of H<sub>2</sub>. Furthermore, it portrays that TS is a significant predictor of TP, i.e. there is a significant link between TS and TP (coeff= 0.1629, t= 4.1575, p = 0.0000), so endorsing the approval of H<sub>3</sub>, also the effect shows mediating role of TS on the association between TD and TP, (se= 0.039), thus confirming the acceptance of H<sub>3a</sub> as well.

However, the table represents WCI not to be a significant predictor of TP, i.e. there is no significant relationship between WCI and TP, (coeff= 0.0601, t= 1.4855, p= 0.1382), since all the values are insignificant, therefore, rejecting H<sub>4</sub>. Similar results were reported by (Kim Nimon, Drea Zigarmi, Dobie Houson, David Witt, Jim Diehl, 2011).

It further depicts WCI to be a significant predictor of SC, i.e. there is a significant relationship among WCI and SC (coeff= 0.4295, t= 7.66, p= 0.0000), hence confirming the acceptance of H<sub>5</sub>. Furthermore, it explains SC to be a significant predictor of TP, i.e. there is a significant relationship between SC and TP (coeff= 0.2037, t= 6.2322, p= 0.000), consequently confirming the acceptance of H<sub>6</sub>, similarly the effect shows the positive mediating role of SC in the link among WCI and TP, (se= 0.327), Hence confirming the acceptance of H<sub>6a</sub>. Overall the standard error testified in all equations is low.

## **4.9. Testing the Assumptions for Hypotheses Testing**

Before testing the hypotheses the following assumptions have been tested i.e. normality test, multicollinearity, linearity and homoscedasticity.

### **4.9.1. Normality Test**

There are diverse kind of tests that lead to check that information as ordinary and there is no issue of blunders. It is critical to make a guarantee that the instrument which has been joined in this examination is precise and genuinely measuring the variable. There could be conceivable variety like including a discarded or unessential instance of things. The better use of scale shows the reliability and validity of data and demonstrates the precision of data. The firmness of a test shows the extent to which it doesn't contain disposition and subsequently assures stable assessment from time to time and on diverse elements in the instrument.

According to Ho (2013) the data set is said to challenge normality if it is skewed or it contain outliers. Therefore skewness and kurtosis of the constructs was calculated. As per the rule of thumb, normality assumptions are rejected if skewness and kurtosis statistics come beyond  $\pm 3$  interval (Stamatis, 2003). The results showed that the values of skewness and kurtosis of all the constructs were above  $\pm 3$ , therefore the data distribution is said to be normal.

### **4.9.2. Multicollinearity**

According to the assumptions of multicollinearity, there should be no greater level of intercorrelation between predicting variables of study. "Multicollinearity exists when explanatory variables have correlation coefficients equal to or greater than .80 (Rubin, 2009; Garson, 2011)".

As already mentioned in table 3.4, in construct validity section, the investigation of the inter-correlation matrix reveals that each construct is significantly correlated with other construct and none of the correlations are above 0.443. So, no multicollinearity problem has been found. As Hair, Anderson, Tatham, and Black (2006) express that outcomes can be influenced by multicollinearity and the values surpassing 0.80 can be characteristic of issues. However, values surpassing 0.90 ought to be dependably analyzed. The lower the values of correlation, the lesser will be the multicollinearity.

### **4.9.3. Linearity and Homoscedasticity**

Another assumption is of linear relationship between dependant and independent variables. In case of non linear relationship between variables, there will be chances of type I or type II errors which sacrifices accuracy of results. One of the commonly used method for checking linearity is scatterplot, in which dependent and independent variables are plotted against eachother. If a line is formed through the scatterplot then it confirms the linearity of data (Hair et al., 2010; Ho 2013).

“Homoscedasticity assumption is concerned with similarity of error variances of dependent variable at every level of independent variable”. In case of non uniform values, heteroscedasticity is indicated which enhances the possibility of type I error. Homoscedasticity can also be checked via bivariate scatterplots. According to Stamatis “If residuals randomly scatter around the horizontal line and form an oval shape, then uniformity of variance is established, and if residuals funnel out, making a bow-tie or cone shape, then heteroscedasticity is diagnosed (Stamatis, 2003)”. The researcher has checked scatter plot for checking both assumptions of linearity and homoscedasticity.

In the scatterplot the residuals were scattered evenly and randomly around the horizontal line. Hence, it was confirmed from the distribution pattern of residual that the independent and dependent variables had linear relationships and the error variances of dependent variable were uniformly distributed at every level of the independent variable.

## **4.10. Hypotheses Testing**

A total of ten hypotheses were tested in the current research with suitable statistical techniques. Structural equation modeling, principal component analysis, confirmatory factor analysis and correlation were used to test this section.

### **4.10.1. Direct Relationships**

Direct relationship is investigated for checking the amount of variation incurred in one variable due to variation in another variable. This relationship can be negative, positive or may also found unrelated.

### 4.10.2. Hypothesis H<sub>1</sub>

The first hypothesis pursued to confirm the constructive association among team diversity and team performance.

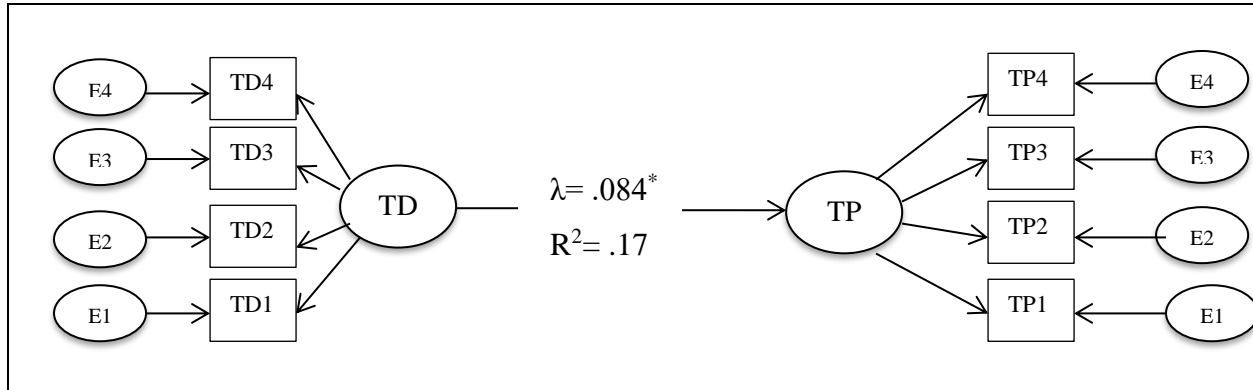


Figure 4. 3 showing impact of Team diversity on Team Performance

The coefficient of team diversity indicated that a unit change in TD will lead to an increase of .084 units in team performance. Moreover R-square is indicating 17% of changes in TP are due to TD in regression analysis.

Table 4. 11 Team Diversity and Team Performance

IV	DV	B	S.E	T	P
TD	TP	.084	.028	2.93	.003

The probability value and the t-statistics are in the range of significance level, indicating TD to be acting as a contributing factor in team performance, thus accepting H<sub>1</sub>. This finding provided an evidence of improving performance of healthcare sector of Pakistan by creating diversified teams. Srikanth et al, (2016) have also reported positive relationship between diversified teams and performance.

Furthermore the hypothesis 1 is also tested through various tests performed during analysis, a tabular summary of those tests regarding hypothesis 1 is as under;

Table 4.12 showing the results of statistical tests performed for confirming hypothesis H<sub>1</sub>

H <sub>1</sub>	R	KMO	BTS	Eigenvalue	X <sup>2</sup> /df	CFI	GFI	NFI	RMSEA
TD > TP	.256	.707	278.7	2.11	2.68	.994	.997	.990	.065

Results of the statistical tests revealed acceptance of this hypothesis as team diversity is found to be positively associated with team performance. As the values of correlation, KMO (Kaiser Meyer-Olkin), BTS (Bartlett’s test of sphericity), Eigenvalues, normed chi square ( $\chi^2/df$ ), CFI, GFI, NFI & RMSEA, for team diversity are all in acceptable range, therefore TD is considered as good and positive indicator of TP.

Moreover, table 4.10 shows a positive association among TD and TP as the values of (coeff= 0.084, t= 2.933, p= 0.003) are also in acceptable range, hence H<sub>1</sub> is accepted.

### 4.10.3. Hypothesis H<sub>2</sub>

The second hypothesis pursued to detect the positive relation between team diversity and team satisfaction.

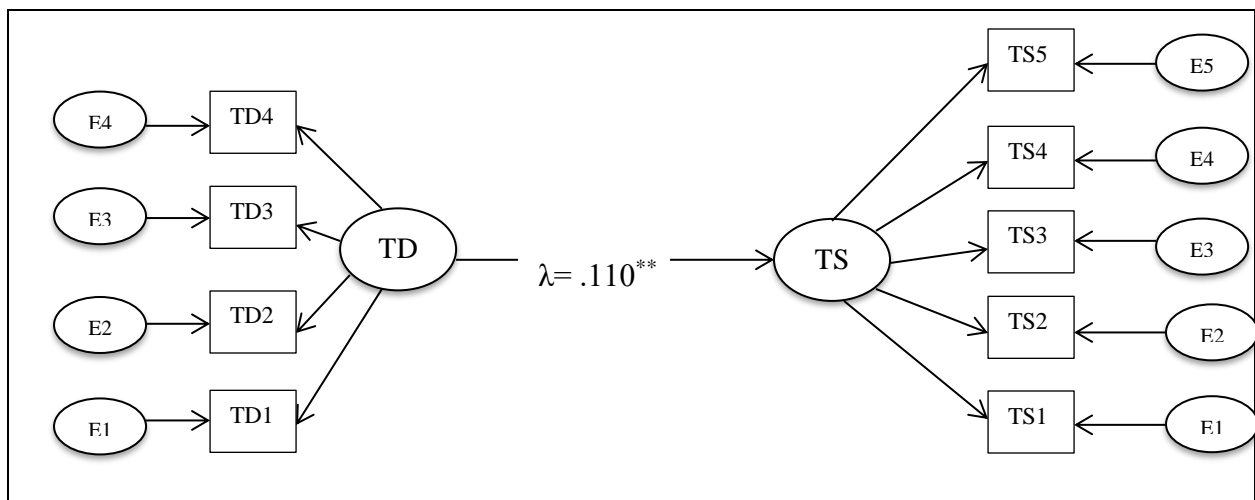


Figure 4. 4 showing impact of Team diversity on Team Satisfaction

The coefficient of team diversity indicated that a unit change in TD will lead to an increase of .110 units in team satisfaction.

Table 4. 13 Team Diversity and Team Satisfaction

IV	DV	B	S.E	T	P
TD	TS	.110	.036	3.02	.002**

The probability value and the t-statistics are in the range of significance level, indicating TD to be acting as a contributing factor in team performance, thus accepting H<sub>2</sub>. This finding

provided an evidence of improving performance of healthcare sector of Pakistan by satisfying members of diversified teams. This result is similar to the findings of Shung J. et al., (2012) that employees satisfaction results in better performance.

Furthermore the hypothesis 2 is also tested through various tests performed during analysis, a tabular summary of those tests regarding hypothesis 2 is as under;

Table 4. 14 showing the results of statistical tests performed for confirming hypothesis H<sub>2</sub>

H <sub>2</sub>	R	KMO	BTS	Eigenvalue	X <sup>2</sup> /df	CFI	GFI	NFI	RMSEA
TD > TS	.177	.707	278.7	2.11	1.749	.979	.997	.990	.085

Results of the statistical tests revealed acceptance of this hypothesis as team diversity is found to be positively correlated with team satisfaction. As the values of correlation, KMO (Kaiser Meyer-Olkin), BTS (Bartlett’s test of sphericity), Eigenvalues, normed chi square ( $\chi^2/df$ ), CFI, GFI, NFI & RMSEA are all in acceptable range.

#### 4.10.4. Hypothesis H<sub>3</sub>

The third hypothesis tried to inspect the positive link among team satisfaction and team performance and its single sub-hypothesis investigated the mediating role of team satisfaction among team diversity and team performance.

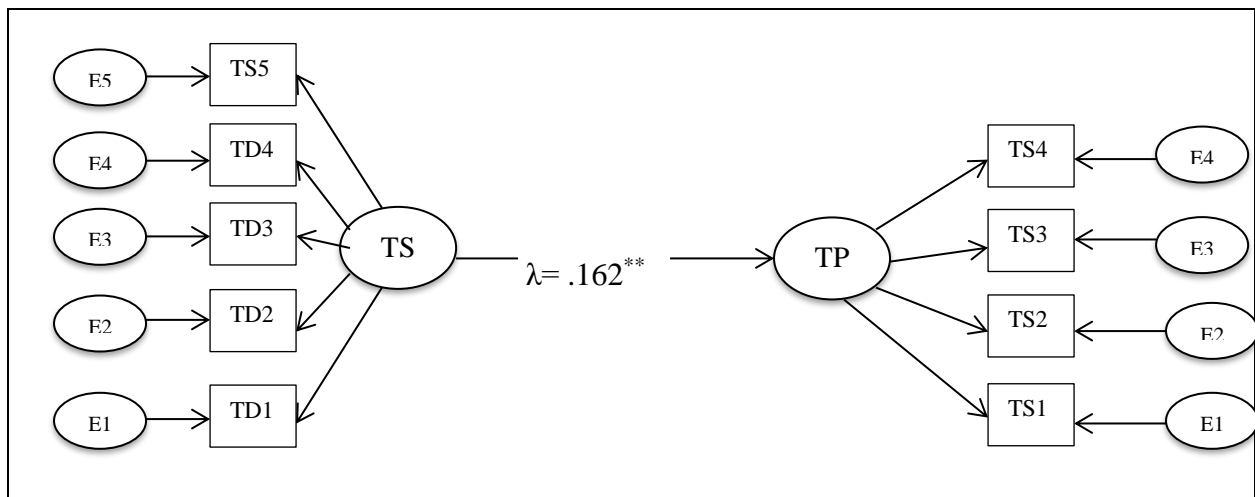


Figure 4. 5 showing impact of Team Satisfaction on Team Performance



The coefficient of team diversity indicated that a unit change in TS will lead to an increase of .162 units in team performance.

*Table 4. 15 Team Satisfaction and Team Performance*

IV	DV	B	S.E	T	P
TS	TP	.162	.039	4.15	.000**

The probability value and the t-statistics are in the range of significance level, indicating TD to be acting as a contributing factor in team performance, thus accepting H<sub>3</sub>. This finding provided an evidence of improving performance of healthcare sector of Pakistan by satisfying members of diversified teams. This result is inlined with the findings of (Shung J. et al 2012) who concluded significant relationship between team satisfaction and team performance.

Furthermore the hypothesis 3 is also tested through various tests performed during analysis, a tabular summary of those tests regarding hypothesis 3 is as under;

*Table 4. 16 showing the results of statistical tests performed for confirming hypothesis H<sub>3</sub>*

H <sub>3</sub>	R	KMO	BTS	Eigenvalue	X <sup>2</sup> /df	CFI	GFI	NFI	RMSEA
TS ≥ TP	.380	.771	536.9	2.66	1.749	.997	.998	.994	.043

Results of the statistical tests revealed acceptance of this hypothesis as team satisfaction is found to be positively correlated with team performance. As the values of correlation, KMO (Kaiser Meyer-Olkin), BTS (Bartlett’s test of sphericity), Eigenvalues, normed chi square ( $\chi^2/df$ ), CFI, GFI, NFI & RMSEA are all in acceptable range. This suggests a positive and significant mediating role of team satisfaction, hence H<sub>3</sub> is accepted.

#### **4.10.5. Hypothesis H<sub>4</sub>**

The fourth hypothesis argued for the constructive relationship between work cognition inventory and team performance.

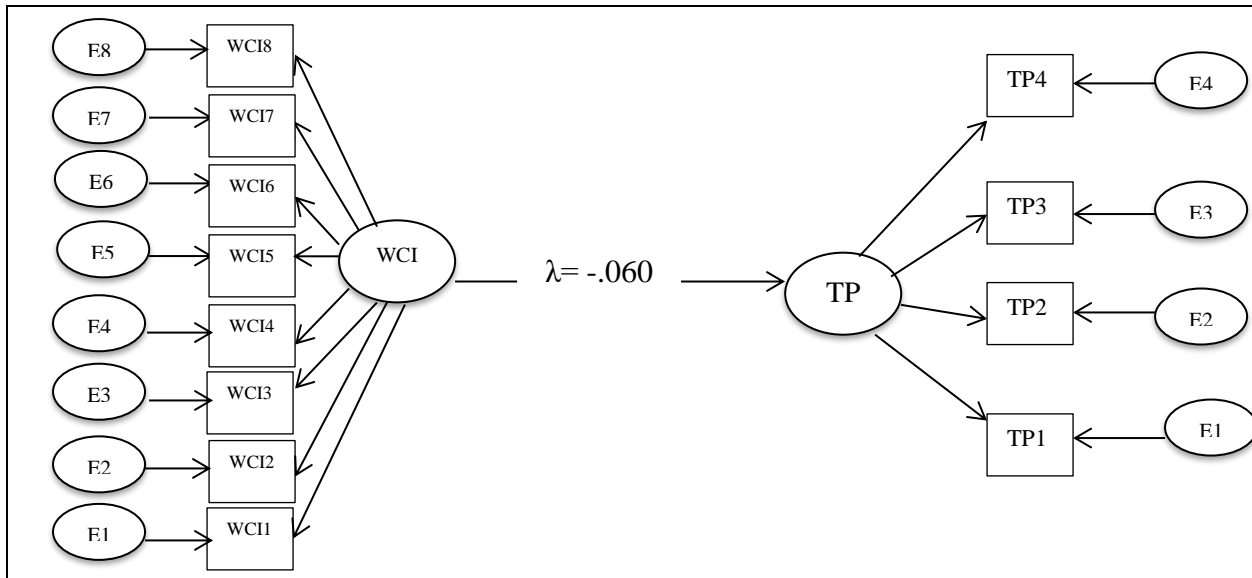


Figure 4. 6 showing impact of Work Cognition Inventory on Team Performance

The coefficient of work cognition inventory indicating negative results, indicating no positive impact of WCI on TP.

Table 4. 17 Team Diversity and Team Performance

IV	DV	B	S.E	T	P
WCI	TP	-.060	.040	1.48	1.38

Both the probability value and the t-statistics are out of the range of significance level, indicating WCI not to be a contributing factor in team performance, thus rejecting  $H_4$ .

Furthermore the hypothesis 4 is also tested through various tests performed during analysis, a tabular summary of those tests regarding hypothesis 4 is as under;

Table 4. 18 showing the results of statistical tests performed for confirming hypothesis  $H_4$

$H_4$	R	KMO	BTS	Eigenvalue	$X^2/df$	CFI	GFI	NFI	RMSEA
WCI $\geq$ TP	.380	.761	584.5	2.91	5	.76	.84	.73	.109

The KMO (Kaiser Meyer-Olkin), BTS (Bartlett's test of sphericity) & Eigenvalues for work cognition inventory are greater than standard values but the hypothesis is rejected on the basis of non acceptable value of CFI, GFI, NFI & RMSEA. Also table 4.10 represents work

cognition inventory not to be a significant predictor of team performance, i.e. there is no significant association among WCI and TP, (coeff= 0.060, t= 1.485, p= 0.138), since all the values are insignificant, therefore, rejecting H4. Nimon et al. (2011) have also reported no significant association between work cognition inventory and team performance.

#### 4.10.6. Hypothesis H5

The fifth hypothesis supported the link between work cognition inventory and social capital.

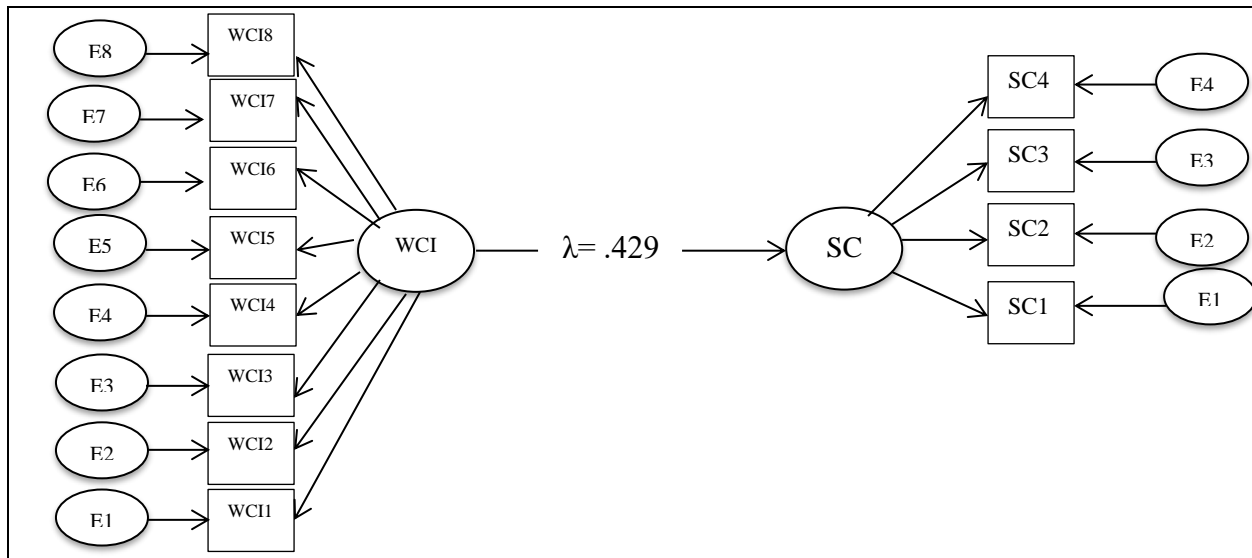


Figure 4. 7 showing impact of Work Cognition Inventory on Team Performance

The coefficient of WCI indicated that a unit change in WCI will lead to an increase of .429 units in team performance.

Table 4. 19 Work Cognition Inventory and Social Capital

IV	DV	B	S.E	T	P
WCI	SC	.429	.056	7.66	.000**

Both the probability value and the t-statistics are in the range of significance level, indicating WCI to be a good contributing factor in social capital, thus accepting H5. Furthermore the hypothesis 5 is also tested through various tests performed during analysis, a tabular summary of those tests regarding hypothesis 5 is as under;

Table 4. 20 showing the results of statistical tests performed for confirming hypothesis H<sub>5</sub>

H <sub>5</sub>	R	KMO	BTS	Eigenvalue	X <sup>2</sup> /df	CFI	GFI	NFI	RMSEA
WCI ≥ SC	.372	.761	584.5	1.002	3.213	.86	.945	.833	.100

Results of the statistical tests revealed acceptance of this hypothesis as work cognition inventory is found to be positively correlated with social capital. As the values of correlation, KMO (Kaiser Meyer-Olkin), BTS (Bartlett’s test of sphericity), Eigenvalues, normed chi square ( $\chi^2/df$ ), CFI, GFI, NFI & RMSEA are all in acceptable range. Table 4.10 further depicts WCI to be a significant predictor of SC, i.e. there is a significant association among WCI and SC as the values of (coeff= 0.429, t= 7.66, p= 0.000) are all in acceptable range, hence confirming the link of social capital with WCI, thus accepting H<sub>5</sub>.

#### 4.10.7. Hypothesis H<sub>6</sub>

The sixth hypothesis supported the relationship between social capital and team performance.

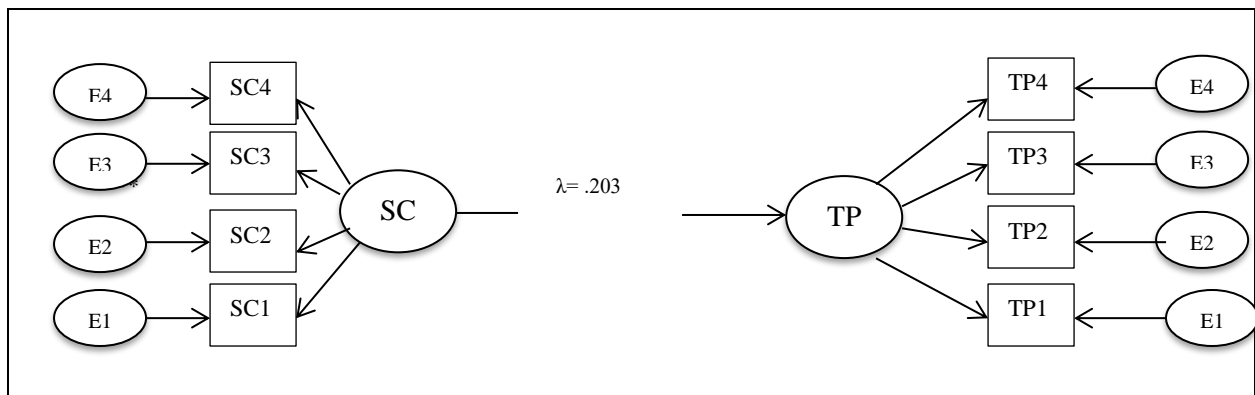


Figure 4. 8 showing impact of Social Capital on Team Performance

The coefficient of social capital indicated that a unit change in SC will lead to an increase of .203 units in team performance.

Table 4. 21 Social Capital and Team Performance

IV	DV	B	S.E	T	P
SC	TP	.203	.032	6.233	.000*

The probability value and the t-statistics are in the range of significance level, indicating SC to be acting as a contributing factor in team performance, thus accepting H<sub>6</sub>. This finding provided an evidence of improving performance of healthcare sector of Pakistan by increasing knowledge sharing between diversified teams. This result is similar to the findings of (Hajro et al., 2017) who concluded knowledge sharing to be effecting team effectiveness.

Furthermore the hypothesis 6 is also tested through various tests performed during analysis, a tabular summary of those tests regarding hypothesis 6 is as under;

*Table 4. 22 showing the results of statistical tests performed for confirming hypothesis H<sub>6</sub>*

H <sub>6</sub>	R	KMO	BTS	Eigenvalue	X <sup>2</sup> /df	CFI	GFI	NFI	RMSEA
SC ≥ TP	.448	.692	512.4	2.43	3.213	.994	.945	.833	.088

Results of the statistical tests revealed acceptance of this hypothesis as social capital is found to be positively correlated with team performance. As the values of correlation, KMO (Kaiser Meyer-Olkin), BTS (Bartlett's test of sphericity), Eigenvalues, normed chi square ( $\chi^2$ /df), CFI, GFI, NFI & RMSEA are all in acceptable range.

Furthermore, table 4.10 explains SC to be a significant predictor of TP, i.e. there is a significant association among SC and TP (coeff= 0.203, t= 6.232, p= 0.000), consequently confirming the acceptance of H<sub>6</sub>.

#### **4.11. Mediating Hypotheses: H<sub>3a</sub> and H<sub>6a</sub>**

Mediation is a phenomena which distinguishes an unseen relationship between forecasted and forecasting variable by introducing another variable, known as a mediator.

##### **4.11.1. Hypothesis H<sub>3a</sub>**

During mediation analysis, firstly, it is verified that team diversity is influencing team satisfaction positively and standardized regression weight is 0.514.

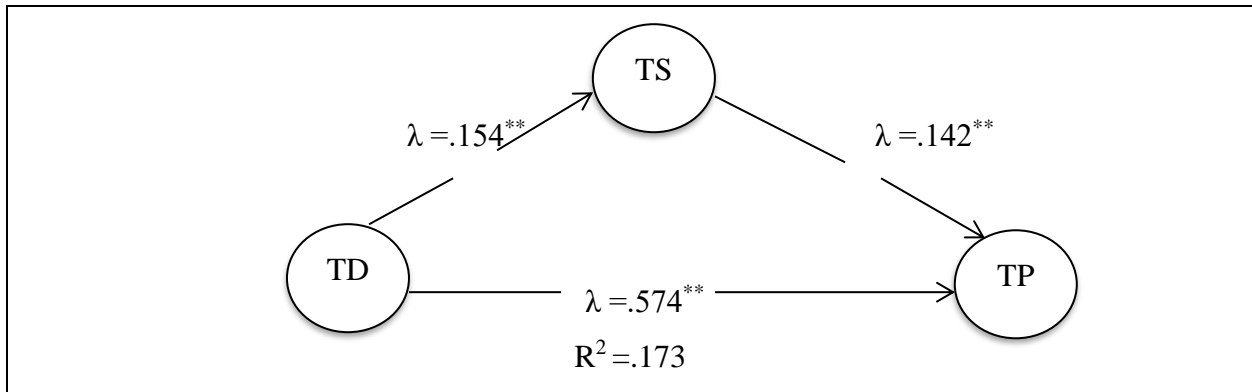


Figure 4. 9 Team Satisfaction acting as Mediator between Team Diversity & Team Performance

Figure 4.15 shows that one unit change in TD will lead to 0.514 unit changes in TS. The significance of this relation confirms that mediation is possible (Baron & Kenny, 1986). Secondly, the impact of TS is verified on TP. Results revealed that team satisfaction is significantly contributing to team performance, i.e. TS is positively contributing to 0.142 variations in TP as concluded by (Shung J. et al 2012).

Table 4. 23 shows Mediation I

	IV	DV	B	S.E	T	P	LLCI	ULCI
1	TD	TS	.514	.075	6.85	.000	.366	.661
2	TS	TP	.142	.046	.002	.000	.051	.232
3	TD	TP	.574	.072	7.79	.000	.429	.718

Table 4.23 explained that team satisfaction carried 57% of the total effect of team diversity on team performance. Preacher and Hayes Model 4 is used for this mediation analysis.

#### 4.11.2. Hypothesis H<sub>6a</sub>

During mediation analysis, secondly, it is verified that work cognition inventory is influencing social capital positively and standardized regression weight is 0.224.

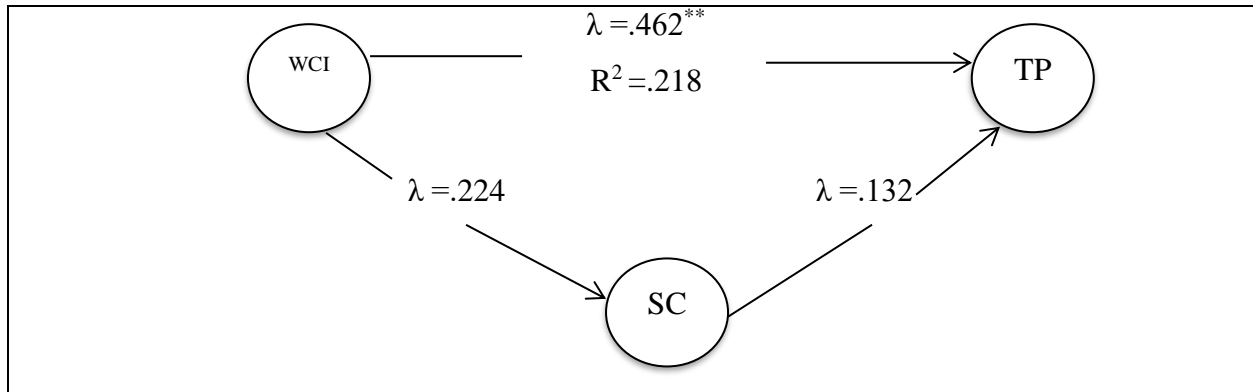


Figure 4. 10 Social Capital acting as Mediator between Work Cognition Inventory & Team Performance

Figure 4.16 shows that one unit change in WCI will lead to 0.224 unit changes in SC. The significance of this relation confirms that mediation is possible (Baron & Kenny, 1986). Then the impact of SC is verified on TP. Results revealed that social capital is significantly contributing to team performance, i.e. SC is positively contributing to 0.132 variations in TP.

Table 4. 24 shows Mediation II

	IV	DV	B	S.E	T	P	LLCI	ULCI
1	WCI	SC	.224	.038	5.825	.000	.148	.299
2	SC	TP	.132	.033	4.044	.000	.068	.195
3	WCI	TP	.462	.052	8.915	.000	.360	.563

Table 4.24 explained that social capital carried 46% of the total effect of work cognition inventory on team performance. Preacher and Hayes Model 4 is used for this mediation analysis.

#### 4.11.3. Indirect Effect of X on Y

The indirect effect of X on Y reveals the positive mediating role of SC in the link between WCI and TP.

Table 4. 25 Indirect effect of X on Y

	Effect	Se	Hypotheses Acceptance/ Rejection
TS	.072	.017	H <sub>3a</sub> = Accepted
SC	.087	.018	H <sub>6a</sub> = Accepted
Total	.1602	.025	

Table 4.25 shows the result of indirect effects, i.e. team diversity (TD) effect on team performance (TP) via team satisfaction (TS) was verified. This further provided proof for TS as a mediator between TD and TP. Similarly, the mediation among work cognition inventory (WCI) and team performance (TP) via social capital (SC) was found significant for TP.

Effect size at 95% confidence interval indicated good mediation effect of TS(0.072) and comparatively larger mediation effect of SC (0.087). Noteworthy variances among mediation effects were therefore obtained, indicating acceptance of mediating hypotheses H<sub>3a</sub> and H<sub>6a</sub>. Nonetheless overall the standard error testified in all equations is low.

#### 4.12. Moderating Hypotheses: H<sub>7a</sub> and H<sub>7b</sub>

The researcher applied Preacher and Hayes (2004) method of testing for moderation analysis. Preacher and Hayes model 1 was used for this analysis.

Table 4. 26 showing the results of statistical tests performed for confirming hypothesis H<sub>7a</sub> & H<sub>7b</sub>

H <sub>7</sub>	R	KMO	BTS	Eigenvalue	X <sup>2</sup> /df	CFI	GFI	NFI	RMSEA
IC $\Rightarrow$ TD & TP	.402	.744	495.3	2.45	1.426	.971	.998	.933	.078

This hypothesis is partially accepted on the basis of the values of correlation, KMO (Kaiser Meyer-Olkin), BTS (Bartlett's test of sphericity), Eigenvalues, Multiple chi square ( $\chi^2$ /df), CFI, GFI, NFI & RMSEA, as all of them are in acceptable range.

##### 4.12.1 Moderation I

Preacher and Hayes (2004) method was applied to test both hypotheses of moderation. Firstly, it was tested that team diversity is influencing team performance positively and



standardized regression weight is 0.204. This means that with one unit change in team diversity will lead to 0.204 unit changes in team performance. Impact of individual team member creativity was then tested on team performance. Interaction term showed a significant and positive relation which means moderation is affecting.

*Table 4.27 showing Moderation-I*

IV	DV	B	S.E	T	P	LLCI	ULCI
TD	TP	.204	.181	2.98	0.000	.436	1.224
IC	TP	.746	.160	3.617	0.000	.746	1.473
Int-1	TP	.090	.031	2.60	0.000	.298	.088

In the context of conditional effect, the relationship between team diversity and team performance is very significant and positive. As the influence of individual team member creativity moderates, the relationship weakens and the value of the coefficient decreases. But in the end, when the moderator is influencing completely, the coefficient drops immensely. Thus proving individual team member creativity to has significant moderating effect on the relationship between team diversity and team performance.

#### **4.12.2. Moderation II**

Preacher and Hayes (2004) method was applied to test both hypotheses of moderation. Firstly, it was tested that work cognition inventory is not influencing team performance significantly as the standardized regression weight is -0.06. Impact of individual team member creativity was then tested on team performance. Interaction term showed a non significant and negative relation which means moderation is not affecting. The empirical analysis concluded that individual team member creativity is not significantly establishing the WCI and team performance relationship. Nimon et al., (2011) have reported reported no significant relationship between WCI and TP, therefore the moderator was unable to impact on the non significant association.

Table 4.28 showing Moderation-II

IV	DV	B	S.E	T	P	LLCI	ULCI
WCI	TP	-.06	.041	1.126	1.38	.260	.463
IC	TP	.011	.121	.926	1.17	.161	.321
Int-1	TP	.146	.170	.859	1.11	.120	.142

In the context of conditional effect, the relationship between WCI and TP came negative. As the influence of individual team member creativity moderates, the association strengthens a bit and the value of the coefficient slightly raises but not upto a significant level. Even in the end, when the moderator is influencing completely, the coefficient increases a bit. Thus proving individual team member creativity not to has a significant moderating effect on the association among work cognition ionventory and team performance.

#### 4.13. Overall Moderation Effect of the Scales by Sample

Table 4. 29 showing the moderation effect of scales by sample

	Coeff	S.E	T	Hypotheses Acceptance/ Rejection
IC	.204	.181	1.126	
TD	.090	.031	2.90	H <sub>7a</sub> = Accepted
WCI	.146	.170	.859	H <sub>7b</sub> = Rejected

Table 4.29 portrays that IC strongly moderates the relation among TD and TP (coeff= 0.090, se= 0.031 and t= 2.908) thus confirming the acceptance of H<sub>7a</sub>. A positive and significant relationship was found in such a way that higher the individual team member creativity higher will be the association among team diversity and team performance. Nonetheless the table reveals no significant moderation of IC between WCI and TP (coeff= 0.146, se= 0.17 and t= 0.859) thus rejecting the hypothesis H<sub>7b</sub>, as reported by Nimon et al. (2011) not to find any significant link among work cognition inventory and performance, due to which the moderator has insignificant effect on their relation

#### 4.14. Hypotheses Testing Summary

Table 4. 30 Summary of Hypotheses Testing

Hypotheses	Hypotheses Description	Hypotheses Status
H <sub>1</sub>	<i>There is significant relationship between team diversity and team performance.</i>	Accepted
H <sub>2</sub>	<i>There is a significant relationship between team diversity and team satisfaction.</i>	Accepted
H <sub>3</sub>	<i>There is a significant relationship between team satisfaction and team performance.</i>	Accepted
H <sub>3a</sub> .	<i>Team satisfaction mediates the link between team diversity and team performance.</i>	Accepted
H <sub>4</sub> .	<i>There is a significant relationship between work cognition inventory and team performance.</i>	Rejected
H <sub>5</sub> .	<i>There is a significant relationship between work cognition inventory and social capital.</i>	Accepted
H <sub>6a</sub> .	<i>There is a significant relation between social capital and team performance.</i>	Accepted
H <sub>6b</sub> .	<i>Social capital mediates the relation among work cognition inventory and team performance.</i>	Accepted
H <sub>7a</sub> .	<i>Individual team member creativity moderates the association among team diversity and team performance.</i>	Accepted
H <sub>7b</sub> .	<i>Individual team member creativity moderates the association among work cognition inventory and team performance.</i>	Rejected

#### 4.1.5 Chapter Summary

It explained data collection method through questionnaires. It comprises of descriptive statistics, normality tests, correlation, item parceling, principal component factor analysis, model fit indices, formation via AMOS, structural equation modeling, mediation effect of the sample by scale, moderation effect of the sample by the scale and finally testing of hypotheses for

confirmation or rejection. A quantitative method of analysis was applied to the sample size of 395 respondents. Team diversity and work cognition inventory were found to be positively and significantly related to team performance. Team satisfaction and social capital worked as mediating variables between their associations while individual team member creativity was found as a moderator between this association.

## **CHAPTER 5**

### **DISCUSSION AND CONCLUSION**

#### **Introduction**

The determination behind this research was to find out the impact of diversified teams and employees cognitive features on their performance, in presence of mediators like, team satisfaction and social capital, i.e. cooperation and collaboration among diversified teams and level of their satisfaction while working in that team. Also with a moderating effect of right of being creative within the team i.e. individual team member creativity. This study audited the writing on team diversity through a more powerful, transient focal point to clarify how diversity in teams affect execution. The survey uncovers an alternate representation that assesses why different teams deliver assorted results to supplant the notable double process show.

Another motivation was to scrutinize the adequacy of the twofold edged sword allegory i.e. diversity in teams maximize or minimize performance, is identified with questions raised about the viability of attempting to lessen social classification by making groups amplify task-oriented diversity while limiting social-oriented diversity. The quantitative approach was applied for data collection and results were solely based on questionnaire responses. As a whole 395 questionnaires were analyzed through structural equation modeling, after fulfilling the requirements of reliability and validity for concluding this research.

#### **5.1. Discussion**

This study can be summed up as team members usually concede to those with whom they feel social fondness. As concluded in social identity theory by (Byrne 1971) that teams having similar members may perform more well due to their understanding of each other nature. The connection of social capital with WCI urges access to more broad wellsprings of information and progresses information's quality, relevance and makes more openings. As Coleman (1988) said to this favorable position with the instance of a social analyst getting up to speed with the latest examination in related fields through common participation with partners. System research has demonstrated that system ties help performing team members' access data about openings for work (Fernandez & Weinberg, 1997) and about progressions (Rogers, 2013). Existing conceptualizations delineate reverence as streaming just from low-status to high-status group

individuals. A colleague will concede to another colleague whose statistic properties are moderately more noteworthy.

### **5.1.1. Research Questions, Research Objectives and Hypotheses wise Discussion**

This section will discuss the link among research questions, research objectives and hypotheses of current study.

The first research question and first research objective were linked to H<sub>1</sub>, acceptance of this hypothesis answers the first research question and accomplished the first research objective that there exists positive association between team diversity and team performance.

The second research question and second research objective were linked to H<sub>2</sub>, H<sub>3a</sub> and H<sub>3b</sub>. The acceptance of these hypotheses, positively answers the second research question and accomplished the second research objective by showing a positive association among team diversity and team satisfaction. Moreover the acceptance of the sub hypothesis i.e. H<sub>3b</sub> confirms the mediating role of team satisfaction between the association of team diversity and team performance.

Similarly the third research question and third research objective were linked with H<sub>4</sub>. The rejection of this hypothesis, negatively answers the research question that no positive relationship exists between work cognition inventory and team performance. Thus another research objective has been achieved.

Likewise the fourth research question and fourth research objective were linked with hypotheses H<sub>5</sub>, H<sub>6a</sub> and H<sub>6b</sub>. The acceptance of H<sub>5</sub> positively answers the research question by showing positive relationship between work cognition inventory and social capital. Furthermore the acceptance of sub-hypotheses H<sub>6a</sub> and H<sub>6b</sub> endorses the mediating role of social capital. Hence the fourth objective of the study is achieved.

The fifth research question and fifth research objective were linked with hypothesis H<sub>7a</sub>. The acceptance of H<sub>7a</sub>, significantly answers the research question and accomplished the third objective of this study by revealing individual team member creativity moderating role.

Moreover the six<sup>th</sup> research question and six<sup>th</sup> research objective were linked to hypothesis H<sub>7b</sub>. The rejection of H<sub>7b</sub> confirms that individual team member creativity cannot strengthen or weaken the association among work cognition inventory and team performance. One of the reason of rejection of this hypothesis is the rejection of the main hypothesis, i.e. H<sub>4</sub> that was designed to show a positive relationship between work cognition inventory and team performance. But the results revealed no positive association among the said variables. The evidence for this rejection can be found in the research performed by Nimon et.al (2011) who concluded there is no significant relationship among work cognition inventory and team performance in their study.

## **5.2. Contribution of the Study**

This research offers a novel clarification; why interactional procedures hidden in social chains of command in groups are now and then use and, at different circumstances become useless. Another contribution of this study is that it highlighted the fact that even after making diversified teams, members remain satisfied if they are allowed to work in inventive style, rather than doing whatever the senior doctor or administrator say. Thus individual team member creativity is found to be impacting diversified team members performance on greater extent.

A unique contribution of this study is regarding the non impact of work cognition inventory on diversified team members performance. One clarification of this astonishing fact can be found in the study of (Nimon et al. 2015) who also concluded work cognition inventory to be not effecting employees performance. Furthermore, this study contributed in highlighting an important aspect of employees cognitive features i.e. work cognition inventory link with their satisfaction if the diversified workers are provided with equal growth opportunities. Similar was concluded by Nishii, L. H., Khattab, J., Shemla, M., & Paluch, R. (2018) who targeted training of diversified teams along with their work life balance issues to influence their affirmative actions regarding equal opportunity programs.

### **5.2.1. Practical Implications for Policy Makers**

Some of the practical implications of the current study include; it helped the policy makers of CMHs to make need-based teams i.e. for information-based tasks, making diversified teams, so they may achieve the task by information sharing, as suggested by Srikanth et al. (2017) i.e. if a team of doctors in Pakistan is made for developing a vaccine against the upcoming variants of the

pandemic covid-19 then maximum information can be gained by making diversified team belonging to various age groups of senior doctors who share their experience and junior doctors who may share the latest knowledge in the field. It furthermore aided in making nexus between the organization, job, and people along with cognitive abilities and geographic diversity to increase satisfaction for better performance in groups.

This study helped the policy makers to provide employees right of being innovative in their own capacities while working in teams, for making team members satisfied, as suggested by Shung J. et al.(2012). For example, if a junior doctor prefers manual stiches instead of dissolvable stiches after the operation, he/ she will be allowed to do so without asking from senior doctors. Likewise, it assisted HR policymakers and professionals to make strategies and practices for segregating individual and team performance.

Moreover, it benefited practitioners in not repeating the same mistakes i.e. if diversified or similar teams are not performing well for some task then not making such teams again or trying to make them satisfied i.e. if diversified or similar teams of helping staff during operations are not performing well then not making such teams again or trying to make them satisfied for improved performance of healthcare sector of Pakistan.

The researcher furthermore contends here for managerial implications that joining centered arrangements empower aggregate individuals to hold their special points of view and personalities, yet in addition adequately incorporate them into unrivaled arrangements (Srikanth et al., 2016). Administrative remedies in view of the developing point of view in this manner give a chance to accommodate the conflicting impacts of team diversity by enhancing previously emerged relational difficulties, without trading off the data benefits of diversified teams. This study suggested the administration to enhance cooperation culture among team members by providing them inter dependent tasks.

This may help in increasing social capital and trust among diversified workers which in turns results in improved performance i.e. the doctors may rely on any vaccine developed by R & D department to be injected against covid or any other pandemic by experimenting on themselves first and then to their patients.



### **5.2.2. Theoretical Implications for Researchers**

Few of the theoretical implications of the study include; new insight of individual team member creativity as a moderating variable, as proposed by Shung et al. (2012). Likewise, it gave a new aspect of social capital not as an independent or dependent variable but as a mediating variable, as suggested to be studied by Adler, P. S. & Kwon, S. (2002). It also helped in making policies regarding balanced team composition on the basis of diversity i.e. if one kind of diversified team is not working well, e.g. diversified team members were not cooperating with each other while disclosing the treatment against any disease and let others to find out the remedy themselves then not making any such team again. Moreover, this study helped in investigating employees' cognitive features' influence on their performance, as proposed to be studied by Nimon et al. (2015).

A novel addition of this research is it concluded no link among work cognition inventory and team performance when hospitals environment is taken into consideration, as the rejection of hypothesis H<sub>4</sub> reveals diversified team members may work well even after non fulfillment of their cognitive features in Combined Military Hospitals. One reason for this astonishing result may be that CMH employees give priority to the task given to them for saving lives of people instead of focusing on their well being. Results may vary in different contexts.

### **5.3. Recommendations**

This study recommends that coordination disappointment is more essential and proximal after effect of team diversity in bunches than social classification. It counters coordination issues right on time to gather advancement and is probably going to empower a team to profit by the positive parts of social arrangement while keeping away from the negative impacts; giving a more hopeful viewpoint to the eventual fate of an inexorably differing workforce, as suggested by (Srikanth et al., 2016).

Existing research on diversified teams recommended that ranking in light of statistic contrasts happens quickly, regularly, unwittingly, and generally easily, as concluded by (Ito and Urland, 2003). Along these lines, the exact proof from working specifically to diminish social order forms proposes that doing as such may all the while decrease educational advantages from task diversified teams or might be insufficient in situations where it elevates the social arrangement

dangers of social-oriented diversity. A portion of the negative connections amongst assorted variety and gathering procedure may likewise be translated as mirroring the results of misconception and difference in essence (i.e. a more useless side of data/choice-making forms) instead of social order. A key recommendation of the double procedure show is that different groups confront a noteworthy test in overseeing relational connections with a definite aim to retain social arrangement forms from causing ineffectual gathering forms e.g., struggle, absence of attachment, and absence of trust. Incapable gathering forms do have a tendency to rise in diversified teams after some time.

In order to achieve the set goals and objectives in healthcare sector of Pakistan, hospital management should ensure quality infrastructure, priority to robust information system, integrated delivery of healthcare, strict compliance of policies and recommendations given by international organizations like WHO, similar is recommended by (Khalid et al., 2018). There exists a communication gap between federal, provincial and district level managements of health care system. This is mainly because there is no participation of stake holders and community in formulation of health policies and planning. Moreover, there are other weaknesses too i.e. lack of implementation, duplication of resources, zero outcome programs etc, as concluded by (Kurji et al., 2016). Therefore work is needed to overcome these policy errors in healthcare sector of Pakistan.

Weak governance is responsible for the many feeble results in healthcare sector, including lack of implementation, evaluation of policies, lack of analysis and lack learning shortcomings for future maturity. Implantation on ground is managed by Doctors but they are not given any authority to take actions against the corruption or malpractices. Feeling of humiliation is also very common for the doctors by the administrative people like EDHOs (Executive Director Health Officers) and Nazims. Decline in reliance and assurance of people on public health providers is also because of the poor governance and inefficient system, as highlighted by, Wajid G., Massoud H.A., 2002 & Kurji et al., 2016). This study therefore recommends to give complete right of being innovative to the doctors while treating their patients as per latest technologies given by research and development department of healthcare sector.

Training of health professionals is generally ignored by those who are making the health policies. They focus on increasing number of health facilities, laboratories, ambulances and modern equipment. But they do not bridge the gap of training of concerned people to optimally utilize these facilities and equipments. Policy makers take references from developed countries, but they miss out the fact that they have a complete infrastructure that can easily engage the latest developments, as highlighted in (Health policy in Pakistan, 2016). Therefore training & counseling must be provided to all the staff members to work together for the betterment of hospital instead of felling in differences issues.

#### **5.4. Limitations**

Background factors like power dynamics, corporate strategies, and control mechanisms are expected to affect the think tanks within CMHs. This direction has not been investigated in the current study. Exploration of time perspective is seen promising in relevance to the collaboration of diverse members of an organization (Gibson, Waller, Carpenter, & Conte, 2007).

Diversity management practices and programs related work has not been included to keep the focus on dimensions of diversity and identify its future road maps. This might have excluded some good elements also like, large stream of diversity management programs / practices, but it will allow the future research to be more focused upon different management practices such as, diversity training, diversity programs, diversity policies and initiatives. Cognitive team diversity, knowledge integration, team creativity and absorption capacity should have appropriate time lag.

It will require every team member to assess his experience of sharing knowledge with other team members followed by aggregation of results at team level as suggested by Huang, Hsieh, & Hesupporting 2014). For creativity which s one of the most critical factor, can be Intrinsic motivation (Shung J. et al., 2012 & Amabile, 2001). Researcher didn't include it as moderator of the relationship between team diversity and creativity. Individuals will be more self-driven to search and integrate different ideas and perspectives in the context of cognitive team diversity. This is likely to strengthen positive relationship between creativity and cognitive team diversity. Understanding of why? and how? team diversity influences individual's creativity should be investigated in future studies.

One of the basic shortcomings of existing research is cross-sectional nature of data results that might vary if data will be collected after some time interval and compared. The respondents should belong to one cultural setting i.e. Pakistan, outcomes may vary in other contexts, therefore the results cannot be generalized.

### **5.5. Future Research Avenues**

This study proposes to reconsider that twofold edged sword with respect to time, similar was suggested by (Srikanth et al., 2016). In such a way to take the data longitudinally and seeing the difference in their responses in the start of when the teams were recently formed and then asking the same respondents to fill the same questionnaires after sometime of formation of their teams.

Another proposed way for doing further research is to differentiate and compare the data department wise in any organization. As in the existing research the data has been taken from 30 different departments but the data is not compared for knowing which department is performing more better than other. So this direction can be explored in upcoming researches. This will help in knowing department wise impact of team diversity on the performance of that specific department.

This examination extends indicated bolster for the complementary view for the knowing style and the integral view with respect to arranging style. This research lacked to explore the reason of coordination failure i.e. low social capital, among diversified team members, this might be because of difference in their psychological style of working. This area of research may be examined in detail in future.

Moreover forthcoming exploration on diversified teams should be done on the emerging pool of how data is corresponded in teams, similar was suggested by (Gardner, Gino & Staats, 2012). This developing point of view moves the concentration from seeing how different gatherings get data about how they incorporate their educational assets and rise above illustrative holes to successfully play out their tasks, as proposed by (Harvey, 2013). In divergence to the dominant view that diversity should benefit information amplification forms in a way that is naturally anticipated that would bring about more perplexing and coordinated arrangements. Existing exploration discoveries unequivocally recommend that diversity research is, however, to

completely observe; how to deal with the attachment hindrance related to different groups without risking the enlightening preferred standpoint.

## 5.6. Conclusion

Team members who invest their energy in a useful division of an association ought to be presented to and be impacted by data pertinent to those useful zones, and they ought to create convictions predictable with their utilitarian parts, similarly it was suggested by Chattopadhyay et al. (1999). The rising powerful point of view well reveals the entire scope of writing on diversified teams than the twofold edged sword show. It additionally uncovers potentially better approaches to determine the capacity of diversified teams. The researcher has particular ramifications for experts in associations that use work teams. Staffing teams with individuals from various practical foundations, (e.g., promoting, designing) might be gainful, especially in circumstances where differing useful points of view are fixing to the task. Be that as it may, being process centered is regularly connected with being less adaptable in considering about option models for doing work (Vallacher & Wegner, 1989) and focusing more on the ultimate result than on the inference through which it ought to be accomplished (Aggarwal & Woolley, 2013). The mix of an individual concentrating on the procedure and another concentrating on the result may be helpful for information groups chipping away at perplexing, open-finished assignments, and could clarify the positive impact of assorted variety in arranging style on group fulfillment and in a round about way, on the outcome variable.

This research can be concluded by answering the questions on which the research was based. This investigation has fruitfully answered all the research questions and achieved its objectives i.e. for the question; Does diversity among team members influence team satisfaction and team performance? and the objective; to inspect the level of satisfaction and performance in diversified teams. The acceptability of  $H_1$ ,  $H_2$ ,  $H_3$  and  $H_{3a}$  clarifies that diversity between team members positively influence team performance and team satisfaction. Moreover, it was concluded that there is a link between team satisfaction and team performance and team satisfaction mediates the relationship between team diversity and team performance.

Likewise, this study has fruitfully answered the next research question i.e. Do the relation between work cognition inventory and team performance is mediated by social capital? and the

research objective; to examine the impact of social capital as a mediator on subjective and objective outcomes of teams in relation to work cognition inventory. The acceptance of H<sub>5</sub>, H<sub>6a</sub>, and H<sub>6b</sub> elucidates that there is an association among work cognition inventory and social capital. Similarly, there is an association between social capital and team performance. Moreover social capital mediates the association among work cognition inventory and team performance. In the same way the approval of H<sub>7a</sub> explains individual team member creativity to be a moderator between the association among team diversity and team performance.

Similarly, this study has successfully answered the final research question, i.e. Is the relationship between work cognition inventory and team performance moderated by individual team member creativity? and the research objective, i.e. to study the effect of individual team member creativity as a moderator on the association among work cognition inventory and team performance. The rejection of H<sub>7b</sub>. elucidates that individual team member creativity doesn't moderate the relationship between work cognition inventory and team performance. So it cannot be taken as a moderator between the association of work cognition inventory and team performance, same was reported by (Nimon et al., 2011) who stated employees cognitive features not to be linked with performance.

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**Annexure-A**  
**Questionnaire**

**The Role of Team Diversity & Work Cognition Inventory on  
Team Satisfaction and Performance**

The objective of this survey is to collect data regarding diversified team satisfaction and performance; specifically, it's aimed to know about health sector staff cognitive perspectives regarding their job, their social collaboration, and impact of being creative on their performance. Kindly give your opinions that you may have about working at your organization, your input is essential for this research study to succeed.

<b>Section A</b>
<b>Demographics of Respondent</b>

**Gender**

- Male  Female

**Age**

- 20 – 30 Years  31 – 40 Years  
 41 – 50 Years  Above 50 Years

**Designation**

- Head of Department  Senior Most in the Department  
 Other\_\_\_\_\_

**Name of the Department you belongs too**

\_\_\_\_\_

**What is the length of your experience?**

- 0-5 Years  6-10 Years  
 11-15 Years  Above 15 Years

**Name of CMH you belongs too**

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## Section B

<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
▼	▼	▼	▼	▼
<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>

<b>Team Diversity Downey, Van der Werff, Thomas, and Plaut (2015)</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
TD1	All viewpoints, including those that differ from the majority opinion, are considered before decisions are made by my team.					
TD2	Differences are valued and appreciated in my team.					
TD3	Everyone in my team, regardless of background and perspective, is encouraged to share his/her ideas openly.					
TD4	There is zero-tolerance for any form of diversity harassment in my team.					
<b>Individual Creativity (George and Zhou, 2001)</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
IC1	I come up with new and practical ideas to improve performance of hospital.					
IC2	I am allowed to give creative solutions to problems					
IC3	I exhibit creativity on my job when given the opportunity to do so.					
IC4	I develop adequate plans & schedules for the implementation of new ideas by R & D.					
<b>Team Satisfaction, Kyle A. Cameron, (2014)</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
TS1	I am pleased with the way my team members and I work together.					
TS2	I have a positive working relationship with my team members.					
TS3	I would like to work with this team again.					
TS4	I felt like I get a lot out of being a member of this team.					
TS5	This team has helped me to meet the personal goals I had in mind when I joined it.					
<b>Social Capital, Narayan, and Cassidy, (2001)</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
SC1	How many teams in this hospital do you belongs with					
SC2	On average, how often do you participate in the activities of the teams to which you belong in a year?					
SC3	To what extent do you participate in team decision-making?					
SC4	Do you think that most people would try to take advantage of your ideas if they got the chance, or would they try to be fair?					



<b>Team Performance, Thompson BM, Levine RE, Kennedy F, et al, (2009)</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
TP1	Team members encourage one another to express their opinions and thoughts					
TP2	Often members help a fellow team member to be understood by paraphrasing what he/she is saying.					
TP3	All team members consistently pay attention during group discussions.					
TP4	My team resolve many conflicts by compromising between team members, with each one giving in a little.					
<b>Work Cognition Inventory-Revised (WCI-R) Ken Blanchard (2009) Scale:</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
WCI1	I have the authority I need to make decisions about my job.					
WCI2	People in this hospital support me on my tasks.					
WCI3	I think there is an equal exchange between my effort & my compensation					
WCI4	Management of this hospital use procedures that reduce biasness in decision making as much as possible.					
WCI5	I receive appropriate feedback on my job performance to know how well I am doing.					
WCI6	I have opportunities to develop new skills to do my present job.					
WCI7	My workload is just right on most days.					
WCI8	My expected level of performance is clearly defined.					

***Thank You!***

## Annexure B

### Existing Models, Problems & Newly Suggested Model

Table 2.1 Showing all the existing models related to current research, along with authors, variables, main findings and problems in those models. Also with current model novelty.

No	Model	Year	Authors	Variables	Main Findings	Problems with the Model
A	Functional Diversity-Team Performance Model	2016	Amanuel G. Tekleab, Ayse Karaca, Narda R. Quigley, Eric W.K. Tsang	Functional diversity, team cohesion, behavioral integration, team learning, and team performance	Team behavioral integration diminishes the negative relationship between functional diversity and team cohesion.	Self-reported biased results were taken as a sample with a maximum of 7 members in the team
B	Gender Diversity-Team Performance Model	2015	Thijs Bosselaar	Team gender diversity, team performance, perceived inclusion and diversity beliefs	The positive relationship between team gender diversity and team performance and perceived inclusion to be a partial mediator affecting performance	Moderators were not confirmed to have moderating effect; results were based on individual diversity beliefs with a low rate of internal reliability of diversity belief scale and insignificant result.
C	Team Satisfaction Mediation Model	2015	Karliën Vanderheyden, Shari De Baets	Diversified team, team performance, team satisfaction, and team performance	Diversified teams good or bad relationships depend on their cognitive style and satisfaction among team members directly affects the performance of the diversified team.	No significant relationship was found, also difference in projecting and consequence variable with respect to time.
D	Input Outcome Model	2010	Karliën Vanderheyden, Ben Lommelen and Eva Cools	Team diversity constructs, satisfaction, and performance.	Team composition didn't affect team performance and satisfaction, no relationship has been found between team composition and perceived relational orientation and groupthink.	no impact of team type on team satisfaction and performance, so non-significant relationship was found between homogenous, semi homogenous and heterogeneous teams with team satisfaction and team performance
E	Work Cognition Inventory Model	2011	Nimon, K., Zigarmi, D., Houson, D., Witt, D., and Diehl, J.	Twelve employees workplace features, both about work and organizational aspects	Employees work better if the twelve cognitive attributes are fulfilled.	Similar selection bias (Nimon et al. 2009). Moreover, the 12-constructs were difficult to analyze, somewhat repetitive and much time-consuming.
F	The Merged Model	2015	Kim Nimon and Dera Zigarmi	Organization cognition, job	These notions refer to the level of effective	Convenient sampling; moreover the model

				cognition, and people cognition	and cognitive perspectives of employees about the workplace, which critically relates to their performance in diverse teams	was based on limited reliability measures of internal consistency and low nomological validity.
G	The Mediating Model	2016	Kannan Srikanth, Sarah Harvey and Randall Peterson	Group diversity, group performance deep, i.e., task-oriented diversity and surface, i.e., social relation oriented diversity, access to information and social categorization	Group diversity has altering trends with respect to time passed in the formation of the group and rejected the idea of considering diversified groups to the double-edged sword of giving both positive and negative performance	Result was contrary to the group formation literature, i.e., they have argued newly formed group to be more functional and performance-oriented than groups formed from a longer period of time. While group formation literature, Tuckman, B. and Jensen, M. (1977); Mary Ann G. Hennen, (2014)
H	Knowledge Sharing Model	2017	Aida Hajro, Cristina B. Gibson, Markus Pudelko	Knowledge sharing, i.e., social capital among awareness focused, engagement-focused and policy-focused	Diversified teams which undergo assertive or cooperative knowledge exchange process to be more effective	Disproportionate sample by taking data from Austrians only, other contextual factors that may affect team effectiveness were neglected, i.e., authority dynamics, control tools, and corporate policies.
I	Moderating Model	2012	Shung J. Shin, Tae-Yeol Kim, Jeong-Yeon Lee, Lin Bian	Cognitive team diversity, individual team member creativity, team members' creative self-efficacy, and transformational leadership.	Moderators effect, i.e., team members creative self-efficacy and transformational leadership were only positive when are taken high	No objective measure for creativity, therefore supervisor biasness in the rating of creativity remained unanswerable; results were based on examination of perceived cognitive diversity instead of measuring actual cognitive diversity among team members.
J	<b>Current study model</b>	<b>2022</b>	S. Urooj Babar	Team diversity, team satisfaction, work cognition inventory, social capital, individual team member creativity, and team performance	Individual team member creativity moderates the relationship of team diversity and work cognition inventory with team performance, whereas team satisfaction mediates the link between team diversity and team	<b>Novelty/ Bridging the Gap:</b> Diversified teams can rise above social order forms by distinguishing mediators that assist them to limit social classification forms while as yet permitting for data

					<p>performance while social capital mediates the relationship between work cognition inventory and team performance.</p>	<p>trade for better performance. Employees perform better when their cognitive features are satisfied. Social capital is required at every movement for achieving team long and short objectives.</p>
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