CAPITAL UNIVERSITY OF SCIENCE AND TECHNOLOGY, ISLAMABAD

Shared Leadership, Organizational Commitment and Well-being: Mediating Role of Psychological Capital and Moderating Role of Task Interdependence

by

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Dedicated to my parents

CERTIFICATE OF APPROVAL

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"Then which of the Blessings of your Lord will you deny".

(Surah Ar-Rehman)

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Abstract

It is a well-established fact that shared leadership plays a crucial role in achieving various organizational outcomes including organizational commitment. However, the role played by task interdependence in this association needs to be explored. For enhancing productivity for organizational outcomes, the impact of this interaction with employee wellbeing must also be studied. Thus, the aim of this research was to study the impact of shared leadership on organizational commitment and wellbeing, with mediating role of psychological capital and moderating role of task interdependence. The sample of this study was Pakistani Nongovernmental Organizations. Convenience sampling technique was used for data collection from 290 individuals. Data was collected online in google forms by contacting potential participants through email. Participants filled the questionnaires in google forms anonymously. After cleaning, data was transferred to Statistical Package for Social Sciences-20 (SPSS-20) and Mplus 7.11. Along with descriptive statistics and correlational analysis in SPSS-20), Full Structural equation modeling (SEM) was performed in Mplus. Correlation analyses indicated significant relationship between shared leadership, psychological capital, task interdependence, organizational commitment and wellbeing. The final SEM model indicated that psychological capital mediated the relationship of shared leadership with organization commitment and wellbeing although the path from shared leadership to psychological capital was insignificant. Task interdependence served as a significant moderator in SEM. The study results suggests that task interdependence is an important factor in understanding the influence shared leadership will have on organizational commitment and employee wellbeing. The results are discussed in the thesis with reference to the existing literature along with this study's limitation and implications.

Keywords: Shared leadership, Organizational Commitment, Well-being, Psychological capital, Task interdependence

Contents

List of Figures

List of Tables

Chapter 1

Introduction

1.1 Background of the Study

Leadership is a dynamic process which inspires and encourages people to achieve the particular goal (Frankel, 2019). It is a soft skill that will not dictate what to do, but empowers how to do in a given situation (Feldman, 2018). Over the past 15 years, a variety of leadership ideas have been introduced including, innovative and motivating, based on the leader's extraordinary ability (Katz, Eilam-Shamir, Kark & Berson, 2018). There is no particular form of leadership that can be said to be more suitable for all scenarios, as a leader's effectiveness relies on the opportunity to change a leadership style as per the situation (Caceres, 2019). In overseeing a project, style of leadership is highly influential and can contribute to improved production and profitability (Tabbassi, Argyropoulou, Roufechaei & Argyropoulou, 2016). For projects, an efficient leadership style is essential because the specific time and diverse team make them less dedicated and involved, resulting in poor management, dispute and poor communication (Zhang, Cao & Wang, 2018). Project leadership is a mixture of leadership and management, where the attention is on completing results as a planner and the emphasis is on establishing, leading and motivating as a leader (Pretorius, Steyn & Bon-Bernard, 2018). Significance of management and leadership is required to establish consistency in the company. However, it has been observed that the project teams are often

unfamiliar with handling and knowing the corporate system and the outcome and the supervisors are unaware of this (Bolman & Deal, 2000). Project leadership can be transferred from the project manager to team members along with the administrative and strategic aspects by introducing shared leadership, which has a humongous potential for enhancing the project team's strength in leadership (Yu et al., 2018).

Over this century, analysis of leadership has changed various trends that concentrate on human characteristics, personality types, contextual events, and many other, personal and group-based variables (Smith, 2017). In modern research, it is important to decide the goals of leadership. This essentially refers to a characteristic of a team by which power is shared among project team members instead of relying on a single leader (Wang, 2013). Organizations focused on projects refer to a variety of organizational processes that have short-term frameworks (Rodney, 2017). Recently, project-based organizations have gained growing attention as an evolving organizational method to incorporate unique rational properties and expertise (Popaitoon & Siengthai, 2014).

Project based organizations mostly deal with projects where people from diverse professional backgrounds with various skills prefer to work together to accomplish common goals for limited time (Kwak, Sadatsafavi, Walewski & Williams, 2015). For this diverse professional background combination, a style of leadership must incorporate sharing of the leadership power and empower the project team members; and for this empowerment, the importance of shared leadership is well established (D'Innocenzo, Mathieu & Kukenberger, 2014). Research has indicated that shared leadership is a state of shared factors embedded in team member ties and it can greatly boosts team efficiency as well as organizational efficiency (Wang, 2013). Individuals with shared leadership will gain freedom as well as self-control from the dedicated leader or from the team's decision. Team members may also become more accountable for the decision-making process (Turner, Scott-Young, & Holds, 2019). For example, by promoting sharing of knowledge among team members and increasing individual motivation to take on responsibilities helps build team strength, team unity, and satisfaction. Moreover, as an intangible tool

derived from team communication networks, shared leadership appears to be positively related to team success through team harmonization and efficiency (Carson et al.,2007). Similarly, shared leadership boost team performance through the social focus of teams, by augmenting expertise, abilities and skills, and information processing and learning by team (Turner et al., 2019).

Projects are a temporary endeavor with limited time and budget so the wellbeing of team members is important. As far as wellbeing is concerned, it is clearly described as recognition of the different emotional levels of satisfaction, employee state of mind and personal growth (Part, 1984; Warr, 2006). Wellbeing of the team is a distinct concept and has been measured in a variety of ways (Lyubomirs, 2001). Previous research has found that both emotional wellbeing and behavioural wellbeing are significant as a way of maintaining stability in good and bad circumstances and preserving feelings of achievement (Schimmack et al. 2002). Wellbeing has gained great attention from researchers and practitioners over the past few decades (Danna & Grin, 1999; Robertson & Cooper, 2010). For Leadership, efficient team members have long been a matter of concern (Hoppock, 1935; Pennock, 1930). Workplace efficiency is high for team members who are happy with their work, and there is reduced efficiency for team members who are not happy with work (Hersey, 1932; Spector, 1997).

Many scholars have proposed that employee's wellbeing should be evaluated on all aspects of career growth (VellaBrodrick, 2009). In previous studies, wellbeing of team members has been evaluated to capture team members' quality of life at work in order to enhance their psychological status in the productive direction (Siegrist et al., 2006). In professional work wellbeing is measured by enhancing the psychological status of employees in the positive aspect (Siegrist, 2006). Maximum employee wellbeing can be accomplished by decreasing employee stress factors and increasing their level of satisfaction (Vanhala, 2006).

Research has demonstrated a positive relation between shared leadership and enhanced wellbeing and organizational commitment, more it creates a positive relation between leader and team members (Park, Kim, Yoon & Jo, 2017).

As far as projectized organizations are concerned, organizational commitment is an essential variable for projects' success, it is the behavior of employees that is actively embraced by employers in order to minimize the goal turnover and create closer ties with stakeholders. It represents several aspects reflecting the loyalty and devotion of the employee towards a specific organization (Wulandari, 2017). This multidimensional concept describes a relationship with an organization and its workers. If employees are closer to the organization, they are less likely to quit the organization (Mofokeng, 2016). Analysis examining the connection between leadership trends and organizational commitment, found that shared leadership and resources not only increase control, but also improve organizational commitment (Kim et al., 2012). Along with organizational commitment psychological capital is the most important element for project work, leadership style and psychological capital have a direct impact on the project team. The psychological capital is the most important subgroup of intellectual resources when talking about team challenges in organizations (Luthans & Youssef, 2004). Previous studies have shown that while enhancing the combined effects of the four elements of psychological capital, managers who lead in the project team can lead very well (Bandura, 1997). Psychological capital helps to have the same significant impact of attitude and actions on performance beyond demographic differences (Stajkovic & Luthans, 1998). Components of psychological capital are interpreted specifically to increase the efficiency of people. Strong psychological capital indicates significant psychological emotions along with the growth of the enterprise leading to success (Luthans & Youssef, 2007). It is characterised as the development of positive state in one individual's emotions and is composed of self-efficacy, hope, optimism and resilience (Luthans, 2007). Self-efficacy puts trust in individuals with their own skills. It has been primarily discussed in previous studies and falls under its banner since the introduction of positive psychology (Bandura, 1977). High self-effective individuals promote good thoughts and highly motivating environments (Peterson, 2000; Seligman, 1999). As far as hope is concerned, hope depends on optimistic individuals' emotional states that provide a sense of achievement in the future (Snyder, Irving & Anderson, 1991). The third element of psychological capital is optimism,

optimists are the people who always think about the positive aspect of the situation; even in hard times optimists have good and positive energy (Youssef Morgan & Dahms, 2017). Finally, resilience is a last element of psychological capital. Team members have to face challenging and complicated situations in organizations, so resilience in these circumstances plays an important role. Resilience is a capacity to help recover strength of a team member. It allows individuals to cope with challenging circumstances, handle confusion, resolve conflicts and recover other components of psychological capital after failure (Luthans, 2002).

For projectized environment tasks depend on each other, someone's output depends on the other's effective output, in current study task interdependence used as moderator (Kiggundu, 1981). Task interdependence was also defined as three sub dimensional notions; scope of work, resources and criticality. As far as scope is concerned, it is the range of a detailed job's interconnection with further team members (Hinings, et al. 1974). Resources is the stage in which interdependence between two or more tasks includes the receipt or availability of the required resources to do the job. Materials, instruments, and services can be included in it (Jenkins, Naddler, Lawler & Cummann, 1975). Criticality is the degree to which the interdependence of the significant attribute with one or more other workers is important for the success of another significant attribute (Hickson, Hinings, Lee, Schneck, & Pennings 1977).

Research also distinguished between task interdependence initiated and task interdependence obtained. Interdependence of the initiated task can be explained as the extent to which work flows from one specific job to another, such that the good output of the latter depends on the initial task. Interdependence of the obtained task is the degree to which the work from one or more other jobs influences an individual in a specific job (Kiggundu, 1981). So, task interdependence has a significant role in a projectized environment, which directly affects the output. As per previous studies and arguments, therefore it is significant to study the impact of shared leadership depicting internal team environment on organizational commitment (affective commitment) and wellbeing of team members with mediating role of psychological capital and moderating role of task interdependence in

projectized environment.

1.2 Gap Analysis

Project success is the key element of project-based organizations. There are various success factors established in project management literature that have a positive effect on project success, one of the significant element is shared leadership, which has a positive influence on projectized environment. As indicated in the literature review, there is dearth of research available on the influence of shared leadership on organizational commitment in organizational settings other than hospitality sector (Wu & Chen, 2018). Involvement of nongovernmental organizations in development projects has significant value to improve research, Sometimes NGO's are in a great position to recognize specific research issues, and disseminate research results (Kate, 2018). Hence, to fill this gap as indicated by Wu & Chen, (2018), this study has focus on NGO's sector of Pakistan.

As far as task interdependence is concerned, it indicates the dynamics of a shared work and distributed team, so it is important to learn how team members collaborate to carry out their shared tasks (Marlow, 2017). The social networking relationship with the leaders depends on team members communicating with other team members for their tasks, team members having high task interdependence have strong interaction between team (Sut, 2018). Team having high task interdependence encourage the shared work, connect more efficiently and trust others to accomplish their shared goals (Liao, 2017). Team members who recognize knowledge and expertise for each other may rely more on each other for professional expertise, rather than other sources, such as leadership (Guo, 2017). A study conducted by Wu & Chen (2018) on shared leadership, organizational commitment, psychological capital and creativity has established a model of interaction of these variables and suggested that future research should include task interdependence as a moderator. Therefore, in this study task interdependence will be included as a moderator.

Employee wellbeing of individuals has a strong impact on work performance of shared goals (Peter, 2018). Wellbeing of employees increases job satisfaction and job performance (Arnold, 2018). Wellbeing of a team has always been a part of life in modern workplaces that has a good and bad effect on the emotional and physical health of a team (Sajid, 2018). Few researches, such as Kim (2016), studied the influence of shared leadership on organizational wellbeing, but there is a need to recognize the influence of shared leadership on employee's wellbeing. This study will therefore include wellbeing of employees as a second dependent variable.

1.3 Problem Statement

Projects are temporary endeavors with a specific start and specific end time, and each project has unique characteristics, in project-based organizations, the working climate is diverse. This dynamic and complex nature of projects puts extra pressure one team members, such as task pressure, unclear expectations and requirements for various positions. In some situation project base organizations have problems coping with the job and emotional situation of the team members which can create the extra pressure. Such pressure will increase well-being concerns of the team and these problems should be addressed.

While handling the projects the project manager needs to share the responsibilities and leadership power with team members. With shared leadership, project team feel sense of responsibility and ownership with the project work, senses of ownership also creates the strong relationship between project team and the organization, which creates a satisfactory work environment for the project team, and affects team performance (Robert, 2016).

With shared leadership, the power of leadership is transferred with the project team which empower team members for knowledge sharing, and there is a strong coordination towards all activities related to team goal, at the end all factors affect the project.

1.4 Theoretical Framework

To explain the framework of the study Social Exchange theory is used.

1.4.1 Social Exchange Theory

Social Exchange Theory supports the variables of this analysis and will help to explain the correlation between variables. According to Social Exchange Theory, "social behavior is an exchange of material things but also non-material, such as validation or social status" (Homans, 1958). Social Exchange Theory postulates that a person who seeks profit from others will later have a strong feeling to pay back as an obligation through commitment and positivity (Tse, 2013). Employee's loyalty and commitment can be experienced through their success and desire to remain in the organization (Shah, 2018). SET describes the shared connection between people, businesses, assignments and projects (Cook, 2013). The psychological involvement of the team and how to assess the effect of those attitudes on work innovation can also be addressed through Social Exchange Theory (Cropanzano, 2005). When team members work together, after some time, they experience the need to respond to the other person's support, which is called the standard of correspondence (Blau, 1983; Gouldner, 1960). When this quality of correspondence evolves, it eventually leads to a sense of confidence and commitment (Cropanzano, 2005). When individuals do not have a strong relationship among team members, they explore different experiences in different direction. So, people need to establish a shared and coordinated relationship with each other to resolve these distinctions. It represents successful leadership involvement in coordination with the team members and such collaboration can only be accomplished by enhancing robust shared leadership style (Sherony, 2002).

Organization Citizen Behavior scholars have traditionally conceptualized social exchange as a method of interaction process (Organ, 1988). The theory of social exchange argues that the performance of team members is the product of an interaction process. Exchange interactions specifically classified as either personal or commercial (Deluga, 1994). The employee and organization partnership appears

to be established by the work contract in economic transactions. As far as social connection is concerned, it goes beyond the job agreement. These social exchanges between team member and leader creates loyalty, shared feelings of commitment and liking.

The Organization Citizen Behavior of team members is driven in an organization where shared interactions define the nature of associations (Moorman et. al 1993; Deluga 1994; Konovsky 1994; Pillai et al., 1999; Aryee et al., 2002). High level social interaction creates more engagement between team members. The mechanism of social interaction is based on shared commitment and trust (Blau, 1964). Commitment and innovation are generated when the team members with a shared goal find a solution that gives full benefits to all team members (Chi-Min Wu, 2018). When team members actively embrace shared goals and encourage others through shared leadership, their interaction with the organization improves (Katz & Kahn, 1978).

According to social exchange perspective, shared leadership develops through an evolving episode of situation appropriate exchanges of involvement (Cox, 2003). So that shared leadership is viewed as a mutually beneficial procedure (Blau, 1964). Conceptualization of the interpersonal influence between team members as shared relationships aimed at optimizing team efficiency and considering advice provided by other teammates as a useful service (Blau, 1964; Cropanzano & Mitchell, 2005; Homans, 1958). As far as shared leadership is concerned, team members participate in social interactions on behalf of their colleagues while fulfilling leadership positions and duties (Seibert, Sparrowe, & Liden, 2002).

The execution of duties and obligations by one person also needs the support of other team members (Robert, 2013). This social exchange, along with the help of team members, have been shown to be related to the expectations of a healthy supporting team environment (Drescher et al., 2014). The results of shared management derived from social exchange are explained by the anticipated team support (Hoch 2013; Wegge 2014; Pearce 2003; Herbik, 2004). Team help reflects commitment of the workers and support of the staff (Bishop et al., 2000). It is said that teams strong in Perceived Team Support have an atmosphere marked

by shared loyalty among their participants (Wayne, 1997). Shared management/leadership is directly proportional to social interactions required for development of an environment characterised by high levels of support from the team (Hoch & Dulebohn, 2013). These are the arguments which support the social exchange theory, and having impact of shared leadership on organizational commitment.

Organizational scholars have used the idea of social exchange to describe the motivational framework behind team actions and the creation of productive team attitude. Philosophers in social exchange have pointed to work as the exchange in commitment and dedication for material and social-emotional gains (Blau, 1964). One of the core principles of the philosophy of social exchange is that relationships grow into trusting and shared loyalty over period (Cropanzano & Mitchell, 2005). In terms of affective motivation and work-related attitude, team members who enjoy a high degree of organisational assistance are more likely to have a responsibility to "pay back" the organisation with commitment (Eisenberger et al., 1986). In their trade partnerships with organizations, team members establish a connection through commitment with the organization (Wayne et al., 1997). High level partnerships with social exchange may have positive effects for the organization (Cropanzano & Mitchell, 2005). Team members who enjoy a high level of social exchange are more committed towards the organization (Wayne et al., 2002).

High social exchange will decrease the stress of an individual which improves wellbeing (Berscheid 1969; Homans, 1961). While handling the projects the project manager needs to share the responsibilities and leadership power with team members. Without shared leadership project team feel lack of ownership, which creates the lack of responsibility with the project work, lack of ownership also creates the weak relationship between project team and the organization, leading to a dissatisfactory work environment for the project team, and affects team performance and wellbeing of the individual (Robert, 2016).

According to Antonucci, (1990); George, (1996) social exchange has a positive impact on wellbeing. Some researchers reported that social exchange helps to improve the PsyCap (Antonucci 1990; George, 1996). There is a mutual understanding that social exchange boosts wellbeing (Kessler, 1986; Krause, 1997).

Some studies have established psychological wellbeing improves with high level of social exchange (Larson 1974; Wood, 1978; Krause, 1986). Several researches indicate that having good social exchange can reduce stress (Newsom, 1998; Barrera, 1981; Cohen, 1983). In particular, social exchange increases human satisfaction and wellbeing (Jackson, 1990), while Stoller (1985) stated that the failure to return the favour in exchange had a bad psychological effect. The team members obtained the greater assistance from the social exchange depending on need and its related hopes of long-term mutual trust (Morris, 1998). The above claims clearly indicate that the results of social exchange theory increase the wellbeing of the team having strong impact on organizational commitment and shared leadership, which support the model of this research.

1.5 Research Questions

The research questions of the present study are mentioned below:

1. Does shared leadership significantly impact organizational commitment?
2. Does shared leadership significantly impact wellbeing?
3. Does psychological capital mediate the relationship between shared leadership and organizational commitment?
4. Does psychological capital mediate the relationship between shared leadership and wellbeing?
5. Does task interdependence moderate the relationship between shared leadership and psychological capital?

1.6 Research Objectives

Following are research objectives of this study:

1. To examine the relationship between shared leadership and organizational commitment.

2. To examine the relationship between shared leadership and wellbeing.

3. To examine the mediating role of psychological capital between shared leadership and wellbeing.

4. To examine the mediating role of psychological capital between shared leadership and organizational commitment.

5. To examine the moderating role of Task interdependences between shared leadership and psychological capital.

1.7 Significance of the Study

Now a day's project work is focused on innovations with new opportunities. The successful leader actively manages project teams for successful final results. Successful managers communicate with their team through innovative procedures, which include resolving problems, managing those issues and bring new solutions (Schoemaker, Heaton & Teece, 2018). This work will not only provide analytical material for project management but it will also help to understand the needs of the organization to deal with different projects. This study will provide information to help the project managers to utilize and enhance their personal abilities in practicing the shared leadership theory to increase the organizational commitment and wellbeing of the project teams. This research would be useful for project-based organizations to understand the factors that can help enhance the efficiency of the mission and create a positive and safe project atmosphere with a culture of shared leadership in projects. This research would also be useful for researchers to establish strategies that can be used to create an atmosphere that will lead to successful projects for team members.

There is no such study found while reviewing literature, shared leadership environment affecting the psychological well-being and organizational commitment of

the team members, psychological capital acting as a mediator and task interdependence acts as a moderator between the relation of mediating and dependent variables. This research will also fulfill the literature gap, and this framework will contribute to existing knowledge. This research will demonstrate new dimensions of shared leadership in relation with organizational commitment of the project team. This should help project leaders acknowledge the specific impact of shared leadership on the wellbeing of the team.

Chapter 2

Literature Review

This section will present a narrative discussion of the research evidence for conceptualizing the association of shared leadership, organizational commitment, wellbeing, psychological capital and task interdependence in accordance with the theoretical framework of social exchange theory. Both empirical and theoretical studies have been considered for developing study hypotheses and model in the light of the literature review.

2.1 Shared leadership and Organizational Commitment

Shared leadership was addressed implicitly between 1950 -1960 (Gibb, 1954; Katz & Kahn, 1966). In the late 1980s and early 1990s, further comprehensive studies began (Weiss 1994; Firestone, 1996). It has three major characteristics; (1) Leadership is a universal characteristic of the relationship between individuals in a team, (2) there are no clear limits to leadership, and (3) for all team members, leadership activities are shared (Bolden et al., 2009). Such shared leadership qualities will guarantee that the company is still diverse, systematic and engaging. This collaborative mechanism focused on sharing would make the company more successful as it will improve the team capabilities (Yukl, 2002). Team members always accept leadership and collaborate to ensure that the company is always

diverse, interactive and engaging. (Chen, 2007). All these characteristics are important for organizational commitment of the team members.

Organizational commitment refers to the essence of the relationship of the team to the organization, identification of the team and participation in a given organization (Mowday, Porter & Steers, 1982; Shahnawaz & Jafri, 2009). It reflects the decision of the team member to remain or leave the company (Meyer et al., 1993). For project-oriented organizations, organizational commitment is the most important factor in its success.

Organizational commitment is often used during employee evaluation processes to decide if an individual can continue to be a part of the company (Mayer & Allen, 1996). It is a psychological condition representing a bond between team members and the organization (Karagoz, 2008; Artun, 2008; Leithwood et al., 2012; Khasawneh et al., 2012). The variables that influence organizational commitment split into three categories; environmental, organizational, and individual factors (Meyer et al., 1997; Alim 2019; Gurdogan 2018).

Research that has explored the correlation between leadership patterns and organizational commitment indicated that sharing of leadership and resources not only increases sense of ownership but also enhances organizational commitment (Raub & Robert, 2013; Kim et al., 2012). Studies have shown that shared leadership in different organizations enhance positive emotions in workers (Terzi et al., 2005; Ozden, 1997). Hence organizational commitment can be conceptualized as a positive emotion that workers may build towards the company.

Depending on this framework, shared leadership is often believed to have a positive effect on organizational commitment, in projects, shared leadership with team members increases the organizational commitment (Necati, 2020). The association between shared leadership and organizational commitment is specifically explored in this research.

So, the first hypothesis of the study pursues that:

H_1: Shared leadership has a significant impact on organizational commitment.

2.2 Shared Leadership and Wellbeing

As stated earlier, one of most studied subjects of organizational culture is the existence and influence of leadership (Barling, Christie, & Hoption, 2010). According to literature organizational leadership have strong impact on team wellbeing (Kelloway & Barling, 2010). The action of manager has a significant impact on wellbeing of workers (Gilbreath et. al., 2004). There have been important consequences for studying human wellbeing with the introduction of positive psychology (Seligman & Csikszentmihalyi, 2000). Wellbeing and positive psychology have strong impact on workplace and individual psychological health (Fullagar & Kelloway, 2012). Shared Leadership creates good psychological health and positive feelings, stimulating more innovative, dynamic and productive thinking patterns (E. Kevin, 2012). This enhances the intrinsic motivation of the team members, which offers a theoretical structure that describes the correlation of pleasant emotional states with productivity of an individual through shared leadership (Fredrickson's, 2001). So, according to previous studies, it is hypothesized that:

H_2: Shared leadership has a significant impact on wellbeing.

2.3 Psychological Capital as Mediator between Shared Leadership and Organizational Commitment

The connection between leadership and psychological capital is based on Bandura's agentic theory (2006), which argues that leadership plays a significant role in collective interaction, shared leaders evaluate the internal and external information and communicate with their team members (Walumbwa et al., 2011). When leadership and other members accept the productive ideas of the colleagues, team members feel more empowerment in a shared environment (Kirkman & Rosen, 1999). Therefore, since shared leadership in a team creates shared goals, team members are more likely to recognize the goals. This creates optimism among the

team members regarding the achievement of these objectives. In addition, shared leaders are responsible for promoting and helping the participants appreciate the meaning of the objectives and accomplishment of the team goals. Through this, leaders will motivate members of the team to adopt more positive learning habits and to face potential challenges (Heled et al., 2016). Therefore, the working attitudes and environment of the shared leadership model will influence the team members and increase confidence within the team when leaders respond to problems with confidence in the form of constructive, adaptive, and focused attitude. Shared leadership promotes shared group environment that embraces team members with mutual support and encouragement to express their views in terms of group. The trust of team members in their leader is an important psychological resource that enhances their resilience (Chi-Min Wua, Tso-Jen Chen, 2018). So, based on these arguments shared leadership has a strong relation with elements of psychological capital (self-efficacy, hope, optimism and resilience), also having impact on organizational commitment. Psychological capital is an evolving research topic at the team or organizational level however there is dearth of published studies on its importance in various organizational settings (Newman et al., 2014). As far as organizational commitment is concerned, it is an essential leverage point for team in an institute. According to Meyer and Allen's model (1990), commitment comes in three ways; emotional, continuous and normative commitment. Team's emotional attachment towards the institute/company is called emotional commitment. Willingness to remain in the organisation is continuous commitment. Positive attitude, responsibility and desire to participate in organisational matters is called normative commitment. Etebarian (2012) has concluded that employees having strong emotional engagement; having strong continuous commitment and strong duty commitment stay with the organization as they have strong attachment.

The concept of organizational commitment is the degree of identity and alignment of an individual towards the organisation (Sağlam-Arı, 2003). An individual's psychological commitment requires involvement in the job, dedication and confidence in the value of the organisation (Ölçüm-Çetin, 2004). Team members having

strong degree of interpersonal engagement in an organisation perform their tasks with high work satisfaction, good efficiency, greater loyalty and accountability with other members, which creates good psychological capital and boost employee performance and organizational commitment (Balcı, 2003).

According to the available research evidence, Psychological capital has a positive influence on organizational commitment. (Luthans, Norman, Avolio & Avey, 2008; Youssef & Luthans, 2007). For instance, Sinha, Talwar and Rajpal, (2002) argue that organizational commitment is associated with self-efficacy, hope and optimism. Buys and Rothmann (2010) identified a strong association between work involvement and organizational commitment. They concluded that team members who are involved in work have a strong social role and effective contribution. Jung and Yoon (2015), showed that there is an optimistic relationship between psychological capital and organizational commitment.

Psychological capital is a component that improves the organisation's workplace efficiency. It is also a good management solution that boosts performance and organizational commitment of employees (Luthans et al., 2005). Positive psychological capital is where the people focus not on their negative facets but on their good aspects. Exploring the construct of positive psychological capital in this way leads the organisations in identifying qualities that make people more optimistic (Erkmen & Esen, 2012). According to Luthans (2004), psychological capital is negatively correlated to the turnover of employees, the disappointment of employees and the purpose to leave, and positively related to organizational commitment.

Most management research made it clear that psychological capital has more impact on job performance (Balcı, 2003, Luthans 2005, Akbar Etebarian 2012). Comprehensive influence of positive psychological capital increase work efficiency and organizational commitment and build competitive advantage for organizations (Akbar Etebarian, 2012).

A more modern approach examines psychological capital and abilities of the human capital as emotionally focused to improve operational and personal efficiency and to gain organizational achievement (Turner et al, 2002). Employee behaviour

as organizational commitment is considered to have significant implications for organizational practices such as efficiency, performance and service quality (Saari & Judge, 2004; Judge et al., 2001; Meyer & Becker, 2004; Wegge et al., 2007). Employees with a high degree of trust, confidence and self-efficacy as elements of psychological capital can be happier with work and committed to workplace. This interpretation helps explain the role of psychological capital in determining the desired team outcomes for organizational success (Fatih Çetin, 2011).

Psychological capital can be characterized as a set of characteristics that can be enhanced with experience or knowledge, in particular, by the employee's success in working life and enhancing organizational efficiency (Luthans, 2002). Positive psychological capital is where people focus not on their negative facets but on their positive aspects. Thus, this motivates organisations to identify traits that make people more optimistic (Erkmen & Esen, 2012). It can be assumed that increased organizational commitment is linked to commitment with the organisation and happiness at work (Uğurlu-Kara, 2014).

Numerous studies have asserted that psychological capital has a strong correlation with organizational commitment (Fatih Çetin, 2011; Luthans, Norman, Avolio & Avey, 2008; Youssef & Luthans, 2007). For instance, Youssef and Luthans (2007) established a correlation high level of psychological capital with high level of organizational commitment. General concept of psychological capital has a positive relation to commitment, success and happiness (Luthans et al., 2008). So, according to previous literature, it is hypothesized that:

H_3: Psychological capital significantly mediates the relationship between shared leadership and organizational commitment.

2.4 Psychological Capital as Mediator between Shared Leadership and Wellbeing

Research has conceptualized the concept of wellbeing in various manners. From a physiological point of view, wellbeing is the mechanism in which people escape

suffering and distress in terms of the accomplishment of enjoyment (Kahneman et al., 2003). From a teleological point of view, wellbeing is more than just pleasure, it relies on meaning and purpose and allows people to understand their true nature (Waterman, 1993). In general, well-being is characterized as an "individual's psychological health" that people experience typically including positive behaviors and emotions (Ryan & Deci, 2001). Wellbeing of an individual is much more than simply just experiencing psychological disorder, as it also includes the psychological capacity to face life problems (Ryff & Singer, 2006).

Since, psychological capital completely covers intellectual capital "What you know?" and have direct concern with "Who are you?", it has been one of the factors that enhance positive psychological responses to stressful circumstances (Luthans et al., 2006; Luthans et al., 2007). The concept of psychological capital argues that many of the psychological structures are used as measures of a larger central framework. Luthans et al., (2008), Avey, (2010) have described that team with higher psychological capital have psychological tools which improve positive workplace behavior, so psychological capital has direct effect on organizational commitment and wellbeing. Controlling workers' personal and work-related energy creates anxiety and leads to internal weakness, depression and disturbances of wellbeing. Elements of psychological capital like self-efficacy, hope and optimism tend to buffer the gateway to stress and anxiety. Avey and colleagues (2009) argued that psychological capital has a negative association with stress and anxiety. In another study, the positive association between psychological capital and wellbeing were demonstrated (Avey et al., 2010).

It is important to recognize the distinct qualities of psychological capital as compared to positive emotions to understand its importance to determine its contribution in desired workplace outcomes such as wellbeing. There are two basic differences between psychological capital and positive emotions. Firstly, positive feelings have shorter timescales than psychological capital and shift more often over time. Secondly, positive feelings are usually associated with such conceptualizations as "real important circumstances" (Fredrickson, 2001) while, psychological capital may be conceptualized in regard to both common and individual

circumstances (Luthans & Youssef, 2007). According to Broaden and Build theory, feelings such as pleasure, accomplishment and enjoyment expand the mentality of the individual and navigate the experience of negative feelings such as depression and stress (Fredrickson, 2001). Hence, productive feelings form personal capital leads to a state of personal well-being (Fredrickson, 1998).

As stated, earlier wellbeing has been conceptualized in various research studies as moving away from stressful situations such as anxiety and depression. In this context psychological capital also enhance wellbeing by buffering against stress, anxiety and depression. Anxiety occurs when a team member feels that the situation expectations are far from being able to respond (Avey et al., 2009). Destructive stress is bad emotions, that can contribute to anxiety. Stress is the trigger that develops agitation, but anxiety cause a team member to experience discontent and panic that is typically the product of long-term stress. Excessive stress and anxiety have detrimental results, such as medical issues and job frustration; which effect wellbeing of the team. Positive psychological capital can reduce this excessive stress and anxiety (Bernard & Krupat, 1994). It has been established that while team members have good psychological capital, they are happier, exhibit less negative job habits and have good energy and psychological wellbeing (Diener, 2000; Diener & Oishi, 2003; Diener et al., 1999). The theory of BandB claims that productive feelings and positive psychological capital expand the realm of awareness and understanding and thereby form an upward spiral trend towards emotional health and wellbeing (Fredrickson & Joiner, 2002). The association between psychological capital and psychological wellbeing is specifically explored in this research. Hence, it is hypothesized that psychological wellbeing will improve when team members have good psychological capital.

Psychological capital relies on team's constructive qualities rather than negative qualities thus, it enhances wellbeing by responding positively (Seligman, 2012; Ryan & Deci, 2001). The fundamental concept behind psychological capital is to better people lives (Luthans, Youssef & Avolio, 2007). psychological capital reflects optimistic psychological emotions and plays its part in employee wellbeing (Luthans & Youssef, 2007). Employee wellbeing is a positive psychological growth

represented by the ability to succeed, an ambitious attitude towards future, strong optimism and resilience to achieve success (Luthans, Youssef, & Avolio 2007). Positive psychological capital can improve the wellbeing of employees in a challenging work environment as psychological capital has optimistic interaction with desirable attitudes, behaviors, and well-being (Avey et al., 2010).

Psychological capital has not only been identified as positive contributor to organizations commitment and employee wellbeing, its path of operating as mediating factor has also been identified in several reach studies. For instance, Park, Kim, Yoon and Jo (2017) and Wu and Chen (2018) have provided evidence for mediating role of psychological capital in association of shared leadership with organizational commitment and psychological wellbeing. Currently there is limited research that shows the mediating role of psychological capital. Thus, in order to clarify and fill this gap the role of psychological capital in this research has hypothesized.

H_4: Psychological capital significantly mediates the relationship between shared leadership and wellbeing.

2.5 Moderating Role of Task Interdependencies

The hierarchical work model provides new possibilities in terms of mobility and job structure, but team members who work together from different places rely on one another (Jimenez, 2017). Projects are typically structured; different tasks require different skills, and these tasks are highly independent to each other. For instance, if one person lacks the skills needed to complete the job, then other team members cannot perform their own task until the first person completes his task (Wang, Gray, & Meister, 2014).

This work connectivity is defined as task interdependence, which refers to what degree the results of a job are affected or dependent on others actions (Morgeson & Humphrey, 2006; Kiggundu, 1983). Empirically, interdependence of tasks is significantly correlated with factors like shared influence (Molleman, De Jong & Van der Vegt 2007) and can thus influence shared leadership's association with other factors like psychological capital. For instance, Rico and Cohen (2005) stated the

team success depends on how well team coordination and task interdependence are associated. Sui, Wang, Kirkman, and Li, (2016) have shown that team structure such as teamwork affects the interpersonal interaction between leader and team members. Employees with a low task interdependence have low efficiency (Hollenbeck & Spitzmuller, 2012). Bruke and colleagues (2006) also demonstrated that when there is high task interdependence between team, there will be efficient team interaction, which can help to bring team members closer together. In addition, interdependent team members make each other's jobs easier, they communicate more and trust each other to achieve shared goals (Liao, 2017). So, employees having high task interdependence are more vigilant as compared to other team members (Van De Vliert, Van Der Vegt & Emans, 2000).

However, it must be kept in mind that communication between team members does not automatically apply to the leader. A team having high task interdependence needs different leadership as compared to a team having low interdependence (Hinds & McGrath, 2006). Teams having high task interdependence are less dependent on leader's input (Gray & Meister, 2004). Thus, based upon discussion of literature in this section it can be discerned that there is a need to study the role of task interdependence as a moderator.

H_5: Task interdependence moderates the relationship between shared leadership and psychological capital.

2.6 Hypotheses

Following are the research hypotheses of the present study

H_1: Shared leadership has a significant impact on organizational commitment.

H_2: Shared leadership has a significant impact on wellbeing.

H_3: Psychological capital significantly mediates the relationship between shared leadership and organizational commitment.

H_4: Psychological capital significantly mediates the relationship between shared leadership and wellbeing.

H_5: Task interdependence moderates the relationship between shared leadership and Psychological capital.

2.7 Hypothesized Model

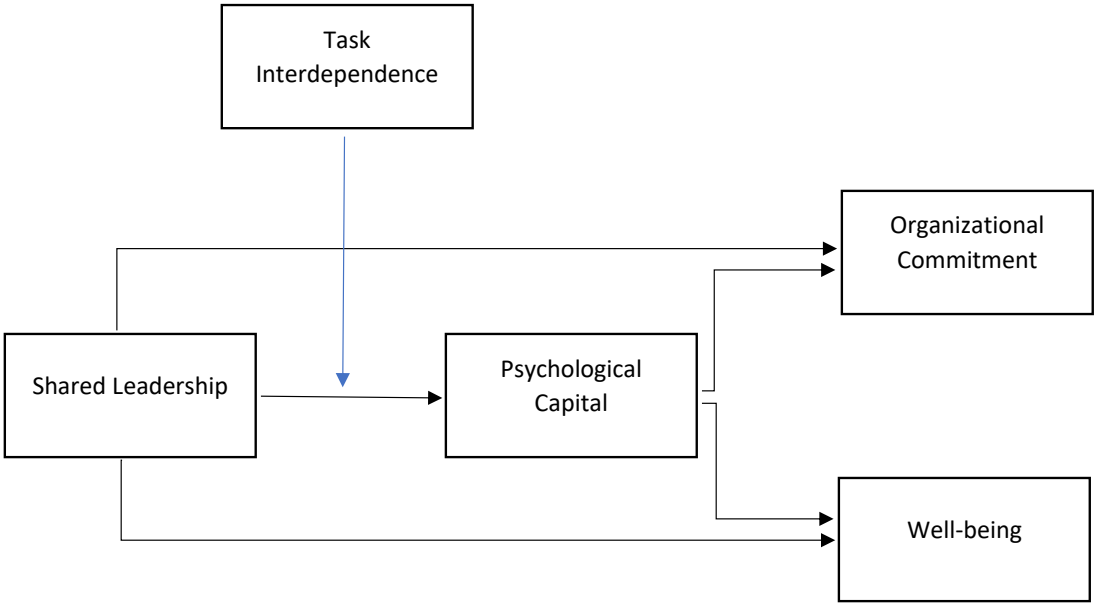

FIGURE 2.1: Association of shared leadership with organizational commitment and wellbeing mediated through Psychological capital and moderated by task interdependence.

Chapter 3

Research Methodology

This chapter provides information on the methods and measures used to achieve objectives of the current study. This section includes, study design, research philosophy, population, sample and sampling technique, data analyses, type of the study, unit of analysis, research instruments and pilot testing.

3.1 Research Philosophy and Research Design

A cross-sectional survey is carried out. Employees of non-governmental organizations will be invited to participate in the study through email. Team members who carry out project-based activities will be included in the study.

This study would investigate the hypothetical deductive reasoning approach, which is explicitly focused on the determinism point of view of discovering the truth using evidence in which the above reasoning and prevailing hypotheses were used to test and endorse the expected hypothesis, which would then be empirically tested for the proposed theory to be validated. A projected example of the empirical method is the hypothetical deductive method. For this research analysis, this research model is ideally adapted since it focuses on a vital emphasis on results. The hypothetical deductive method has two parts i.e., hypothesis, which is recommended for testing and second one is deductive part which discusses the research outcomes derived from hypothesis. In order to fail or pass the test, the

findings required from the hypothesis are correlated with experimental evidence. Conferring to this methodology, experimental investigation promises to use a theory in a method that may be created accurately by a test on empirical statistics. A finding that runs antagonistic to the hypothesis predictions is assumed as a hypothesis proven false. The idea is verified by a test which is not oppositional to the hypothesis.

The informative importance of competing theories is then predicted to be related by checking how deeply their predictions are real. Quantitative approaches are used to cover a broad scale of society generally in study. For this purpose, this analysis would also leverage the technique of quantitative analysis to collect consistency data to compare variables with each other and to show the essence of the connection between the variables used in the study.

3.2 Type of Study

This thesis emphasizes the effect of shared leadership on organizational commitment and well-being, for this matter, cross-relational analysis was followed. In order to obtain the necessary data and to produce practical results, the focus audience for this study was Pakistan's Non-Governmental Organizations (NGO's). This research consists of various project-based NGO's from Pakistan at the management level. The current study employees quantitative method of exploration. A cross sectional online survey was conducted from 13/07/2020 to 09/08/2020. Which explore the impact of shared leadership on wellbeing and organizational commitment with mediating role of psychological capital and moderating role of task interdependence

3.3 Study Setting

The research was carried out by the employees of NGOs in Pakistan by engaging them in their work atmosphere and encouraging them to fill out a questionnaire in the professional setting.

3.4 Unit of Analysis

The unit of analysis is the most important aspect of the research sample. The unit of analysis explains what attributes should be evaluated in the research. In a research sample, from which the researcher gathers the data, the analysis unit will vary from individuals to various communities, societies, governments and institutions.

The objective of this research is to see the influence of shared leadership on organizational commitment and well-being, so; the unit of analysis was dyad. The project managers, who have power of leadership, and this leadership have strong impact on team members which affect the commitment level and wellbeing of the team. In order to determine the effect of shared leadership, the specific sector of project-based organisations addressed in this study.

3.5 Time Horizon

For this research data collection was completed in around one month from 13/07/2020 to 09/08/2020.

3.6 Population and Sampling

3.6.1 Population

The key source of competitive advantage for Pakistan are project-based organizations. This sector is making a significant contribution to encouraging diverse investors to invest in social projects in Pakistan. Irrespective of the sector, each project is particular and has some basic objectives, priorities and expenses, whether its development projects, NGO projects or IT projects. It is the main responsibility of the project manager to execute the project within the budget, time frame and scope of the project. NGO's from all over Pakistan were approached for this research. Team members of different projects are directly involved in this

research by completing the questionnaire survey. The target population directly deals with the different projects and have knowledge of project environment.

3.6.2 Sample and Sampling Technique

The sample method for data collection is widely used, the current study sample is the representation of the population. Convenience sampling has been used for the current study and is used in the non-probability sampling. The most suitable approach to be used in this analysis is convenience sampling, since random data can be obtained from different NGO's in Pakistan by this technique. That will accurately reflect the true image of the entire population in explaining the impact of shared leadership on organizational commitment and wellbeing. The employees working with NGO's reported the data on independent variable (i.e., shared leadership), moderator (i.e., task interdependence), dependent variable s (i.e., organizational commitment and wellbeing) and mediating variable (i.e., Psychological Capital). In Pakistan, self-administered questionnaires were spread among various NGOs. Respondents have been told that their data will be kept confidential and will be used for academic research. By maintaining the anonymity of their responses and names, they were asked to respond to the questionnaires as correctly as possible so that the respondents could not fail to fill in the survey confidently. Nearly 500 questionnaires were provided to employees for data collection, and 300 detailed answers were eventually obtained.

3.7 Instrumentation

3.7.1 Measures

This analysis consists of a closed-ended questionnaire from various sources, which was used to test variables. Questionnaire is for all variables adopted from previous work, established by scientists. The medium language of data collection was English. The questionnaires with six sections in this sample were answered

by team members as respondents: demographics variables (gender, age, qualification and current position), Shared Leadership, Organizational Commitment, Wellbeing, Psychological Capital and Task interdependence. In this study 5 and 6 point-Likert scale was used to tap the responses.

TABLE 3.1: Description of variables.

Variables	**Instrument**	**No. of Items**
Shared Leadership	(Carson et al. 2007)	10
Psychological Capital	(Luthan. 2007)	12
Organizational Commitment	(Meyer 1991)	08
Wellbeing	(Christian 2015)	05
Task Interdependence	(Pearce 1991)	05

3.7.1.1 Shared Leadership

In the present study, shared leadership is considered as independent variable. This variable was measured by using a standardized scale of 10 items developed by Carson et al., 2007. The answers were obtained by expanding the 5-point Likert scale from "1 = Not at all" to "5 = to a very great extent". Some of the items of scale are, e.g. "Members of my team spent time discussing our team's purpose, goals, and expectations for the project", "Members of my team recognize each other's accomplishments and hard work", "My team supports everyone actively participating in decision making", etc. The Cronbach's Alpha of the scale is 0.78 (Carson et al., 2007).

3.7.1.2 Psychological Capital

In this research, psychological capital is considered as mediating variable, to check the relationship between independent (shared leadership) and dependent variable (organizational commitment and wellbeing). This variable was measured by using a standardized scale of 12 items developed by Luthan, 2007. The answers were obtained by expanding the 6-point Likert scale from "1 = Strongly Disagree" to "6

= Strongly Agree". Some of the items of the scale are, e.g. "I can always manage to solve difficult problems if I try hard enough", "At this time, I am meeting the work goals that I have set for myself", "I am able to handle difficult problems". The Cronbach's Alpha of the scale is 0.88 (Luthan, 2007).

3.7.1.3 Organizational Commitment

In present study, organizational commitment is considered as dependent variable which is influenced by independent variable (shared leadership). This variable was measured by using a standardized scale of 08 items developed by Meyer 1991. The answers were obtained by expanding the 5-point Likert scale from "1 = Strongly Disagree" to "5 = Strongly Agree". Some of the items of the scale are, e.g. "I would be very happy to spend the rest of my career with this organization", "I think that I could easily become as attached to another organization as I am to this one", "I do not feel a strong sense of belonging to my organization". The Cronbach's Alpha of the scale is 0.721 (Meyer, 1991).

3.7.1.4 Wellbeing

Second dependent variable of the current study is wellbeing which is influenced by the independent variable (shared leadership). This variable was measured by using a standardized scale of 05 items developed by Christian 2015. The answers were obtained by expanding the 6-point Likert scale from "0 = At no time" to "5 = All of the time". Some of the items of the scale are, e.g. "I have felt cheerful and in good spirits", "I have felt active and vigorous", "My daily life has been filled with things that interest me". The Cronbach's Alpha of the scale is 0.82 (Christian, 2015).

3.7.1.5 Task Interdependence

In this research, task interdependence is considered as moderating variable. This variable was measured by using a standardized scale of 05 items developed by Pearce 1991. The answers were obtained by expanding the 5-point Likert scale

from "1 = Strongly Disagree" to "5 = Strongly Agree". Some of the items of the scale are, e.g. "I work closely with others in doing my work", "My own performance is dependent on receiving accurate information from others", "My work requires me to consult with others fairly frequently". The Cronbach's Alpha of the scale is 0.70 (Pearce, 1991).

3.8 Statistical Tools

SPSS and Mplus tools are used for this research.

3.9 Pilot Testing

It will be a very efficient and reliable strategy to run a feasibility test with it before conducting anything on a wider scale, since it would eliminate certain complications related to wasting of data and time. So, for this study pilot testing of the first 40 responses checked during data collection, the result of the piolet testing was perfectly fine having no issue with data. The findings of pilot testing were according to the requirements and expectations. Since the pilot test was completed, it was found that the variables were not dramatically problematic and the measurements were accurate for the pilot analysis carried out.

3.10 Analysis

For the purpose of analysis software package for Social Science - 21 (SPSS – 21) and Mplus was used. Data was treated step by step i.e., data collection, data cleaning, data processing and data analysis. To measure the internal reliability of scales Cronbach's alpha was calculated. For ordinal variables percentages and frequencies were found out, while for interval variables Mean, median, mode, standard deviation, skewness, kurtosis was calculated, Kolmogorov-Smirnov test and p value of the scales were also calculated. To check the relationship between variables correlations were calculated. In structural equation modelling factor analysis

of each variable was measured. In full structural equation modelling (Step 1) task interdependence used as predictor and in full model (Step 2) task interdependence used as predictor and moderator.

Chapter 4

Results

4.1 Data Analysis

In this section, results of the study are presented. Along with descriptive results, Structural Equation Model to test the study model is presented in this chapter. The following section describes the sample characteristics of the study.

4.2 Sample Characteristics

The demographic variables used in this study are, gender, age, qualification and work experience of employees working with Pakistani NGO's. The detailed characteristics of demographic variables given below in table.

Table 4.1: Demographic variables.

Variable	Frequency	Percentage (%)
Gender		
Male	179	61.7
Female	110	37.9
Transgender	01	0.3
Age in Years		
14-19	17	5.9
20-29	114	39.3

Variable	Frequency	Percentage (%)
30-39	83	28.6
40-49	49	16.9
50-69	27	9.3
Qualification		
Matric	4	1.4
Inter	16	5.5
Bachelors/Masters	209	72.1
MS/PhD	61	21.0
Work Experience in Years		
0-5	123	42.4
6-10	61	21
11-15	48	16.6
16-20	26	9
21-25	14	4.8
26-45	18	6.1

Table 4.1 shows the ratio of male, female and transgender in the data. Among 290 participants, there were more males (N = 179, 61.7%). There were 110 (37.9%) females and 1 (0.3%) transgender.

Age has 33.34 mean, 31 median, 27 mode and 10.506 SD. Skewness and Kurtosis value of age are 0.69 and .044 respectively. Figure 4.1 present distribution of age with superimposed normal curve. Age was categorized into categories in accordance with the decade of life in which participants were. Most of the participants (N = 114, 39.3%) were in third decade of life (20-29 years of age). There were only 3 (1%) participants in 60-69 years age group. This category was merged with 50-59 years of age group resulting in total 27 (9.3%) respondents in 50-69 years age group.

With respect to qualification status bachelors was the most frequently reported qualification level (N = 209, 72.1%). The least reported qualification level was matric (10 years education) (N = 4, 1.4%). Almost half of the sample has 0-5 years of experience (N = 123, 42.4%). Work experience was categorized into

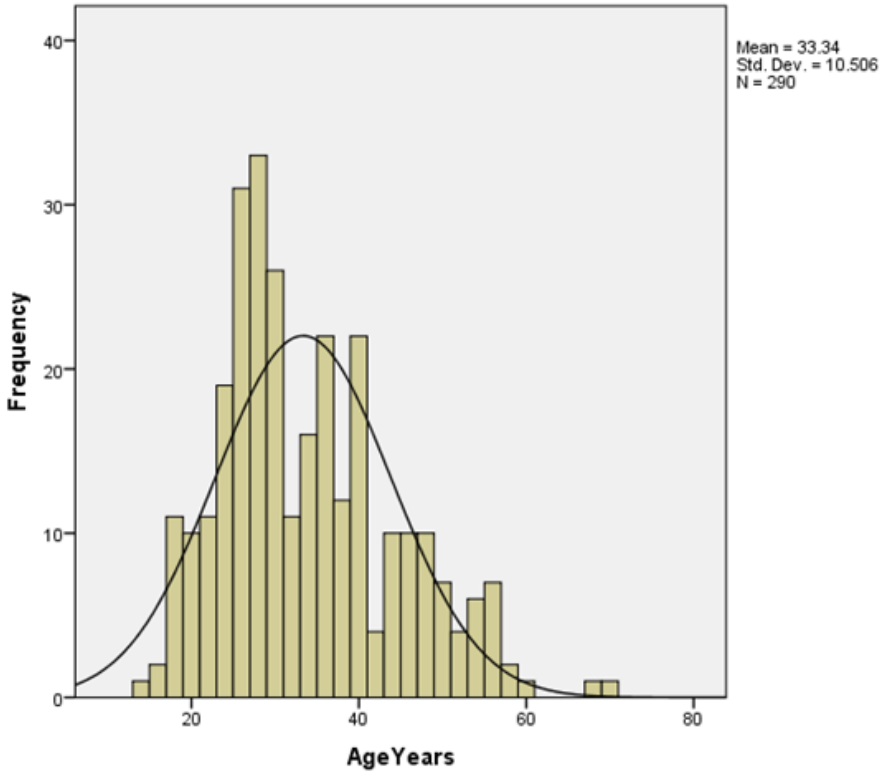

FIGURE 4.1: Distribution of participant's age (N = 290).

groups with 5 years class interval. As categories with work experience of 31 years and above had less than 5 frequency distribution per group, they were merged with 26-30 years' work experience. This resulted in 18 participants reporting 26-45 years' experience; within which 12 participants reported 26-30 years' work experience, 4 reported 31- 35 years, and 1 participant for each of the 36-40 years and 41-45 years categories.

Among 290 participants, (7, 2.4%) members did not provide information about their current position. 31 (%) members were working at entry-level positions, 198 (%) members are working mid-level positions and 54 (%) members are working experienced professional level positions.

4.3 Reliability of Scales

Cronbach's alpha (α) test applied on this study sample (290) to find the reliability of the scales. Reliability of the scales are presented in the following table.

TABLE 4.2: Reliability of scales.

Scale	N	M	SD	α	Range		Skewness	Kurtosis
					Potential	Actual		
Shared Leadership	10	37.45	7.43	0.91	10-50	10-50	-0.807	0.841
Organizational Commitment	08	28.26	5.55	0.81	08-40	08-40	-0.497	0.853
Wellbeing	05	16.26	4.92	0.84	00-25	00-25	-0.763	0.581
Psychological Capital	12	56.42	8.49	0.88	12-72	17-72	-1.275	3.333
Task Interdependence	05	19.75	3.03	0.77	5-25	5-25	-0.945	3.025

N = Total number of items, M = Mean score, SD = Standard Deviation,
α = Cronbach's alpha reliability

The value of cronbach's alpha of all variables is more than 0.7, which shows good reliability of all scales used in this study. Shared leadership has maximum value 0.91 and task interdependence has minimum value of 0.77.

4.4 Descriptive Statistics for Shared Leadership, Organizational Commitment, Wellbeing, Psychological Capital and Task Interdependence

Descriptive statistics of the scales are presented in the following table.

TABLE 4.3: Descriptive statistics.

Scale	M	Mdn	Mode	SD	Skewness	Kurtosis	K-S	p
Shared Leadership	37.45	39	40	7.43	-0.807	0.841	0.11	0.0
Organizational Commitment	28.26	29	30	5.55	-0.497	0.853	0.09	0.0
Wellbeing	16.26	17	20	4.92	-0.763	0.581	0.10	0.0
Psychological Capital	56.42	58	57	8.49	-1.275	3.333	0.10	0.0
Task Interdependence	19.75	20	20	3.03	-0.945	3.025	0.14	0.0

M = Mean , Mdn. = Median , SD = Standard Deviation and K-S = Kolmogorov-Smirnov test

The values are significant of the Kolmogorov- Smirnov test for all variables of this study, and the value of p for all variables is 0.00 which is significant.

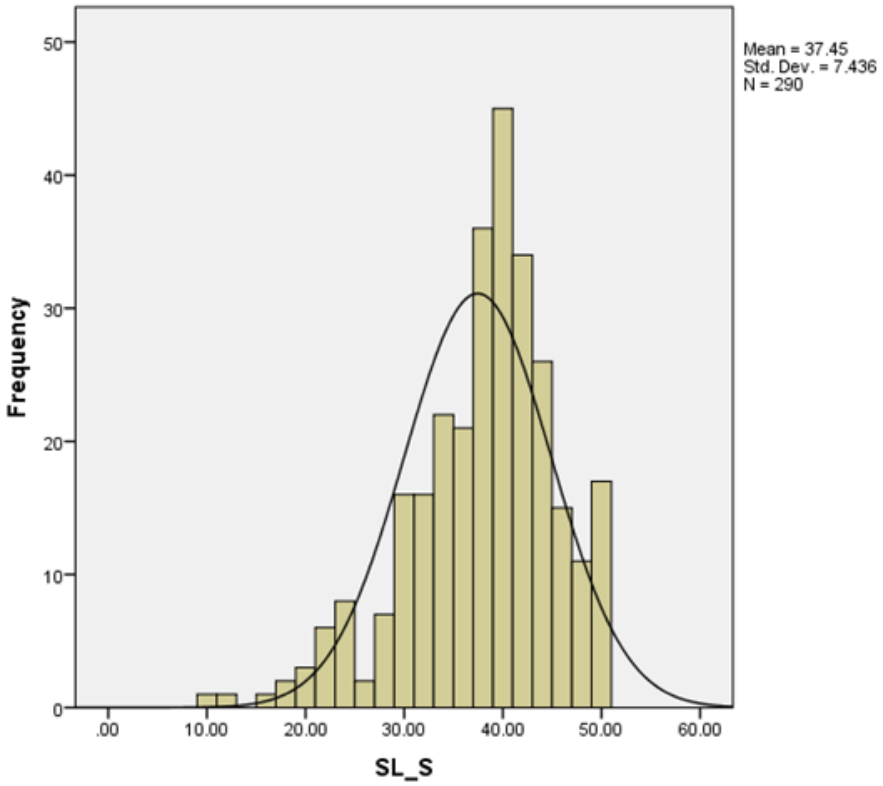

FIGURE 4.2: Distribution of shared leadership scale (N = 290), Mean = 37.45 and Std. Dev. = 7.436.

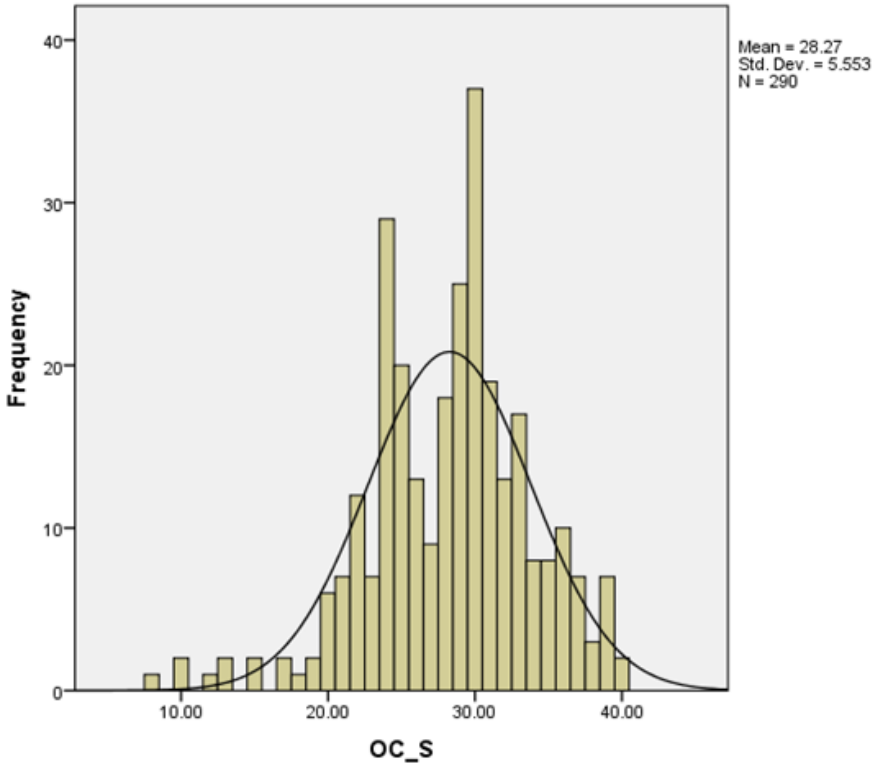

FIGURE 4.3: Distribution of organizational commitment scale (N = 290), Mean = 28.27 and Std. Dev. = 5.55.

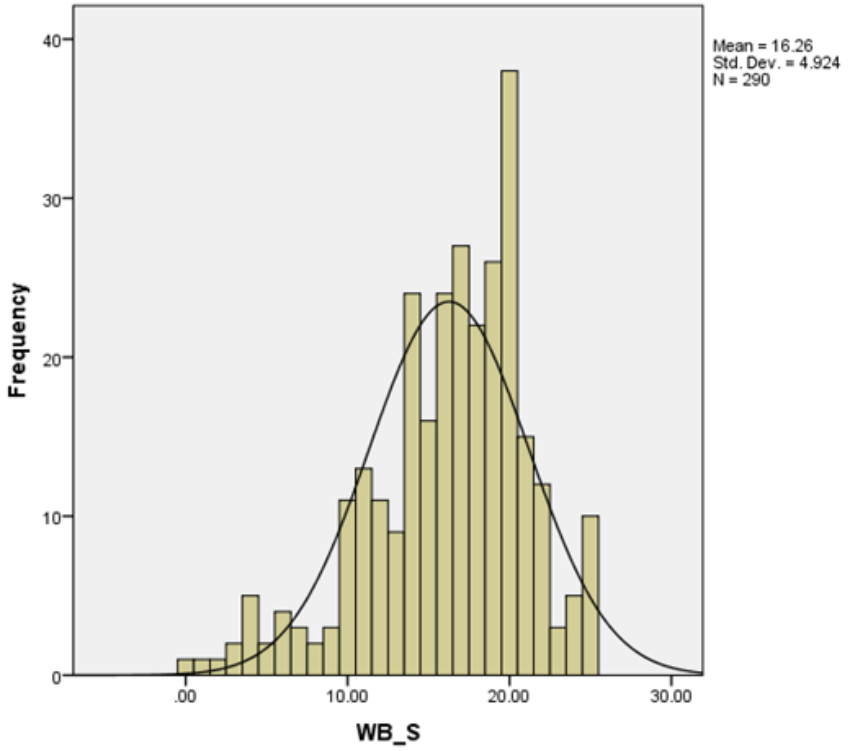

FIGURE 4.4: Distribution of Wellbeing scale (N = 290), Mean = 16.26 and Std. Dev. = 4.924.

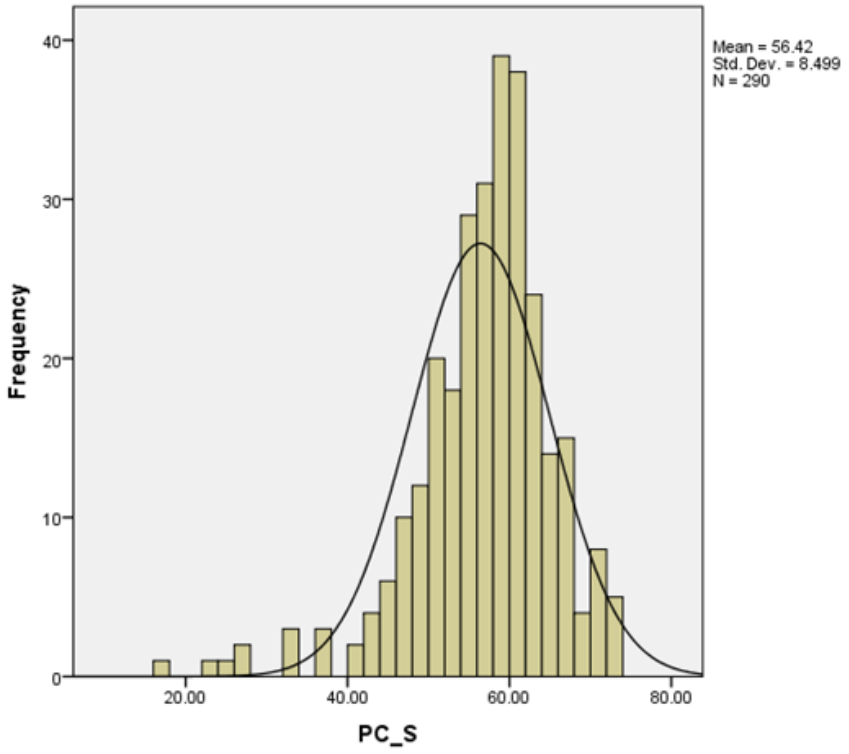

FIGURE 4.5: Distribution of psychological capital scale (N = 290), Mean = 56.42 and Std. Dev. = 8.499.

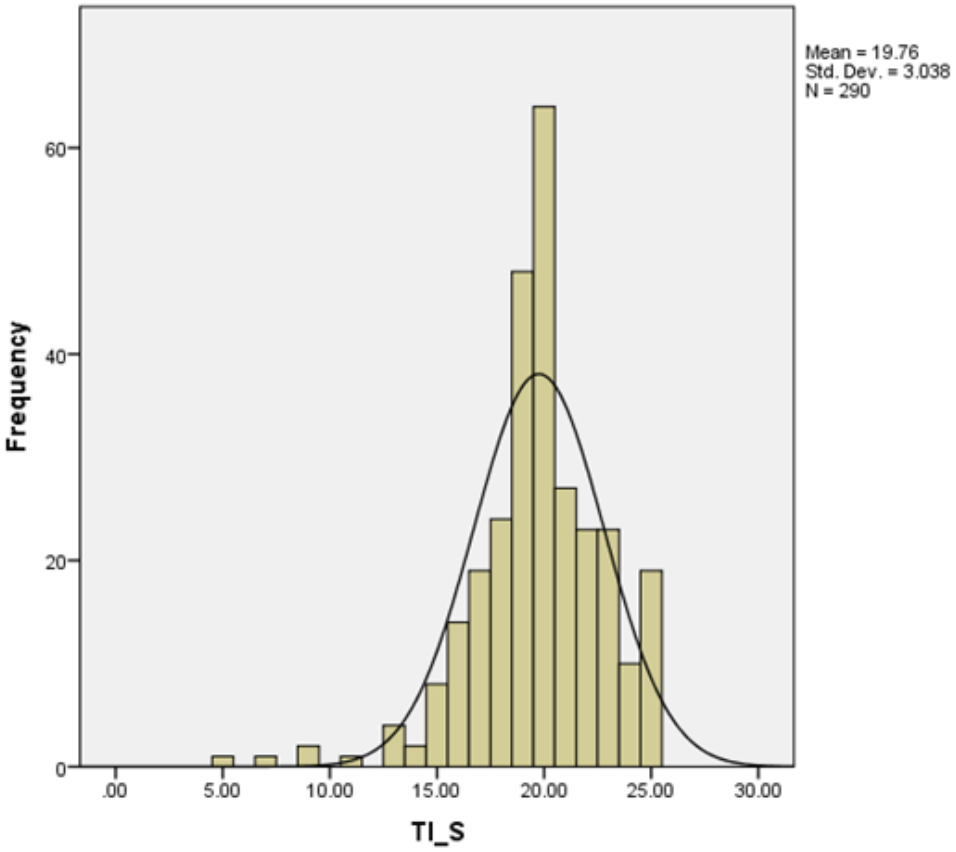

FIGURE 4.6: Distribution of task interdependence scale (N = 290), Mean = 19.76 and Std. Dev. = 3.038.

4.5 Correlations

The following table presents the correlation between study variables.

TABLE 4.4: Correlations.

Scale	1	2	3	4	5
Shared Leadership	-	0.45**	0.39**	0.39**	0.37**
Organizational Commitment	-	-	0.35**	0.28**	0.29**
Wellbeing	-	-	-	0.54**	0.42**
Psychological Capital	-	-	-	-	0.46**
Task Interdependence	-	-	-	-	-

***. Significant correlation at the 0.01 level (2-tailed)*

Shared leadership has a significant and positive relationship with organizational commitment (r = 0.45, p = 0.00), wellbeing (r = 0.39, p = 0.00) and psychological capital (r = 0.39, p = 0.00).

Task Interdependence is positively and significantly related with shared leadership (r = 0.37, p = 0.00), organizational commitment (r = 0.29, p = 0.00), wellbeing (r = 0.42, p = 0.00) and psychological capital (r = 0.46, p = 0.00). Psychological Capital is significantly positively associated with organizational commitment (r = 0.28, p = 0.00) & wellbeing (r = 0.54, p = 0.00).

4.6 Structural Equation Modeling

4.6.1 Measurement Model

4.6.1.1 Factor Analysis of Shared Leadership

The study of shared leadership was measured by using a standardized scale of 10 items developed by (Carson et al.,2007). The answers were obtained by expanding the 5-point Likert scale "1 = not at all" to "5 = to a very great extent".

An exploratory factor analysis of a priori first order was subjected to the hypothesized one factor model. 10 indicators were used to predict latent constructs of shared leadership.

4.6.1.2 Hypothesized Model

The model χ^2 was 130.62, with df = 35. The value of CFI is 0.90 and RMSEA was 0.09 (C.I = 0.08 – 0.11). RMSEA value showed poor fit to data.

4.6.1.3 Final Model

The χ^2 of the final model was 83.90, df = 32, CFI = 0.94, p = 0.00 and RMSEA = 0.07 (C.I = 0.05 - 0.09) which shows a good fit to the dataset. In the final model a correlation of SL2 was drawn with SL1 (0.35) and SL3 (0.22) and second

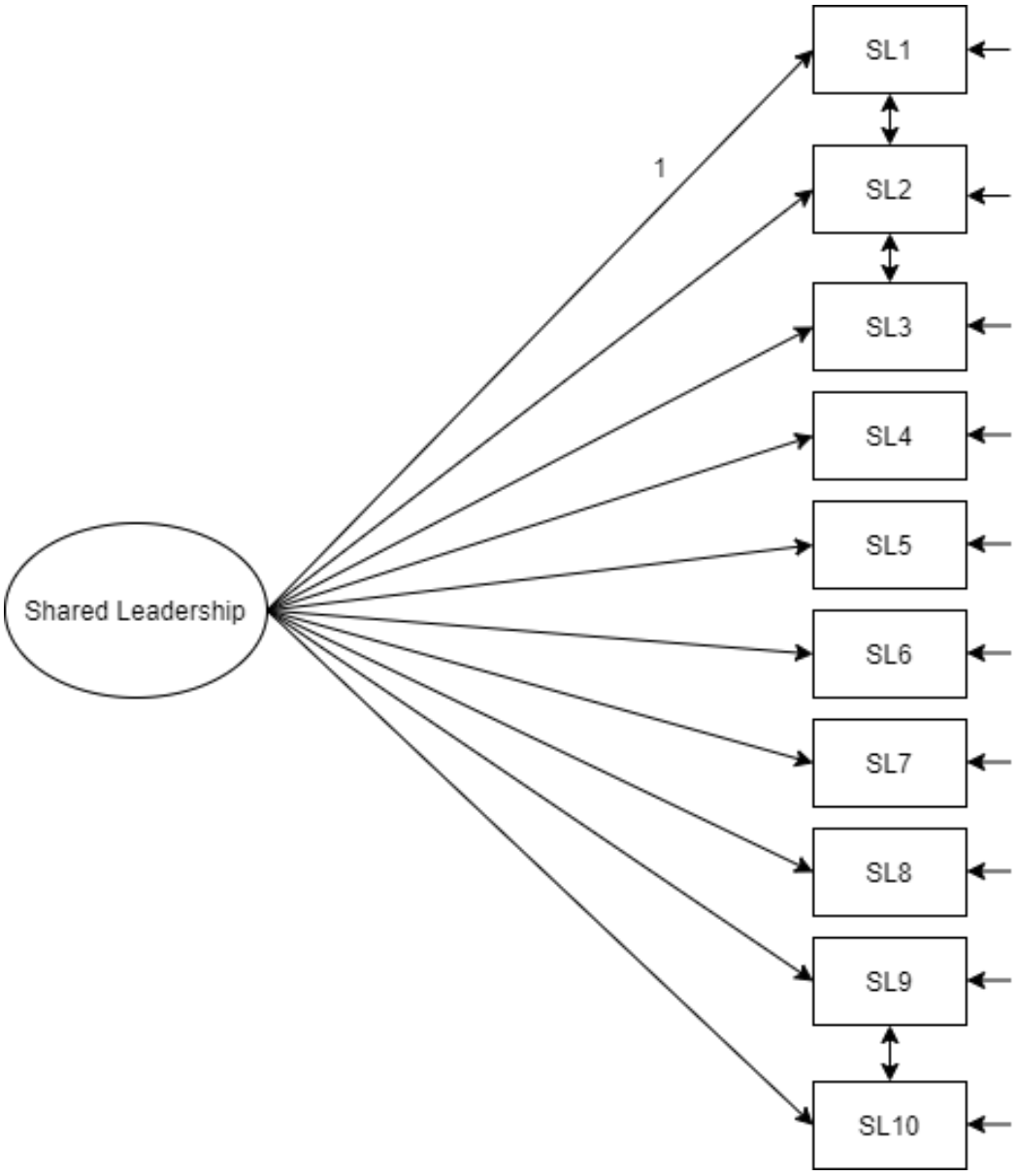

FIGURE 4.7: Hypothesized factor structure of shared leadership.

correlation SL9 was drawn with SL10 (0.26). The smallest standardized estimate was (0.64, p = 0.00) of SL3 and SL8. The remaining standardized regression estimates ranged from 0.69 of SL1 to 0.79 of SL5. SL3 had the lowest value of R^2 statistic (0.41, p = 0.00). Remaining indicators similarly had significant R^2 statistic, ranging from 0.42 (SL8) to 0.63 (SL5). The general model fit measures show that the model matches well with the data and that the loading of the factor is statistically important. In the following diagram and chart, the variation measured by each indicator and graphic presentation of the final model having uniform loadings is presented.

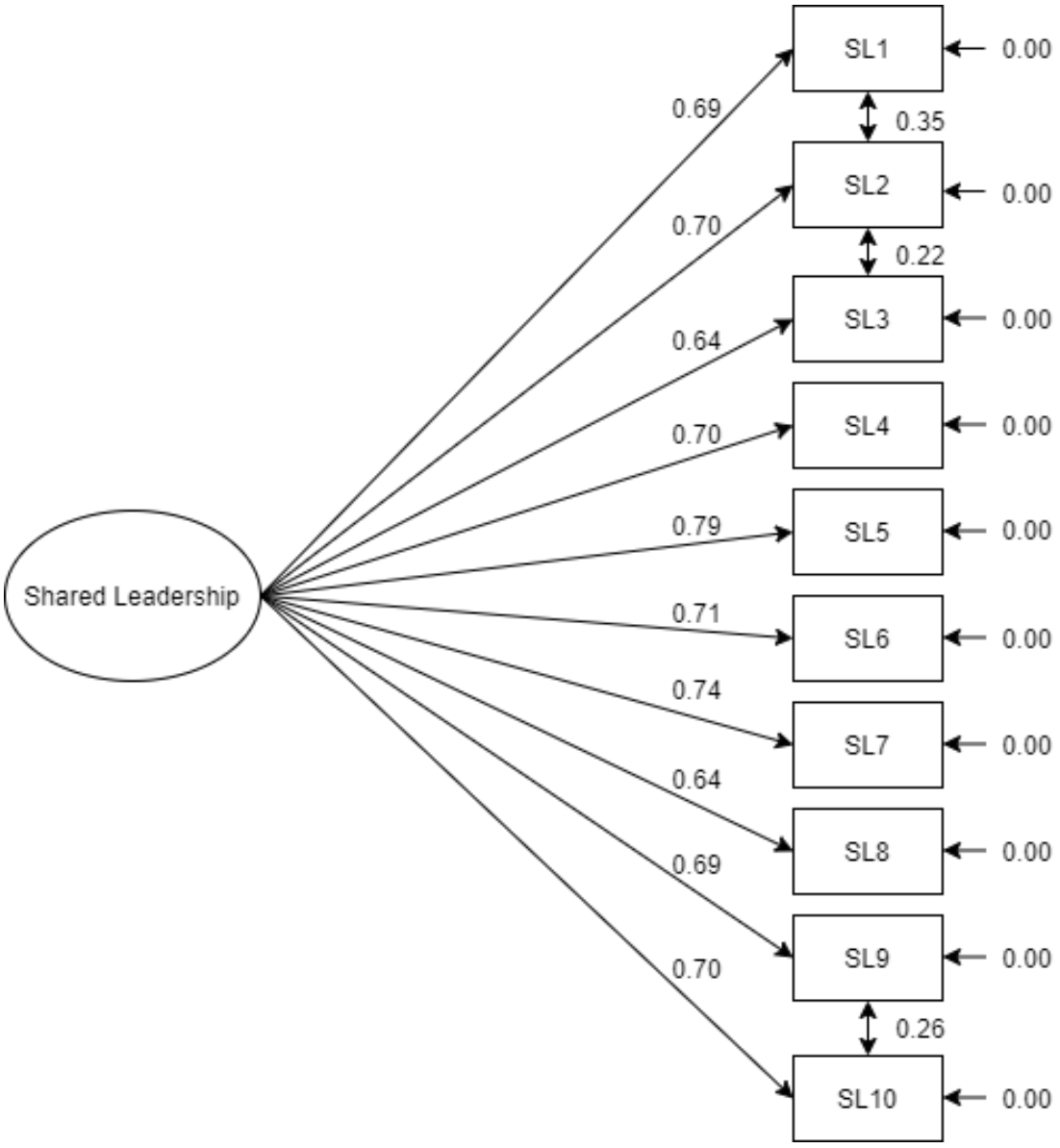

FIGURE 4.8: Obtained factor structure of shared leadership.

4.6.2 Factor Analysis of Organizational Commitment

The study of organizational commitment was measured by using a standardized scale of 08 items developed by Meyer & Allen (1991). The answers were obtained by expanding the 5-point Likert scale "1 = strongly disagree" to "5 = strongly Agree".

An exploratory factor analysis of a priori first order was subjected to the hypothesized one factor model. 8 indicators were used to predict latent construct of organizational commitment.

TABLE 4.5: Variance accounted for (R^2) by shared leadership items (N = 290).

Indicators	**R^2**	**SE**
SL 1	0.47**	0.06
SL 2	0.49**	0.05
SL 3	0.41**	0.06
SL 4	0.49**	0.06
SL 5	0.63**	0.04
SL 6	0.51**	0.05
SL 7	0.54**	0.05
SL 8	0.42**	0.07
SL 9	0.47**	0.05
SL 10	0.49**	0.06

*Note: R^2 = variance; SE = standard error; ** = $p < 0.001$*

4.6.2.1 Hypothesized Model

The model χ^2 was 277.90, with df = 20. The value of CFI is 0.58 and RMSEA was 0.21 (C.I = 0.18 – 0.23). RMSEA value showed poor fit to data.

4.6.2.2 Final Model

The χ^2 of the final model was 41.50, df = 18, CFI = 0.96, p = 0.00 and RMSEA = 0.06 (C.I = 0.04 - 0.09) which shows a good fit to the dataset. In the final model a correlation of OC8 was drawn with OC5 (0.57) and OC6 (0.59) and second correlation OC5 was drawn with OC6 (0.55). The smallest standardized estimate was (0.37, p = 0.00) of OC5. The remaining standardized regression estimates ranged from 0.42 of OC6 to 0.80 of OC3. OC5 had the lowest value of R^2 (0.13, p = 0.01). The remaining indicators similarly had significant R^2 values, ranging from 0.18 (OC6) to 0.64 (OC3). The general model fit measures show that the model matches well with the data and that the loading of the factor is statistically important. In the following diagram and chart, the variation measured by each

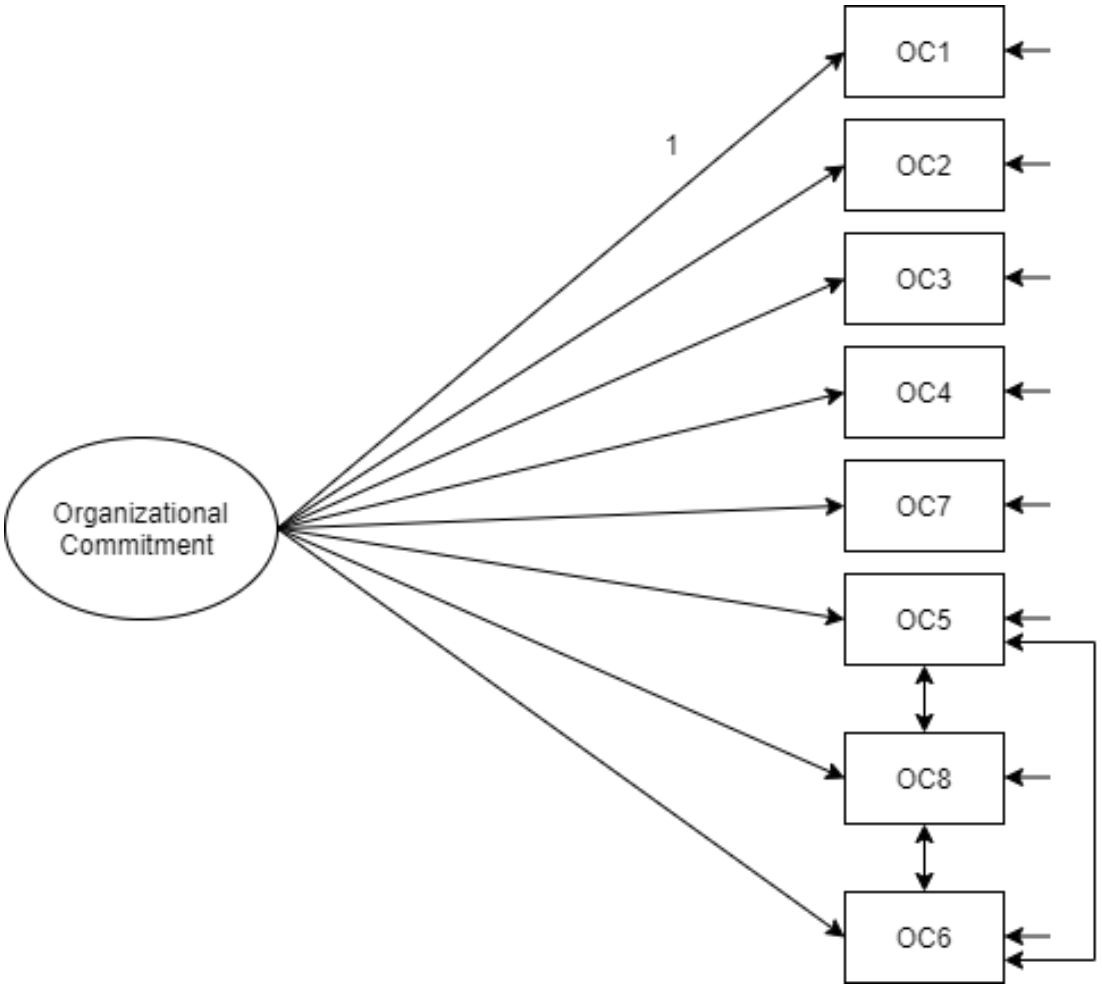

FIGURE 4.9: Hypothesized factor structure of organizational commitment.

indicator and graphic presentation of the final model having uniform loadings is presented.

4.6.3 Factor Analysis of Wellbeing

The study of wellbeing was measured by using a standardized scale of 5 items developed by Christian Winther Topp (2015). The answers were obtained by expanding the 6-point Likert scale from "0 = at no time" to "5 = all of the time". MRL estimate is used for this model.

An exploratory factor analysis of a priori first order was subjected to the hypothesized one factor model. Five indicators were used to predict latent construct of wellbeing.

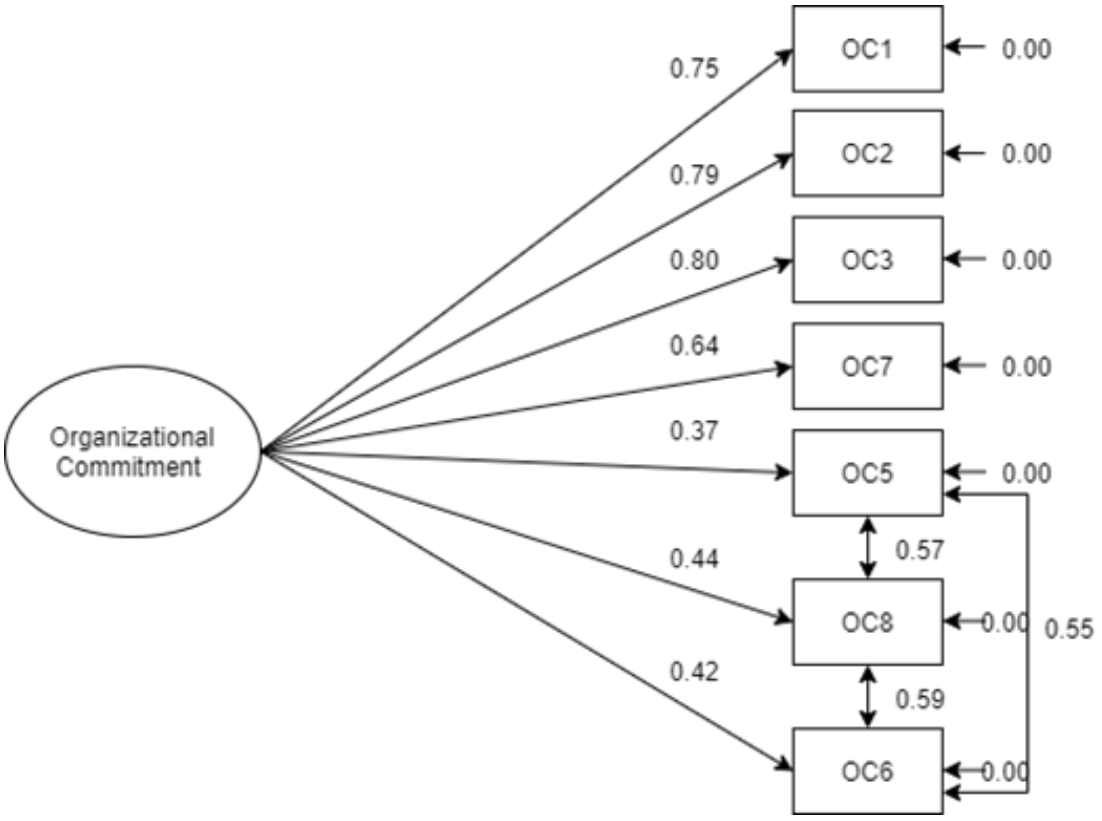

FIGURE 4.10: Hypothesized factor structure of organizational commitment.

TABLE 4.6: Variance accounted for (R^2) by organizational commitment items (N = 290).

Indicators	**R^2**	**SE**
OC 1	0.56**	0.05
OC 2	0.63**	0.05
OC 3	0.64**	0.06
OC 5	0.13**	0.05
OC 6	0.18**	0.06
OC 7	0.41**	0.07
OC 8	0.20**	0.06

*Note: R^2 = variance; SE = standard error; ** = $p < 0.001$*

4.6.3.1 Hypothesized Model

The model χ^2 was 9.23, with df = 5. The value of CFI is 0.98 and RMSEA was 0.05 (C.I = 0.00 – 0.10). RMSEA value indicated a good fit to data. The smallest

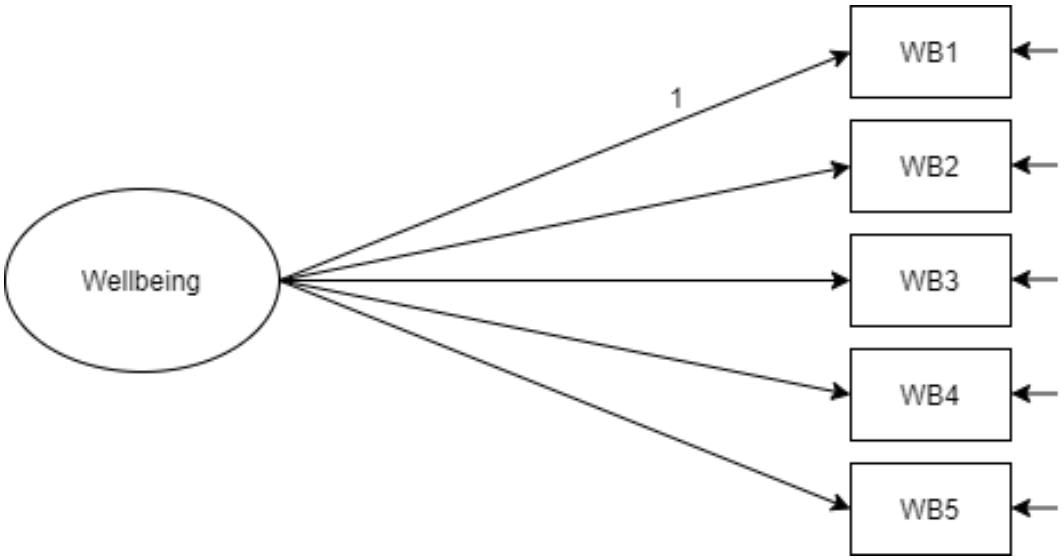

FIGURE 4.11: Hypothesized factor structure of wellbeing.

standardized estimate was (0.70, p = 0.00) of WB1 and WB4. The remaining standardized regression estimates ranged from 0.71 of WB3 to 0.75 of WB2. WB1 and WB4 had the lowest value of R^2 (0.49, p = 0.00).

The remaining indicators similarly had significant values of R^2, ranging from 0.51 (WB3) to 0.56 (WB2). The general model fit measures show that the model matches well with the data and that the loading of the factor is statistically important. In the following diagram and chart, the variation measured by each indicator and graphic presentation of the final model having uniform loadings is presented.

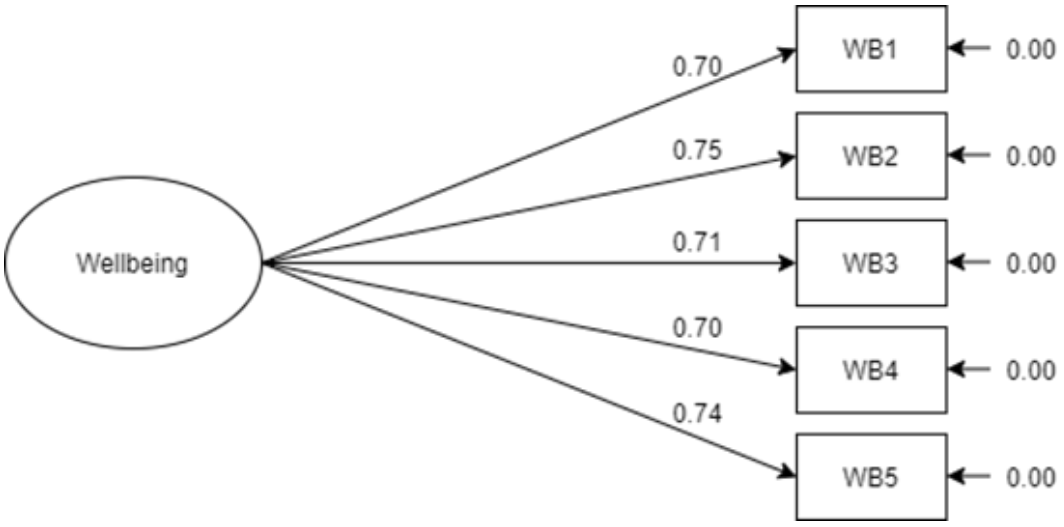

FIGURE 4.12: Obtained factor structure of wellbeing.

TABLE 4.7: Variance accounted for (R^2) by wellbeing items (N = 290).

Indicators	**R^2**	**SE**
WB 1	0.49**	0.069
WB 2	0.56**	0.062
WB 3	0.51**	0.065
WB 4	0.49**	0.062
WB 5	0.55**	0.053

*Note: R^2 = variance; SE = standard error; ** = $p < 0.001$*

4.6.4 Factor Analysis of Psychological Capital

The study of psychological capital was measured by using a standardized scale of 12 items developed by Luthan, Avolio, Avey and Norman (2007). The answers were obtained by expanding the 6-point Likert scale "1 = strongly disagree" to "6 = strongly Agree". MRL estimate is used for this model.

An exploratory factor analysis of a priori first order was subjected to the hypothesized one factor model. 12 indicators were used to predict latent construct of psychological capital.

4.6.4.1 Hypothesized Model

The model χ^2 was 99.97, with df = 54. The value of CFI is 0.93 and RMSEA was 0.05 (C.I = 0.03 – 0.07). RMSEA value indicated a good fit to data. The smallest standardized estimate was (0.50, p = 0.00) of PC9. The remaining standardized regression estimates ranged from 0.55 of PC2 to 0.74 of PC12. PC9 had the lowest value of R^2 (0.25, p = 0.00). The remaining indicators similarly had significant values of R^2, ranging from 0.30 (PC2) to 0.5 (PC12). The general model fit measures show that the model matches well with the data and that the loading of the factor is statistically important. In the following diagram and chart, the

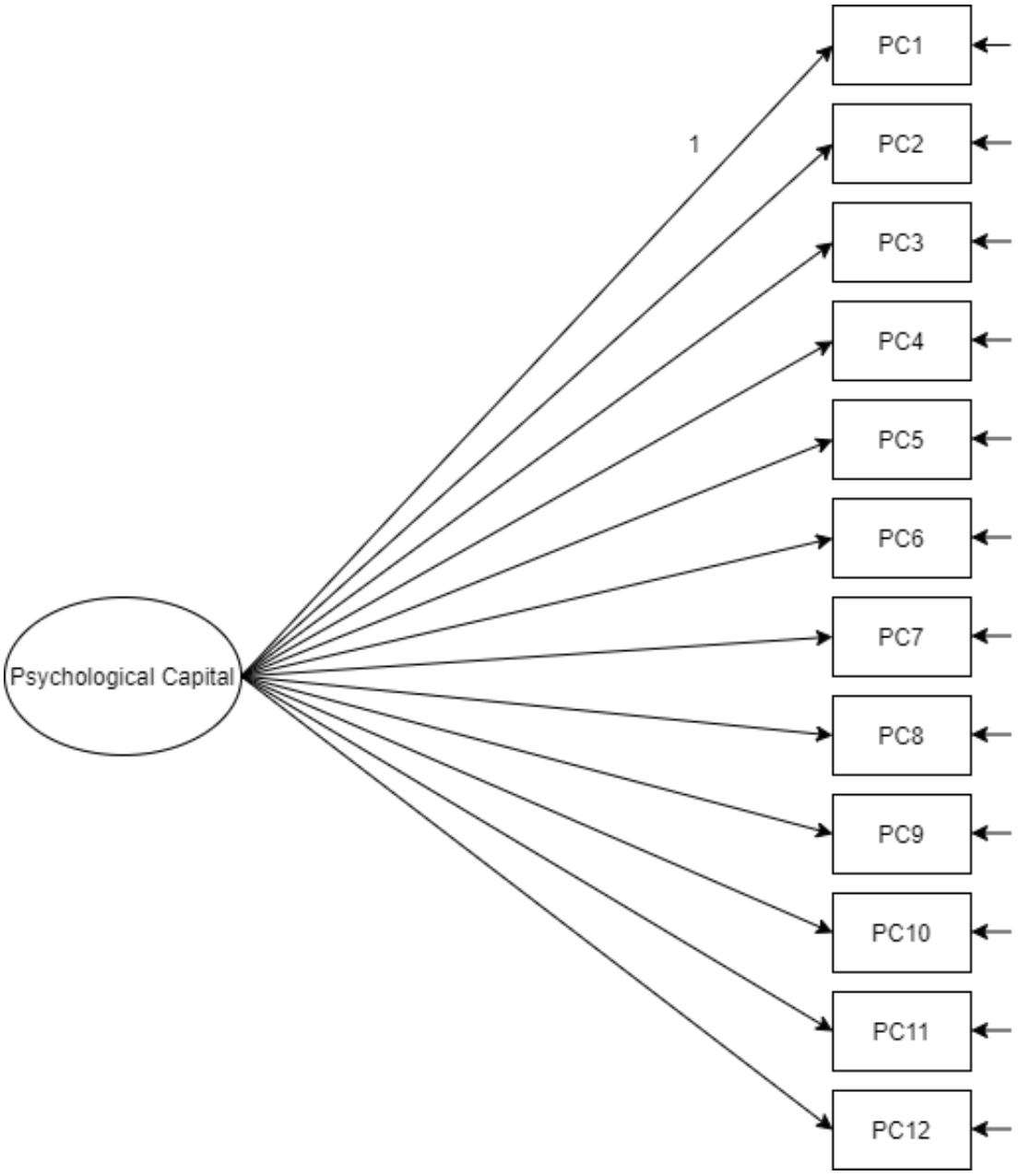

FIGURE 4.13: Hypothesized factor structure of psychological capital.

variation measured by each indicator and graphic presentation of the final model having uniform loadings is presented.

4.6.5 Factor Analysis of Task Interdependence

In this study of task interdependence is measured by using a standardized scale of 5 items developed by Pearce and Gregersen's (1991). The answers were obtained

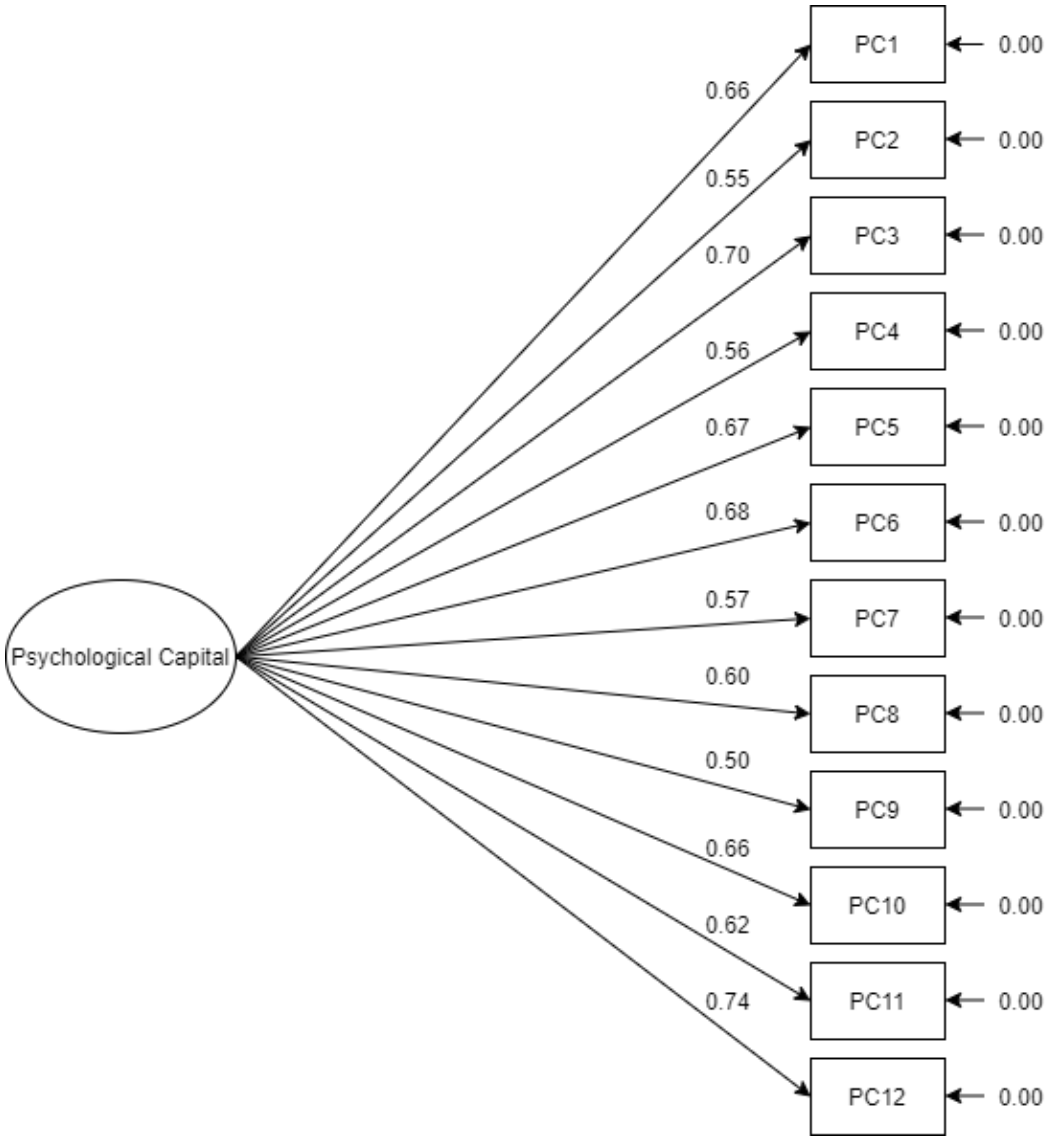

FIGURE 4.14: Obtained factor structure of psychological capital.

by expanding the 5-point Likert scale "1 = strongly disagree" to "5 = strongly agree".

An exploratory factor analysis of a priori first order was subjected to the hypothesized one factor model. Five indicators were used to predict latent construct of task interdependence.

4.6.5.1 Hypothesized Model

The model χ^2 was 36.81, with df = 5. The value of CFI is 0.86 and RMSEA is 0.14 (C.I = 0.10 – 0.19). RMSEA value indicated a poor fit to data.

TABLE 4.8: Variance accounted for (R^2) by psychological capital items (N = 290).

Indicators	**R^2**	**SE**
PC 1	0.44**	0.09
PC 2	0.30**	0.06
PC 3	0.49**	0.07
PC 4	0.32**	0.08
PC 5	0.45**	0.09
PC 6	0.46**	0.07
PC 7	0.33**	0.07
PC 8	0.36**	0.06
PC 9	0.25**	0.07
PC 10	0.44**	0.07
PC 11	0.38**	0.08
PC 12	0.55**	0.07

*Note: R^2 = variance; SE = standard error; ** = $p < 0.001$*

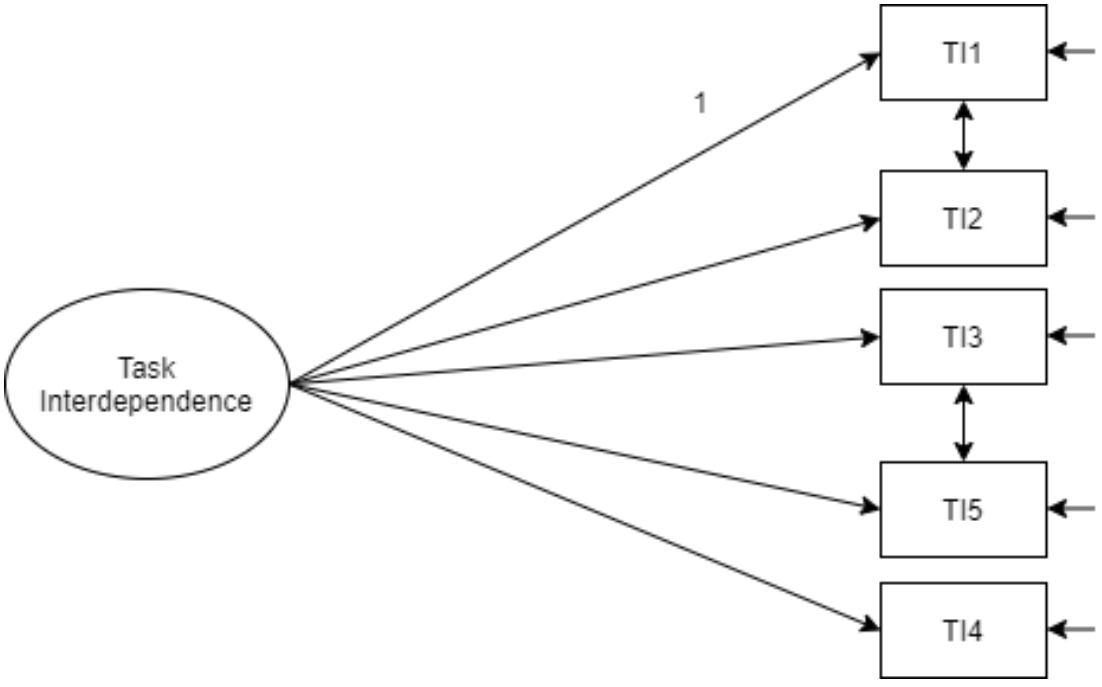

FIGURE 4.15: Hypothesized factor structure of task interdependence.

4.6.5.2 Final Model

The χ^2 of the final model was 5.34, df = 3, CFI = 0.99, p = 0.14 and RMSEA = 0.05 (C.I = 0.00 - 0.12) which shows a good fit to dataset. In the final model a correlation of TI1 was drawn with TI2 (0.32) and second correlation TI3 was drawn with TI5 (0.19). The smallest standardized estimate was (0.45, p = 0.00) of TI3. The remaining standardized regression estimates ranged from 0.51 of TI1 to 0.85 of TI4. TI3 had the lowest value of R^2 (0.20, p = 0.00). The remaining indicators similarly had significant R^2 statistic, range from 0.26 (TI1) to 0.73 (TI4). The general model fit measures show that the model matches well with the data and that the loading of the factor is statistically important. In the following diagram and chart, the variation measured by each indicator and graphic presentation of the final model having uniform loadings is presented.

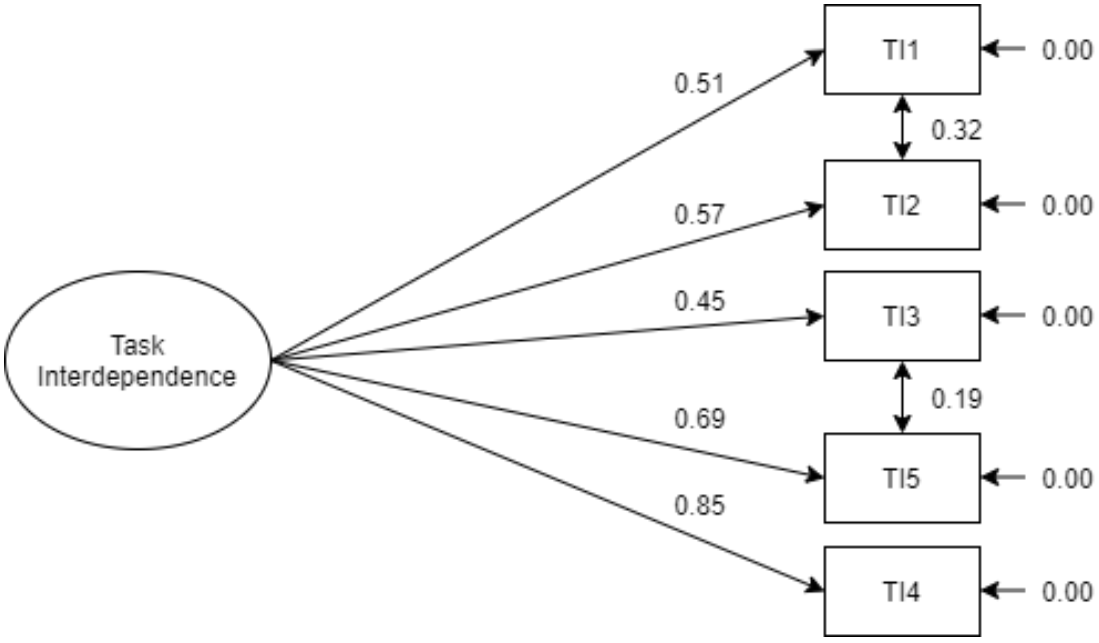

FIGURE 4.16: Obtained factor structure of task interdependence.

4.7 SEM: Structural Model

For testing the hypothesized relationships figure 4.17, structural equation modelling was performed in two steps, as per recommendations of Sardeshmukh & Vandenberg (2017).

TABLE 4.9: Variance accounted for (R^2) by task interdependence items (N = 290).

Indicators	**R^2**	**SE**
TI 1	0.26**	0.09
TI 2	0.33**	0.09
TI 3	0.20**	0.06
TI 4	0.73**	0.10
TI 5	0.47**	0.06

*Note: R^2 = variance; SE = standard error; ** = $p < 0.001$*

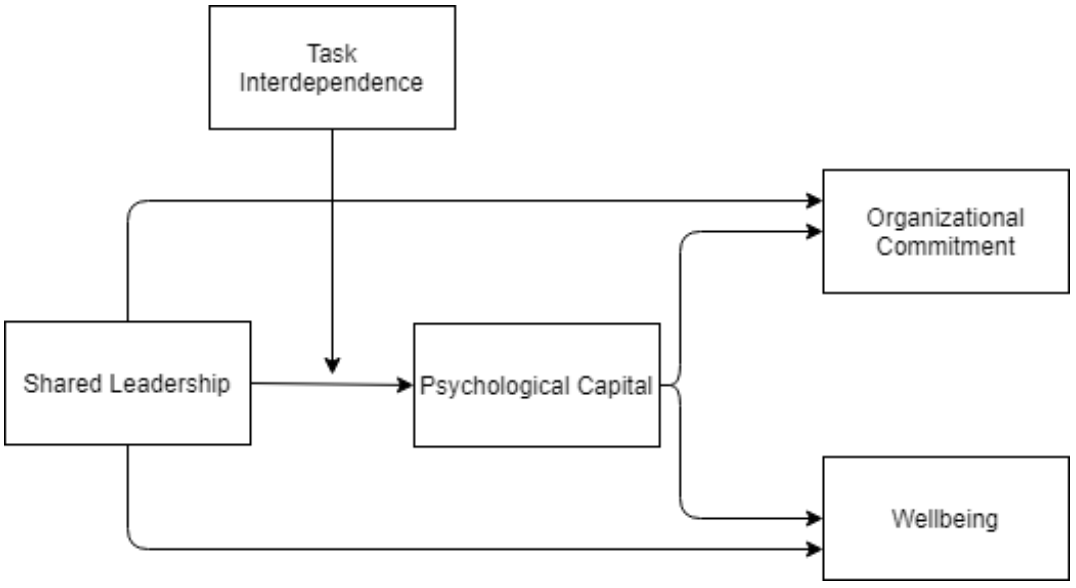

FIGURE 4.17: Hypothesized model.

In step 1, full structural equation modelling was performed but with mediating pathways only. Task interdependence was entered only as a predictor as shown in the following figure 4.18 Sardeshmukh & Vandenberg (2017). As per literature review, this model was tested for partial mediation of Psychological capital.

In step 2, moderating role of task interdependencies was introduced in the model tested in step 1 (Figure 4.19).

Since a comparison of model 1 and 2 is required to address the aims of this research, only non-standardized estimates are presented here as Mplus provides only non-standardized estimates and AIC values for moderation-mediation (model 2). The results of the two Models are presented in the following two subsections.

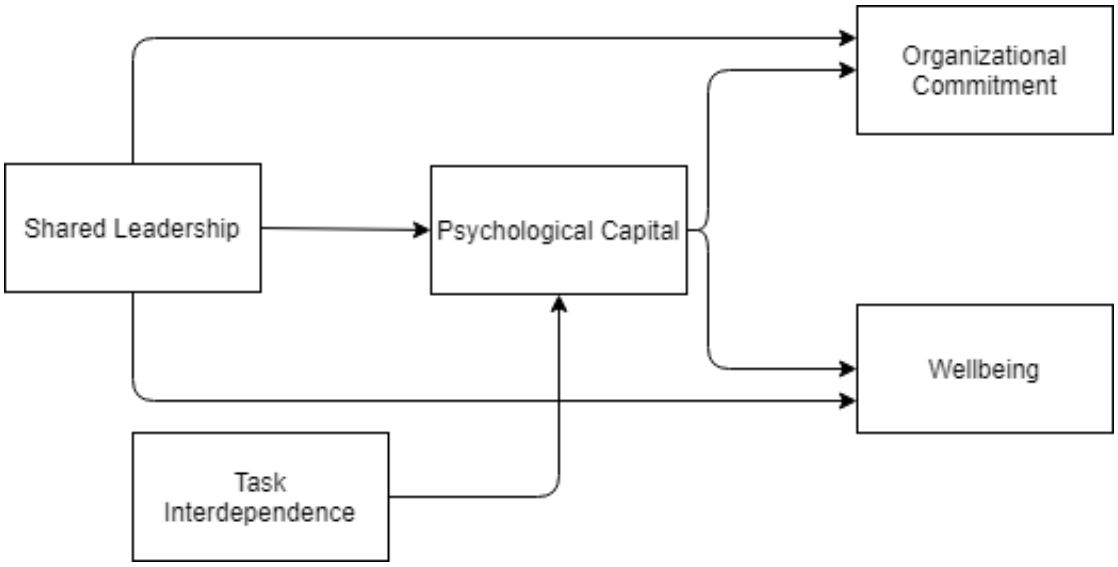

FIGURE 4.18: Task Interdependence used as a predictor.

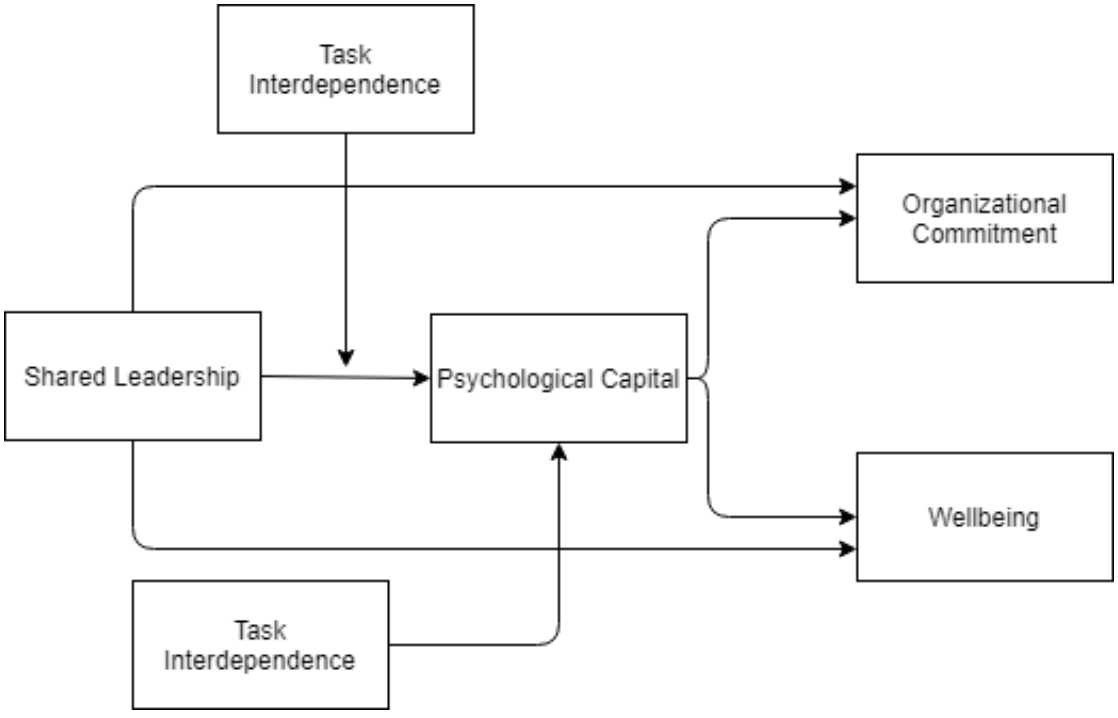

FIGURE 4.19: Task Interdependence used as a moderator and predictor.

4.7.1 STEP 1: Structural Model 1 with Psychological Capital as Mediator and Task Interdependence as Predictor

The χ^2 value of the model was 1081.116 with RMSEA 0.04 (C.I = 0.03 - 0.05) and CFI 0.90 which indicated good fit to data. Number of free parameters was 133.

The AIC value of this model was AIC 28195.22.

In this model shared leadership had direct influence on organizational commitment (0.53, p = 0.00) and wellbeing (0.23, p = 0.01). Results also indicated that psychological capital mediates this relationship of shared leadership with organizational commitment and wellbeing. The mediating pathway indicated that increase in shared leadership led to increased psychological capital (0.14, p = 0.08), though it is statistically insignificant, and then this increased psychological capital statistically significantly predicted increase in organizational commitment (0.50, p = 0.00) and enhanced wellbeing (0.82, p = 0.00). The model also indicated that task interdependence predicted psychological capital significantly positively (0.83, p = 0.00). Figure 4.20 shows a diagrammatic presentation of the model 1.

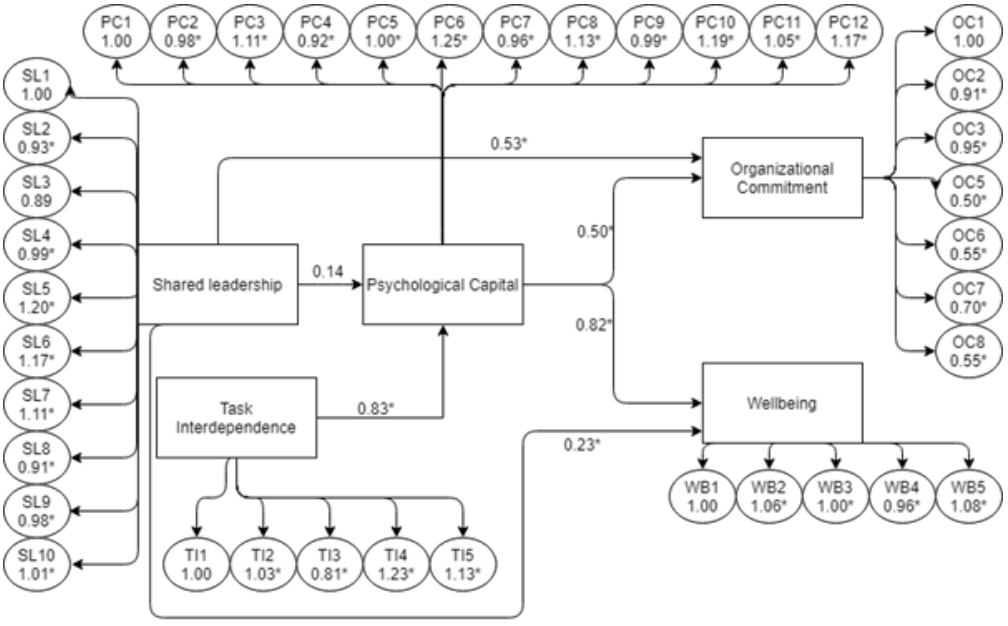

FIGURE 4.20: Structural model 1 with Psychological capital as mediator and Task interdependence as predictor (Note: * = p < 0.05).

4.7.2 STEP 2: Structural Model 2 with Psychological Capital as Mediator and Task Interdependence as Predictor and Moderator

The AIC value of the model was 28181.69 and number of free parameters in this model was 134. According to Burnham & Anderson (2002) the difference of AIC

can be calculated as per the following formula and the AIC (AICi – AICmin), (28195.22 - 28181.69 = 13.53). The difference of M1 and M2 was 13.53, which shows good fitting model. In this model shared leadership had direct influence on organizational commitment (0.54, p = 0.00) and wellbeing (0.23, p = 0.01). Results also indicated that psychological capital mediates this relationship of shared leadership with organizational commitment and wellbeing. The mediating pathway indicated that increase in shared leadership led to increased psychological capital (0.12, p = 0.09), though it is statistically insignificant, and then this increased psychological capital statistically significantly predicted increase in organizational commitment (0.50, p = 0.00), and enhanced wellbeing (0.82, p = 0.00). The model also indicated that task interdependence predicted psychological capital significantly positively (0.76, p = 0.00). This model also showed negative significant impact of the moderating role of task interdependence on the relationship of shared leadership with psychological capital (-0.34, p = 0.01).

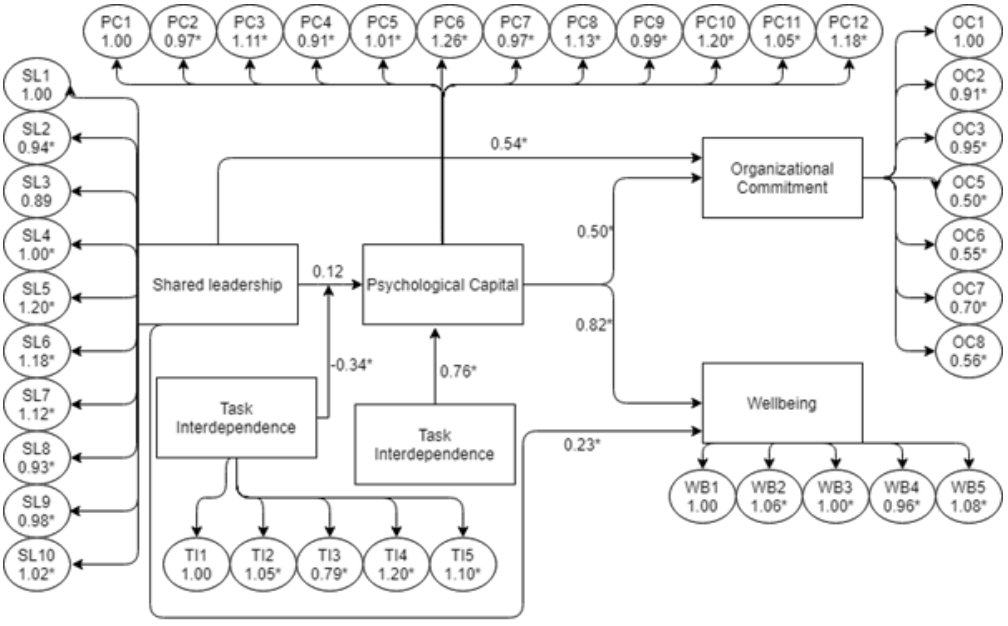

FIGURE 4.21: Structural Model 2 with Psychological capital as mediator and Task interdependence as predictor and moderator (Note: * = p < 0.05).

Chapter 5

Discussion and Conclusion

5.1 Discussion

This section presents a detailed discussion of the results including demographic characteristics, factor analyses and the structural equation model. The aim of the study was to find the impact of shared leadership on organizational commitment and wellbeing, with the mediating role of psychological capital and moderating role of task interdependence. Data was collected from the non-governmental organizations of Pakistan and the results will aid decision makers and project managers for enhancing organizational success and successfully achieving organizational outcomes.

5.2 Demographics

Out of the total 290 respondents, 179 (61.7%) were male and 110 (37.9%) were female. One member was transgender (0.3%). The ratio of male members was higher than female, this could be because the ratio of female members working with social activities is less than male. According to 2017-2018 survey by Pakistan bureau of statistics, Government of Pakistan (www.pbs.gov.pk) there are 1.56% Pakistani's working with social activities in which 30.12% are female and 69.23% members are male.

5.3 Structural Equation Modelling

In this section, firstly, measurement model of SEM will be discussed in the form of discussion of factor analysis of variables. This will be followed by discussion of the structural pathway of SEM.

5.3.1 Measurement Model

Five measurement models were built by using confirmatory factor analysis approach for shared leadership, organizational commitment, wellbeing, psychological capital and task interdependence. Each of these models are discussed in this section.

5.3.1.1 Factor Analysis of Shared Leadership

The hypothesized model of shared leadership was measured by using a standardized scale of 10 items developed by (Carson et al.,2007). The answers were obtained by expanding the 5-point Likert scale from "1 = Not at all" to "5 = to a very great extent". The final model of shared leadership showed that the model matches well with the data and that the loading of the factor is statistically significant. In the shared leadership final model, correlations were found between items; SL1 – SL2 (r = 0.35, p = 0.00) and SL2 – SL3 (r = 0.22, p = 0.00). The reason of for this correlation could be that these items were related to team's coordination and the final goal (shared purpose). In shared leadership, third correlation was found between SL9 – SL10 (r = 0.26, p = 0.00); this could be because both items were tapping into encouraging team members to participate in decision-making (voice). These correlations could also be an indication of presence of subscales as stated by Carson, Tesluk and Marrone (2007). Carson, Tesluk and Marrone (2007) measured internal team environment depicting shared leadership influence through this scale. In factor analysis, they proposed three subscales; shared purpose, social support and voice. These three subscales were aggregated into a total score based on their high zero-order correlations (.72 to .80 ($p < .001$) by the authors. The

internal consistency of the scale in the current study (α = .91) is comparable to α = .94 reported in Carson, Tesluk and Marrone (2007). The overall model fit of the current study (RMSEA = 0.07, CFI = 0.95) was also slightly lower but is comparable to Carson, Tesluk and Marrone (2007) model's RMSEA = .06 and CFI = 0.98 values; indicating appropriate fit of the model.

5.3.1.2 Factor Analysis of Organization Commitment

The study of organizational commitment was measured by using a standardized scale of 08 items developed by Meyer & Allen (1991). The answers were obtained by expanding the 5-point Likert scale from "1 = Strongly Disagree" to "5 = Strongly Agree". As per the value of RMSEA (0.21) indicated the hypothesized model of organizational commitment was poor fit to the data. In final model of organizational commitment OC4 was removed, due to least contribution towards the research model. The correlation was found between OC5 – OC8 (r = 0.57, p = 0.00), OC6 – OC8 (r = 0.59, p = 0.00) and OC5 – OC 6 (r = 0.55, p = 0.00). The reason of these correlations could be, all the items addressed belongingness and emotional attachment towards the organization. Meyer & Allen (1991) reported the correlation of the scale .74 to .89 (p < .001). The internal consistency of the scale in the current study (α = .72) was comparable to α = .72 reported in Meyer & Allen (1991). The results of the final model of organizational commitment (RMSEA = 0.05, CFI = 0.99) found that model was well matched with the data and loading of the factor is statistically important.

5.3.1.3 Factor Analysis of Wellbeing

The study of wellbeing was measured by using a standardized scale of 5 items developed by Christian Winther Topp (2015). The answers were obtained by expanding the 6-point Likert scale from "0 = at no time" to "5 = all of the time". MRL estimate was used for this model. The internal consistency of the scale in the current study (α = .84) is comparable to α = .86 reported in Christian Winther Topp (2015). As per the value of (RMSEA = 0.05, CFI = 0.98) wellbeing indicated

good fit to data. Which showed a well-matched model for data and loading of factor statistically important.

5.3.1.4 Factor Analysis of Psychological Capital

The study of psychological capital was measured by using a standardized scale of 12 items developed by Luthan, Avolio, Avey and Norman (2007). The answers were obtained by expanding the 6-point Likert scale from 6-point Likert scale from "1 = Strongly Disagree" to "6 = Strongly Agree". MRL estimate was used for this model. These four subscales were aggregated into a total score based on their high zero-order correlations (.26 to .82 ($p < .001$) by the authors. The internal consistency of the scale in the current study ($\alpha = .88$) was comparable to $\alpha = .88$ reported in Luthan, Avolio, Avey and Norman (2007). The overall model fit of the current study (RMSEA = 0.54, CFI = 0.93) was low as compared to Luthan, Avolio, Avey and Norman (2007) model's RMSEA = .08 and CFI = 0.76 values.

5.3.1.5 Factor Analysis of Task Interdependence

In this study of task interdependence was measured by using a standardized scale of 5 items developed by Pearce and Gregersen's (1991). The answers were obtained by expanding the 5-point Likert scale from "1 = Strongly Disagree" to "5 = Strongly Agree". As per the value of RMSEA (0.14) the hypothesized model of organizational commitment was poor fit to data. In final model correlation of TI1 – TI2 ($r = 0.32$, $p = 0.00$), TI3 – TI 5 ($r = 0.19$, $p = 0.00$) was found. The reason of the first correlation between TI1 and TI2 could be, both variables directly linked with coordination of team members in the organization and the second correlation between TI3 and TI5 addressed the individual's performance dependences on other team members. The internal consistency of the scale in the current study ($\alpha = .77$) was high as compared to $\alpha = .70$ reported in Pearce and Gregersen's (1991). The overall model fit of the current study (RMSEA = 0.05, CFI = 0.99) was comparable to Zhang, Hempel, Yu-Lan and Tjosvold (2007) model's RMSEA = .05 and CFI= 0.93 values; indicating appropriate fit of the model.

5.4 Discussion of Structural Model and Correlations

H_1: Shared leadership has a significant impact on organizational commitment.

According to the first hypothesis, organizational commitment was directly linked with shared leadership. The results of the hypothesis (r = 0.45, p = 0.00) were significant and a positive relationship between shared leadership and organizational commitment was identified. Similar results were found by Wu & Chen (2018). Studies (Raub & Robert, 2013; Kim et al., 2012; Terzi et. al., 2005) have indicated a positive association between shared leadership and organizational commitment, that shared leadership not only increase the sense of ownership but also increase the organizational commitment of the team. As per the results of SEM shared leadership linked with organizational commitment, direct link having values (r = 0.54, p = 0.00) and through mediation of psychological capital having values (r = 0.12, p = 0.09). Therefore, the first hypothesis of the study pursues, in direct relation, shared leadership significantly and positively related to the organizational commitment and with mediation effect of psychological capital shared leadership showed non-significant and had positive association with organizational commitment.

H_2: Shared leadership has a significant impact on wellbeing.

The concept of shared leadership was positively and a significantly related with wellbeing of team has been endorsed and embraced. The results of the hypothesis (r = 0.39, p = 0.00) proved the significant and positive relationship between shared leadership and wellbeing. As the findings of the Kevin (2012) shared leadership increase the psychological health of the team which has strong and significant effect on wellbeing of the employees. This enhances the intrinsic motivation of the team and positive correlation between optimistic emotional state and productivity of the team which increase wellbeing through shared leadership (Fredrickson's, 2001). As per the results of SEM shared leadership had direct link with wellbeing having values (r = 0.23, p = 0.00) and through mediation of psychological capital

having values (r = 0.12, p = 0.09). Therefore, the second hypothesis of the study pursues, in direct relation, shared leadership significantly and positively related to wellbeing and with mediation effect of psychological capital shared leadership showed non-significant and positive association with wellbeing.

H_3: Psychological capital significantly mediates the relationship between shared leadership and organizational commitment.

According to third hypothesis of the study the mediation of psychological capital was measured. The results of the hypothesis (correlation SL - PC = 0.39, p = 0.00 & correlation PC – OC = 0.28) proved the existence of psychological capital significantly mediates the relationship between shared leadership and organizational commitment. As per the study of Wu & Chen (2018) similar results found that psychological capital mediates the relationship between shared leadership and organizational commitment. Shared leadership in a team, increase the shared vision and ownership (Heled et al., 2016) also support the environment of mutual care an encouragement which enhance the psychological capital, which indicate the strong and mediation between shared leadership and organizational commitment (Chi-Min Wua, Tso-Jen Chen, 2018).

Hence, as per the findings of the results psychological capital mediates the relationship between shared leadership and organizational commitment.

H_4: Psychological capital significantly mediates the relationship between shared leadership and wellbeing.

In forth hypothesis of the study the mediation of psychological capital between shared leadership and wellbeing was explored. The results of the hypothesis (correlation SL - PC = 0.39 & correlation PC – WB = 0.54) proved the existence of psychological capital significantly mediates the relationship between shared leadership and wellbeing. As per the findings of Luthans et al., (2008), Avey, (2010) high psychological capital has high psychological tools, which increase the optimistic behavior and had direct impact on wellbeing of the team. In another study the positive relationship between psychological capital and wellbeing were explored (Avey et al., 2010). It has been also established that team with good psychological capital have optimistic attitude, good energy which increase the wellbeing and

show direct and positive association between psychological capital and wellbeing (Diener, 2000; Diener & Amp; Oishi, 2003; Diener et al., 1999). Hence, as per the findings of the results, psychological capital mediates the relationship between shared leadership and wellbeing.

H_5: Task interdependence moderates the relationship between shared leadership and psychological capital.

In this study the moderating effect of task interdependence in projectized organizations was explored, such as if task interdependence is high in Pakistani NGO's then the relationship between shared leadership, organizational commitment and wellbeing would be strengthened. The results of the hypothesis (correlation TI - SL = 0.37 & correlation TI – PC = 0.46) proved the existence of task interdependence significantly moderates the relationship between shared leadership and psychological capital.

As per the findings of Molleman, De Jong & Amp; Van der Vegt (2007) task interdependence is significantly corelated with environment having shared influence and have direct association with psychological capital. Hollenbeck & Spitzmuller (2012) explored task interdependence has direct association with wellbeing and efficiency, low task interdependence has low efficacy and low wellbeing. Bruke and colleagues (2006) also demonstrated that, team having high task interdependence creates good interaction between team which enhance the organizational commitment of the employees.

But as per the results of SEM full model, where task interdependence used as predictor and moderator the value of the results indicated that task interdependence negatively and significantly moderates the relation between shared leadership and psychological capital. As per the results, individually task interdependence had positive and significant association with shared leadership and psychological capital, but in full model it had negative and significant association as moderator between shared leadership and psychological capital.

Hence, as per the findings of the results, task interdependence negatively and significantly moderates the relationship between shared leadership and psychological capital in final model.

5.5 Structural Model 1: Psychological Capital as Mediator and Task Interdependence as Predictor

In full model structural equational model (SEM) was performed. In first model psychological capital was used as a mediator and task interdependence as predictor. As per the results of the first model, the mediation effect of psychological capital was found, increase in psychological capital will increase the organizational commitment and wellbeing in NGO sector. As per the study of Wu Chen (2018) there is a significant and positive relationship between psychological capital and organizational commitment. Etebarian (2012) also indicated that strong psychological capital led towards the organizational commitment.

According to Avey and colleagues (2009) there is negative association between psychological capital and stress and positive relation with wellbeing. Results also indicated the positive and significant relationship between shared leadership and psychological capital. In literature Wu Chen (2018) showed the positive relation between shared leadership and psychological capital. The model also indicated that as predicator task interdependence had significant positive relation with psychological capital.

5.6 Structural Model 2: Psychological Capital as Mediator and Task Interdependence as Predictor and Moderator

In second model of SEM task interdependence used as predictor and moderator. Moderating effect of task interdependence checked between shared leadership and psychological capital. In second model positive and significant association was found between shared leadership, organizational commitment and wellbeing, and also a positive relationship was found between shared leadership and psychological

capital. Which indicates a good mediating effect between shared leadership, organizational commitment and wellbeing. As per the results, in this model, negative and significant moderating effect of task interdependence was found. Gray & Meister (2004) argued that high task interdependence creates the less dependence on leadership. Wu Chen (2018) suggested to use task interdependence as moderator, and according the results of this study task interdependence dose not moderates positively in this model. This can be the novelty of the current study, increase the task interdependence between the team members has negative moderating impact between shared leadership and psychological capital. So, if task interdependence increase between team members, it will create the less dependence on leadership. Although as a predictor, it has significant and positive association.

5.7 Research Limitations

Every research has its limitations so there are some limitations to this research as well. All aspects cannot be addressed in one study.

By adding some well-informed literature in this study, few research gaps have been filled in the present analysis. But at the other end, there are several other limits associated with this research because of time and resource constraints.

1. The study targeted only Pakistan's project-based organizations (NGO's) and the findings may not be generalized to other sectors.

2. Due to time constraints, only one mediator and one moderator were checked. Future research should however, extend the model and also check the other mediators. As per the direction of (Cecily, Tony & Crossley 2014; Rego, Owens et al. 2017) psychological capital can be used as moderator to check the strength of the relationship.

3. To change the mediation effect of the model, Kayani, Zafar, Aksar & Hassan (2019) suggested emotional execration can be use as mediator to check the wellbeing of the team.

4. As per recommendation of Nauman Fatima, & Haq (2018) different moderators like organizational justice, emotional intelligence, social support to check the psychological wellbeing and anxiety.

5. This work only indicates the positive relationship between shared leadership, organizational commitment and wellbeing of team members, but it is also possible to examine negative relationships for more research. This can also be a limitation of this research and can be explored by potential researchers to recognize the negative dimensions of shared leadership, organizational commitment and wellbeing in projects.

6. In addition, convenience sampling approach is used and select the sample that can easily access and data were collected from limited organizations. So, the findings of the present study cannot be generalized for organizations (NGO's) not participated in this study.

5.8 Future Research Directions

There are some potential research directions for current research, that have been highlighted and listed below.

1. Different organization have different corporate and social responsibility (Cornelius et al., 2008; Humphreys, Brown, 2008). This research was limited to Pakistani NGO's, for future research, Cross-industry and inter-industry studies of shared leadership and its impact on organizational commitment and well-being should be analyzed with other related variables. IT/Software industry deals with different projects, so future research IT/Software industry can be used as sample.

2. Different countries have different values and culture due to social and demographical variation (Patricia M. Greenfield, 2013). This study conducted in the culture of Pakistan and if this same research activity conducted in some other country, it is likely to have different outcomes compared to this study. So, future research can be done some other culture.

3. The sample size of the current study is slightly small, and it has a significant influence on results of the research. Future research should pick a larger sample size and test the model to be more universal.

4. Projects are temporary endeavor with specific start and end time having inadequate resources. In development sector, NGO's are working with different projects at the same time, for this complex and multidirectional environment sustainability of employee's creativity and commitment is important. As per the study of Wu Chen (2018) employee's creativity can be measured as dependent variable with organization commitment while shared leadership as independent variable, having mediation of psychological capital.

5.9 Implications

There are many implications of the present study that fill the missing gap in literature. This study discussed the role of shared leadership in projectized environment specially NGO sector of Pakistan. This study also addressed how shared leadership effect the organizational commitment of the team and most important psychological wellbeing of the employees, which showed the direct impact of the shared leadership on employees. In this study the mediation effect of psychological capital also checked. which shows the partial mediation between dependent variable (organizational commitment & wellbeing) and independent variable (shared leadership).

To check the strength of the relationship, moderation effect of task interdependence was also checked, but according to results task interdependence showed the negative moderating effect between shared leadership and psychological capital. So, as per results of this study where task interdependence showed negative and significant moderation between shared leadership and psychological capital; will help project managers to understand the connectivity between shared leadership and task interdependence. Whenever task interdependence will increase between the team members the dependencies of the team member will be low towards the leadership. Which can help project manager to reduce extra work. So, if task

interdependence between team members increases, it will decrease the workload on leadership and will also reduce the significance of shared leadership. Therefore, when designing intervention to enhance team productivity, task interdependence must be targeted along with shared leadership.

This study will help project managers/team leads to create shared environment in the organization, which will help to reduce the anxiety and improve the commitment of the team, towards the organization. Project based organizations (NGO's) directly deal different projects at the same time, which create a great pressure on leadership. As per Gray & Meister (2004), team having shared environment are less dependent on leader's input. So, this environment will also reduce the extra work and pressure on leadership and empower the project team in their relevant area.

5.10 Conclusion

The present study aimed to examine the impact of shared leadership on employee's organizational commitment and wellbeing. Furthermore, this research demonstrates the role of psychological capital as a mediator in the relationship between shared leadership, organizational commitment and employee wellbeing. In addition, this research examined the effect of task interdependence as a moderator between shared leadership and psychological capital. This research focused on Pakistan-based non-governmental organizations (NGOs) and aimed to find empirical evidence of positive shared leadership relationships with employee's organizational commitment and wellbeing. Project manager of NGO's are responsible to produce the anticipated results on time, and this study will help managers to manage their team in a batter way by improving their shared leadership process, which in effect leads to improved organizational commitment and team's wellbeing in their respective projects. It is also important to examine the various aspects of shared leadership that influence the organizational commitment and wellbeing of the team, that future researchers can take into consideration in relation to specific projects in this industry. The study also indicated that organizational culture and

values play an important role, that project managers need to take into consideration, like if managers tend to avoid shared culture in project-based organizations (NGO's), the commitment and wellbeing of the team effect negatively, which can be the reason of project failure. Hence, it can be said that this research offers a comprehensive study that can be followed by the shared leadership of the project managers in carrying out their team's organizational commitment and wellbeing.

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Appendix

Shared Leadership, Organizational Commitment, Psychological Capital, Task Interdependence and Wellbeing in Project Management

Dear Participant,

My name is Muhammad Asad and I am MS Project Management student at Capital University of Science and Technology, Islamabad. You are invited to participate in a research study. Following is some information to help you decide to take part in the study. Please read the information carefully. If you have any questions about the study, you can ask by email:

Researcher: Muhammad Asad (asadmehr@gmail.com)

Co-Supervisor: Dr. Sabahat Haqqani (sabahat.haqqani@cust.edu.pk)

Information Sheet

This research is to studying the relationship of shared leadership, organizational commitment, psychological capital, task interdependence and wellbeing for organizations that perform project based activities. Thesis Committee of Capital University of Science and Technology, Islamabad has approved this study. All employees of the organizations that carry project based activities are invited to participate in this study. To participate, you have to fill in the questionnaire. It will take only 20 - 25 minutes of your time. Your response to the email with the filled questionnaire will be considered as your consent to participate in the

study. Your responses will be kept strictly confidential and will not include any names or other details about yourself. Any publication of the research will also not include personal identification details of participants. While there may not be any immediate personal or professional benefit from your participation in the study, your participation is highly valued. It will help us understand the dynamics of our study variables in project based activities and make recommendations for wellbeing of people working in such environment. Participation in this study is voluntary. There will be no cost to participate in this study. **Please insert your name in the consent form below before filling in the questionnaire.**

Consent Form

I confirm that I have read and understood the preceding information sheet. I was given the opportunity to ask questions. My participation in the study is voluntary and I have the right to withdraw from the study at any time during the administration without any of my medical care and legal rights being affected. I understand that the information obtained from the questionnaires will be anonymized and will be used for the purposes of research only. I agree to take part in this study.

Name: _____ Date: _____

Demographic

Please provide the following information

1. Gender: _____
2. Age in Years: _____
3. Qualification:

1	**2**	**3**	**4**	**5**	**6**	**Any other**
Metric	Inter	Bachelor	Master	MS/M.Phil	PhD	

4. Work Experience in Years: _____

5. Current Position: _____

Shared Leadership

Please encircle the appropriate column to indicate whether you agree or disagree with each of the following statements:

(1 = not at all, 2 = to a very little extent, 3 = to some extent, 4 = to a great extent, 5 = to a very great extent)

1	Members of my team spent time discussing our team's purpose, goals, and expectations for the project.	1	2	3	4	5
2	Members of my team Discuss our team's main tasks and objectives to ensure that we have a fair understanding.	1	2	3	4	5
3	Members of my team Devise action plans and time schedules that allow for meeting our team's goals.	1	2	3	4	5
4	Members of my team talk enthusiastically about our team's progress.	1	2	3	4	5
5	Members of my team recognize each other's accomplishments and hard work.	1	2	3	4	5
6	Members of my team give encouragement to team members who seem frustrated	1	2	3	4	5
7	People in this team are encouraged to speak up to test assumptions about issues under discussion.	1	2	3	4	5
8	As a member of this team, I have a real say in how this team carries out its work.	1	2	3	4	5
9	Everyone on this team has a chance to participate and provide input.	1	2	3	4	5
10	My team supports everyone actively participating in decision making.	1	2	3	4	5

Psychological Capital

Please encircle the appropriate column to indicate whether you agree or disagree with each of the following statements:

(1 = strongly disagree, 2 = disagree, 3 = somewhat disagree, 4 = somewhat agree, 5 = agree, 6 = strongly agree)

1	I can always manage to solve difficult problems if I try hard enough	1	2	3	4	5	6
2	If someone opposes me, I can find the means and ways to get what I want.	1	2	3	4	5	6
3	I can usually handle whatever comes my way.	1	2	3	4	5	6
4	Right now I see myself as being pretty successful at work	1	2	3	4	5	6
5	I can think of many ways to reach my current work goals.	1	2	3	4	5	6
6	At this time, I am meeting the work goals that I have set for myself	1	2	3	4	5	6
7	I can be "on my own" so to speak at work if I have to.	1	2	3	4	5	6
8	I usually take stressful things at work calmly.	1	2	3	4	5	6
9	I can get through difficult times at work because I'ye experienced difficulty before	1	2	3	4	5	6
10	I always look on the bright side of things regarding my job.	1	2	3	4	5	6
11	I am optimistic about what will happen to me in the future as it pertains to work.	1	2	3	4	5	6
12	I am able to handle difficult problems	1	2	3	4	5	6

Organizational Commitment

Please encircle the appropriate column to indicate whether you agree or disagree with each of the following statements:

(1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree)

1	I would be very happy to spend the rest of my career with this organization.	1	2	3	4	5
2	I enjoy discussing my organization with people outside it.	1	2	3	4	5
3	I really feel as if this organization's problems are my own.	1	2	3	4	5
4	I think that I could easily become as attached to another organization as I am to this one.	1	2	3	4	5
5	I do not feel like 'part of the family' at my organization.	1	2	3	4	5
6	I do not feel 'emotionally attached' to this organization.	1	2	3	4	5
7	This organization has a great deal of personal meaning for me.	1	2	3	4	5
8	I do not feel a strong sense of belonging to my organization.	1	2	3	4	5

Wellbeing

Please encircle the appropriate column to indicate whether you agree or disagree with each of the following statements:

(0 = At no time, 1 = Some of the time, 2 = Less than half the time, 3 = More than half the time, 4 = Most of the time, 5 = All of the time)

1	I have felt cheerful and in good spirits	0	1	2	3	4	5
2	I have felt calm and relaxed	0	1	2	3	4	5
3	I have felt active and vigorous	0	1	2	3	4	5
4	I woke up feeling fresh and rested	0	1	2	3	4	5
5	My daily life has been filled with things that interest me	0	1	2	3	4	5

Task Interdependence

Please encircle the appropriate column to indicate whether you agree or disagree with each of the following statements:

(1 = strongly disagree, 2 = disagree, 3 = neutral, 4 = agree, 5 = strongly agree)

1	I work closely with others in doing my work.	1	2	3	4	5
2	I frequently must coordinate my efforts with others.	1	2	3	4	5
3	My own performance is dependent on receiving accurate information from others.	1	2	3	4	5
4	The way I perform my job has a significant impact on others.	1	2	3	4	5
5	My work requires me to consult with others fairly frequently.	1	2	3	4	5