# INTERRELATIONSHIP OF PSYCHOLOGICAL CAPITAL, WORKPLACE FLOURISHING AND ORGANIZATIONAL PSYCHOLOGICAL OWNERSHIP: A STUDY OF COLLEGE TEACHERS

By

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# NATIONAL UNIVERSITY OF MODERN LANGUAGES ISLAMABAD

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The undersigned certify that they have read the following thesis, examined the defense, are satisfied with the overall exam performance, and recommend the thesis to the Faculty of Social Sciences for acceptance.

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### ABSTRACT

# **Thesis Title:** Interrelationship of Psychological Capital, Workplace Flourishing and Organizational Psychological Ownership: A Study of College Teachers

Present research was carried out to identify the interrelationship of psychological capital, workplace flourishing and organizational psychological ownership of collage teachers. Main objectives of study were to determine relationship between psychological capital and workplace flourishing of college teachers, assess relationship between psychological capital and organizational psychological ownership of college teachers and investigate relationship between organizational psychological ownership and workplace flourishing of college teachers. Moreover, further analysis was carried out to analyze the differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers in different groups based on their gender, participation in faculty development programs, nature of job, job positions/title and age. Present research followed the quantitative research approach with correlational research design. The stratified random sampling technique was used, and data were collected from each stratum of men teachers and women teachers. 511 teachers working in public colleges of Islamabad constituted the sample of study. Psychological capital of college teachers was assessed by scale CPC-12 developed by Lorenz et al. (2016). Workplace flourishing of college teachers was assessed by Workplace Flourishing Scale develop by Kern (2014) and organizational psychological ownership scale was developed by Brown, Pierce and Crossley (2014). Findings revealed that college teachers were owning higher level of psychological capital/resources, flourishing/functioning and organizational psychological ownership at their workplaces. Moreover, in workplace flourishing elements, normal functioning was found in engagement, and relationship. Findings also revealed that relationship was found between psychological capital, workplace flourishing, and organizational psychological ownership of college teachers and all variables increases or decreases with each other. Additionally, gender and job positions/titles were not the reason of change (high and low level) in teachers' psychological capital, workplace flourishing and organizational psychological ownership levels. Likewise, faculty development program/workshops did not bring change in level of teachers' psychological capital and organizational psychological ownership while participation of teachers in faculty development program/workshops enhanced the

teachers' workplace flourishing. Furthermore, psychological capital and workplace flourishing was high in young teachers while organizational psychological ownership level was found high in middle-aged teachers. It is recommended that Federal Directorate of Education (FDE) may introduce trainings and workshops related to psychological capital, workplace flourishing and organizational psychological ownership for colleges teachers irrespective of nature of job and age groups.

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# LIST OF ABBREVIATIONS

ANOVA	Analysis of Variance
α	Cronbach's
CEOs	Chief Executive Officer
D1	Demographic 1- Gender
D2	Demographic 2 -Faculty Development Programs Attended
D3	Demographic 3 -Job Nature
D4	Demographic 4 -Job Positions
D5	Demographic 5-Age
FDE	Federal Directorate of Education
MBA	Master of Business Administration
PC	Psychological Capital
PCO1	PC Optimism-1
PCO2	PC Optimism-2
PCO3	PC Optimism-3
PCR1	PC Resilience-1
PCR2	PC Resilience-2
PCR3	PC Resilience-3
PCH1	PC Hope-1
PCH2	PC Hope-2
PCH3	PC Hope-3
PCSE1	PC Efficacy-1
PCSE2	PC Efficacy-2
PCSE3	PC Efficacy-3
POB	Positive Organizational Behavior
PO	Psychological Ownership
r	Correlation
SD	Standard Deviation
WF	Workplace Flourishing
WFM1	WF Meaning-1
WFM2	WF Meaning-2
WFM3	WF Meaning-3

WFA1	WF Accomplishment-1
WFA2	W F Accomplishment-2
WFA3	WF Accomplishment-3
WFE1	WF Engagement-1
WFE2	WF Engagement-2
WFE3	WF Engagement-3
WFP1	WF Positive Emotions-1
WFP2	WF Positive Emotions-2
WFP3	WF Positive Emotions-3
WFR1	WF Relationships-1
WFR2	WF Relationships-2
WFR3	WF Relationships-3
WFHap	WF Happiness

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# **Dedicated to**

My Loving Parents Muhammad Afzal & Shahida

> My Dearest Husband Imtiaz Ali Qureshi

My Dear Siblings Amara &Mansoor

My Beloved Sons Muhammad Hashim Qureshi & Muhammad Ibrahim Qureshi

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### **CHAPTER 1**

### **INTRODUCTION**

### **1.1 Introduction of the Study**

Positive psychology has influenced many fields including education, health, and business. Moreover, positive psychology also contributes to betterment in workplace. As Kjerulf (2014, 2016) described that positive emotions, happiness and other positive human aspects increase job performance and make workplace happier and more positive place. Positive approach in workplace is more helpful for both employees and employers to deal with uncertainty, turbulence and challenges (Luthans & Youssef, 2017). Successful organizations focus more on positive sides in difficult times (Cameron, 2010). Many streams emerged and applied positive psychology at workplace in fields of organizational behavior and management (Luthans, 2016). Organizations are now increasing their attention on positivity and it has become a popular topic in organizational studies (Cameron et al., 2011). Positive psychology provides foundation for various fields including an emerging field of positive organizational behavior (POB) (Luthans & Youssef, 2017). It is evident that positive constructs like wellbeing, optimism, life satisfaction, happiness etc. are related with number of desirable outcomes in life, education and workplace including better physical health, lower divorce rates, strong friendship and greater occupational as well as educational success (Diener & Chan, 2011). One of the emerging constructs from the field of organizational behavior is psychological capital which acts as performance booster in workplace and keeps the organization in competitive world (Luthans, Youssef, & Avolio, 2015). Researchers were doing their efforts to understand the human functioning through positive lens in last ten years. As a result, POB field has been emerged (Bakker & Schaufeli, 2008). There is also a need of more research studies in the field of psychological capital at workplace to understand its importance (Choi & Lee, 2014). Therefore, there is a need of research in the field of positivity. Thus, present research explored the interrelationship of positive constructs of psychological capital, workplace flourishing and organizational psychological ownership of college teachers.

One variable of present research is psychological capital. The term psychological capital has its basis in the positive psychology and positive organizational behavior. According to Luthans et al. (2015) psychological capital is a positive psychological state of individual development which is characterized by the four positive psychological resources. These psychological resources are optimism, resilience, hope, and self-efficacy. These four psychological resources have impact on the wellbeing, performance, attitude and behavior. Psychological capital is multifarious and is associated with many other positive constructs (Lorenz, et al., 2016) and have strong effects on attitude, performance, behavior and wellbeing (Luthans & Youssef, 2017). These claims justify the hypothesizing of interrelationship of psychological capital, workplace flourishing and organizational psychological ownership.

Flourishing is another variable of this current research which is also from the realm of positive psychology. It is related to many positive concepts and have an important role in improving the life of people. Flourishing is the combination of functioning effectively and feeling good (Huppert & So, 2013). Organizations must give special attention towards flourishing (Diedericks & Rothmann, 2014) and research studies are also needed to assess effects of flourishing on workers and organizational outcomes. In education, quality can be enhanced by committed, competent, well-function teachers but unfortunately less work has been done on workplace flourishing (Redelinghuys, Rothmann, & Botha 2019). Development of teachers' strength and positive attributes results in positive outcomes. Mehrotra and Ravikesh, (2014) said that relatively there are limited research studies that focus exclusively on flourishing in work. Moreover, Cherkowski and Walker (2016) also highlighted the fact that limited studies have focused on flourishing in the school organization context. These gaps open a door to work on flourishing and investigating its relationship with other variables in teaching community.

Another positive psychological construct of present research is psychological ownership which has received attention over past decades in management and psychological academics frontlines. It is vital job resource (Olckers, 2013; Olckers, & Du Plessis, 2015) which is linked positively with many individual outcomes like happiness and engagement and associated with favorable organizational outcomes (Pierce & Jussila, 2011). Psychological ownership is one more thinkable addition to the group of PsyCap constructs in future (Youssef & Luthans, 2015). Moreover, optimizing psychological ownership is challenging for organization (Van Zyl, Vaart & Stemmet, 2017). Ownership feelings are important aspect of positive organizational behavior (Dawkins, Tian, Newman, & Martin, 2015). Job ownership helps in development of organizational ownership (Peng & Pierce, 2015) and finally employees see organizational success as their own. (Pierce & Rodgers, 2004). Although, psychological ownership has shown potential impact in many fields like engineering, management, marketing, industrial psychology but applicability in other fields should be explored (Van Zyl, Olckers & Vaart, 2017). Investigation of psychological ownership in educational sciences also needs attention (Hietanen, Koiranen, & Ruismäki, 2017). Therefore, present research also felt the need of psychological ownership exploration in educational field.

Furthermore, PO shares feelings of striving and positivity with other positive organizational concepts, for instance psychological capital and psychological wellbeing due to their role as positive resource help workers to develop positive association among themselves and organizations. It is assumed that research studies in the field of PO will grow continually in importance and prominence in both applied settings and academic field (Avey et al., 2009). Therefore, present research hypothesized the interrelationship of organizational psychological ownership with workplace flourishing and psychological ownership.

Youssef and Luthans (2015) identified in their research that relationship exists between the psychological Capital and well-being. Here the wellbeing was general wellbeing not in context of workplace. Keeping in view the above relationship, this research hypothesize relationship between psychological capital and workplace flourishing. The positive influence of psychological capital was also found on the organizational commitment (Hsing-Mingat at al., 2017). Organizational commitment is also outcome of psychological ownership (Brown, Pierce & Crossley, 2014). The relationship of psychological capital and organizational psychological ownership is still required to explore. Therefore, it is hypothesized in present research that relationship exists in variable of psychological capital and organizational psychological ownership. Consequently, present research is contributing by hypothesizing interrelationship between psychological capital, workplace flourishing and organizational psychological ownership of college teachers. Teaching community was selected as sample. Additionally, interrelationship was explored present study as psycap, workplace flourishing, and organizational psychological ownership share conceptual similarity in the sense that their constructs nature is positive. All three constructs have roots in positivity. As explained earlier, workplace flourishing is rooted in positive psychology and organizational studies while PsyCap and organizational

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psychological ownership are rooted in Positive organizational behaviour. As Brent and Brett (2015) said that research studies in fields of positive psychology, POB and psycap may provide ways to cope with and thrive in adversity in difficult times

The context of present research is workplace. Present research investigated the interrelationship of positive constructs of psychological capital, organizational psychological ownership and workplace flourishing in context of workplace. Work is important factor because it affects the quality of life (Rothmann, 2013). People spend most of their time in workplaces at organizational environment. Educational institutions are also focusing on creating the positive workplace culture to promote well-being of scholars, students, staff and faculty (Kenny, 2018). Psychological capital construct has gained importance in the field of POB during last two decades. Although, there is need of further investigation of issue specifically in educational organizational context (Cimen, & Özgan, 2018). Therefore, present research explored the psychological capital in college teachers. As, Baron (2011) said that human resources are assets of business industry. Moreover, human resources in field of education are faculty which are most important. Another reason is that education is highly challenging job that requires multifaceted capabilities, divergent knowledge, and experience. A teacher has to deal with students physically and emotionally which put teachers into greater psychological and physiological confrontation (Rehman, Qingren, Latif, & Iqbal, 2017). Therefore, teachers' positive psychological resources, flourishing at their workplaces and psychological ownership with organizations and job will give benefit to students, school and society.

As, it becomes difficult for organizations to help workers to cope with work demands. This situation becomes further complicated due to the personal differences of employees. Specifically, if organization understand and acknowledge demographics, it will benefit to organizations, employees and managers. The plentiful literature supports that individual demographic variables influence organizations in several ways (Geldenhuys, & Henn, 2017). In addition, Luthans et al. (2017) in their framework of psychological capital also described that demographic of person impacts the psycap. Likewise, McKay et al. (2020) examined that demographic of people predicted the well-being scores. Lincoln et al. (2010) also examined the demographic correlates of wellbeing and included demographics of age, marital status, gender, region, family income, and education. Addai et al. (2014) claimed that demographic variables are significant well-being determinants. Therefore, in addition, all three variables of study were also explored in terms of respondents' demographics.

### **1.2 Rationale of the Study**

Present research study focused on three positive constructs, which are psychological capital, workplace flourishing and organizational psychological ownership. These positive constructs drew the attention of researcher as positivity has proved to give positive results in all fields of life including workplace. Therefore, it deemed imperative to conduct a research study on positive variables like interrelationship of psychological capital, workplace flourishing and organizational psychological ownership. In fact, emergence of positive psychology has given a new vision to the researchers and organizations. As stated by Cameron (2010), human beings incline inherently towards positive energy. Positivity activated more to human beings as compared to negativity. Positive workplace environment reinvigorates the growth need in employees. There are rigorous evidences which show that positivity enhances success of organization (Cabrera, 2012). As positive psychology inspired all fields, it also influenced organizational behavioral studies which has turned it into the positive organizational behavior. Research on areas of psychological capital, flourishing at workplace and organizational psychological ownership was felt important by researcher due to their numerous positive outcomes for employees and organization. Present study has identified the interrelationship of psychological capital, workplace flourishing and organizational psychological ownership in college teachers. Moreover, all three areas stress on positivity at workplace and share interdisciplinary theoretical basis. As, psychological capital is construct of POB and has its deep roots in fields of positivity and positive psychology. It is also associated with numerous positive outcomes (Luthans et al., 2017). Flourishing is promising and most important areas examined in positive psychology. It relates to various positive concepts (Ackerman, 2021). Moreover, Avey et al. (2009) said that psychological ownership is a positive phenomenon and now academics are including PO in field of positive organizational behavior as it accomplishes inclusion criteria to be included in POB like psychological capital and well-being. Olckers (2013) explicates that PO is associated with many positive individual and workplace outcomes such as engagement, happiness, and performance. Based on these facts present research study hypothesized the interrelationship of psychological capital workplace flourishing, and organizational psychological ownership.

Above discussion disclosed the fact that these three variables are beneficial for organization, its productivity and employees. In previous research studies, psychological capital, workplace flourishing, and organizational psychological ownership were studied independently and with other variables as well. Additionally, impact and effect of these variables were also found on other variables but interrelationship of these three variables was not explored. Different research studies had explored relationship of psychological with the job satisfaction (Youssef & Luthans, 2015) performance (Cetin, 2011) creative performance (Sweetman, Luthans, Avey, and Luthans, 2011) organizational commitment (Hsing-Mingat at al., 2017) and work engagement (Luthans et al., 2007). Psychological

capital also supports well-being (Thompson, Lemmon & Walter, 2015) and this relationship should be replicate again (Youssef & Luthans, 2015). The present research filled a gap by investigating the combined contributions of psychological capital, workplace flourishing and organizational psychological ownership by using teachers as sample. Psychological capital, workplace flourishing, and organizational psychological ownership are valuable constructs which will not only help individual but also help colleges as these are related with number of other organizational outcomes.

Furthermore, different research studies have been done on the psychological capital, workplace flourishing and organizational psychological ownership in European contexts. In Pakistan, a smaller number of researchers explored these variables especially in teachers' community. These concepts identified by different researchers have opened the doors for upcoming researchers to further work on these three variables to improve the situation of employees, their workplace conditions and organizations. As constructs of psychological capital, workplace flourishing and organizational psychological ownership have shown beneficial results for employees, employers as well as for organizations.

In addition to exploration of interrelationship of these three positive constructs, sensitization of these constructs in teaching community is also needed. Current research study is a small effort and contribution for sensitizing these important aspects of human beings at workplaces. As far as organizational practices are concerned, it has been observed that financial and physical resources / capitals are considered more important for productivity while the human capital is not focused. Although financial resources have value in organization, but psychological resources are also having equal weightage. One of the aspects of human capital is psychological capital which focused on psychological resources. Psychological capital is the combination of optimism, resilience, efficacy and hope. The prevalence of these psychological resources contributes positively to the

wellbeing of the individual and organization. Those who are enriched with psychological capital capital become a productive human resource for the organizations. Psychological capital provide framework for comprehending human assets that is beneficial in realizing human potentials and help people to cope with and thrive in period of adversity (Brent & Brett, 2015). Employees' wellbeing is getting attention of researchers due to their implications for employees' physical and mental health and for enduring effectiveness of organization.

Similarly, investment on development of peoples' wellbeing pays to the organizations in many ways. Organizations which invest on employees' wellbeing, their people will be more engaged, satisfied, will feel empowered, will have emotional connections with their organization, will be responsible for work and performance and more importantly turnover rate of such organizations will be low (Mendes & Stander, 2011). Therefore, investment on the wellbeing of employees is important (Seligman, 2011). In addition to general wellbeing of people, workplace wellbeing is important because it saves the costs of organization (Cascio & Boudreau, 2011). As far as the variable of psychological ownership is concerned, investment on the development of psychological ownership results in high work performance, innovative work behavior, low absenteeism and increase in efficiency (Robertson, 2012). Those who exercise work and organizational ownership behavior are healthier, motivated, productive and less likely to leave the organization. Moreover, Pierce & Jussila (2011) also said that organizations must work on the employees' psychological ownership for retaining the talented employees in organization. Psychological ownership has substantial power to explain many phenomena related to work and organizational context. With retaining the talented employees in organization PO is a personal resource which could be used to manage the job-related demands (Olckers, 2013). Sense of ownership can be at micro, meso and macro level and all types of psychological ownership exert positive attitude (Chang et al., 2012). Previous

research studies investigated legal ownership in context of happiness and ignored psychological ownership role (Li, & Atkinson, 2020).

Psychological capital and psychological ownership are areas mostly studied in business context. However, these areas are also getting rapid and increasing attention in context of education sector. Teachers are preparing skilled people for other fields. Therefore, psychological capital and psychological ownership of teachers are also equally rather more important. Teachers' psychological ownership with their teaching profession is as important as for employees in other fields. Same is the case of psychological capital which is combination of optimism, resilience, self-efficacy and hope. Moreover, Adil et al. (2018) conducted a research study on psychological capital and psychological ownership in the context of teaching and concluded that psychological capital enhances psychological ownership among teachers.

Furthermore, interrelationship of psychological capital, workplace flourishing, and organizational psychological ownership is still needed to be explored in context of college teachers in Pakistan. College teaching faculty was selected as sample of study. It was selected as (Elcan, 2017) said that over the time responsibilities of teachers have been increased. It is difficult for teachers to work simultaneously on the student's achievement, follow mandated syllabus and align their instructional strategies with standards. All these and many other pressures have eroded wellbeing of teachers and increased the level of stress, burnout and demoralizations. Due to deterioration of teachers' professional standing and pressures on them, there is a need to give attention to wellbeing of teachers. Moreover, occupational wellbeing is a determinant of teachers' success (Klussman, Kunter, Trautwein, Ludtke & Baumert, 2008). Unluckily, much of focus of organizations are on product and ignore contributors and their workplace situations. In educational environment, teachers are the main contributors who produce the quality students. Even in educational

organizations focus is on the students' achievement and less focus is on the constructs related with teachers' wellbeing. Teachers are producing people who contribute to the other fields. Teachers are producing engineers, doctors, educators, journalists, economists etc. Therefore, it is important to uncover and enhance teachers' psychological capital, workplace flourishing and organizational psychological capital. Moreover, most of research studies are carried out while focusing on university faculty members (Adil, 2015; Adil, et al., 2018; Aftab, Rashid, & Shah, 2018) and less research studies are conducted on college teachers. College teachers of Islamabad were treated as population for the study. In addition to this, in education system of Pakistan, college level accommodates the students studying at intermediate, bachelors and masters' level. Public colleges have the capacity to accommodate large number of students in these programs of studies. Faculty working in these colleges is as important as working in other levels of education. In Islamabad Capital Territory, these public colleges have many faculty members and students. Another reason for conducting research study on college level teachers is that it is a less researched group.

### **1.3 Statement of the Problem**

The present study aimed at investigating interrelationship of psychological capital, workplace flourishing and organizational psychological ownership of college teachers. It was considered a matter of inquiry that how increase or decrease in one variable or other variable may contribute to increase or decrease in the other variable/s under investigation. In other words, how change in one variable will alter the other variable/s. In previous research studies, these positive constructs were studied independently or in relationship with other variables but examining of interrelationship of psychological capital, workplace flourishing and organizational psychological ownership was an unresearched problem.

Moreover, less-availability of research literature on college sector generally in the global context and specifically in the Pakistani context also lead the way for conducting this research study.

As far as positive constructs are concerned, these were chosen for the study because positivity has given fruitful results in every field of life, either it is professional or personal life. The old formula of overcoming the negativities and getting positive results is no more functional. Furthermore, objective of making organization flourished is not possible with only focus on existing four D's method that is disease, damage, dysfunction, and disorder. In current times, organizations must shift their focus from preventing low motivation, poor performance, ill-health, disengagement, and unwell-being towards positivity. Due to this, areas like psychological capital, workplace flourishing, and organizational psychological capital are captivating researchers and organizations. The current research study aimed at bridging these gaps by finding out interrelationship of psychological capital, workplace flourishing and organizational psychological ownership of college teachers. Other objectives of the research were to identify the differences in psychological capital, workplace flourishing and organizational psychological ownership across gender, faculty development program attended, job nature, job positions and age.

### 1.4 Objectives of the Study

The following objectives were developed to carry out the research study. The objectives were to:

- 1 determine relationship between psychological capital and workplace flourishing of college teachers.
- 2 assess relationship between psychological capital and organizational psychological ownership of college teachers.

- 3 investigate relationship between organizational psychological ownership and workplace flourishing of college teachers.
- 4 analyze differences in psychological capital, workplace flourishing, and organizational psychological ownership of college teachers based on gender, attendance / non-attendance in faculty development programs/workshops, nature of job, job positions/titles and age groups.

Following objectives were based on the objective 4.

- 4a. Analyze gender-wise differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers.
- 4b. Examine differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers due to attendance/ non-attendance in faculty development programs/workshops.
- 4c. Find out differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers in different groups based on their nature of job.
- 4d. Examine differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers in different groups based on their job positions/titles.
- 4e. Identify differences in psychological capital, workplace flourishing and organizational psychological ownership in different age groups of college teachers.

### 1.5 Hypotheses of the Study

H1: Psychological capital is positively and significantly correlated with workplace flourishing.

- H2: Psychological capital is positively and significantly correlated with organizational psychological ownership.
- H3: Organizational psychological ownership is positively and significantly correlated with workplace flourishing.
- Ho4: There is no significant mean score difference in groups of male and female teachers' psychological capital level.
- Ho5: There is no significant mean score difference in male and female teachers' workplace flourishing level.
- Ho6: There is no significant means score difference in male teachers and female teachers organizational psychological ownership level.
- Ho7: There is no significant mean score difference in teachers' psychological capital due to their participation in faculty development programs/workshops.
- Ho8: There is no significant mean score difference in teachers' workplace flourishing due to their participation in faculty development programs/workshops.
- Ho9: There is no significant mean score difference in teachers' organizational psychological ownership due to their participation in faculty development programs/workshops.
- Ho10: There is no significant mean score difference in teachers' psychological capital due to their nature of job.
- Ho11: There is no significant mean score difference in teachers' workplace flourishing due to their nature of job.
- Ho12: There is no significant mean score difference in teachers' organizational psychological ownership due to their nature of job.
- Ho13: There is no significant mean score difference in teachers' psychological capital of different job positions/titles.

- Ho14: There is no significant mean score difference in teachers' workplace flourishing of different job positions/titles.
- Ho15: There is no significant mean score difference in teachers' organizational psychological ownership of different job positions/titles.
- Ho16: There is no significant mean score difference in teachers' psychological capital of different age groups.
- Ho17: There is no significant mean score difference in teachers' workplace flourishing of different age groups.
- Ho18: There is no significant mean score difference in teachers' organizational psychological ownership of different age groups.

### **1.6 Significance of the Study**

Present research contributes to academic literature. Psychological capital, workplace flourishing, and psychological ownership have not been studied together in literature. The exploration of interrelationship of dimensions of psychological capital, workplace flourishing, and organizational psychological ownership advance literature of POB. Different studies addressed the relationship of these variables with another variable. Present research filled gaps by adding interrelationship of psychological capital, workplace flourishing and organizational psychological ownership to literature.

Secondly, most of research studies have been conducted in western context on these variables. In Pakistan, fewer studies were found in business context as these variables are rooted in organizational behavior and POB. Contextualization of these variables at college level is also important. As teachers are those who prepare the people for other professions. For that reason, present research add value in literature as it addresses psychological capital, workplace flourishing and organizational psychological ownership in teaching community.

Different research studies have proved the significance of psychological capital, workplace flourishing and organizational psychological ownership. Present research is a humble effort to draw the attention of all stakeholders towards the importance and need of these constructs/ variables.

Findings of present research is significant for college principals. College principals may get benefits from recommendations of study for enhancing their teachers' positive psychological resources, flourishing and ownership. Federal Directorate of Education (FDE) who is a monitoring and controlling body of Colleges of Islamabad. Mostly trainings conducted by FDE are based on content knowledge. FDE may get benefit from present research and incorporate this framework in their trainings for enhancing psycap, flourishing and ownership with job and colleges. Development of positive attributes in teaching faculty will in return help in development of positive resources in students.

Moreover, this research is significant for administrators, faculty members and policy makers as it carries implications for improvement of these variables in teaching community. The recommendations of research study are beneficial for educational institutions in a sense that they can get awareness about the teachers' psychological capital, workplace flourishing and organizational psychological ownership. They may take further steps for the maintenance and development of these constructs. All these constructs are providing direct and indirect benefits to individual and organizations.

As, psychological capital, workplace flourishing, and organizational psychological ownership constructs are related with many other individual and organizational outcomes. The present research study will also explore the sub dimension of each of these three constructs. So, awareness of these will also be beneficial in this context. Additionally, optimism, resilience, hope, and self-efficacy-sub variables of psychological capital have their own value. All these components are also related with many job outcomes. Thus, organizations may gain many benefits by focusing and developing these components. Similarly, flourishing construct is multidimensional, and all elements should be considered separately at workplace for getting better results suggested by the author. The meaning, accomplishment, engagement, positive emotions and positive relationship are state like flourishing element that can be enhanced by training. Every element of flourishing has their own place and beneficial for many individual and organizational outcomes. In the same way, organizational psychological ownership constructs will also be beneficial for teaching community. PO is more required in teaching because they are preparing students who will be in the all field of life and work.

### **1.7 Delimitations of Study**

Prime focus of present thesis was to assess interrelationship of psychological capital, workplace flourishing and organizational psychological ownership of college teachers thereby research was delimited to:

- Islamabad the Capital Territory
- Public sector colleges
- Teachers teaching to classes from first year onwards

It was further restricted to self-reported opinions of teachers working in public colleges of Islamabad with regard to their psychological capital, workplace flourishing and organizational psychological ownership.

### **1.8 Conceptual Framework of Present Research**

The present research intends to study the interrelationship of psychological capital, workplace flourishing and psychological ownership. Different research studies have been
done on these three variables separately. Relationship, effect and impact of psychological capital, workplace flourishing, and organizational psychological ownership has been studied with other variables but none of the research studied the interrelationship of these three variables. Hence, psychological capital, workplace flourishing, and organizational psychological ownership are separate variables but equally important and present at a time in the workplace. The results of present research study of interrelationship of psychological capital, workplace flourishing, and organizational psychological ownership will contribute to the existing body of knowledge.

### **1.8.1** Psychological Capital Theory

Luthans et al. (2007, 2015) provided the theoretical bases of psychological capital. According to Luthans et al. (2015) psychological capital is defined as positive psychological state of individual development which is characterized by the four positive psychological resources. These psychological resources are optimism, resilience, hope, and self-efficacy. Psycap is drawing from broaden-and-build theory of Fredrickson's (2009) which explains that positivity is a source for building psychological resources and optimism, resilience, hope, and self-efficacy are positive psychological resources which meets inclusion criteria of psycap (Luthans et al., 2015). Psycap optimism refers to positive exploratory style which associates positive events to permanent, persuasive cause and personal while associates negative events to temporary, external and situational (Seligman, 2011). Optimist people expect that good things will happen to them in future (Carver et al., 2009). Optimism is described as positive attribution about succeeding in future and now.

Psycap resilience is the person' ability to bounce back or rebound in adverse circumstances as well as in progress, positive events and increased responsibility. It is disposition of positive adaptation processes and patterns to overcome risk factors or adversities by capitalizing psychological, personal and social assets (Masten, 2015). Hope is positive motivational condition of individual based on sense of successful which has two dimensions, goal-directed energy (agency) and planning to reach at goals\_ pathways. It is ability and way power to search new paths in difficult situations to achieve goals. Psycap hope theory is rooted in work of Snyder and has impact in various domains of life (Lopez, 2013). Hope is described as determined towards goal and redirecting goals when necessary. Psycap- efficacy is confidence or conviction of individual about capabilities to execute task successfully within specific context through mobilizing motivation, course of action and cognitive resources. Efficacy is rooted in theory of social cognition given by Bandura's (2001, 2010). It is associated with performance in life and organization.

### **1.8.2 Workplace Flourishing Theory**

Flourishing model is given by Seligman (2011) which provides the theoretical basis of present research. Flourishing theory focuses on five dimensions given by Seligman (2011). These dimensions are meaning, accomplishment, engagement, positive emotion, and relationships. Flourishing is finding fulfilment in lives, accomplishment of worthwhile and meaningful tasks and making connection with other peoples. Simply, flourishing is living a good life. (Seligman, 2011). Workplace flourishing is employees flourishing at workplace. Moreover, workplace flourishing is conceptualized as presence of positive emotion, engagement, relationships, meaning, and accomplishment characteristics in the employees.

Positive emotions explain our feelings, positive affects and having pleasure. Seeking and experiencing positive emotions are important for the well-being. (Peterson, Park, & Seligman, 2005). Engagement explains concept of flow. It is involvement with and concentration on object (Csikszentmihalyi, 2003). Engagement is passion, enthusiasm or zest and in organization it is show of perseverance and commitment towards work (Amiot, Vallerand, & Blanchard, 2006). Having a sense of engagement in life is important in which become completely involved in something we excel at and enjoy. It is a necessary part of well-being. It is difficult to establish sense of well-being if you are not involved in something you do (Seligman, 2011).

Accomplishment is pursuance towards success and mastery. Accomplishment is achievement. We thrive when achieve our goals. Authentic well-being is not possible without the drive to achievement and accomplishment. Positive relationship is absence of unsociable existence as Peterson said other people matters. Positive relationship explains satisfying, trusting and warmth affiliation with others. It is a crux of all things. We need connections with people around us to truly flourish. Deep and meaningful relationships are important for the well-being. Purpose and meaning explains that you know your talents and strengths and use them. In a meaningful life people feel connection to something which is larger than themselves. (Park, Peterson, & Ruch, 2009) said meaning is linked to self-transcendence and external goals. Finding meanings in life is important even for those who are deliriously happy. Having a cause in life is necessary for well-being.

## **1.8.3** Psychological Ownership Theory

Psychological ownership theory is given by the Pierce et al. (2001). Psychological ownership is the cognitive and affective construct that is based on the possessiveness feelings attached to the material and non-material objects. Psychological ownership is limited to two targets of organization that are job and organization (Peng & Pierce, 2015). Job-based and organizational-based ownership are distinct foci of psychological ownership in organization. Organization-based ownership explains that employees have possession feelings and psychological connection to their organization. In job-based ownership

explains the psychological connection of employees with their specific role or job. Peng and Pierce (2015) explained that both job and organization-based ownership describe experience of mine. Moreover, job-based ownership helps in development of organizationbased psychological ownership behavior (Peng et al., 2015). Therefore, the present research has conceptualized organizational psychological ownership as job as well as organizationbased PO. Psycap has impact on behaviors, attitudes, well-being and performance. PO is also associated with many individual and organizational outcomes.

Different research studies have been done to explore the relationship of these phenomena with other variables. To bridge the gap, the research study identified interrelationship of psychological capital, workplace flourishing and organizational psychological ownership. Based on above-mentioned theories, the researcher developed the following framework of research.



Figure1: Conceptual Framework of Research

# **1.9 Operationalizing Research Variables**

Operational definitions of variables help in many ways as it helps in clearly describing variable in the quantifiable ways. Additionally, it also helps the readers to communicate precise meanings which researcher intends to convey (Gay, Mills, and Airasian, 2012). And so, definitions of terms of psychological capital, workplace flourishing, and organizational psychological ownership have been explained.

### **1.9.1 Interrelationship**

Interrelationship is the relationship between two or more than two variables. In present research study, interrelationship is identified between psychological capital and workplace flourishing; psychological capital and organizational psychological ownership; and workplace flourishing and organizational psychological ownership.

## **1.9.2 Psychological Capital**

Psychological capital and its components are state-like capacities that are malleable and enhanced with interventions. It can be defined as psychological state of individual development characterized by four psychological resources optimism (positive attribution about success in future and now), resilience (sustain and bounce back in adverse circumstances to attain success), hope (determined towards goals achievement and redirecting paths if necessary to goals), and self-efficacy (confidence to put necessary effort at challenging task to succeed).

## 1.9.2.1 Optimism

It is described as positive explanatory style which relates the positive events with pervasive causes, permanent, and personal, and explains negative events as temporary, situation specific factors and external. As compared to positive explanatory style, a pessimistic explanatory style relates the positive events with temporary, and external, situation-specific reasons, and negative events with permanent, pervasive and personal ones. In addition, optimism can also be described as comprehensive positive outlook that produces positive expectations. Simply, optimists' people expect good and positive things to take place in present and future. The view of positive outlook is conceptualized as more general while view of explanatory style is conceptualize as more situation specific. The psycap optimism incorporates both positive outlook and explanatory style interpretations.

## 1.9.2.2 Resilience

Resilience is the ability of individual to bounce back or rebound from failure, conflict, adversity, or even progress, increased responsibility and positive events. It shows deployment of the positive adaptation processes and patterns to reduce risk factors or adversities by capitalizing on psychological, personal or social assets.

#### 1.9.2.3 Hope

Psycap hope is an individual's positive motivational state that based on sense of success. It has dimensions of agency and pathways. Agency refers to determination or will power of individual to continue goals while pathways refer to way power that is ability to identify paths to accomplish objectives in obstacles.

### **1.9.2.4 Self-efficacy**

Psycap self-efficacy is defined as an individual's confidence in personal abilities to mobilize and self-motivate cognitive resources and plan the course of action required to complete a goal. High self-efficacy is needed to flourish on hard challenges. Efficacious people thrive with persistent efforts and firm beliefs on their abilities.

## **1.9.3 Workplace Flourishing**

Flourishing is important conception in field of positive psychology and it is extends and encompasses to several other positive concepts. Flourishing people pay attention to every aspect of flourishing theory that are meaning, accomplishment, engagement, positive emotions, and positive relationships. People flourish when they cultivate their strengths and talents, feel enjoyment and pleasure, develop meaningful and deep relationships, and meaningfully contribute to world. People flourish when they achieve contentment in life together with attaining more objectives associated to accomplishment, when they are really living good life. Workplace flourishing is employees flourishing at their workplaces.

**1.9.3.1 Meaning** describes that the individual has a sense of meaning and purpose in the work. Simply the work is purposeful, and it also matters.

**1.9.3.2 Engagement** is a state in which the individual is being absorbed, involved and interested in work. It is an important measure for present-day workplaces. Flow is a state in which the level of engagement becomes very high and the individual is completely involved in work or in an activity. The individual also loses the sense of time due to complete absorption in work.

**1.9.3.3** Accomplishment includes both objective and subjective components of achievement. Objective accomplishments are the awards and honors. Moreover, personal feelings of achievement and mastery are also important. Accomplishment involves doing efforts in reaching of the goals and feeling capable of completing daily responsibilities and tasks.

**1.9.3.4 Positive Emotions** describe the hedonic feelings such as feeling happiness, content, cheerful and joyful.

**1.9.3.5 Relationships** explain that the individual is feeling connected, valued and supported by other people in an organization. The positive relationship at workplace is an essential component of life which explains that life is going well, and individual is feeling

good. So, other people also matter. The useful, inspiring and positive associations lead towards the positive emotions.

### **1.9.4 Organizational Psychological Ownership**

Psychological ownership describes connection among objects and individual that can be immaterial or material in nature, wherein object becomes part of individuals extended self. The person experiences object as mine when object befits psychologically grounded because now individual finds himself or herself present in object (such as one's job, a work project, one's organization). This object or target of ownership has now developed close association with person's identity. The present research contextualized the psychological ownership in organization and explains that organizational psychological ownership means person is having both job/work and organization based PO.

## 1.9.4.1 Job and Organization Based Ownership

Job and organization based ownership describe experience of mine. Job based ownership focus on stronger connection with job while organization-based ownership focusses on stronger connection with organization. Employees having strong PO exhibit loyalty with organization.

## 1.10 Research Methodology

Research methodology section consist of research design, population, and sample, sampling technique, instrument of study, data collection and data analysis. As far as research design is concerned, present study followed quantitative research paradigm. The research study was comprised of three variables psychological capital, workplace flourishing and organizational psychological ownership. The research study was quantitative research and it explored the interrelationship between psychological capital, workplace flourishing and organizational psychological ownership. The study has a correlational research design. In this research design, researcher apply the correlational statistics to assess the degree of relationship and association between two or more variables without manipulating and controlling these variables like in experimental research (Creswell, 2012). The research study also fulfills the correlational research design requirements.

Population of study consisted of college teachers. All teachers working in Federal Government Colleges in Islamabad Capital territory (under the control of Federal Directorate of Education) was the population of the study. There is a total 32 colleges and 2357 teachers are working in these colleges. Total 511 teachers were the sample of study. Total 16 colleges consisting of eight men and eight women colleges, were selected. For getting a representative data, both male and female colleges were taken into consideration. At next stage, stratified sampling technique was used, and data were collected from each stratum of men teachers and women teachers.

Three instruments were used. All these instruments are standardized. Permission for the use of these three questionnaires has been taken from the questionnaire's developers. Pilot testing was done to make all these instruments contextual. After the pilot testing and expert opinion, the instruments were administered to the samples of study. The details of the instruments are as under:

 Psychological capital theory was introduced by Luthans et al. (2007) and Luthans et al. (2017). The psycap psychological resources are optimism, resilience, hope, and selfefficacy. Assessment of psychological capital in present research study was done through CPC-12. Lorenz, et al., (2016) developed the scale of CPC-12.

- For assessing the workplace flourishing, the model of wellbeing developed by the Seligman (2011) was used. Kern (2014) developed an instrument based on the Flourishing Model. It consists of five dimensions and 16 questions.
- 3. For assessing the organizational psychological ownership, two scales were selected. First was job-based ownership and second was organization-based ownership. Brown, Pierce, & Crossley (2014) developed the scale of job-based ownership while Van-Dyne & Pierce (2004) developed the organization-based ownership scale. It consists of ten questions. The instruments permission was taken from authors.

Before collecting the data, the questionnaires were consulted with experts and pilot testing was done to make the instruments culture fair. After the results of pilot testing and expert opinions the instruments were administered to the samples for the purpose of gathering the data. Data were collected through questionnaires. Researcher self-administered the questionnaires to the sample of study. The present quantitative research study employed both descriptive and inferential statistics. Statistical techniques of reliability, mean, standard deviation, kurtosis, skewness correlation, ANOVA and t-test were applied to test the hypotheses and achieve the objectives.

# **1.11 Chapter Summary**

First chapter of Introduction provided brief synopsis of research. This included rationale of research, problem statement, objectives and research hypotheses. Moreover, the framework of study covered the information about theoretical basis of variables of psychological capital, workplace flourishing and organizational psychological ownership. Introduction chapter also covered delimitations, brief view of methodology, and operational definitions of variables. Furthermore, next chapter of literature review will cover the research studies and theories regarding variables of study.

# **CHAPTER 2**

# LITERATURE REVIEW

The purpose of present research study was to identify the interrelationship among psychological capital, workplace flourishing and organizational psychological ownership among college teachers. Literature review section covers the theoretical bases of psychological capital, workplace flourishing and organizational psychological ownership variables. This section of dissertation reviews the existing literature on variables of present research. Different strategies for developing these positive constructs among teachers have also been discussed in this chapter. Present chapter of literature review also identifies previous work done on these areas and gaps which identifies the need of interrelationship of psychological capital, workplace flourishing and organizational psychological ownership among college teachers.

# **2.1 Interdisciplinary Theoretical Foundations of Research**

Psychological capital, workplace flourishing, and organizational psychological ownership constructs have their basis in positivity, positive psychology and positive organizational behavior. Psychological capital, workplace flourishing, and organizational psychological ownership also shared the interdisciplinary theoretical basis. Interdisciplinary framework of research integrates information, perspectives, and theories from two or more than two disciplines (Keestra, at el., 2016).

Psychological capital refers to four psychological resources of optimism, resilience, hope, and self-efficacy. It is emerging construct in POB which have bases in positive psychology and positivity. Moreover, Psychological capital is related to many positive outcomes like performance, satisfaction, wellbeing, feelings of empowerment, self-perception of growth and competence and citizenship behavior. Additionally, it is also negatively associated with anxiety, stress, intention to quit and cynicism (Avey et al., 2011; Choi & Lee, 2014). This construct has been studied with many other variables and related to many positive outcomes of individual, group and organization but still its association with PO and workplace flourishing needs to be explored. Although psycap relationship with subjective wellbeing of individual has been already explored but present research explored its relationship with workplace flourishing. Based on these facts, present research hypothesized the relation of psychological capital with PO and workplace flourishing.

Flourishing or wellbeing of teachers has been a topic of interest for researchers (Kern et al., 2014). Wellbeing research from the perspective of positive psychology will add value in literature because it focuses on increasing positive states like PERMA (Hoy & Tarter, 2011). Rothmann (2013) in his research work claimed that 80% people in general and 50% employees in organization are woefully not flourishing.

Psychological ownership is also considered as a positive phenomenon now researchers are incorporating it in area of POB (positive organizational behavior) because it is similar with other areas of POB like psychological well-being and psychological capital as it fulfills the inclusion criteria (Avey et al.,2009; Luthans, 2002). Olckers (2013) explains that psychological ownership is significant job resource as it is linked with numerous positive individual outcomes such as happiness / engagement at workplace and many organizational outcomes such as company performance. Moreover, Serenko and Bontis (2016) discussed that it acts as barrier against counterproductive behaviors at work. Furthermore, PO shares feelings of striving and positivity with other positive organizational concepts for instance psychological capital and psychological well-being. Due to its role

as positive resource that help workers to develop positive association among themselves and organizations. it is assumed that research studies in the field of PO will grow continually in importance and prominence in both applied settings and academic field (Avey et al., 2009). As PO is associated with many individual and organizational outcomes, based on these facts present research hypothesized the relation of psychological capital with psychological ownership and workplace flourishing.

In short, these three constructs have their basis in positivity, positive psychology and POB. These are not only beneficial for employees but also significant for organization. In addition to this, literature review uncovers the fact that these three positive constructs have relationship with other positive constructs related to individual and organization but interrelationship of these is still lacking in previous literature. This gap has opened way for exploration of interrelationship of present research constructs.

# 2.2 Positive Psychology

Positive psychology is an emerging field which studies, development of positive habits, mental models and outlooks that focuses on positive qualities of individual instead of repairing destructive and negative aspects of individual (Ben-Shahar, 2008). It studied the strengths, virtues and conditions that help individual to flourish (Bakker and Schaufeli, 2008). The focus of positivity is on wellbeing, optimism and happiness (Diener, & Chan, 2011). Moreover, findings of positive psychology are now applied in education and schools to establish positive education and positive environment in institutions (Seligman *et al.*, 2009). Today positive psychology field is booming around the world. Positive psychology is getting the attention of thousands of professionals in many countries and inspired lots of college students. It is more than science of happiness. Compton, and Hoffman (2013) said that areas like flow, forgiveness, gratitude, resilience, zestful work, wellness, and positive families have gained interest. Positive psychology field is not limited to psychology now it has expanded in different disciplines like sociology, education, social work, public policy and contexts like health, work, coaching, counseling, organizations. It is essential to help people to find ways to spend life happier, purposeful and meaningful (Joseph, 2015). Positive psychology helps individuals, groups and organization to reach at optimal functioning and flourish (Gable & Haidt, 2005). It deals with everyday life. Human beings' purpose is to spend meaningful and pleasurable life and positive psychology helps to achieve this goal (Joseph, 2015). Seligman and Csikszentmihalyi (2014) explains positive psychology is scientific study which promotes human flourishing and flourishing at multiple levels including personal, biological, relational, global and cultural life dimensions. Compton and Hoffman (2013) in their book discussed that positive psychology range of interest is large and encompass humans in positive aspects. Seligman and Csikszentmihalyi (2014) explained its role in three areas of human being life.

1. First is subjective level. In this level it studies positive emotions or positive subjective states. These positive states include happiness, joy, and love, satisfaction with life, contentment, intimacy, and relaxation. Moreover, it also covers constructive thoughts of individuals about self and future for instance hope, optimism, vitality, feeling of angry, confidence and many positive emotions.

2. Second is individual level. This level studies positive individual trails or positive behavioral pattern among people over a period. These behavioral patterns contain persistence, courage, wisdom and honesty. These positive traits and behaviors were previously studied as virtues and character strengths.

3. Third level is societal or group level. At this level it focuses on creation, maintenance and development of positive institutions. It covers the issues of healthy

work environment, healthy families and civic virtues. The purpose is to nurture and support institutions to work for betterment of citizen.

Positive psychology also contributed to field of organization particularly at workplace. It is explained in terms of confidence, hope, optimism and positive feelings of employees associated with many outcomes at individual, group and organizational level (Lehmann et al., 2017). Positivity contributed to many fields including organizational behavior. Positive organizational behavior study psychological capabilities and positive human resources that helps in improvement of workplace performance (Luthans, 2002). Initially positivity research studies like Fredrickson and Branigan (2005); Schutte and Malouff, (2015) and my other were carried on individual level for exploring human and strength capabilities. The focus of these research studies was on engendering employees' self-efficacy, mental health and resilience. Later, researcher also focused on many individual outcomes associated with workplace positivity. Workplace positivity areas includes wellbeing, positive affect, psychological capital, engagement, job satisfaction and citizenship (West, Patera, & Carsten, 2009). Another level of workplace positivity is group that deal with team cooperation, team cohesion, team satisfaction, job performance and team coordination (Lehmannk et al., 2017; West et al., 2009). Another important area highlighted by Cameron et al. (2004) and others is influence of organizational effectiveness. Avey et al. (2011) highlighted that there is a need to know importance of positivity in team and organization.

# **2.3 Positive Organizational Behavior (POB)**

Bakker, and Schaufeli (2008) said that objective of making organization flourished is not possible with focus on existing four D's method that is disease, damage, dysfunction and disorder. Now organizations must shift their focus from preventing low motivation, poor performance, ill-health, disengagement, and unwell-being to the positivity. POB can help to overcome the problem related with four D's. The POB field has originated from newly suggested approach of positive psychology and organizational behavior. Psychology field faced lot of criticism due to addressing more to mental illness instead of mental wellness. Seligman and Csikszentmihalyi (2014) reported that a greater number of research publications are on negative states of human beings as compared to on positive situations. As positive psychology focuses on the virtues and strengths that helps persons and societies to flourish. The positive experiences and positive traits help individuals to prevent pathologies which are cause of meaningless and barren life and improve their life quality. These pathologies have dominated our discipline and cause of lacking positive features in human being. Hope, future mindedness, wisdom, creativity, spirituality, courage, perseverance, and responsibility are overlooked.

Luthans and Youssef (2007) discussed that like positive psychology field, POB is not a new discovery in field of positivity. It stresses on positive behaviors, traits, and states of employees at workplace and organization. Now there is a time for more positive approach that is not only needed in psychology filed, but also require in business and management disciplines. Research studies have shown that use of negatively biased terms like win and beat have increased as compared to positive words/terms like virtue and compassion over last 17 years in business press (Walsh, Weber, & Margolis, 2003). POB fills this gap and encourage researchers to study human resource strengths and positive psychological situations of individual that are related to performance improvement or employee well-being. The research studies in POB field focus on the people's cognitive abilities like creativity, wisdom etc. and affective capabilities like humor and work engagement. POB also studies role of states like psychological resources optimism, resilience, hope, and self-efficacy and personal resources for fostering employees and organizational performance. Additional, Bakker, and Schaufeli, (2008) said that POB researchers are also concerned with peak performance in the organizations including circumstances necessary for employees to flourish.

As far as positive organization scholarship is concerned, it is broader term like umbrella concept while POB focus is on more positive constructs. POB study is describing as positively focused psychological capabilities and human resources potentials that can be developed, effectively managed and measured for bringing improvement in workplace (Luthans, 2002). This definition points out many inclusion criteria of psychological constructs to become art of POB. Firstly, it should be evidence and theory based in order to become as scientific study. Second criteria are positively oriented, thus persistent with POS, positive psychology and positive research area. Third criteria are reliably and validly measurable. Fourthly, it should be open to management and development. Finally, it should give measurable and desired work, behaviors, performance criteria and attitude (Luthans, 2002). Four psychological resources of optimism, resilience, hope, and self-efficacy fulfil inclusion criteria of POB and psycap. Fredrickson's (2009) broaden-and-build theory and Hobfoll (2002) psychological resource theory provided bases of psycap. Fredrickson's said that positivity helps in building psychological resources. Luthans et al. (2015) said that psycap resources fulfils the inclusion criteria of POB and are part of synergistic, interactive resource group. The resources of optimism, resilience, hope, and self-efficacy are interdependent on each other rather than isolated.

# 2.4 Psychological Capital

Financial capital gained more importance in organizational context as it is considered as source of organizational flourishing. Hence, financial capital is valuable and has central place in assets of organization but other forms of capitals are also important which directly and indirectly contribute in development of organization. In last decade, psychological capital received attention of organizational leaders due to its numerous benefits for employees and organizations. Psychological capital is simply psychological resources which human being possess. The formula is simple, more the resources organization have more it will have chances of success. Same in the case of psychological resources. People with high psychological resources contribute more to organizational flourishing as well as people flourishing. Psychological resources are as important as other forms of capital because people are in the center of organization. All resources revolve around the people such as financial, material and information. Thus, psychological capital is getting attention of organization. Psychological capital construct has been studied more in business context and now getting popularity in education sector as well. Present research studied the psychological capital is as important as it is in other fields. Teachers are multitasker and are simultaneously busy in research and teaching.

Psycap received considerable attention in literature of industrial organization. It is associated to various work-related positive outcomes. However, less attention has been given to psycap in educational context. Psycap has its importance in educational setting (King & Caleon, 2021). Before defining the term psychological capital, it is important to know what capital is. Capital refers to human creations which are used to produce services and goods. Economists draw a line between physical and human capital. Physical capital comprises of machines, factories, tools, airports, buildings, highways etc. used to produce services services and goods while human capital includes skills and knowledge acquired by people to enhance knowledge (McEachern, 2011). Moreover, the term capital is used for financial assets, for example funds taken from the financing sources or/and funds in deposit accounts. Capital assets include cash equivalents, cash, marketable securities, production facilities,

storage facilities, and manufacturing equipment. Businesses mostly focus on equity capital, working capital, debt and trading capital.

The term capital was also conceptualized by classical theory and neoclassical theories as human capital, cultural capital, and social capital (Lin, 2001). The concept of capital was also described by Bourdieu as linguistics capital and intellectual capital as he categorizes linguistic capital under the category of cultural capital. Bourdieu discussed nature of culture that how culture is transformed and reproduce and its connection to exercise of power, reproduction and social stratification. He also identified association among different forms of economic, social, cultural, and symbolic capital. According to Bourdieu, the powerful position in social life depends on the capital one has (cited in Navarro, 2006). Alike Marx, he also reasoned that capital is foundation of one's social life and decided position of person in social order. Although, Bourdieu extended the conception of Marx economic capital and explained that with economical capital, social and cultural capital also decided the power and status of individual in the society. The conceptualization of Bourdieu is grounded in symbolic power and social reproduction theories.

Additionally, the work of Bourdieu highlights unequal access to capitals and structural constraints based on race, class, and gender. According to Bourdieu, social capital is based on idea of *power over* against *power to* and linked to reproduction of status, power relations and class. According to Bourdieu, cultural capital is gathering of symbolic elements for instance skills, credentials, posture, tastes, clothing, material belongings, mannerisms that person acquires in social class. There are three kinds of cultural capital—objectified (record collection or luxury car), institutionalized (qualifications and credentials) and embodied (dialect or accent).

### Table 2.1

	Explanation	Capital	Level of Analysis
The Classical The	eory		· · ·
(Marx)	Social relations Exploitation by the bourgeoise (capitalists) of proletariat	Part of surplus value between the use value (in consumption market) and the exchange value (in production-labor market) of the commodity Investment in production & circulation of commodities	Structural (classes)
The Neocapital T	Theories		
Human Capital (Becker, Schultz)	Accumulation of the surplus value by means of laborer	Investment in the knowledge and technical skills	Individual
Cultural Capital (Bourdieu) Social Capital	Reproduction of dominant meanings and symbols (values) Social relations	misrecognition or Internalization of dominant values	Individual /class
(Lin, Burt, Flap, Marsden, Coleman)	Use of and access to resources embedded in social networks	Investment in the social networks	Individual
(Bourdieu Putnam, Coleman,)	Reproduction and solidarity of groups	Investment in the acknowledgment and mutual recognition	Group / individual

Overview of capital theories adopted from Lin (2001)

The term capital has been explained in different context such as financial, social, cultural and human. Research studies in the field of positive organizational behavior talked about another essential resource known as psychological capital. Organizations are more focusing on financial capital although other forms of capitals are also significance. Luthans et al. (2007) describe psychological capital as individual motivational propensities which accumulate with positive psychological capital consists of efficacy, optimism, hope and resilience.

One of the areas from the field of positivity and POB is psychological capital. It provides framework that helps in understanding human assets and potentials. It helps individuals to cope and thrive effectively in adverse circumstances. It is also a viable path to encourage and understand optimal performance of individuals in workplace (Brent & Brett, 2015; Luthans et al., 2007). Demerouti et al. (2011); Peterson et al. (2011) and Luthans et al. (2007) in their research studies said that psychological capital is different from psychological states like emotions and traits like intelligence and personality that are unchangeable and fixed. Psychological capital and its components are state-like capacities that are malleable and enhanced with interventions. It can define as psychological state of individual development characterized by four psychological resources optimism (positive attribution about success in future and now), resilience (sustain and bounce back in adverse circumstances to attain success), hope (determined towards goals achievement and redirecting paths if necessary to goals), and self-efficacy (confidence to put necessary effort at challenging task to succeed).

Psychological capital is related to many positive outcomes like performance, satisfaction, wellbeing, feelings of empowerment, self-perception of growth and competence and citizenship behavior. Moreover it is also negatively associated with anxiety, stress, intention to quit and cynicism (Avey et al., 2011; Choi & Lee, 2014). Ma, Zhou and Liu (2021) also confirmed the association of psychological capital, job involvement, psychological empowerment and retention intention among teachers. Furthermore, Wang, Chen, and Zhu, (2021) said that high level of leaders' psycap positively affect innovative behavior of their subordinate. Soykan, Gardner, and Edwards (2019) said that teachers with high psychological capital reported more wellbeing, less stress and conceptualized work demands as more challenges than pressures. They use task-focused strategies.

Moreover, Luthans et al. (2015) explained that psycap components fulfill the inclusion criteria of POB. The four psychological resources optimism, resilience, hope, and self-efficacy are combined to from core construct of psycap that have empirical support. These are higher order constructs and have the commonalities of first order construct. They also fulfil the criteria of resource caravan. Resource caravan refers to psychological resources which interact synergistically and travel together to produce distinguished manifestations across contexts over time.

As far as commonalities are concerned, optimism, resilience, hope, and selfefficacy share agentic goal pursuit, intentionality and sense of control. In addition to these commonalities, they also contain mutual themes of probability for success and positive assessment of situations based on perseverance and motivated effort. Luthans and his colleagues further clarified with example that optimistic persons view their possibility of success high. Persons with high efficacy will be confident and select challenging tasks intentionally with motion to accomplish it. Same is in case of persons with hope, they will encourage pursuit of numerous pathways for achievement of goals. Resilient persons will allow themselves to recover from setbacks. Collectively all four resources help to maintain intentionality and sense of control while objectives are being followed and attained.

Furthermore, of first-order resources of optimism, resilience, hope, and selfefficacy also possess unique characteristics. Efficacy, optimism, and psycap hope constructs are proactive in nature while optimism as exploratory style and resilience are reactive in nature as they occur after some positive and negative events. Additionally, efficacy and hope share internal focus while resilience and optimism are outwardly oriented. Literature of positive psychology also support inclusion criteria of these resources in psycap (Alarcon et al., 2013). The broaden-and-build theory of Fredrickson's (2009) and psychological resource theory of Hobfoll (2002) explained that psychological resources can be built with help of positivity and tapped in times of need. Luthans et al. (2015) further claimed that of optimism, resilience, hope, and self-efficacy as a psychological resource fulfil inclusion criteria and thus are part of synergistic and interactive resource set. These four collectively make independent and complete psychological constructs.

### 2.4.1 Psycap Optimism

Tal (2013) mentioned that term optimism is dated back in 18<sup>th</sup> century that is also known as modern era of philosophy. There was no comprehensive analysis of optimism until the 20th century in context of learned helplessness and generalized expectancy outcomes (Carver & Scheier, 2001). Optimism in work of Scheier, Carver and Bridges (2001) was conceptualized as disposition trait and defined as positive expectancy outcomes. Further, Carver (2014) considered optimism as comprehensive which comprises of many or specific positive beliefs and expectations of outcomes. In is also taken as individual differences in beliefs about favorable future expectancies. Optimism as exploratory style relates positive events with permanent, persuasive cause, and internal while relates negative events with temporary, situation specific and external. Optimism can be enhanced through motivating individuals and encourage them to believe on their personal abilities (Luthans & Youssef, 2004). Luthans et al. (2010) also suggested that training can enhance the optimism of individuals. Moreover, Carver et al. (2009) conceptualizes optimism as individuals' positive outlook which produce positive expectations. Positive outlook expresses general view while explanatory style explains situation-specific view. POB includes point of view of both.

One of the very important and least understood psychological resource is optimism. Most of the people use the term optimism in their daily life for those who expects good things will happen in their future. They also relate the pessimism with those who have negative thoughts and expects negative and undesirable things will happen with them in future. Carver et al. (2010) explained that optimism is an individual's belief about good things will happen in future while pessimistic hold the positioning that bad things will happen in future. Carver and his colleagues further explained that optimistic people grasp desirable outcomes as achievable and are involved in goal-directed activities. In contrast to this, pessimistic people normally give up and are passive.

The phrase of half glass full and half glass empty usually used to indicate optimism and pessimism. Optimism is attached with many outcomes. People with high optimism have better job performance (Xanthopoulou, et al.,2007), social relations (Sumi, 2009) and health. Moreover, creative abilities and acceptance of challenges are other qualities of optimistic people. Leadership also helps in improving optimism among teachers (Börü, & Bellibaş, 2021). There is also a criticism that optimistic people assume situations as best. As far as psycap components are concerned, psycap optimism is more than dispositional optimism that expects good things will happen in future. Optimism describes positive global expectations and these expectations depends on attributions and reasons to explain specific negative and positive events occurs in presents, future and past (Carver et al., 2009). Interpreting positive events without going into the context of explanatory style is still pessimistic.

Research studies have shown that high optimism may help people to increase longevity and reduce stress, anxiety and worry. A little effort will increase the level of optimism, but it will give benefit to organization in long terms (Murphy, 2015). Improved health, increased motivation, performance and career success are benefits of optimism (Moore, 2020). Evidence showed that psychological and physical wellbeing is related with optimism. Positive health outcomes can be achieved with the help of optimism as less distress etc. Optimism contributes to increasing better health. Seligman (1998) in his theory of learned optimism suggested that positivity helps to learn optimistic attitude for coping stressor in better way. Moreover, dispositional optimism helps people to respond to the situational stress.

Rand and Cheavens (2009); Seligman (2011) said that optimistic and hopeful people possess more life satisfaction as compared to others. Carver, Scheier, and Sagerstrom (2010) disclosed that optimistic people have ability to cope effective with uncertain situations, enjoy good physical health and have better relationship with other people. Moreover, they possess perseverance and self-confidence when faced challenging situation. They contain positive expectancies. These positive expectancies enhance the positive mood and foster the person to better cope with stress and adverse circumstances. They have less chances of sinking in depressive self-pity. Optimistic are more realistic and accept the situation (Carver et al., 2009). The two studies conceptualize the optimism in two ways. Carver and colleagues introduced dispositional optimism and you may call it global expectation about events that it will produce good results in future. Peterson and Steen (2009) explained that another way of conceptualizing optimism is an explanatory style. It is the way of interpreting causes of previous events in life. They believe that if the cause of past failure is transient then it will finish easily, and future is bright. However, if the cause of past failure is permanent then future will be depressed. Seligman (1998) in his study stressed that people may learn optimistic attitude by giving attention to their thinking of patterns of explaining past events. He called this learned optimism. Optimistic are true realists. They said that optimists were found more prepared to accept negative feedback than pessimists about their progress, easily absorb bad news. It is true that optimistic people are more realists. Optimistic thinking promotes the realistic attitude towards future and things. In fact, realists' optimists seek opportunities of learning experiences and growth even in most difficult times. There is darker side as well. Some optimistic peoples hold

dangerous and unrealistic beliefs (Dillard, Midboe, & Klein, 2009). Researchers found close relation between hope and optimism. (Lopez, 2013) said that hope has two components. Pathways and agency. People may discover pathways to get desired goals and motivation play role in it (Rand & Cheavens, 2009). This perspective justifies the relation in optimism and hope.

Bharti and Rangnekar (2019) in their research study discussed that optimism is associated positively with well-being and healthy behavior, happiness, healthier immune system working, academic performance, interpersonal relationship and more success. Optimism is negatively associated with, daily stress, clinical depression and sadness. There are studies which showed that positive outlook of individual depends on jobs designs, Human resource practices and engagement levels of employees, interpersonal relations or involvement and knowledge-sharing practice recognized that optimistic or confident attitude as cause of organizational performance. The conception of optimism has also been examined in relationship with employee retention, performance, up gradations and technological changes, innovation and emotional intelligence that enable people to concentrate on the problems and solutions.

### 2.4.1.1 Optimism as Attributional or Explanatory Style

Seligman (1998) explains optimism as explanatory style that relates positive events to pervasive causes, permanent and personal. He further related negative events with temporary, situation-specific aspects and external. According to him, on the other hand, pessimistic explanatory style relates positive events to temporary, situation-specific attributes, and external while negative events are related with permanent, pervasive reasons and personal. The mechanism for explaining pessimistic and optimistic explanatory styles depends on persons' judgment of independence response-outcome. When we think that future is dependent on our actions. We prepare ourselves to fight for good future. Here we are not helpless instead we are inoculated of it. Moreover, when a person perceive event as uncontrollable and there is no connection between actions and outcome, person feel helpless and stop trying. Peterson and Steen (2009) further said that in situations of helplessness people passively responds to situation and do not avail opportunities.

Table 2.2

Life Events	Pessimistic Explanatory Style	Optimistic Explanatory Style
Positive	Local	
	Temporary	Pervasive
	General/External	Permanent
		Personal/Internal
Negative		
	Pervasive	Local
	Permanent	Temporary
	Personal	General/External

Optimistic and Pessimistic Explanatory Style

Optimists' people take a credit of positive incidences in lives. They are of the opinion that causes behind desirable events are in within their control and power. They want these causes to happen in their future so they can use these to handle other situations in their lives. Moreover, people with optimistic exploratory style internalize good aspects of life and view events positively in present, past and future times. Luthans et al. (2015) in their book explains this phenomenon with example of employees in organization. Optimistic employees when get recognition and positive feedback from their administrators, mangers or bosses, they relate this positive event of appreciation to work ethics and assure themselves to be successful and work hard in jobs and in other chosen endeavors. When employees experienced or faced negative events with unwanted circumstances, optimistic individuals relate reasons to be temporary, situation specific and external. Therefore, they remain confident and positive about their future. When optimistic

employees get negative feedback about work/ task, they use reasoning and blame to boss mood, colleagues' uncooperative attitude etc.

Luthans and his colleagues also quoted example of pessimistic employees in organization. Pessimists' employees do not give credit to themselves for positive outcomes tool place in their lives. When pessimistic employee achieve promotion, they explain it as good luck or other applicants were deficient in needed experience and so on attach promotion to external events. Additionally, the pessimists use attributional causes as situation specific, temporary and they also believe that positive events have less chances to happen once more in future. In addition, pessimist people blame themselves for undesirable circumstances take place in lives. They internalize reasons of negative happenings and unfortunate situations. They suppose that they will again face unpleasant events in future and these negative events will threaten their well-being and success in similar situations and in all fields of life.

Personal examination may also be done to analyses your own position on pessimistic or optimistic style. If you explain causes attached with negative events as temporary, one-time occurrence, situation specific and external you fall within category of optimism explanatory style. In contrast to this, if you blamed yourself for negative events, you possess pessimistic style. Peterson and Steen (2009) challenged unidimensionality of pessimism and optimism within optimism explanatory style. Though pessimism and optimism are negatively linked, but further studies are needed to explore the constructs independence. Mostly researchers focused on the outcomes of optimism. Researchers emphasis on optimism positive results like well-being or mental and physical health, recovery from sickness, effective coping from negative life circumstances, authentic happiness and life satisfaction (Seligman, 2002). Moreover, optimism is positively related with numerous desirable results, including performance at workplace (Avey at al., 2011), and performance in many other life fields, for instance well-being, health, sports, politics and education (Peterson & Steen, 2009). Spurk et al. (2015) explained that career optimism is associated with job satisfaction, career adaptability and subjective career success.

### 2.4.1.2 Flexible, Realistic PsyCap Optimism

PsyCap optimism is flexible and realistic. One quality of effective psycap optimism is that it does not go for extreme forms in internalizing success, externalizing failure, control over work life, and therefore shirking responsibility. Avolio and Luthans (2006) revealed that flexible, realistic, psycap optimism does not depict as deceptive ego increaser and just feel-good. PsyCap optimism characterizes as robust lesson in analysis of past situations, self-discipline, preventive care and contingency planning. It also systematically combines multiple aspects of optimism considering earlier conceptualizations as well. Flexible, realistic, optimists learn and enjoy from several workplace events and life course to the maximum possible extent.

### 2.4.1.3 Strategies for Developing Optimism at workplace

Optimism contains both qualities such as trait-like and dispositional as discussed by Scheier et al. (2001) and learned optimism discussed by Seligman (1998) and Carver et al (2009). The conceptual continuum of optimism exists (Youssef & Luthans, 2015). There is a debate on every construct about their state-like or trait-like characteristics. Optimism is state-like that have developmental properties. It can be enhanced or developed by focusing on changing pessimistic style and positive expectations. Research study conducted by Schneider (2001) explained three viewpoints that are specifically suitable for developing flexible and realistic optimism at work, detailed as under:

1. Leniency for the past behavior;

2. Admiration and accomplishment for the present times;

3. Seeking the opportunity to flourish in future.

Leniency for past behavior does not suggest evasion or denial of work responsibility. Despite this, realistic optimism is a positive reframing method that recognizes realities of situation. It follows problem-centered handling method toward the manageable features of situation. Murphy, (2015) said that People may enhance their optimism at work quickly by following three easy steps, but honest assessment of people is needed. First step is to find five to ten people at your workplace with whom you like to spend most time of your time. It's just a means to prioritize and distill your list of people. Secondly rate the optimism level of these people. Make a separate list of optimism and pessimism people. Thirdly, spend more time with people who are most optimistic. There is no need to cut out the pessimist. Just increase the exposure and amount of time with optimistic people. This simply method will help you to enhance your optimism level.

In crux, optimism is to expect that good things will happen in present times as well as in future. Optimism is a positive construct and has its foundations in positive psychology and now is also considered as positive psychological resource. It is gaining popularity in all fields of life such as business organizations and education sector due to its various positive outcomes. Different research studies also provided the evidence that it is malleable and can be learnt. Optimism is an important ingredient in success of people and organization. Optimistic people possess positive qualities. Optimistic teachers may help students to become optimistic.

# 2.4.2 Psycap Resilience

Luthans (2002) described resilience as individuals' ability to face the adversity and bounce back in adversative job situations like drastic change responsibilities etc. Demerouti et al. (2011) said that resilience can be boosted through strategy of three main activities. First is to focus on available resources and utilize them to enhance likelihoods of success, second is to minimize risks of mitigating odds to increase possibility of achievement and third is to increase probability of success through strengthening the action-strategies. This process will increase knowledge gradually. Luthans (2002) further said that you may call resilience as a person's ability to bounce back or rebound from failure, conflict, adversity or even in progress, increased responsibility and positive events. Masten et al. (2009) said that resilience involves the disposition of positive adaptation processes and patterns to resources. They further said that resilience encompasses psychological strengths and everyday skills which can be measured, identified, nurtured and maintained in all people irrespective of their psychological conditions and age. Resilience can be developed with training programs.

Masten (2015) observes that resilience originates from everyday normative human resource. It has reflective insinuations for promoting human capital and competence in persons and society. Avolio & Luthans (2006) extended and generalized the positive psychology concept of resilience at workplace. Luthans (2002) said that resilience fulfils the criterion on inclusion in psycap. He further describes resilience as a process in which individual not only come back to the normal from adversity but also learn from hardship and use it as catalyst toward development and growth. Fletcher, and Sarkar, (2013) said that resilience covers adverse circumstances and positive adaptation of individual in adversity. Resilience is needed in various adversities of life and work. Positive adaptation should be based on examination of adversity in context of domain assessment and use of stringency criteria. Resilience benefits the people who face the difficulties and adversities and build through a dynamic interaction with the environment. The teachers are required resilience to face the setbacks and challenges due to the economic crisis (Botou et al., 2017).

Recently the resilience concept has been practiced across lifespan. People face different challenges in various stages of their life. Theorists have recommended that challenges are important part of lifespan development. As we face various challenges or crises in our life. Another important thing is that challenge and some difficulty in the life are essential for healthy development of individual. According to Seery, Holman and Silver (2010) resilience development is a gradual process. those people who have having history of managing moderate level of adversity contains higher resilience in their later life. People with lower resilience levels were found with history of not facing/experienced any major hardship, losses and traumas.

Resilience at workplace is defined as developmental path that is characterized by showing competency in adversity continue professional growth afterward in workplace (Caza & Milton, 2012). These concepts describe few characteristics about resilience: (i) adverse circumstances (ii) showed adaptation and (iii) following growth. Therefore, goal of learning the concept of resilience in work context is to learn the circumstances that are helpful to facilitate capacity in leaders, employees and organizations. Sutcliffe and Vogus (2003) said that research studies on workplace resilience are needed as previous work on this is very fragmented, inadequate and relatively rare. From the perspective of clinical psychology, Masten et al. (2009) state resilience as positive adaptation patterns of individuals following or during significant risk or adversity. As Avolio and Luthans (2006) explained that psycap approach of resilience broadened the concept and explain that it to recover from adversity, tackle it as positive challenging situation and to do more than equilibrium point or normal. There are many factors that contribute or hinder in resilience development. Masten (2001) classified these factors into risk factor and assets. Additionally, Masten et al. (2009) disclose that the adaptational processes tie these factors interactively, synergistically and additively that results in resilience.

## 2.4.2.1 Resilience Resources

Resilient employees are beneficial for organization in many ways as they build strong relationships and connections with others in organization (Davis, 2014). These good relationships among employees are characterized by several features and connections results in effective communication wherein employees are responsive and listens actively to the other people around them. Additionally, they also take care of their emotions as well (Davis, 2014). More importantly relationships at positive workplaces, resilient employees will help other employees to attain accomplishment in workplace. Moreover, resilient employee acts as a team-player and work for win-win situation.

Jackson, Firtko and Edenborough (2007) said that social support in workplace plays a significant role to enhance resilience in employees. Personal and professional networks can be developed through social support which act as guidance source in situations of stress. Resilient people in organization nurture their developed networks and build trust environment. Most of the definitions of resilience covers the positive adaptation and adversity concepts. Contemporary workplaces are typified by tension and stress. Internet and other technologies mean that employees are engaged with work continuously. Resilient employees have a capability to manage their work stresses effectively so work is not detrimental and overwhelming for them (Davis, 2014). Resilient employees do not burnout as they are actively engaged in nurturing themselves and self-care after adversity and stressful incident. Moreover, they are also honest to their real self and are authentic. Their behavior is aligned with their beliefs and values. There is no difference in their practice and preach. They also show grit attitude (Davis, 2014). Resilience building is a concept that help individuals to prepare for and respond to change effects along with other stresses and shocks (Archer, 2019).

Pietrzak and Southwick (2011) said that while defining resilience, there is need to specify that resilience is a process, trait, or outcome. Moreover, it is also important how to identify resilience in people. Though, resilience exists on range that shows differing degrees of resilience across numerous fields of life. Kim and Turkewitz (2012) further explained that resilience level may change with passage of time due to function of development and people interaction with its environment. Resilience asset is a measurable characteristic of persons or situations which forecasts positive outcome with specific criteria of outcome across various levels of risk. Masten et al. (2009) described the potential assets which contribute to enhance resilience are cognitive capabilities, self-regulation, faith, temperament, general attractiveness or appeal, positive self-perceptions, emotional stability, a positive attitude towards life, humor. Other assets that contribute in increasing resilience are insight, relationships, independence, initiative, humor, morality and creativity (Wolin, Desetta, & Hefner, 2016). Masten (2001) explains role of effective parenting, ruleabiding and prosocial peers, collective efficacy and caregiving adults in enhancing the resilience. Moreover, Gorman (2005) discussed the importance of both relationship-based and personal resources in increasing resilience. He further said that people who discover and improve their capacities and discover effective mentors have more chances of recovering from adversity and achievement in life and career.

# 2.4.2.2 Developing Resilience

Resilience can be developed in the adults and children. There are many factors that contribute to the development of resilience in people. As Greve and Staudinger (2006) said that these are same in children as well as adults. The community and family factors are more contributing in development of resilience as compared to individual factors. Family and community factors stress on the strong social supports in terms of emotional level and practical or instrumental level. Here the important aspects are how people deal with difficulties in successfully manner. The social network support of friends and family including sense of involvement in community and participation in the various activities also contributes towards cultivating resilience among people. This also indicates that sense of meaning and positive relationships in life helps to buffer the influence of unwelcome events of life and stresses.

Positive emotionality factor that is relevant to the field of positive psychology can enhance resilience. Tugade and Fredrickson (2007) study has also found that positive emotions help in moderating the responses to stress. Tugade, Fredrickson and Barrett (2005) said that emotional intelligence also play an important role as it is more helpful because now individual to express their positive emotions with specificity and precision. Moreover, problem or task -focused coping strategy may also enhance the resilience among people. Kashdan, Breen and Julian (2010) claimed that too much effort to regulate emotions does not give any positive result in resilience. However, resilience needs balance between the too little and too much control of emotions. Different research studies identified different factors that contribute to the development of resilience among people. These are self-integration, high self-complexity, practical and emotional intelligence, openness to experience and capacity of individual for empathy. Hildon, et al. (2008) said that resilience can be understood by looking at the stories or narratives created by the person. These stories help to understand person about how he or she look at the situation and more importantly the way of resolving it. As life stories are important to learn from it. Resilience cannot be trail. It is the way in which individual deal with adverse circumstances which can be developed in person. Each person has its own unique way to deal with adversity. The APA recommends various factors that are important for development of resilience in people. These are following:

• Make networks with friends, family and community;

- Do not see crises or adversity as insoluble problems;
- Accept changes as it is part of life;
- Approach your goals and targets;
- Search for opportunities in life for self-discovery;
- Take some decisive action in life and use task and problem focused coping strategies;
- Develop a positive view about yourself and about others;
- Look events in their perspectives;
- Develop a hopeful attitude; and
- Pay attention to yourself, your feelings and needs,

Masten, Cutuli, Herbers, and Reed, (2009) identified some protective factors necessary for development of resilience in youth and children. Positive affection relationships, organized environment of home, authoritative parenting, positive family environment with low dissonance among parents, connections to rule-abiding and prosocial fellows and socioeconomic advantage are some protective factors necessary for development of resilience in the close relationships and family. Masten and his colleagues also explained that effective schools, bonds with pro-social organizations, neighbors and friends with high level of collective efficacy, high degree of good public health and safety are some protective factors necessary for development of resilience in the community. Good problem-solving abilities, positive viewpoint about life, skills of self-regulation for self-control of arousal, impulses, and attention, self-efficacy and positive self-perceptions, sense of meaning and faith in life, adaptable personality and easy temperament are some protective factors necessary for development of resilience in the child (Masten at al., 2009).
Master training program of resilience is the largest training program that effort to teach resilience among people particularly in army. Now, thousands of military persons in US Army have been received training of resilience (Seligman, 2011). The purpose of resilience program is to develop resilience skills that will help people to protect themselves against the PTSD (posttraumatic stress disorder) and help them for posttraumatic growth in future. There are three modules explained by resilience training program which are helpful for the development of resilience skills in people. These are building the strong relationships, developing the character strengths and building the mental toughness. The techniques of mental toughness are used in trainings of learned optimism; rational cognitive and rational emotive therapies are also useful for the development of resilience among people. This primarily focuses on changing catastrophic and pessimistic views into adaptable and rational thoughts. The gratitude journal is another useful way in this module.

Research studies on resilience have identified that people are amazingly malleable to different types of problems in their life. Seery, Holman and Silver (2010) said that unfortunately, in some situation's adaptability work as partial success and lingering problems remain even after undesirable event. Though, in many situations people find some heroic and creative ways to grow themselves from disappointments, tragedies and setbacks in life. It is important to note that that unforeseen problems are part of life. Therefore, it is important to accept the challenge and difficulties of life and deal with these difficulties and challenges of life (Seery et al., 2013).

### 2.4.2.3 Approaches for Developing Resilience in Workforces

Resilience training proved many helpful effects on individuals. Resilience training is also effective for enhancing positive mental well-being. It also reduces depression, stress, negative emotion and anxiety. The focuses of resilience training are mainly on executive /

developmental coaching, skills-based coaching, compassion-based practices and mindfulness (Robertson et al., 2015). Resilience is a developable, flexible, dynamic psychological strength or capacity. As Masten, (2001) claimed that resilience is not a mystical or magical strength. Moreover, Sutcliffe and Vogus (2003) said that it is not hardwired and super material fixed trait. The positive psychology field and business firms are taking resilience as trait that can be developed and people became more resilient with the passage of time. Emerging research studies in field of neurology also favors the brain malleability toward improved resilience in people. Davidson (2012) research on resilience also roved that it can be objectively measured and improved quickly or slowly when one come back from adversity. Resilience training and assessment is effective in numerous settings including treatment, education, and prevention. In business settings resilience training and development have made their place. As many organizations are now working on development of resilience amongst employees. The trainings of resilience development also offer interventions and resolutions tailored for change management circumstances and leadership development. Masten (2015) recognized three approaches set for resilience development that are helpful at workplace. These approaches are termed as asset-focused, risk-focused and process-focused approaches.

Asset-focused approach focusses on improving the actual and perceived level of resources and assets that increases the likelihood of positive results. Youssef and Luthans (2015) highlighted that in workplace, these assets include social capital (networking, relationships), human capital (education, experience, knowledge, abilities, skills), and components of psychological capital (hope, efficacy, optimism). Human capital as explicit knowledge, aptitudes and skills can be enhanced and learned with traditional programs and development trainings. The human capital as tacit component that explains the comprehensive understanding of organization's culture, specific values, strategies,

processes, and structure can be acquired with many recognized techniques and approaches for example mentoring, job rotation and socialization. Trust building, open communication, transparency and authenticity, recognition and feedback, work-life balance and teamwork initiatives are the sources of development for Social capital.

The risk-focused approach offers risk factors which enhance the chance of unwanted results being prohibited (Masten et al., 2009). Luthans et al. (2006) highlighted that psycap resilience focuses on the management of risk factors instead of avoidance. As in earlier explanation of resilience Luthans (2002) explained it as capacity that is developable to bounce back or rebound from conflict, failure, and adversity and even progress, increased responsibility and positive events. So, in organization, promotion of employee is a growth opportunity and positive event that will increase responsibility on employee, and it can also be supposed as high-risk and overwhelming situation. Only working on the risk-factor approach, person who got promotion will take his promotion as increased responsibility etc. In this situation there is need to go for risk-management strategy instead of risk-factor approach. With risk-management strategy, a person work on enhancement of self-efficacy. This can be done through constructive feedback, mentoring, and coaching. The intrapreneurial and entrepreneurial initiatives are examples of risk-focused approach. This involves thinking out-of-the-box, that motivate high risktaking but has high returns. risk-taking in entrepreneurial business environment is commended, necessary and encouraged for achievement in the competitive atmosphere. Many people with high-potential thoughts and creative capacities sacrifice their dreams and go for protective risk-avoidance policies. However, still there is a need to avoid unnecessary and destructive risk factors, even physically and psychologically healthy individuals should avoid these at workplace.

Another approach is process focused. This strategy presents as an effective adaptational processes and systems (Masten et al., 2009). These adaptational processes and systems are organized to classify, develop, select, maintain and employ the resources in handling risk factors. This process helps in overcoming adversities. Avolio and Luthans (2006) discussed that the processes of self-regulation and self-awareness is important for development of resilience process. only possessing true resources are not enough in difficult periods for effective functioning. It is also important to accurately measure these resources that is self-awareness and meticulously develops and employs these to reduce the risk factors that is self-regulation. The fields of adolescent and child psychology highlighted many coping mechanisms and resilience at work clearly differentiates among approach coping and avoidance coping (Harland, 2005). Moreover, approach-coping methods are positively related with resilience more as compared to avoidance-coping as it is negatively associated to effect of resilience. According to Dunn, Uswatte and Elliot (2009) resilience is a descriptor refers to wide range of capabilities for positively and constructively adapting to adversity, risk or and in colossal negative happening, it is also defined as positive adaptation pattern of individual in face of risk or adversity. Lack of resilience is threatening for wellbeing of individual as people with having a quality of resilience have a potential to bounce back in difficult circumstances. Different people possess different degree of resilience as it differs in in its intensity. Davydov et al. (2010) explains that there are studies that conceptualize the construct of resilience as protective mechanism which is like the concept of psychological immunity. As psychological immunity refers to mechanism which act as buffer against the future challenge.

Concludingly, resilience is a positive construct and one of the important psychological resources. Resilience is an ability of people to bounce back in times of adversity. People face various circumstances in their life including adverse situations. In these situations, only way to come out of it is to face the situation and find out ways to handle it. Resilience is one of the very powerful psychological resource which helps people to handle and cope with difficult circumstances. Additionally, it has many positive outcomes for individuals and as well for organizations. Resilient people never give up easily. Resilience is not only important in daily life and business world, but also a necessary element of teachers' life. Teachers face different situations and stressors in their life and teaching profession. Resilient teachers would help students in becoming resilient students who can face the tough practical life of future.

#### 2.4.3 Psycap Hope

Hope refers to motivational state based on shared relationship of factors like agency, goals, and pathways that assists people to envision different solutions of difficult situation to attain achievement (Luthans and Youssef, 2004). Agency refers to goal-directed energy while pathways describe planning to reach at goals. Simply, agency is the determination or willpower to follow goals and pathways is the way power to reach at goal (Lopez, 2013). There is certain guideline by following these hopes can be increased. These are acceptance of goal, identifying measurable goals, developing alternate paths, defining required goals, developing skills needed for enhancing critical reasoning. Hope construct is embedded in Snyder's hope theory that is applicable in various life domains (Snyder, 2000).

Hope or expectation is a key element that determine person's motivation level to follow their goals to eventually achieve them. It is very hard to pursuits the goal enthusiastically when you know that you will never achieve. Many theories of motivation and hope follow the notion of expectation of individual to attain success in achieving goals. Snyder, Rand, and Sigmon (2002) in their research study explained that pathway and agency are two processes of hope theory. As mentioned above, pathways are believed of an individual that he or she can find out paths to reach at goals while agency is energy to pursue to goals. Thus, hope theory holds the view that future hope is result of believing that one can make realistic plans and have enough energy to reach at significant goals. Rand and Cheavens (2009) further added that hopeful people possess positive emotions. There are many positive benefits of hope. People with high level hope are confident, enjoy well-being in future and can handle stress successfully. Moreover, they find out alternate paths to achieve goals and have higher level of social support. Training helps to improve hope of employees. The hope has impact on various domains and dimensions of mental and physical health. Moreover, hope promotes positive functioning and resilience (Gallagher, & Lopez, 2018).

Hope is frequently used word in routine language. Though, there are few misunderstandings about hope construct as a psychological resource about its constitution and its characteristics in persons, groups, organizations, societies, and nations. Lopez (2013) clarified that it is not wishful thinking as many people confuse hope construct with the term wishful thinking, emotional highs, an unconfirmed positive behavior or illusion. Research of Snyder on hope supports that hope is thinking or cognitive state which enables individual to set realistic and challenging expectations and goals and then reach out those aims with a self-directed energy, awareness of internalized control and determination. This refers to willpower or agency.

Snyder explained that waypower or pathways are integral and equally necessary components or elements of hope. Snyder, Rand and Sigmon (2002) said that in waypower or pathways hope component, people show capability of proactively making alternate pathways to their preferred outcomes. Bryant and Cvengros, (2004) clarified that this is the component (pathways) that distinguish hope from terms including other psychological resources such as optimism, efficacy, and resilience.

Further, there exists reiteration between pathways and agency. As Lopez (2013) added that one's determination and willpower motivate or energize search for more new pathways while the innovation, resourcefulness and creativity are involved in developing the pathways that in turn provoke one's sense of control and energy, which together as a result uplift hope to upward spiral. If person has the capability to control, when necessary, then alternative predetermined pathways might work so hope can even grow and is sustainable. Luthans at al. (2015) explained that there are several ways that explain high hope levels. Firstly, clear goals are needed. Secondly, consistent attitude of person towards accomplishment of goals is needed which shows the strength of one's willpower, amount of energy put in and clear sense of control and agency over desired destination. Third is that when setbacks and obstacles put halt towards reaching their goals, they shift to different alternate and creative paths around their hindrances and follow goals without any disruption. People sometimes get stuck or blocked on pathway and are unable to find alternative, they are frustrated. They are at early stage of learned helplessness discussed by Seligman. They thought that situation is not under their control. While hope theory explained learned hopefulness instead of helplessness. Learned hopefulness helped people to redirect themselves to some alternate pathways around adverse circumstances for attainment of goals. Finally, new effective pathways further enhanced people enthusiasm that leads towards more chances of achievement and positively enhanced hope upward spiral.

Apparently, the word "hope" is small but very important one. It explains difference between giving up and having a go. Hope helps to find ways to accomplish tasks (Strategic Direction, 2014). Hope refers to expecting good things in future. It has gained attention of researcher since 1990s as it is linked with wellbeing (Brouwer et al., 2008). Snyder (2000) conceptualized hope construct as cognitive and trait-like including affirmative beliefs about their ability to achieve goals. Geraghty et al. (2010) reported same belief in their study and said that it is cognitive that identify through shared interplay between components of agency and pathways. In pathway component of hope, individual identify different available routes or means that lead the person towards achievement. Individuals with higher on pathway component possess the capability to generate many possible ways to attain their goals and have ability to determine various viable routes and alternative routes in case of failure of strategies. Agency component of hope describes one's belief in their abilities to be successful through pathways to apprehend desired goals. People with higher level of agency component of hope is described by motivation, energy, and determination that direct them towards attainment of goals. Although, construct of hope has some common features with self-efficacy and optimism concepts as they all shared with beliefs regarding expected success. Hope is also different in aspects like Peterson and Byron (2008) said that construct of self-efficacy does not contain component of pathways that helps to reach at desired outcomes. The emphasis of self-efficacy is on whether a person can execute actions in the particular circumstances while hope stresses on belief of individual to carry on goalfocused actions. In the same way, optimism and hope relate to positive expectations but focus of positive expectations varies. In case of hope positive expectations are associated with goal fulfilment while in optimism positive expectations are linked with general expectations regarding positive events.

There are research studies that explain that hope pushes the adaptive behavior and it also develop in early life like other characteristics. Pathways thinking arises first as child learns relationship among actions and the outcomes. Then, the recognition of self-develop after understanding of self. It can be strengthened with the help of personal experience. People with high hope find ways to overcome problems (pathways) and confidently deal with strategies (agency). Different research studies provided evidences that construct of hope shows positive behavioral outcomes like performance in many fields( academics, athletic and job), problem solving and coping (Peterson & Byron, 2008). It protects people from anxiety and stress. Moreover, it also encourage healthy behaviors in people (Enavati, 2013). The hope construct has positive physiological effects. Therefore, it is a positive psychological resource as employees with high hope directs their energies toward attainment of goals and redirecting path when necessary to goals to get success (Luthans at al., 2010). High hope people invest more effort towards attainment of goals as these people are goal oriented. They are risk taker and act proactively while performing work related tasks. They have capability to generate pathways to achieve goals in certain situation. In addition to this, they develop new approaches and methods to generate ways to approach goals in difficult obstacles as they believe in themselves. Hopeful employees display better resilience and efficacy. As they self-select challenging objectives/ goals that act as mechanisms which contribute to the resilience and efficacy. There is a connection between hope and confidence (efficacy). People having both characteristics of hope and efficacy possess internalized energy and motivation or positive hope as they have faith in their capabilities (Avey et al., 2010).

#### 2.4.3.1 Approaches for Developing Hope in Employees

Lopez (2013) described that people of this generation are facing crisis of hope. The reason behind is that they are lacking three necessary elements of hope. First, there is a need of at least one important future goal. Second, people are confident that they have both agency (power) and pathways (resources) to attain their objectives. Third, they are lacking one caring person who will cheer them. Luthans et al. (2015) further describes the reasons and said that people have developed the feelings of hopeless due to challenges of modern world. There are many causes of hopeless feelings. Some of the reasons are obsolete school syllabuses that have little relevance with life; substandard instructional approaches that

stress more on rigorous assessment of students than learning and application of knowledge in real life; hard-hearted role models, teachers, and parents who are less concerned and at best distant; unsecure localities that enforce unnecessary distractions and obstacles; and ineffective leaders and poorly designed jobs that become hindrances instead of pathways for achievement and success. These problems are affecting all people including children, youth and old. These hopelessness circumstances are damaging people hope. Carlsen, Hagen and Mortensen (2012) explained that hope is one's ability to envision better futures that enable collective and relational processes which facilitate ideation and open-ended thinking and develop pathways, possibilities and new goals. Luthans (2002) and Ouweneel et al. (2012) justified that psycap hope is a developmental state and malleable.

Development of hope can be done in organization by focusing on hope necessary components, agency, the goals and pathways including its underlying collective and relational processes. There are many approaches that have shown successful results in nurturing and developing hope construct. These are goal setting, stretch goals, approach goals, stepping, mental rehearsals, rituals, involvement, reward systems, strategic alignment, resources, and training. Goal Setting is very helpful approach for developing hope in employees. Lopez (2013) metaphorically and literally labels goal setting as showing up. Goals push us and motivate us through life and are important prerequisite for any success. Physical presence of individual does not assure achievement. It helps us to understand our present state and helpful to know our desired targets. So, sight of desired targets is important otherwise we will lose hope. There is a relationship between performance and goal settings. Moreover, internalized, committed and self-regulated goals help to get performance gains. Furthermore, Latham, Ganegoda, and Locke (2011) explained that goals (agency component of hope) which are participatory, self-set, or even assigned, and yield logical rationale show higher performance as compared to unexplained dictated, goals. The effective goal setting effects level of motivation, effort extended, persistence, choices made and enhances ability and willingness to go for creative techniques to attain goals (pathways component of hope).

Stretch Goals is another way for developing hope among employees. Specific, challenging, measurable, and achievable goals promote hopeful thinking, are conducive to develop and therefore bring performance enhancement. Stretch goals are difficult to stimulate exploration and excitement, however still supposed to be reached. They permit reasonable expectations and trials of achievement given additional effort.

Approach Goals strategy may help employees to enhance hope. Mostly people frame goals for those things which they want to leave or eliminate in their lives. Elliot et al. (2014) clarifies that these kinds of goals are known as avoidance goals. The problem people face in avoidance goals is that the motivation, excitement and sustainability level is not the same as in approach goals. In avoidance goals, people frame goals negatively and it also promotes fight-or-flight system. The example of this is that people promise and goal setting for not eating junk food. With the passage of time due to deprivation, people start thinking about forbidden foods and give up their goals. One of the reasons behind is that delayed gratification and self-regulation exist for limited amounts. With the passage of time, people give in when emotional mental, and physical conditions wear out. Once the resolution is broken, people stop trying as they feel thwarted because they considered one pathway that has been blocked. In contrast approach, goals are followed by achievable plans to meet such goals, for instance, I will add more vegetables and fruits in my diet and regularly do exercise. Achieving goal in each day in form of tangible achievement encourages the person to pursuit next cycle of goal. On the other hand, the reinforcement and sense of achievement related with approach goals benefits to withstand goals and waypower and willpower to accomplish them. As a result, person take goal as scaffolding

and there are many means to approach scaffolding depending on pathways and goals created.

Stepping Strategy is an important step in hopeful goal achievement process. In process of stepping, long-term, overwhelming and even difficult goals are divided into smaller, manageable and proximate milestones. Youssef and Luthans (2015) said that stepping is a gradual progress of reaching to distant goals. In this process pathways and agency are enriched. It provides a sustainable base for following extreme challenges effectively.

Mental Rehearsal is another effective method to pathways thinking toward attaining goals. It provides opportunities to people to prepare and think about for future in contrast to reflecting on restricted options accessible in past. This method allows to practice our actions and thoughts that will help to accomplish goal, as well as facing and handling problems and moving to alternative pathways. Real problems can be faced better after going through the activity of mentally rehearsing. Gollwitzer and Sheeran (2006) discussed in their meta-analysis study that spelling out in advance about how to pursue goals, increases the chances of accomplishing goals as compared to just having intentions to attain goal. Moreover, mental rehearsal approaches even help low hope level people to get better results.

Rituals also contribute to process of development of hope. Sometimes consistency in pursuing goal is difficult even when agency, pathways and goals are fully mobilized because of constrains of time, resources (mental, physical and emotional) and social support. Though hope is mainly cognitive, but emotions are also important. In case when energy is low people may use ritual that is an effective approach for sustaining goal pursuits. Rituals keep people on track without thinking excessively and use of huge amount of energy in constructing up waypower or willpower. Rituals involve behaviors at times, for instance, there are many things that people are used to it or regularly perform like brushing teeth. Rituals are just putting brain on autopilot while pursuing goals as we also do mental rehearsals. It is easy to understand with example of daily exercise at a specific time of day. Those who have habit of regular exercise don't do any commitment of other activities at time of exercise. It also protects people from habit of procrastination. It also shows the importance of that activity to others who are around us. The same principle applies to other repetitive targets for example studying, spiritual activities and meditation, and investing time in relationships with friends and family (Youssef & Luthans, 2015).

Work Involvement is another important approach. The bottom-up communication and decision making, opportunities for involvement, empowering employees, engagement, increased autonomy and delegation have showed desirable outcomes at workplace. For instance, Harter, Schmidt and Hayes (2002) and other researchers have found that such types of involvement in works results in high employee satisfaction, commitment, increased performance, identification and psychological engagement. In examining the importance of involvement approaches in building hope in employees, it is obvious that these techniques provide freedom, authority and power to make choices and decisions to workforce that is agency. Additionally, involvement approach helps people to take initiative and encourage to implement the self-designed course of action that is pathways. According to PsyCap hope, involvement of employee for performance increase is not just motivational or emotional as it also a cognitive processing that helps individuals to evaluate and consider how to convert impossible to possible one (Luthans, 2016).

Reward Systems also contribute to hope development process. People get what they reinforce. PsyCap hope can be reinforced through positive feedback and rewarding genuine recognition to those people who contribute towards goals, take initiatives of effective goal

setting, exhibit self-regulating behaviors and internalized control (agency), and relentlessly and creatively follow numerous alternate pathways to achievement of goal. It is important to understand that well-designed system of reward align goals of organization with extrinsic and intrinsic rewards, helps in success process. In many situations reward systems do not develop connection with performance and motivation in organization; people in organizations feel lack of connection in the work they do and reward they get. As organizations are not making any connection between reward and work (Luthans, 2000). Moreover, this connection gap can lower performance and motivation. Peterson et al. (2011) explained that organizations must make a link between actions and rewards that will highly motivate the employees.

Resources play significant role in hope development process. It is inevitable to hold back the blockages of resources to achieve goals in today's hypercompetitive and everchanging environment. Therefore, alternative pathways for enhancing and maintaining hope become important. Psycap hope is concerned with alternating pathways to identify routes that work well to attain goals. Though, with situational constraints like lack of resources, highly disengaged employees can encourage an externalized perspective that quickly lessens the accessible pathways which results in apathy, disengagement and hopelessness. Measurable, clear and achievable goals with effective resource allocation are important for achieving goals and sustaining hope. In addition to this, organization and leader Support also helps to find alternative pathways. Managerial commitment and support are also essential resources along with material resources. Let us say, only few vital goals can be achieved without backing of top management, irrespective of waypower and willpower that front-line employees and middle managers hold. In fact, supportive environment is also needed with hopeful members in organization.

Strategic Alignment is vital in hope development process. In todays' work environment, contemporary perspectives on strategic management give more importance to the human resources for enhancing competitive advantage (Luthans et al., 2015). Although, organizations are paying more attention to strategic leadership that provide employees clearer sight about their future possibilities. Even organizations are focusing more on motivation of employees that is pushing employees into a wide range of innovative pathways for attainment of success. Avolio and Dunn (2013) explain that organizations where their leaders share their views get more financial benefits. The way leaders express their hope both externally and internally matters for motivation of workforce and for tangible financial returns. In the same way, successful strategic management focuses on provision of financial and material resources where they expect highest return with focus of developing pathways and agency of hope needs and align development and placement of human resources of all employee's potentials and capacities. The other extreme is to hire people incompatible to their job responsibilities, so they have less opportunities for achievement. These misalignments restrict the possibilities of pathway, with employees' hope.

Trainings and workshops are necessary part of any organization and contribute to development of hope. Those organizations that belief human resources as their important resource and invest on people with training also must be cautious in adopting training philosophies and implementing programs. As, prescriptive trainings may limit the pathways thinking. Noninteractive or one-way training techniques may also reduce contributors' agency sense. Instead, skill-oriented trainings disseminate task related information and technical knowledge that also limits thinking in some way. While in contrast, hope-promoting training are interactive, participative and hands-on. The focus of hope trainings is to enhance competencies and develop capacities into strengths that can be

used in numerous conditions. Additionally, hope training also equips and enable the individual with skills with focus on self-regulation, self-awareness, self-development and self-evaluation. Hope trainings also provide room for people to develop both own and passionate goals. Hope in individuals cannot be developed on assigned pathways and borrowed agency (Luthans et al., 2010).

Lopez (2013) discussed that hope helps in development of emotions and well-being. Rand and Cheavens (2009) further clarified that hope theory supports that well-being is improved when individuals have strong goals and they have resources and capacities to reach them. Thus, hope therapy benefits individuals to hypothesize clearer goals, consider various pathways and summon commitment and energy to reach at them. Furthermore, goals should be meaningful. There many benefits people can get from hope training. Firstly, individuals need to set specific, achievable and measurable goals. Moreover, there is need to set criteria. If goal is happiness, then you must define and revisit what happiness is. Do you want to feel pleasant emotions; become content; be engaged in life fully; or give additional love to others? You must assess your happiness level as well. Hope training is also helpful in a way that it helps to emphasis on immediate and concrete objectives that provides a way to happiness. The hope training helps people to prevent themselves to become a victim of false hope syndrome. People support is also necessary in changing their unhopeful behavior to hopeful behavior and can be achieved in short time period. During hope training, there is a need to be careful about overconfident behavior as it is a false hope. In fact, unrealistic expectations weaken efforts to change behavior ((Luthans, etal., 2017).

In short, hope is a positive construct and one of the important psychological resource. Hope is a cognitive state of individual in which s/he set realistic targets and find different pathways for the achievement of these targets. Hopeful people find ways to accomplish goals instead of giving up in difficult circumstances. People with high hope

possesses positive qualities and beneficial for the productivity of organization. Organizations may adopt different strategies for enhancing the level of hope their employees as it is malleable and can be developed in employees. People with high hope also possess high efficacy and resilience.

### 2.4.4 Psycap Self-Efficacy

Psycap self-efficacy is defined as an individual's confidence in personal abilities to mobilize and self-motivate cognitive resources and plan the course of action required to complete a particular goal (Luthans & Youssef, 2004). High self-efficacy is needed to flourish on hard challenges. People with high efficacy prosper with persistent efforts and firm beliefs on their abilities. Moreover, Bandura's (2001) theory of social cognition provides bases of psycap self-efficacy. The trainings and experience are helpful for increasing the self-efficacy. Additionally, Luthans et al. (2006) added that self-efficacy can be enhanced by developing competencies that include role-modeling, task-mastery, feedback and mentoring. Bandura (2010) recommended four approaches for development of efficacy and these are success experiences or mastery, modeling or vicarious learning, positive feedback and social persuasion, and psychological and physiological arousal.

Many theories consider confidence as subordinate of efficacy while Bandura uses the term confidence sparingly for efficacy. Positive psychology also uses both terms interchangeably. In applied domains as business performance or support confidence is widely used term. Psycap uses these two terms of confidence and efficacy interchangeably. Reason behind is that psycap believes on both claims as Bandura (2010) provided theoretical research base for self-efficacy while the term confidence contains more applied orientation. The confidence or self- efficacy is one's belief. Self-efficacious individuals possess five characteristics:

- 1. They set targets by themselves;
- 2. They willingly accept challenging tasks and prosper in it;
- 3. These people are motivated, and they always want to achieve tasks;
- 4. They show perseverance in obstacles; and
- 5. They do effort for the accomplishment of task.

Bandura (2010) said that due to these five characteristics self-efficacious individuals perform effectively and develop themselves independently. They are not dependent on others for setting goals for themselves. They voluntarily select difficult and challenging tasks and have capacity of discrepancy reduction. In contract to this people with low self-efficacy can be upset due to self-doubt, negative feedback, skepticism, social criticism, setbacks, repeated failure and obstacles. More importantly high self- efficacious individuals do not feel disturbed with these negative circumstances and take these as challenge. The concept of self-efficacy has strong associations with hope and control. As said by Bandura (2001) it is a belief of individual on his/her capacities to get desired outcomes and effects by one's own actions. Efficacy is linked to good well-being, it is generally measured with connection to other outcomes. For instance, different measures are present for social, health and academic self-efficacy and for several other forms. Specific measures perform better and good results in explaining positive results as compared to global measures.

# 2.4.4.1 Cognitive Processes in PsyCap Efficacy

Efficacy is deeply rooted in Bandura (2001) theory of social cognition. Luthans, Youssef and Avolio (2015) explained that there are five cognitive processes involved in it and are important components for constitution of self-efficacy equation. These are forethought, symbolizing, observation, self-reflection and self-regulation. Symbolizing is a cognitive process of forming mental images and models in mind. It helps and guide people for future course of action. Forethought is a cognitive process which helps to plan actions in context of performance impact points and to look for expected consequences based on previous success and failure experiences. Observational cognitive process is also known as modeling which helps to learn from the models (other people around). These are more experienced people. This process involves advice, feedback and actions. Self-regulatory cognitive process involved agentic goal setting. Further this process involves setting selfstandards for constant assessment of performance. So, this will help individual to improve his/her performance. Self-regulatory cognitive process is a process of bringing change in behavior and thinking through self-awareness. Context is important and helps to translating self-awareness in self-regulation. Last cognitive process involved in efficacy is selfreflective cognitive process. It is a process of reflecting on success, taken actions and failures. It is process of learning from the experiences of past. Right direction in the cognitive process of self-reflection is important as it helps to analyze the present situation and helpful for developing future efficacy. The right direction important in all five forethought, symbolizing, observation, self-reflection and self-regulation cognitive processes. More importantly, efficacy does not equal to success. One more thing which needs our attention is that how we interpret success. This is also a fact that efficacy helps to raise success and success helps to raise efficacy. In whole process of cognitive development, there is a need to look back and take some time to learn from reflection process and decide for future course of action by utilizing self-reflective knowledge. This process also allows people to figure out the wrongly taken steps and help them to avoid these in future.

### 2.4.4.2 Core Characteristics of Efficacy

Luthans et al. (2015) discussed five discoveries about self-efficacy that will help to develop understanding about efficacy. They will also help to nurture efficacy in life and workplace. These core characteristics are domain specific, practice or mastery, room for improvement, influenced by others and efficacy is variable. One discovery about efficacy is domain specific. Confidence in one domain of life or work does not reflect that you are confident in other domains as well. Thus, efficacy is domain specific in which it is being analyzed. Confident domain cannot be transferred to other domains of life or work. For other areas of life and work there is a need to get familiarity about common elements of that domains that helps to get success. There are certain elements that can be generalized in many situations. Another discovery is mastery. Sometimes people become confidence about task that we are repeatedly practicing. There are many tasks which people didn't practice and have little knowledge and experience about that. Efficacy is one's estimation about future success, so it requires some experience for positive estimation of efficacy. Another fact is that some people have ability to generalize positive experience in other situations (Bandura, 2001).

One more discovery is room for improvement in the efficacy. If one is very excellent in one skill but it does not mean that you are expert in another field. So, there is a need to learn about other fields also. If one is expert in technical skills, it does not mean that person is expert in people skills. Other people are source of enhancing efficacy of individuals. Selfbelief is important, but confidence given by others also have some value. Others motivation affects the self-evaluation. This is pygmalion effect or self-fulfilling prophecy in this situation somebody believes in you. Sometimes by observing others whose interest is similar helps you. The modeling and vicarious learning are powerful tools for enhancing learning. Confidence is dependent on various factors. There are many factors which are under your control like gaining knowledge, abilities and skills as these helps to achieve goals. Here context is also important. There are certain factors which are not in your control. Moreover, psychological and physical wellbeing also contributes to developing efficacy. Resources have value in efficacy as it helps to achieve task. This form of efficacy is also known as means efficacy. So, means of achieving success also matters and contribute or detract you from the efficacy.

Briefly describing, self-efficacy is a positive psychological resource which is required for the wellbeing of individual and organization. High level of efficacy is required for accomplishment of challenging tasks. Self-efficacious people set targets by own, accept challenging tasks, and do persistent effort for accomplishment of target. Moreover, their hope level is also high. Confidence is another term used for efficacy. Teachers need higher self-efficacy as they daily face challenging situations in their teaching. Self-efficacy can be developed among teachers. There are many ways with which college principals can develop self-efficacy among teachers. College principals may use approaches of encouragement on accomplishment of tasks, positive feedback, mastery of various tasks and modeling of required positive behavior for development of self-efficacy among teachers.

### 2.4.5 Psycap Intervention Model

Psycap intervention model (PCI) is helpful for improving psychological capital of teachers (Ma, Zhou, & Liu, 2021). Psycap Intervention Model is useful for the developing of psychological resources. Leaders may use the tools used for development of psycap for enhancing the psychological resources among employees own their own and may hire the expert people for achieving their goals. As far as present research context is concerned,

college principals may use PCI Model for developing psychological resources in their teachers.

# Table 2.3

PsyCap development	Developmental tools examples	Proximal outcomes	Examples of Sustainability	Desirable results	
<b>Optimism</b> Develop positive expectancy Glass half full Interpret events positively	<ul> <li>Write a gratitude letter</li> <li>Hand-write thank- you note to relative, friend, teacher, mentor, boss, co- worker,</li> <li>Balanced well-being</li> <li>Exercise and relax</li> </ul>	Realistic optimism.	Coaching periodically • Online • Face-to-face Apps • "Happify" Scheduled reminders	Higher Performance Happiness Satisfaction Well-being Commitment Mindfulness Engagement	
<b>Resilience</b> Building assets and avoiding risks <b>Hope</b>	<ul> <li>Relationships</li> <li>Yoga and Meditate</li> <li>SMART goal setting</li> <li>Goal setting exercise</li> <li>Set Goals</li> <li>List barriers</li> </ul>	Resilience.	<ul> <li>usage</li> <li>Inspirational videos</li> <li>Sports</li> <li>TED talks</li> <li>Music</li> </ul>	Innovation Creativity Identification Hardiness Relationship Citizenship Health satisfaction	
Pathways and goals design	<ul> <li>Also list ways around the barriers</li> </ul>	Hope.	smartphone / video games	Safety Problem-solving	
Applying scenario and hindrance planning	<ul><li>Apply positive</li><li>reinforcement</li><li>Appreciate</li><li>Recognize and</li><li>provide positive</li></ul>	Confidence / efficacy	<ul> <li>Interactive, strategic</li> <li>"SuperBetter"</li> <li>Gamification for PsyCap</li> </ul>	<b>Lower</b> Anxiety Stress Depression Deviance	
Efficacy Modeling successful people and experiencing success Positive feedback, persuasion and arousal	<ul> <li>feedback</li> <li>Eat right and Hydrate</li> <li>Do 3 positive</li> <li>interactions / things</li> <li>each day</li> <li>Use something to as reminder</li> <li>Keep diary / log of</li> <li>3 things to be grateful for every day</li> </ul>		<ul> <li>Achievement</li> <li>Achievements</li> <li>Tracking</li> <li>Social networking</li> <li>Competing and challenges</li> </ul>	Substance abuse Burnout Work-family conflict Turnover intent Cynicism Negative affect	

PsyCap Intervention Development Model

*Table 2.3.* PsyCap Intervention Model. Adopted from "Psychological Capital: An Evidence-Based Positive Approach." F. Luthans, & C. M. Youssef., 2017. *Annu. Rev. Organ. Psychol. Organ. Behav.* P. 359.

Psycap tools are easy to use and many of them can be practiced by principals through various interventions such as handwritten thank you message, gratitude letter, do three positive interactions on daily basis etc.

# 2.5 Workplace Flourishing

The field of positive psychology offers common identity to all practitioners and scholars who are interested in well-being and human flourishing (Joseph, 2015). The latest scientific research studies explained that positivity is not simply to reflect good health and success, but it is to produce good health and success. The positivity explains the difference between languish or flourish person (Fredrickson, 2009). Butler and Kern (2016) in their research study claimed that terms subjective wellbeing, happiness, flourishing and thriving are used interchangeably in literature.

Organizations recognize the importance of wellbeing of their employees because it has an impact on various organizational outcomes. In fact, flourishing is important component of life, work and organization (Rautenbach, 2015). Different researchers provided the evidence of importance and need of workplace flourishing. Flourished employees are engaged, happy, self-motivated, learning focused, successful (Bono et al., 2012) goal oriented, happy, strengthened, goals setters, capable of reframing negative events (Cope, 2017) and function extraordinarily (Fredrickson, 2009). Flourishing is not simple feeling of good. It is beyond satisfaction with life and happiness. Those people who flourish they add some value to the world (Fredrickson, 2009). Flourishing is the result of engagement and search of authentic life which is the source of happiness and inner joy with the help of achieving goals, connection with passions of life and enjoying these achievements in life (Soots, 2015). According to Kenny (2018), organizations are striving to overcome these issues faced by employees like burnout and stress. Due to these and many more benefits now workplace well-being and happiness is receiving more attention.

The research study of Butler and Kern (2016) highlighted that now researchers, individuals, policy makers and organizations worldwide are stressing more on the wellbeing of people. Results of different research studies like Diener and Chan (2011) ; Huppert (2009) proved that life satisfaction, happiness, subjective wellbeing, optimism and many other positive concepts are related with various desirable results including stronger friendships, lower level of divorce in couples, improved physical health and greater professional and educational success. Huppert and So (2013) favored that supporting and understanding wellbeing is envisioned as interdisciplinary problem that must be solved at all levels including organizations, individuals, societies, and countries. Wellbeing and Happiness are important for people in their lives and as well as at their workplaces. It also has implications for the physical and mental wellbeing. The organizations look to wellbeing of employee as a source of improving performance. Moreover, happy employees are better employees and workplace flourishing brings good return on the investment.

Flourishing is an important concept in field of positive psychology and it extends and encompasses to many more positive concepts. Flourishing is a state in which individuals pay full attention to all aspects of meaning, accomplishment, engagement, positive emotions and positive relationship elements of flourishing. People flourish when they cultivate their strengths and talents, develop meaningful and deep relationships, sense enjoyment and pleasure, and contribute something meaningful to world. People flourish when they obtain fulfillment in the life together with attaining traditional goals linked to achievement when they are living good life in true sense (Seligman, 2011). Flourishing is result of engagement and pursuit of a trustworthy life that produce inner happiness and joy by meeting goals of life, relishing in achievement by valleys and peaks of life and through connected with passions of life (Soots, 2015). It is not a characteristic, trait or something that people are flourishing or not flourishing rather it is a process which involves action. It is not easy for a person to achieve the state of flourishing, but good point is that anybody can flourish.

Compton and Hoffman (2013) claimed that people can thrive and flourish. Positive psychology is a field that investigates about what people correctly do in their lives. Positive psychology identifies that most of the people adjust and adapt to the life in very creative style that help them to feel happy and good about the life. Psychological research too often displays a deliberate bias about assumptions that individuals are ignorant of their childhood, their unconscious and their biology. Many earlier psychological theories and research studies have reasoned that people are governed due to their biology, their past, unconscious drives and their cultural habituation.

Seligman (2011) explained that the field of positive psychology argue that it should be appreciated that majority of the people adjust well in their good and bad times of life even with hardships of life. At least, majority of people try to become good parents, to display love to the people who are near to them, to show some level of respect to others, to learn ways to contribute towards the welfare of society and others and to live life with honesty and integrity. Nevertheless, these accomplishments must be appreciated instead of labelling them as unconscious efforts to protect from fear and anxiety or biological urges. Thus, the positive psychology basic premise is that people are more often attracted by their future instead of propelled by their past.

Moreover, previously psychology field has given less attention on what people do move beyond their basic adjustment to the life to thrive and flourish in the change and challenging situation. In other words, some people perform extraordinarily well instead of just adapt to their life and serve as exemplar of unbelievable fortitude, perseverance, and resiliency. One goal of the positive psychology is that it attempts to identify how people manage such high levels of flourishing (Compton & Hoffman, 2013).

# 2.6 Theories about Flourishing

There are some theories that focus on emotion wellbeing (hedonic wellbeing), while some theories emphasize on eudaimonic components of flourishing and other theories are blend of hedonic and eudaimonic flourishing. For instance, research study of Diener and Chan (2011) explained that cognitive and affective elements both are included in the subjective wellbeing. Psychological wellbeing has been conceptualized across the six domains: purpose, self-acceptance, positive relationships, autonomy, environmental mastery, and personal growth (Ryff et al., 2006). Flourishing is also conceptualized as high psychological, social and emotional wellbeing (Keyes, 2009).

Keyes (2009) introduces some basic level terms in the field of positive psychology about flourishing or not flourishing. The fourfold classification of mental-health functioning model explains these terms. The people with low level of mental illness and high level of well-being are *flourishing*. As, positive psychology in many areas used the term flourishing to explain well-being. While a person who shows both mental illness as well as wellbeing is the person who is struggling in the life. This mentions that a person is performing well but he is presently also facing some significant distress in life about some problem. Whereas those people who are having low level of well-being but have high level of mental illness are *floundering*. Floundering expresses a tough situation. Moreover, when a person shows low level of well-being and display low level of mental illness is *languishing* in life. This situation explains that individual has no major mental health problems and is nevertheless extraordinary unfulfilled or dissatisfied in life. Keyes and colleagues explain the well-being bit farther as it was explained in past. According to them, other systems used for classifying well-being and mental health are incomplete as these systems only focus on portion wellbeing. These systems only explain the meaning of mental health. The complete system of mental health is a blend of high level of psychological well-being, emotional and social well-being with low level of mental illness.

High level of emotional vitality or emotional well-being is present in those people who are satisfied and happy in their lives. Thus, high level of psychological wellbeing is present in people who are autonomous, competent, self-accepting, experience positive connections with people and have some purpose in their life.

High level of social wellbeing explains the positive attitudes of people to others and believe that there is a possibility of social change. Moreover, people with higher level of social wellbeing attempt to contribution to the society and believe that social world is reasonable and understandable. These people feel that they are the part of larger social community. Further social wellbeing is measured in terms of five social components: acceptance, contribution, actualization, integration and coherence. When psychological measurement of flourishing, languishing, floundering and struggling apply across three levels of emotional, social, and psychological wellbeing result in the twelve groupings of mental health.

Westerhof and Keyes (2010) in their research study identified that mental illness is a cause of decline in mental health of people. Although, it is possible for a person to have both high mental health and mental illness simultaneously that is struggling person. He also identified that the therapeutic interventions used by psychologists to decrease the mental illness of person, do not improve wellbeing automatically. Some other types of interventions are required to enhance the wellbeing. Seligman (2011) explained flourishing in terms of five pillars of wellbeing and these are meaning, accomplishment, engagement, positive emotions and positive relationship. Flourishing has also been defined as opposite of symptoms of anxiety and depression and has ten components competence, stability, emotional engagement, optimism, meaning, positive emotion, resilience, positive relationships, vitality and self-esteem (Huppert & So, 2013). Wong (2011) in his research suggests that all kinds of happiness including chaironic (blessed feeling) prudential (engaged fully in life), hedonic and eudaimonic, contribute to subjective wellbeing. These come in individual's life in various ways that depends on circumstances, context and person. Another quantitative analysis explained five-domains that are important for the positive functioning of the person and these are coping and comprehension, awareness and attention, emotions, habits and goal, relationships and virtues (Rusk &Waters, 2015).

From the point of view of positive psychology, researchers consistently explaining that wellbeing is not absence or lack of negative outcomes. It is more than that. In fact, absence of negative aspects like loneliness, depression, illness and insecurity is different from the presence of positive affect such as social connection, happiness, wellness and trust. Additional, different theories explain different domains of flourishing. As, researchers like Forgeard et al. (2011); Friedman and Kern (2014) and many more have realized that multidimensional models of flourishing are required to apprehend the complexity of psychological functioning of individual.

### 2.7 Present Research Focus of Flourishing Theory

Different theorists have given Flourishing theories. Few theories are unidimensional. Flourishing cannot be conceptualized as one-dimensional aspect. Flourishing is a combination of various concepts and multi-dimensional. According to nature of present research, PERMA theory was selected which was given by Seligman in 2011. Seligman is the founder of positive psychology. Present research work assesses the flourishing at college workplace. College teachers flourishing is important because teachers are those who prepare the people for other professions. College teachers are busy in multiple tasks. Flourished teachers can give their maximum input.

The flouring is having an experience of high level of wellbeing, growth and thriving. Usually, people are only conceptualizing flourishing in the lives. Flourishing is important at the workplaces. Separating the personal life and work is very difficult. Even work sometimes dominate the life of people. Present research conceptualizes the flourishing as dynamic state of individual's psychosocial functioning which describes that individual is functioning well in numerous psychosocial areas. Flourishing is multidimensional construct and can be assessed, sustained and developed. Specifically, the focus here in this study is on five elements described by the pioneer of positive psychologist Seligman (2011) in his book *Flourish* as named by flourishing theory. These five elements are meaning, accomplishment, engagement, positive emotions and positive relationship.

Fredrickson (2009) explained that it is very much clear that higher level of wellbeing impact goes beyond the optimized physical and psychological functioning of individual in present situation and also stands as strong predictor of positive outcomes in the future for example productivity, relationship stability, job satisfaction, longevity and physical health. Researchers generally explained that wellbeing field has included two viewpoints: hedonic and eudaimonic conceptions. The first perspective associates positive experience of human being with the positive affect. Therefore, in this way, wellbeing is defined as optimum balance among the negative and positive affect together with perceived satisfaction of individual with life (Diener, Lucas, & Oishi, 2018). In turn, eudaimonic approach is centered around self-realization and virtuous action.

However, the hedonic standpoint of wellbeing does not agree on single formula or method for explaining wellbeing of individual. It places centrality on subjective construction of wellbeing by individual. The eudaimonic viewpoint of wellbeing inclined towards theory-guided method. It claims that only stressing on life satisfaction and affect ignores significant features of functioning. Therefore, wellbeing experience cannot be exclusively represented by evaluative perceptions of individuals. In the last few years, research studies are emphasizing on re-equating the wellbeing as combination of hedonic as well as eudaimonic elements. This is an effort of bringing two approaches closer and merging them. The flourishing theory is one of the attempts that reconcile the eudaimonic and hedonic traditions and explains five elements of flourishing: meaning, accomplishment, engagement, positive emotions and positive relationship. Seligman also described the inclusion criteria of becoming the element of flourishing. He said that each element must contain these three properties for becoming the part of flourishing. Firstly, it must contribute to the wellbeing of individual. Secondly every component is followed due to its own purpose. Thirdly, every component is measured and defined independently (Seligman, 2011).

### 2.7.1 Meaning

Meaningful work is important element of flourishing at work. Purposeful and meaningful work enhances the love for work and people put their best. Meaningful work is important for teachers as it is cause of many workplace positive outcomes. Seligman (2011) described that the meaning is closely related to purpose. It explains ontological importance of life from individual's perspective. This is serving something more than self and feelings of belongingness. It realizes that life is important and matters. It is related with higher satisfaction with life, well physical health and lower mortality risk. Steger (2017) said that sense of meaning is having right path in life, feelings that life is worthwhile and valuable, linking to something greater than oneself and more importantly the purpose due to which one does. Meaning is important as it makes the life purposeful and realizes that life matters. There are measures available for assessing the meaning including multiple and single item measurements.

George and Park (2016) explained that meaning in life can be described as degree to which individual experience life as making sense, motivated and being directed by goals that are valued, and mattering in world. Comprehension, mattering and purpose are three components of meaning. Comprehension, mattering and purpose are closely connected concepts and together constitute the meaning in life. Comprehension is described as sense of understanding and coherence people have about lives. Whereas purpose, explains that how much people experience their life as motivated and directed through valued goals of life. Moreover, mattering is a feeling of people that how much their existence is of valuable, important and significant. Making meaning is very important process.

Steger (2017) recommended that meaning in life involves both sense of significance and purpose. Happy feeling without sense of significance or purpose are uncomplicated, self-indulgent hedonism or, naïve pleasures. Park (2010) advised that meaning is simply subjective feeling of good and must be defined in terms of depth, dynamic understanding and breadth. The breadth attaches meaning to beliefs, goals, personal experiences, worldviews, and cognitive and emotional factors. As far as depth is concerned, it needs that meaning must benefit people to understand and confront fundamental of existence. Meaning deepen the understanding about human condition. Moreover, dynamic understanding explains that how meaning works in different situations of life over time. According to this viewpoint, meaning is the process instead of product simply that people once create and neglect.

Kahn, and Fellows (2013) said that now in coming years, meaningful work will be more important for organizations for improving their performance. Basically, it is a time in which organizations must move beyond commitment and engagement and struggle for the meaningful work. Steger (2017) explained that meaningful work is that in which employee identify personal meaningful contribution due to his or her own effort. For those whose work is meaningful for them, they feel that their careers, work, or jobs are significant and purposeful and work is energetically and harmoniously synergistic with purpose and meaning in broader lives. They also feel empower and enable to help greater good by their work. Meaningful work provides an opportunity for the organizations to transition from the older practices such as maximize output and effort by focusing on engagement, commitment, and incentives to enhance the performance of employees and organization. Meaningful work is a source of optimizing employee effort, motivation and efficiency and employees also eagerly adopt attitudes such as ownership, citizenship and responsibility toward organization. Moreover, employees also enjoy greater health, belongingness and well-being. For gaining all these qualities in workers, organizations must provide such fertile conditions to employees which are important for development of purposeful and meaningful work.

### 2.7.1.1 Theory of Meaningful Work

Steger (2017) discussed that meaningful work brings balance and harmony in busy lives of employees. Moreover, it brings well-being in lives of employees and provide organizations with increased performance, dedication and productivity. Meaningful and purposeful work theories have two primary categories. The first category of theories explains the meaning attributed to work while second category of theories discussed work as calling. Meaningful work is unpaid or paid occupation people that possess purpose, significance or meaning. The meaningful work is a job that worthwhile, valuable and meaningful. Therefore, meaningful work is not trivial or useless. It has meaning and employees spent their efforts to accomplish it. Steger, Dik and Duffy (2012) gave meaningful work model that has three-levels. First level explains the employees' perceptions of purpose or meaning in career or job activities. The second level which explains capacity for work is in harmony and nurture meaning in broader life of the employees that is transcendence and higher than work. The third level is the opportunity to impact positively and provide benefit to stakeholders such as employee's community, even planet, or society. Meaningful work enhances job performance as employees perceive that work is purposeful and meaningful within organization. Meaningful work contributes positively to personal life. Lastly, work is beneficial in life as well has positive impact on people around the person. Now there is also a need to differentiate between meaningful work and meaning of work. Meaning of work is important to people instead of meaningful work is subjective experience of person about meaningful job, career, or work that provide some meaning in life and benefits to others.

Rosso et al. (2010) discussed that authenticity, self-esteem, self-efficacy, purpose, transcendence, belongingness, interpersonal and cultural sensemaking are seven comprehensive pathways to make work meaningful. Steger (2017) characterizes work as an important domain of life in which individuals find their place, learn to navigate and express their strengths, aspirations and values. The meaningful work can be fostered at personal level through characteristics, for example an honest assessment of one's weaknesses and strengths, authenticity, knowledge about organizational operations and policies, ownership toward organization, complete grasp on responsibilities and work, and necessary knowledge of mission and values of organization. Meaningful work can be fostered on interpersonal level by providing enough understanding political and social

landscape of organization, encouraging respectful relationships, be mentored and mentor and opportunities be helped and to help. Meaningful work can be fostered on organizational and leadership level by communicating clear organizational mission and values in combination with adoption of organizational practice and culture, articulated and clear vision about how employee contributes to organizational functioning through their work, and allow personal expressiveness and autonomy in duties. Calling theory explains work which is meaningful personally and have ability to follow prosaically requirements. Calling theories explain that work is expressive personally and provide benefit to others. Now the work is providing personal benefits as well as it is also beneficial for the others (Steger, 2017).

### 2.7.1.2 Promoting Meaningful Work

Steger (2017) in his book identified many benefits of meaningful and purposeful work through analysis of different research studies. Job characteristic model discussed that meaningful work is a source of enhancement in intrinsic motivation, good performance, job satisfaction, and it also lowers the level of turnover and absenteeism in employees. Potential benefits regarding meaningful includes well-being and job satisfaction. Meaningful work also causes the reduction absenteeism among employees. Duffy *et al.* (2014) explained that employees with meaningful work are physically, psychologically, behaviorally and emotionally present in the workplace and is also source of work engagement and career commitment. Additional, Dobrow and Heller (2015) explained that meaningful work is helpful in work and lives of employees. Those employees whose work is meaningful and purposeful are more persistent, committed, satisfied, engaged and possess well-being at work and in life. Meaningful work contributes to better life of people.

### Table 2.4

# SPIRE and CARMA Model Fostering Meaningful Work

SPIRE		CARMA		
Finds pathways to make work meaningful		Fosters meaningful work for followers		
		and employees		
Strengths	Get awareness about unique talents and strengths and utilize these in performing work and go beyond and above basic job responsibilities.	Clarity	Organizations must clearly share mission and vision at all levels, in case if organization lacks purpose, then employees may follow suit.	
Personalization	Give your best at work, make an alignment between work and values, accept responsibility and ownership of work and organization	Authenticity	Organizations need to follow their mission and vision; the leaders of an organization need to work honestly and morally; deceptive exploitation and purpose always kill the meaning	
Integration	Integrate job execution, motivation, with elements of life, do work in a way which bring meaning in life	Respect	Developing effective, positive associations with people in organization starts when management show respect towards workers and provide opportunities of interactions that are beneficial for employees	
Resonance	Learn mission and core values of organization, find ways for making math between everyday work and personal mission	Mattering	Leadership and organization must convey to employees that their contribution in organization is important for health and success of organization	
Expansion	Seek out ways to give benefits to other for greater good, expand broader interests beyond personal self	Autonomy	Allow employees to increase their self- expression through giving opportunities for trial and error, self-direction, idea interchange and innovation	

Steger (2017) explained that there are two models with name of CARMA and SPIRE that are helpful for fostering the meaningful work. SPIRE model discussed the personal-level correlates and predicts importance for fostering the meaningful work. CARMA model explains the organizational and leadership -level correlates and predicts importance for meaningful work. Moreover, organizations must work on CARMA and SPIRE models together. This model may be used to recruit best talent in the organization.

### 2.7.1.3 Ways to Making Meaning

Park (2010) discussed meaning-making processes. There are several distinct ways of making meanings as different people make different meanings but still there are categorizations that will help people to understand common processes involved on meaning-making. These are deliberate vs automatic, accommodation vs. assimilation, searching for significance vs comprehensibility, and emotional vs. cognitive. Deliberate and automatic are ways of making meaning. Meaning making may be deliberate or automatic. People unconsciously engage themselves in meaning-making process, even they are not aware of it. They also purposely engage themselves in meaning making process to get meaning from the situation (Park, 2010).

Accommodation and assimilation are another way which people used for making meaning. Park (2010) explained that in assimilation, people change situational meaning in line with global meaning. In accommodation people change global meaning and make a room for new situation which does not match with any previous situation. In assimilation, people are not required to change their overall beliefs and in accommodation, people alter events of life.

Searching for Significance vs Comprehensibility ways of finding meanings are also very useful. Sometimes people make effort to fit event within certain system of standards and rules and try to find worth, significance, or value of event. For instance, individual suffered from tragic loss can search for comprehensibility and remind herself by saying
that terrible things mostly occur with good people. On the other hand, individual may search for significance through searching the impact of loss on her life (Park, 2010).

Emotional vs. Cognitive ways are also used by people for finding meanings. Park (2010) explained that cognitive processes focus on processing and re-evaluating the information. Alternatively, emotional processes focus on exploring and experiencing emotions. The emotions should be processed and absorbed before individual continue life. Park (2011) in his study recommended that making meaningful life involves (1) feeling associated to something external or greater than self; (2) finding out for greater significance and depth in experience; (3) adjusting to life situation that challenge sense of meaning; (4) understanding about life due to current experiences, refining and adjusting sense of meaning throughout lifetime. Although there are many ways to create meaning, but six criteria are important for making greater meaning. These are greater coherence, congruence and harmony, dedication to worthy cause or provide service to others, creativity, live life deeply and fully as possible, suffering and religious experiences.

# 2.7.1.4 Purpose-Driven Organization

Quinn and Thakor (2019) explained the process that is helpful for leaders to create purpose-driven organization. There are eight steps necessary for making the organization purpose driven. Those people who discover meaning in job give their dedication and energy freely, grow instead of stagnating and do better and more. Purpose-driven organizations are important for making the work meaningful. The eight steps are envisioned inspired workers, find out the purpose, diagnose need for the authenticity, turn authentic purpose into persistent arbiter, stimulate learning among employees, turn managers into purpose-driven managers, connect employees to purpose and unleash the positive energizer. The first step for turning organization into purpose-driven is envision inspired workers. Organization must look around at their employees and find employees who love their work. Leaders must ask from employees why they love their work and then envision infusing 'whys' in workers. Organizations must look for the excellence and examine purpose behind that excellence drives excellence. Next step is to envision excellence imbuing in the employees. The second step for turning organization into purpose- driven is finding out the purpose. Finding out purpose does not mean that task force will intellectually decide the purpose of existence of business. This is finding out purpose of organization with help of empathy, for example understanding and feeling genuine mutual needs of employees. This can be done by asking questions, reflecting, listening, and finding golden nuggets which is heart of your employees. Make things clarify, work with employees and integrate these things or ideas and provide continually feedback (Quinn &Thakor,2019).

The third step for turning organization into purpose-driven is to diagnose need for the authenticity. The higher purpose must be authentic. Authenticity of purpose is crucial. Identify the real purpose of organization. For example, most of the organizations just focus on customers' satisfaction and create value for shareholder and forget about their employees. The real purpose should also be to treat workforces like valued employees. In most of cases, organization determines its values and purpose when things go wrong. This revealed that what organizational leaders do in hard times. The fourth step for turning organization into purpose- driven is to turn authentic purpose into persistent arbiter. Organizational leader must communicate organizational purpose with constancy and authenticity as due to this, workers know their commitment and start believing in purpose and reorient it. Clearly and constantly communicate authentic purpose after defining the authentic purpose (Quinn &Thakor,2019). The fifth step for turning organization into purpose-driven is to stimulate learning among employees. Development and learning are powerful tools which organization may use to enhance productivity. Employees want to think, grow, and learn. Leaders should strengthen connection among learning process and higher purpose. The modern organizations mostly hire new experiences but does not practice reflection. There is a need to make employees proactive and adaptive. In this process less managerial control is needed because employees know purpose. The sixth step for turning organization into purposedriven is to turn managers into purpose-driven managers. Managers should know purpose of organization as well as have a deep connection with organization and lead organization with moral power to build their employees committed and inspired (Quinn &Thakor,2019).

The seventh step for turning organization into purpose-driven is to connect employees to purpose. Organization should encourage their workers to share stories of how they drive process and making difference. Help the employees to connect the purpose to the daily tasks. Here top-down mandate will not work. Change is needed at all levels of organization. Managers should help employees. The eighth step for turning organization into purpose- driven is to unleash the positive energizer. All organizations have positive energizer. These people are not effort and risk averse. Organizations may use these employees as ambassadors. Organizations must find those who are purpose-driven, mature and optimistic in organization. These people naturally encourage others as they are honest, open, take initiative and challenge assumptions openly. These are positive energizers. When these positive energizers go out, exchange thoughts and return in organization with new ideas and feedback (Quinn &Thakor,2019).

# 2.7.2 Accomplishment

Accomplishment is one of the vital components of flourishing. Accomplishment enhances the morale of employees. Accomplishment includes both objective and subjective success. Achievement also motivates individual towards mastery of task. Employees wants success at workplace. Teachers also need accomplishment. Accomplishment is basic human need which help individual to thrive in life and career. Forgeard et al. (2011) explained that another element of flourishing is success, accomplishment and mastery. According to Seligman (2011), the accomplishment includes both internal goals and external indicators. Accomplishment explained in terms of objective success, this thing places the centrality on the conceptualization of accomplishment. Good performance of employees is acknowledged and recognized in many of Western countries. For instance, yearly Forbes magazine chooses 500 the best US business companies and select best athletes from all around the world in every two years. Though, opportunities, personal ambitions and circumstances also impacted objective success. For example, a mother never gets awards in tangible terms for her struggles of raising a compassionate and connected family. Despite she considers her family her success. Subjective meanings of accomplishment include individual's sense of effort for attaining goals, efficacy and mastery to accomplish tasks and duties. According to Ryan and Deci (2000), theory of selfdetermination recommends that competency is an essential basic human need. So, wellbeing include mastery, competence with objective indicators of success. Having ambition and goals in life support people to attain those things that give people sense of achievement. For this purpose, people should set realistic goals that are achievable. Putting effort to achieve those goals will give sense of fulfillment and pride. Accomplishments is important in life as it push individual to flourish and thrive.

Achievement is a building block that helps individuals to develop a sense of success. Moreover, achievement combines both meaning and substance to achieve success. It also provides evidence to competitors, and colleagues to assess a person as less or more successful. Stimulating and interesting, work give sense of joy, pleasure, and pride. Those careers in which employees enjoy autonomy and freedom leads to achievement. Work is an important part of life. So, sense of purpose is needed. Mostly people put their full effort to accomplish a task (Bostock, 2014). Accomplishment is to handle responsibilities and achieve significant goals. The goals and aspirations are important for accomplishment. The clear goals and effort expenditure give people a sense of satisfaction, self-fulfillment and pride. Moreover, personal accomplishment promotes well-being, motivation and happiness to flourish and thrive. In addition, personal accomplishment, also increase a sense of selfesteem (Phan, & Ngu, 2017).

#### 2.7.2.1 Goals Setting and Accomplishment

Moore (2020) discussed the steps needed for goal setting. Moreover, she explained the importance of psychological capital intervention in setting goals. According to Luthans et al. (2006), there are three steps of goal setting. The first step deals with designing goals. While crafting goals, there is a need to remember that goals are intentions that guide behavior. The concrete endpoints in goals setting is important because with clear end points people may measure their success. The approach-based goals are also important because people may easily focus on its accomplishment. Breaking down goals into sub-goals is necessary so, it will be easy to achieve target. The second step is pathway generation. The meaningful goals are set in designing process. In this step, various potential pathways are explored to achieve goals. There is a need to brainstorm various possibilities. The last step of this process is inventory pathways that explains about resources needed to chase pathways. These pathways are known as ABC. These are Achievable (A), Believable (B) and Committed (C). This step helps in refining the potential pathways. This step involves careful thinking about realistic expectations. Third step deals with overcoming obstacles. The thinking plays a vital role in obstacles because it determines the destination of person to disengage or pick up. While setting goals, people should consider possible barriers. The individuals must reflect and think about potential pathways along with strategies to deal with barriers. There is a need to think about those things which prevent us from attaining goal.

There are two kinds of achievement goals. These are mastery and performance goals. The focus of mastery goals achievement is on the skill development while focus of performance goals achievement is on presentation of ability. Mastery goals are skill-focused on which people increase their effort and look for alternative strategies to advance their skills. Performance goals focus on task competence. Setbacks in performance goals are signs of low ability level. Moreover, it also discourages the people to ask help from others (Butler, 2014).

### 2.7.3 Engagement

Engagement is one of the essential elements which contribute to the flourishing of employees. Engaged employees are more productive as they are goal oriented. Engaged employees are more dedicated and are fully absorbed in their work. Additionally, engagement is different from job satisfaction. Engaged employees are happy and motivated workers. Engagement is also called flow. Research studies had also explored the relationship of engagement with psychological capital. Engagement is a deep psychological association of individual to an activity, cause or organization. Forgeard et al. (2011) said that it refers to the psychological state wherein individuals are fully absorbed in job, implying intense involvement, interest, immersion and effort. The measures of engagement have focused mainly on flow that indicates the extreme psychological engagement level which involves intense focus, absorption and concentration (Csikszentmihalyi & Larson, 2014). Engagement viewpoints tends to focus more on level of involvement and our attention in activities. Engagement perspective of flourishing explains the intensity of people's absorption in life as well as work activities. The focus of this perspective is on the activities. According to this perspective, happiness comes when people are being absorbed in, captivated by or engrossed in activities. Schaufeli et al. (2002) said that employee engagement is a positive and fulfilling state of mind related with work which is described as dedication, absorption, and vigor.

Engagement is described as involvement, efficacy, and energy and is reverse of exhaustion, inefficacy and cynicism dimensions of burnout (Maslach & Leiter, 2016). Saks (2006) said that employee engagement is multidimensional construct. Employee engagement is not alike job satisfaction as employee may be satisfied with work but have low level of dedication, involvement and absorption with work. Although these two are similar because both have positive focus. The fully engaged employees are attentive, integrated, absorbed and connected (Kahn, & Fellows, 2013).

Regardless of kind of work, engagement happens when the person goes beyond the average experience of challenge. It is the complete investment of effort towards the accomplishment of task. These experiences are expressed as autotelic person, with high intrinsic motivation. When a person is in a state of flow, the thought and action become combined and individual feelings awareness is usually lacking (Seligman & Csikszentmihalyi, 2014). Therefore, as Seligman (2011) highlights that positive emotion represents the present state of person while engagement represents the retrospective state. Moreover, increase and decrease in the flow is related with increasing creativity and motivation in contexts of leisure and work. Schaufeli, Bakker and Salanova (2006) explained the engagement in an organizational context and explained the work engagement in terms of dedication, absorption and vigor. Appleton, Christenson and Furlong (2008) discussed the engagement in students that includes domains of cognitive, psychological,

academic, and behavioral. The field of work engagement has now become a popular area in the last decade. Although different scholars are interpreting it in different ways, and everyone is also giving his input. Some of the engagement conceptualizations knock eudaimonic wellbeing as its emphasis is on intrinsic motivation, flow experiences and meaning. Bakker and Demerouti (2008) discussed that in organizational context, the conceptualization of engagement perceives as individuals job-related frame of mind which is described as absorption, vigor and dedication. The vigor means having high degree of mental resilience and energy for work. As far as dedication is concerned, it explains that individual is strongly involved and dedicated in work. The person is experiencing the sense of enthusiasm, challenge and significance. Whereas absorption explains that person is happily engrossed and fully concentrated in job, and time passes so quickly, and it is not possible for the person to detach himself from the work.

Gallup (2008) survey suggests elements which enhance engagement among employees. Organization may focus on these for enhancing engagement. The employees should be aware of that what the expectations of organization at work are. Organization must provide equipment and materials for doing the work right. Also provide opportunity to employees to do best at everyday work. There is also a need to provide praise or recognition for good job. Supervisors and bosses should care about employees as a person at work. Organization must work on employees' development. Encourage employees to give opinions or input at work. Also provide feeling to employees that his / her work is of worth value for organization. Committed of fellow employees for performing quality work is also important. Best friends are also source of employees' engagement at work. Provide opportunities to employees to grow and learn at work. Talk to employees about their progress.

### 2.7.3.1 Flow at Workplace: The Science behind Engagement

Those people who love their work, are engaged and absorbed in work. This leads employees towards optimal physical and cognitive performance. Engaging and meaningful work act like fuel for professional successes, provide feelings of fulfillment and contributes to growth of organization. Positive outcomes of organizations are associated with level of engagement employees have with their work. All organizations want their employees to be involved, committed and enthusiastic to the work. Friedman (2015) did a research study on those organizations which enable employees to become happy and to grow in the work. He explored that those organization's employees are happy at work who work on physical and psychological needs of employees. The extraordinary organizations support wellbeing and offer work-life balance of employee, create such environments at workplaces that encourage engagement in employees and satisfy employees psychological basic needs of competence, relatedness, and autonomy (Friedman, 2015).

Work environment and work-life balance affects employees' ability to flourish in the work and both contributes to the employee's engagement at workplace. Employee engagement can be fostered through fulfilment of psychological needs of competence, relatedness and autonomy. Moreover, autonomy need can be enhanced through empowering workers and making them independent in decisions making. This can be done by flexible working hours, personalized space and job crafting. The competence need can be enhanced through job challenges and effective praise. This can be done by personalized and meaningful recognition, providing opportunities and giving time to explore and innovate. The relatedness needs are represented by good relationships at workplace. Supportive and cohesive team satisfies the employees' needs for belongingness (Friedman, 2015). Csíkszentmihályi studied mental state of people when they are truly engaged in work. He interviewed many successfully people from different occupations and even many of them were winners of Nobel Prize. He explored that secret of peoples' optimal performance is the capability to enter deliberately and frequently in state of flow during his research on productivity and creativity. Engagement feelings can be described as sense of control and competence, self-consciousness loss, and concentrated absorption in present task that results in losing track of time while working (Csikszentmihalyi & Larson, 2014).

Csíkszentmihályi devised the term flow. Flow refers to mental state that is characterized as intense focus, absorption, concentration and attention on task. Research studies in field of neuroscience explains that state of flow is linked with biology. There is a unique neurochemical that enhances performance. This neurochemical includes dopamine, norepinephrine, anandamide, endorphins and serotonin flow through the brain and improved by Gamma and Theta waves of brain (Kotler, 2014). The brain processes information from various areas and make link faster. Another important quality of flow is that this mental state promotes the ability of intuition for example people access vivid information and imagery beyond their normal process of conscious awareness. Further, these chemicals help in improved classification of data for greater retention and storage from the short term memory to long term that is essential for learning, lateral thinking and creativity. Kotler (2014) further explained that people in this condition tune inward. Moreover, pre-frontal cortex (cerebral) becomes turned off and perception about time also distorted. Basically, externally focused and slow mental functions are exchanged with faster and energy efficient subconscious processing which allows heightened awareness and attention. Flow helps people to experience selflessness and people do not hear any inner voice in this state. In peak moments of flow, anxiety becomes neutralized and people withdraw themselves from external world. The state of flow increases performance of people. In book Outliers the author Malcolm Gladwell claim that10,000 hours are needed to reach at mastery of skill, but this can be shortened in half with the help of cultivating flow (Kotler, 2014).

#### 2.7.3.2 The Cycle of Flow

The flow mental state is a connection between optimal doing and optimal being. People cannot put themselves all time in flow mental state. There are four phases of flow cycle. This is the cycle of optimum experience of human that need to challenge our self and leave the comfort zone.

The first phase is called as struggle phase and norepinephrine, cortisol hormones, beta brain waves play an important role in this phase. In this phase people do not feel good as they experience frustration, tension, anxiety and stress, however this is an essential component of cycle of flow. The second phase of flow cycle is release phase. In this phase Alpha brain waves produces. This is phase in which people accept challenges by moving away from problem. Parasympathetic part of nervous system becomes activated in this phase. The third phase of flow cycle is flow phase and dopamine, gamma and theta brain waves, anandamide, endorphins play important role in this phase. This phase arises after release phase and shifts minds of people from conscious processing to subconscious working. The fourth phase of flow cycle is recovery phase and oxytocin, serotonin, delta brain waves contribute to this phase. This is final stage in which brain stores and renews flow experiences. It is vital to re-balance and re-build effectively to retain new learned knowledge and skills in this phase of memory consolidation (Kotler, 2014).

### 2.7.3.3 Strategies for Cultivating Flow at Workplace

The flow state can be developed through activities that require particular set of properties such as require skill, challenging, clear goals and provide instant feedback on task. As far as challenges are concerned, these should not be too simple and too demanding. There is a need to set attainable and moderate level difficulty challenges. Csikszentmihalyi and Larson (2014) explained specific conditions for start of flow. He explained nine factors related to flow experiences, detailed as under:

- 1. set achievable, clear and concise goals;
- 2. provide instantaneous feedback;
- 3. make a match of personal skills with challenges;
- 4. integrate awareness and action;
- 5. focus concentration and attention on present goal/task;
- 6. take control over circumstances;
- 7. loss self-consciousness;
- 8. intense absorption that alters sense of time; and
- 9. and autonomous initiative and intrinsic motivation.

There are many advantages of engagement at workplace for both individuals and organizations. There is a need to understand that optimum experiences depend on evaluation of capabilities and possibilities of acting. The characteristics that found in satisfied and fully engaged employees are greater creativity, amplified performance, engagement in deep learning and access to intuition. Individual efforts, organizational culture and leadership helps in the cultivating situations that helps people to experience the state of flow.

Clear goals help in cultivating flow among employees. Many of employees take their job as simply that they must do it because they are not fully engaged in work. They mostly feel that they use their mind energy for attaining goals of someone and doing work against will. Amazingly, many organizations provide opportunities for satisfaction and positive workplace experience but still many employees perceive job as a liability and burden. Newport (2018) said that there are lots of information due to knowledge economy which creates ambiguity. To overcome this problem, organization may prove clear goals through company culture and universal values that help employees to make alignment with their self-identification and personal strivings. Likewise, there is a need to provide a significant rationale for performing task and how the task can empower the employees to give their best. As, people need some cause for doing work and work is now more than for just living. The immediate feedback and goals clarity are imperative because they help in flow experience and tasks engagement and reduce occupational stress experience that is the result of ambiguity. Especially in case of occupational stress, clarity of goals and timely feedback strengthen competence. Whereas choice to do a task enhances feelings of autonomy and promote intrinsic motivation in employees.

Immediate feedback is another way of cultivating flow at work. Employees can maintain their focus when they know how well they are performing task. Now many organizations are working on performance reviews to assess performance of employees as these are the source of feedback. Coaching and recognition are effective in supporting and motivating engagement of employees. Csikszentmihalyi and Larson (2014) said that there is a need to design work activities that support flow and provide immediate feedback.

Balancing of skills and challenges also help individuals in developing flow state. Csikszentmihalyi and Larson (2014) claimed that personal skills matched with high challenges are vital for triggering experience of flow that can be attained through complex activities demanding specific abilities. The flow state is associated with above-average skill condition and challenge. People experience state of apathy when skills and challenges are low and when anxiety and stress demands are higher. People in this situation deny reality to avoid anxiety that results in reduction of challenges or burn out which prevents flow experience. Only control state is not enough to create state of flow, therefore people must increase the challenges at work or life to reach at the level of focused arousal and alert. Tozman, Zhang and Vollmeyer (2016) identified that people perform their best when their skills are matched with challenges. People get bored when people skills exceed from their level of challenge is very high. As, Csíkszentmihályi (2013) said that flow nurtures personal evolution as this activity which is challenging stretches the abilities of person. Flow experience is a psychic event which activates cognitive, performance or technical skills of people. So, it is very important to get awareness about strengths thus people can make a match of it with their capabilities needed to perform the work. It is important to make balance among skill and challenge in flow experience.

One way of cultivating flow is by merging of awareness and action. In flow state, consciousness makes a match with actions, but when task is challenging enough and promote mobilization of engagement, personal skills and concentration. Low skill and repetitive activities are rarely linked with experience of flow. Disciplined concentration is needed for getting optimal performance. The complete focus can be achieved through well-ordered consciousness and when our thoughts, feelings, senses and intentions are all focused on goal. Control over attention is helpful in achieving the experience of harmony (Csikszentmihalyi & Larson, 2014).

Another way of cultivating flow is by focused attention and concentration on task. The focus trains attention and facilitates commitment. Goleman (2013) talked about selective attention which is the ability to maintain focus on a thing despite disruptions. People can attain selective attention with the help of involvement in challenging task. Goleman (2013) further said that people must work on panoramic open awareness and attend to all with calmness rather than judgments and reactivity. Otherwise, attention or willpower will disengage from the desired object and focus attention on something else. Emotional Intelligence help people to protect themselves from hyper-focusing and emotionally on a particle thing in mind. In fact, attention helps to regulate emotion when people keep their focus for longer time and exercise selective attention for keeping amygdala calm.

Perceived control over situation also helps in cultivating flow among employees. Goleman (2013) said that open awareness and selective attention needs developed executive function and cognitive control. Executive function is responsible for willpower which helps to fights against those thoughts which are emotionally charged and are associated with reward system of brain. If urge is more intense then it will be hard to resist. Saying yes to everything divides attention and challenges need for capability to function well and stability. Moreover, inner stability is dependent on sense of independence, mastery, and ownership. Csíkszentmihályi (2013) explained that emotional states are dependent on how mind of people interprets and filters experiences of everyday life. Itself events are neutral. People attach negative or positive values to events which becomes the source of distractions of our attention.

The loss of self-consciousness also helps in cultivating flow among employees. As, people spend their cognitive resources in management of status and performances. In this way they waste their mental energy in perceiving which task is more important instead of the task at hand. People are more anxious about competition, expectations, rules and uncertainty situations. People can make themselves independent of their social environment to overcome these situations. Moreover, they must avoid social comparisons and desire of external validation. Coyle (2018) did an experiment and paired kindergartners against students of MBA, attorneys and CEOs in a competition where they were supposed to shape a tower with the help of string, spaghetti, tape and marshmallow. He found that kindergarteners were just binding together all material and were more energetic, effective, experimenting, spotting problems, noticing outcomes, taking risks, working quickly, fixing problems, and helping others.

Another way of developing flow is though time perception. Csíkszentmihályi (2013) interviewed many creative and accomplished people. All these people reported one thing that there is moment in which they were in control of their actions with slight difference between environment and self: between response and stimulus. Distorted time perception is a strong indicator of deep flow. Intense absorption in work alters the sense of time. Moreover, the time sense would slow down for some people, whereas for other time would not matter because of absorption in work. Moneta (2004) explained difference between Deep and Shallow Flow. According to him, in shallow flow state people get completely involved in task and don't think anything else, they feel good and become cut off from world. While in state of deep flow people is really involved in activity and are not aware of their surroundings. They are even not aware of what s is happening in their surroundings. So, flexibility on work is imperative to get good results.

Autonomous initiative and intrinsic motivation are important factors for cultivating flow among employees. Internal motives are experienced as instantaneous and powerful as compared to extrinsic motivation. Goal that is intrinsically motivated has better long-term results. It satisfies psychological needs such as competence, autonomy and develops positive mental conditions that reinforce positive reinforcement and probability of repetition also increases. Rheinberg and Engeser (2018) introduced term 'activity interrelated motivation' instead of intrinsic motivation. They discussed the relationship between the flow and intrinsic motivation. During studies, they also explored that incentives are related with various activities. As far as positive incentives are concerned, they are stemming from goal orientation, interest, learning, involvement and competence which engage person in activities that are purely for the enjoyment. Csíkszentmihályi (2013) also stressed that self-reward is needed to pursue the activities which are gratifying in themselves. If people think that they need things to become happy then they are not autonomous as flow comes from inside.

Another aspect of cultivating flow deals with autotelic personality. The experience of flow is intrinsically motivated in nature. Csikszentmihalyi and Larson (2014) explained flow as of satisfying state in itself or autotelic. Autotelic is described as pursuit of interesting, enjoyable activities, while satisfaction is resulting from activities itself and is motivational aspect. Some people have the tendency of experiencing flow that is why they are autotelic personalities. In short, learn how to be engaged in everyday things is secret of happy life. Biggs (2011) provides a checklist to enhance the ability of flow experience at workplace, detailed as under:

- involve people in task which they love;
- provide task meaningful because it increases motivation;
- give challenging task but it should not be too much challenging;
- plan time and work when you can concentrate and have energy;
- remove disruptions;
- start with small tasks and try to concentrate for longer time; and

• keep practicing and discover what works.

## **2.7.4 Positive Emotions**

Positive feelings are important for people. These feelings have many positive outcomes in human beings' life. Positive emotions are not only essential part of life but also required at workplace. Positive emotions are vital component of flourishing. Positive emotions are important at workplace. Employees with positive emotions perform better and help others. Teachers' positive emotions are very important as teachers have to develop positive emotions among their students. People possesses both positive and negative emotions. Furthermore, various components help in the development of emotions such as biological, cultural, social, behavioral and cognitive. Positive emotions are not only important for physical and psychological health but also important for better performance. Seligman (2011) described positive emotion in term of feeling well. He also said that it is the combination of affective component and positive appraisal. Positive emotions impact on various life outcomes for example longevity, physical health, psychological stability, work productivity and cognitive performance (Huppert, 2009). The emotions are classified as circumplex model containing activation (ranges from low to high level) dimensions and valence (ranges from negative to positive). Moreover, one can encounter both positive and negative emotions at the same time. Various studies argued that positive emotions add value in across many life outcomes like longevity, physical health, psychological stability, work productivity and cognitive performance (Huppert, 2009). Those people who are having positive moods at work are more open to novel ideas and receptive. This can support organizations in challenges and crisis. This also supports people in handling with conflict resolution and negotiations. People can show more creativity when they experience positive moods that benefits organizations to come up with innovative ideas. Expressing and experiencing positive emotion in the workplace would increase performance. When positive emotions are conveyed by effective communication, can influence pro-social behavior and cooperation, which leads to outcomes like positive performance (Barsade & Gibson, 2007).

The field of positive psychology is not suggesting that individuals should be joyous and happy all time in workplaces. People can work more accurately, find solutions of complications and can-do work more successfully in slightly negative or neutral moods and emotions. This is important to ensure that negative emotions are not influencing and act as destructive agents for people. Negative emotions are source of conflict among people while this can also result in clash of values at deeper level. However, negative emotions maintain conflict and, in some cases, also prevent people dealing effectively with it. Positive emotions help the people to resolve conflicting situation while negative emotions worsen difficulties (Barsade & Gibson, 2007).

Ackerman, (2020) discussed in his article that positive emotions increase the performance of individuals on cognitive tasks because they enhance our spirits. Moreover, these do not distract the people like negative emotions. They also trigger the pathways of reward in the brain, contribute to the greater well-being and lower the levels of stress hormones. They also help people in widening their focus of brain and broadening their horizons. Compton and Hoffman (2013) in their book while discussing about the positive emotions explained that in last 30 years, many of the scientific researchers have disclosed the importance of adaptive behaviors and positive emotions for living productive and satisfying life. In twentieth century, scientists supposed that studying the positive emotions was probably unnecessary and somewhat frivolous. Many of them presumed that the focus of the field of psychology should be more on the social problems of people, for example drug abuse, cure of serious mental illnesses like depression and criminal behavior. The previous justification is partially correct only. It is true to some extent that field of

psychology should also study serious psychological and social problems of people. In fact, positive psychology field does not deny the importance and need to study these personal and social problems for purpose of eliminating them. However, recent research studies propose that positive emotions can help the people to fight against these problems. Huta and Hawley (2010) said that people's awareness about their psychological powers may help them to get better from their psychological complications. Furthermore, now psychotherapies are focusing on the adaptive coping strategies and positive emotions development instead of focusing on internal conflicts, anxieties and negative emotions made in childhood.

Research investigations in the positive psychology field have identified that those therapies which are focusing positive forms are getting more results as compared to the older therapies which were focusing on reducing negative emotions in people (Rashid, 2009). No doubt conventional psychotherapy has a major contribution in treating disorders and symptoms, but it ignored happiness element of people's life. Now there are many positive interventions which are useful for the problems for example, depression, schizophrenia, anxiety, grief, relationship distress and loss. This is not something ignoring the negatives. This is just focusing on the assets and strengths (Rashid, 2009). So, instead of working on the negative aspects, there is need to more focus on the positive side of human beings.

Emotional responses are very important in life. Simple impulsive reactions are simple form of emotional reactions about surprising and sudden events in life for example the reaction of fight-or-flight. There are also complex emotional reactions that are combinations of many experiences and are cause of love, gratitude, meaningfulness and devotion feelings. As far as time duration of emotions are concerned, they can be for short time period or may stay for longer time period. They also become moods in later cases. It is important to know that how emotions constitute. The emotions are result of complex interaction of behavioral, cognitive, sociocultural and biological processes. All these elements play important role in emotional experiences especially in positive emotions. More importantly, positive emotions also contribute to wellbeing and flourishing of people. Throughout the history, investigators in field of psychology have tried to focus on basic emotions of human. These innate emotions are basis for all emotions. Different theories provide different numbers of basic emotions ranges from seven to ten number. Positive psychology research said that enjoyment, joy and happiness are basic emotions of individual. Although, basic positive emotions brings further fine variations in the emotional experience. For instance, fear and surprise are combined and make awe emotion. In many cases, negative emotions become the cause of arise of positive emotions like surprise that is positive emotion in some cases arises from fear that is negative emotion (Compton & Hoffman, 2013).

Interestingly, Ryff et al. (2006) said that significant number of research studies has supported that positive and negative emotions are independent of each other. Moreover, positive emotions of person have little or nothing to do with negative emotions of person. In fact, increase in positive emotions of person will not result in negative emotions decrease and decrease in negative emotions will not result in increase of positive emotions in people. Daily experiences of people also help to classify the emotions of people. The emotional reactions are called as core affects. People consistently experienced these primitive emotional responses but mostly not acknowledged these. These core affects are combination of unpleasant and pleasant including deactivated and activated dimensions that also becomes the part of unconscious of people. Different types of core affect push individuals toward positive or negative explanations of the similar circumstances as different people evaluate core affects in different manner at different times. Bargh and Williams (2007) claimed in their research study that many research studies support that emotional responses of people are operated at unconscious level.

# 2.7.4.1 Components of Emotions

There are sociocultural, cognitive, behavioral and biological components that impact emotional states and reactions of people. These components help in development of various the emotions. Heredity and environment both are involved in emotional development. Cultural also play an important role. People learn various emotional patterns from their surroundings.



Figure2: Components of Emotion adopted from Compton and Hoffman (2013)

## 2.7.4.1.1 Biological Component of Emotion

Genetics, hormones and neurotransmitters play important role in human emotions. The positive emotions, for example, love and joy are patterns of hormonal activity and neurotransmitter. Lutz, Dunne and Davidson (2007) explained that brain parts are actively involved in emotions. For example, left prefrontal cortex of brain becomes activated for happiness in people and helps to recover the person from negative emotions. Moreover, people may train themselves to increase the functioning of this area of brain. Previous studies supposed that after the formation of brain, the childhood minute change can take place in rest of the life. But recent studies have found that brains have the capacity to change and develop throughout lives due to experiences of people. This new idea is known as neuroplasticity. Neuroscientists said that brain continuously grow throughout life. While learning new skills present neural connections becomes strengthened and helps to generate new nerve cells.

Compton and Hoffman (2013) explained that heredity also have impacts on emotional responses of people. As, some individuals are more easygoing and cheerful while some are more inclined to worry and anxiety. People genes with coping skills also have role in emotional reactions. Our evolutionary history shaped satisfaction and happiness emotions. Genetic determines people base emotional reaction to world. Scientific evidence proved that genetic contribute in longstanding well-being of people. However, it does not mean that longstanding well-being only depends on the genetic inheritance. Until recently, psychologists and philosophers perceived emotions as body and brain bound matters. But research studies have challenged this individualist and internalist belief. A speedily growing knowledge proposes that emotions also include external resources and go beyond neurophysiological boundaries of organisms even emotions can be extended socially (Krueger & Szanto, 2016). Moreover, recent research studies are not supporting extreme clarification of the set-point theory because it only considered genes as a determining factor of well-being. Headey (2008) also criticized the extreme positioning of set-point theory and said that it is overly deterministic. Moreover, the significant changes come in students in first and last five years during their study period. Headey (2008) realized that changes come in life over time. Additionally, goals pursued by people had a most important influence on life satisfaction. The goals related with life satisfaction involved the commitments to friends and family, political or social connection and altruism. He further said that through these goals other can get benefit. There are some goals in which one gets advantage at the cost of other does not leads people to life satisfaction. With the passage of time people can enhance happiness level. The interventions to enhance well-being may become effective as genes are not the only determinant of happiness.

#### 2.7.4.1.2 Cognition Component of Emotions

In twentieth century, the field of psychology revive the ancient Greek view that thoughts determine the emotional conditions of people. Different therapies are also focusing on converting the negative thinking style to positive one. For example, cognitive therapy focuses on the positive orientation about us, our future and other people. The change of negative thought into the positive one under right conditions can bring a big positive change in emotional lives of people. People can convert the crisis into an opportunity through interpreting the challenging event in positive terms. The skill of controlling emotions through cognitive control is very useful. Seligman (1998) introduced the learned optimism is significant contribution in this area. Carver, Scheier and Segerstrom (2010) argued that it is important to unlearn negative thinking styles instead of learning to explain events through realistic optimism. Moreover, Wong et al. (2013) said that interpreting events in positive ways help people to find sense of purpose and meaning in life.

### 2.7.4.1.3 Behavior Component of Emotions

Apparently, it seems that behavior has a less influence on the wellbeing of people. Behavior strongly influence emotions. Another substantial positive psychology contribution is its emphasis on the positive behaviors. These positive behaviors are strengths, character and virtues (Compton & Hoffman, 2013).

#### 2.7.4.1.4 Cultural and Social Impacts on Emotions

Compton and Hoffman (2013) in their book said that social situation also influences people's emotional lives. Moreover, people can control their emotions according to their understanding about the present social situation. Furthermore, class structures, social status and culture also affect our identity, self, emotions as well as emotional expression. Even, changes with passage of time also affect our experiences about emotion. Culture also determines experiences of emotions. There are some aspects of emotionality that are innate and considerable differences exists in how individuals label, promulgate and express, positive emotions.

### 2.7.4.2 Fredrickson's Theory on Positivity

The broaden-and-build positive emotions theory said that positive emotions open minds, expand and broaden awareness. They also facilitate the development and building of resources such as relationships, knowledge, capabilities, and skills. Positive emotions effect is sharper as compared to negative emotions effects such as fear, anxiety, terror. Negative emotions usually limit our many options and narrows our focus. Positive emotions allow people for creative action and thought. This helps the people to play, learn, and acquire knowledge. The resources people acquire are enduring. These resources can be physical, social emotional, and psychological.

The strategies such as practice gratitude, be sociable, savor positive feelings, fight with negative thinking, visualize or relish your future, use your virtues and strengths, practice mindfulness meditation cultivate kindness, help others or do good, be open to sensory experiences and find close natural settings are helpful for enhancing the positive emotionality. Relaxation strategies for example positive imagery, muscle relaxation and meditation are helpful in developing positive emotions. Likewise, record of positive events is also very helpful. Fredrickson suggested people that stop over thinking about issues and focus your attention on helping other people, sensory sensations or activities. In addition, pay attention to the positive events as these are cause of bringing joy in life (Fredrickson, 2009).

### 2.7.4.3 Positive Emotions at Workplace

Research studies in the field of positivity have uncovered the fact that positive emotionality have an important influence on employees at workplace. Luthans and Youssef (2015) explored that people with higher positive emotionality level are more energetic, enthusiastic, and excited about jobs. They also report greater job satisfaction. Roffey (2012) said that all people are social creatures and emotional. Emotions and moods of Employee influence numerous critical components of organizations –for example job performance, creativity, turnover, decision making and relationships. At work, relationships among employees are related with emotion. So, it is important to understand the feelings of employees that will in turn improve relationships. Negative emotion of one person influences other people at workplace, specifically in case when person is senior, having high status and big personality. Happier individuals are altruistic and help others that results in cooperation. Altruistic emotions contribute in both psychologically and physically flourishing (Post, 2011).

Park et al. (2009) proposed the personal zest that is way of approaching life by means of energy, excitement and anticipation. One way of expressing the positive emotionality is personal zest and it also predicted satisfaction at work. at workplace, positive emotions enhance both worker productivity and personal fulfillment. Isen (2009) explored in his study that positive emotions impact many psychological processes of people in their lives and at work. Positive emotions increase the ability of decision making and problem solving due to which people come up with more innovative, creative and flexible solutions of problems. This also enhance positive behavior at workplace, for instance generosity, empathy and helpfulness. Even positive affect helps in social interaction, problem solving and thinking through increase in cognitive flexibility. Positive affect produces motives for example generosity, helpfulness and kindness. Recent researchers are focusing on beneficial effect of positive affect on several types of self-control (Isen, 2009)

Positive emotions bring progresses in the physical health, mental health and work life. Goswami et al. (2016) found that positive emotions are the cause of employee engagement. Positive emotions fostered citizenship behavior of employees and decrease negative behaviors. Positive emotions enhance mental health, efficacy and job satisfaction. Winslow et al. (2017) discussed that gratitude and interest type of positive emotions boosts the satisfaction of employees with their work, coworkers and managers. Sui, Cheung, and Lui (2015) also identified that positive emotions reduce negative stress and turnover intentions of employees. Wong et al. (2013) explored that positive emotions help employees to goal attainment. Moreover, positive emotionality also enhances and precedes success at workplace. In short, peoples who have higher level of confidence, sociability optimism, likability, and self-efficacy get advantage in their jobs in terms of advancement as compared to people who are less happy. Harter, Schmidt and Keyes (2002) discussed in their article that positive workplace feelings and perceptions relate to employees' higher productivity, loyalty, lower turnover rates and higher profitability. Moreover, positive affect is related to employee retention, ownership and creativity.

# 2.7.5 Positive Relationships

Positive relations are another indicator of flourishing. Positive relationships are important in group for smooth functioning. Social relations are also need of people. Positive relationships are not only important for personal growth but also vital for career development. Positive relationships are source of job satisfaction and reduce the turnover rate of employees. Additionally, it is the role of leader to enhance and promote positive relationships among employees. In case of college teachers, principals may encourage positive social relationships and provide opportunities of relationships among faculty. The relationships element explains the conception of both quality and quantity of social connections of people. According to Seligman (2011), it explains that one is valued, cared for, and loved. Social relationships are considered essential for wellbeing of individuals. Social relationships have strong impact on the optimized functioning of individual. Compton and Hoffman (2013) said that people live in social contexts so, flourishing is not just a pursuit of an individual. Other people also matter. Positive social relationships are an important and strong predictor of wellbeing. Social interaction is an innate need of our species. Diener, Oishi and Lucas (2018) said that association of well-being with outcomes and predictors depends on values, context and culture of people. Tay et al. (2013) in their recent review found that in the last 10 years more than 18,000 articles are published in the field of health and social relationships.

Moreover, Taylor (2011) said that social support is connected to improved physical health, less psychopathology, lesser death risk, lessened suicidal tendencies, health-promoting activities, and self-management of chronic illness. Sub-domains of social support include social ties (total number of peoples in social circle), social networks, perceived support (subjective viewpoint of resources), received support (objective viewpoint of resources), received support (objective viewpoint of resources), contentment with support, and supporting others. The dimension of relationship has deep-rooted place in most of the flourishing surveys.

Roffey (2012) explained that relationships are heart of good life. He further supported his view by supporting the Darwin opinion who realized that human behavior extraordinary complexity including language, thinking, subtlety of emotions, the diversity and individuals' ability of future envision, all are result of evolution of people as social animals and indicators of social brain. The field of neuroscience explains that brain has ability to sense the other people's feeling and thinking. The mirror cells of brain become triggered when human beings feel compassion or empathy that allow people to share other individual's pain or joy. Moreover, other regions of brain are specialized to read mind and understand the thinking, planning and hoping of other people. The social relationships have shaped the human evolution and play significant role in development of human. From moment of birth, children enter in relationships world through which they through and respond. Research studies have revealed that quality of early relationships has enduring impact on cognitive capability, mental health, behaviors, lifestyle, and later relationships. Studies has also revealed that these relationships are not deterministic and social influences in later life may change trajectories for worse or better (Roffey, 2012).

Colbert, Bono, and Purvanova (2016) discussed that endless meetings, pressing deadlines, micro-managing bosses and stressors at workplace are the causes due to which

employees feels physically exhausted and mentally drained. Even then with all these employees can move themselves from languishing at workplaces to flourishing at workplace. Positive relationships at work are key of making the people flourishing at work. Results of surveys conducted from employees of different industries including banking, education, retail, government, manufacturing, human services, health care, and information technology showed that positive relationships at workplace help employees to flourish at their workplaces. The meanings of flourishing are to experience high level of well-being and to grow and thrive. Usually, people do not associate flourishing with work. Personal lives and our work are associated with each other. More importantly the relationships we make with people at workplace play significant role in lives. Positive relationships at workplace help employees in instrumental and traditional ways.

The work relationships are helpful for employees in career advancement, emotional support and task assistance. The relationship functions such as receiving advice about career, getting help for job tasks and having from colleagues in the stressful work events are related with job satisfaction. Employees also develop deep friendships relationships with others at their workplace, experience personal growth due to positive relationships at work and can give others (Colbert, Bono, & Purvanova, 2016).

# 2.7.5.1 Neuroscience of Positive Relationships

Roffey (2012) explains the neuroscience of positive relationships in his book. Social neuroscience provides understandings in developing positive relationships at work. Brain of human has ability to handle with social networks as it has evolved in complexity and size. When employees feel social pain like job promotion doesn't take place or not including in a project, the same brain part becomes activate that activates in case of physical discomfort. Similarly, brains reply to the fairness and reward area of brain activates when

individual experience cooperation and fairness. This cause workplace implications regarding fairness among colleague, cooperation and rewards in meetings and equality in assigning work (Tabibnia & Lieberman, 2007). Moreover, Mitchell et al. (2006) further elaborated that relationships of people also impact our brains key areas. People like to develop connection with those who are having something similar like them. If an individual is finding something alike in a new group member, they are trying to connect and empathize with them that results in positive relationship among people such as teamwork and cooperation.

In case, person feels significant difference with new group participant, it will be difficult for the person to find commonalities and as a result of this difference the person will not do any effort to develop relationship with them. Here the point is that for building positive relationships, people must find something similar or common in them. This similarity can be history, background, race, experience gender or even project, sport and favorite color. These similar elements allow people to develop positive relationships. Mukamel et al. (2010) research in social neuroscience claimed that positive relationships help in development of mirror neurons in teams. The mirror neurons influence actions and feelings and are significant at work. The working of mirror neurons can be observed with this simple example. Imagine that a person is walking in street, and somebody gives smile to that person. The normal reaction will be smile back.

Same situation happens in work. The mirror neurons subsets job is to sense these prompts and smiles and give response in the same manner in teams due to this person develop a bond with team members that helps people to increase performance at work (Goleman & Boyatzis, 2008). If a person experiences positive emotion, mirror neurons activate positive emotions in people around them and same will happen in case of a person who is undergoing from the phase of negative feelings. Mirror neurons explains that constantly people are in the influence of other at work in context of positive and negative relationships.

### 2.7.5.2 Positive Relationships at Workplace

Relationships at workplace are important in organizations. This is a place where employees interact informally or formally in accomplishing work. Therefore, whether employees and organizations flourish, or flounder mainly depends on positive social relationships. Umberson and Montez (2010) surmised that relationships have substantial influence on physical health, mental health, mortality risk and health behavior. Gable and Gosnell (2011) said that people are gifted with reflexive brain systems for the social thinking. The close relations are connected to health and protect people against unpleasant consequences of anxiety. Our brain releases oxytocin hormone in reply to social contacts. This powerful hormone relates to motivation and trustworthiness at work. Geue (2017) argued that workplace relationships such as cooperation, fairness and trust activate brain which in turn encourages interactions in future. Moreover, this also promote respect, confidence and trust among employees. Positive relationships at work affect physiological processes in people. Furthermore, positive relations help in strengthening the physiological resources through stimulating the cardiovascular, neuroendocrine and immune, systems. Positive relationships may enhance the identities and help individuals to know about themselves. Positive relationships provide social support and inspiration to attain identitycongruent results.

Roffey (2012) discussed that workplace positive relationships may increase financial success and productivity. Although, positive relationships in the workplace are of great value. Workplace positive relationships also helps in developing good relationships with community, friends and family members. One of the abilities of good leader is to foster the positive relationships among employees. Only innovation and inspiration are not enough. A true leader needs social and emotional intelligence for engaging employees in reaching at the vision. The mentorship is valuable function that also helps in developing good relationships at workplace. Professional consultants' role is also effective. These facets of positive relationships can be help for organization.

Workplace positive relationships are important for flourishing of employee. Positive relationships serve various functions such as emotional support, career advancement, task assistance, friendship, and personal growth. Moreover, effective development of individual and sustainable performance of organization are dependent on positive relations among individuals at workplace. Relationships at work are source of learning enrichment, and vitality that helps people, teams, and organizations to flourish, thrive and grow (Amy et al., 2016).

Cornelissen (2016) said that social interaction helps to gain knowledge and increase productivity in all including trained and untrained workers, in teams, or among junior and senior workers especially in low-skilled occupations. Moreover, productivity enhance when employees work with knowledgeable colleagues. Sias (2014) discussed that employees who have good relationships at their work are more devoted to organization. Leaders can foster positive relationships through informal interactions that results in employee's satisfaction with their job. Organizations may face negative consequences due to lack of positive relationships at work. Various studies explored that due to absence of social support at workplace, people face health consequences, such as risk of higher cardiovascular illness, depression, shortened lifespan and compromised immunity (Holt et al., 2015; Mushtaq et al., 2014).

Strong relationships with their co-workers facilitate employees in innovative thinking. Wang et al. (2015) explained that strong ties in employees due to social

interactions helps innovators in search for sponsorship, support and inspiration at workplace. Moreover, People stay at same page due to social interactions in workplace. Informal relationships among co-workers work as source of emotional support and information for workers. Employees may share information by social interactions with their co-workers. Social interactions among employees develop positive feelings. Positive relationships promote altruistic behaviors in co-workers with guidance, help, feedback, and advice on work matters. Jayles et al. (2017) argued that information gathered by social interaction help group members to improve performance. Positive relationships at workplace are vital for many work outcomes such as attitudinal, performance and wellbeing. According to Basford and Offermann (2012), employees' motivation levels increases when they are having good interpersonal relationships at workplace among coworkers. Schermuly and Meyer (2016) argued that depression and emotional exhaustion are threatening for psychological health of employees. Workplace social relationships helps to reduce these threats. Demirtas (2010) said that positive relationships of teachers with students, parents, school management and colleagues help in development of positive attitude of teachers toward profession. Buonomo et al. (2017) said that positive relationships improve level of engagement and motivation in teachers. In fact, positive relationships help teachers in development of professional competencies.

Reis and Gable (2003) clarified that positive interactions of employees are source of vitality and enrichment that encourages and helps employees to flourish and thrive. Negative interactions at work are reasons of depletion, dysfunction and psychological distress. Positive interactions of employees work as appetitive that results in desirable outcomes whereas negative interactions of employees work as aversive that results in unwelcome results. Sharing happy events with colleagues results in personal and relational wellbeing of employees (Peters, Reis, & Gable, 2018). Workplace positive interactions helps employees to enhance job satisfaction. It also reduces the staff turnover for example those employees who get support from co-workers want to stay in organization for long time period (Moynihan & Pandey, 2008). Moreover, Chiaburu and Harrison (2008) said that positive interactions is source of increase in organizational commitment and job satisfaction as it helps employees to get clear understanding about tasks, roles, workload and reduces ambiguity of job role. Workplace positive interactions are marked by mutual regard, active engagement and trust. Rosales (2015) found that interactions may improve awareness of others employee, increase positive emotions for instance respect, compassion, trust, engagement and empathy. Rosales (2015) said that negatively valanced connections among employees results in animosity, avoidance or exclusion that become cause of job dissatisfaction and stress. Oksanen et al (2010) further supported that negative relations have detrimental effect on emotional wellbeing on employees. Moreover, workplace negative social relations such as disrespectful, distrustful, and lack reciprocity results in depression. Venkataramani Labianca, and Grosser (2013) further discussed that employees at their workplace having both positive and negative connections with other employees. Although more negative relations than positive with colleagues results in negative emotions, moods, and social ostracism.

Mastroianni and Storberg (2014) revealed that work interactions can enhance wellbeing when nature of interactions are positive, respected, valued, collaborative and trusting. Lack of positive relations is cause of negative consequences such as lack of sleep and unhealthy eating patterns, lacking socializing, less or no exercise, poor personal relations, less focus on careers, and lack of energy. Seligman (2011) observed that people cannot achieve happiness without focusing on social relationships. Dutton and Ragins (2017) said that positive interactions of employees give energy while negative relationships reduce energy of people and lead to people to floundering.

### 2.7.5.3 Strategies for Improving Positive Relationships

It is crucial for managers and leaders to identify ways through which positive relationships at workplace can be enhanced. Geue (2017) argued that elevating interactions among employees are important for creating positive environment at work. For enhancing the engagement levels of employees, organization must work on the elimination of barriers which limits interaction among employees at work. Moreover, create opportunities of engagement with colleagues for employees. The positive relationships can be attained in many ways with various approaches. Kahn (2007) argued that employees develop attachment to organizations due to positive relationships constellations. Relationships have central place in employees' experiences at work and organization. He finds that five dimensions are helpful for developing meaningful connections between individuals at workplace and these are task accomplishment, sense making, career development, personal support and provision of meaning. These five areas enable employees to develop relationships that helps to meet cognitive, instrumental, growth, expressive, relatedness and identity needs. He developed a framework of relational constellations. He further describes that there are four kinds of constellations. These are concentrated, networked, bounded and scarce. He said that relational constellations are a source of employee psychological attachment to work and organization. Meaningful work connections are causes of attachment and helps employees to show true authentic selves at work.

Roffey (2012) surmised that organization is comprised of individuals who work for it. The performances of individual and relationships among individuals influence organizational effectiveness and success in terms of goals attainment. Numerous factors contribute in the development of positive relationships at work such as job roles, pay scales, leadership role models, environment, and culture markets and competition. People matter
in organization as they make a difference. Positive relationships can be increased by focusing on areas of engagement, meaning and positive emotion that results in positive institutions.

Face to face interaction may help in the development of positive relationships among employees. Now people can contact others anywhere in world due to digital communication. Internet has now eased the communication. There is still need of face-toface communication. Although, email is easier way of communication but there are number of things people miss due to this such as nonverbal tone and cues. Organizations may focus more on the interaction of employees. Moreover, positive relationships may also be developed through effective communication. Communication plays an important role in ruining or developing positive relationships at workplace. People feeling better when receive negative response in positive manner for example smiles and nods than positive response in negative manner (Goleman & Boyatzis, 2008). Dunlap et al. (2016) argued that nonverbal behavior communicates many intents in the face-to-face interaction. These behaviors for example the shoulders and head placement, facial expressions, the usage of hands deliver a lots of information to regulate communication, and to express feelings. Workplace communication can break or make a team or a relationship. For example, a person shares an idea in meeting, but another person is not agreed and suggests that it will not be practical. The idea may be not good but dismissing idea will contract conversation. Moreover, person will be hesitant to share ideas with others in meeting in future. This practice will reduce the relationships at work (Fredrickson & Losada, 2013). The communication language used with others at work can either expand or contract conversation and relationships. Gable, and Gosnell (2011) claimed that active constructive respond method is a powerful tool in for creating workplace relationships because this method expands communication, encourage cooperation and promotes positive dynamic

among people. Moreover, enhancing communication among people in meetings through understanding of positive negative ratio and constructive responding helps in building the relationships. Habits of daily communication and interactions help people to develop connections of high-quality (Stephens, Heaphy, & Dutton, 2012). Organizations may plan collaborative events for social interactions. Organizations must give time for promoting workplace social interactions. Give time to employees for interaction. Barsade and Knight, (2015) said that less cooperation among employees results in greater conflict and poor performance. Strong relationships among employees can enhance commitment.

Meaningful relationships are required for both employees and employees with others at work. Destructive and counterproductive workplace practices are impeded meaningful relationship (Bolden, et al., 2011). This is responsibility of organizational leaders to reduce negative relations among employees with the help of resolving and proactively mediating differences at early stage. Moreover, there is a need to build open communication culture that nurtures relationship building and trust. It is important to promote such environment that encourages positive interactions among workers. Moreover, a leader, manager, or supervisor should set an example and practice positive relations to encourage relationships. Desired culture can be established through exemplify the consistent behavior patterns that encourage environment of positivity and inclusivity. Seligman (2011) points out that positive culture for encouraging belonging can be developed by elements for flourishing. Moreover, leaders in business may adopt flourishing element to promote culture of positivity in organization. At workplace, employees are bound to work in group and forced to develop relations with other employees. People from diverse groups made up work environments. Many employees even are not interesting in socializing or freely meeting outside of office. However, there are certain steps that organization may take to enhance interaction in employees and create an inclusive culture at workplace. Positive interactions at work can become source of flourishing, collective and individual growth and learning.

Positive emotion contributes to enhancing the positive relationships in workplace. People get inspired by those who are happier at workplace and want to be around these persons (Carver et al., 2010). So, enhancing positive emotion should be one of the aims of organization in workplace. For this purpose, strategic planning is needed at various organizational levels. Traditional practices of organization like recognition and reward programs are now not enough. Research in field of positive psychology has suggested many things. The money can't increase happiness and wellbeing after certain point at work (Kahneman & Deaton, 2010). However, research studies about motivation and organizational psychology revealed that fair and standard remuneration level is essential to avoid from de-motivation. Perhaps income have some influence on positive feelings, but emotions are mostly driven by personal relationships, flow and temperament (Diener & Kahneman, 2009). Positive relationships in combination with positive emotion in the workplace help to reduce absenteeism and sick leave. Lemonick (2005) explored that happier people developed more antibodies as compared to average person when gone through the treatment of flu vaccines.

Positive workplace relationships may also develop through individuals. People at workplace influence others. Emotions, knowledge, and behaviors spread among individuals with personal and social ties. People with altruism makes friend who have this quality. Fowler and his colleagues discussed that how uncooperative and cooperative behavior spread in social networks of human. Cooperative and even uncooperative behavior of people influence the other people who are around them. They identified that happy person develops the habit of happiness in his friend (Fowler & Christakis, 2010). Emotions such as happiness spread among people through direct contact and online networks (Coviello et al., 2014). In Gallup survey (2008), one of the questions about having best friend in the workplace explored that good relationships at work results in highly productive workgroups. Furthermore, positive relationships can be enhanced by providing meaning in workplace. This is a responsibility of the leader to provide purpose behind tasks, link tasks to higher vision and give realization to individual that work can make a big difference. Meaning in the work contributes in satisfaction and wellbeing (Berg, Dutton, & Wrzesniewski, 2013).

Additionally, social capital can be built through positive relationships as it facilitates supportive relations and co-operation. The development of social capital is reciprocity among people in workplace. As one person helps other and in return another person also helps the same person or some other person. People are usually more altruistic and helpful in positive moods. Helping others means that we help ourselves (Post, 2011). Social capital is the resources that flow with the help of relationships networks. This network shares knowledge, information, advice, help, emotional support, goodwill, services and material goods (Dutton & Ragins, 2017). Those connections which are of high-quality impact positive relationships. Moreover, high-quality connections in workplace increases physiological functioning, engagement, learning, attachment, cooperation, collaboration performance and commitment. Employees social interactions has enduring, consequential and immediate influence on people (Heaphy & Dutton, 2008). Organizations should promote flourishing relationships. Now working of organization is dependent on use of virtual conferencing and email for interactions. Internal networks and social media reduce the frequency of personal interactions in organizations. At workplace, leaders should do some effort to make social interaction alive among employees.

Roffey (2012) talked about practical strategies for increasing positive relationships. He further explained that there are tools available in positive psychology that may help people in building better relationships. Training of positive psychology help people to enhance relationships. He further discussed that training of building and developing positive emotions, emotional intelligence, social neuroscience learning, effective communication, strengths, and creating contribution and meaning. All these constructs will contribute to developing good positive relationships among people.

In brief, flourishing has its basis in positivity and positive psychology. The concept of flourishing is getting attention in organizational studies. Flourishing is a term which is used interchangeably in literature with wellbeing and thriving. Present research study conceptualized flourishing as PERMA theory given by father of positive psychology Seligman. Research studies proved that flourishing has many positive outcomes for individual as well as for organization. This has helped the researcher to hypothesize the interrelationship of workplace flourishing with psychological capital and psychological ownership. Moreover, literature has also identified the relationship of wellbeing with psychological capital. In lieu of this, present research study has hypothesized the interrelationship of workplace flourishing with psychological capital. Similarly, present research work also explored the relationship of flourishing with psychological ownership as both variables have their basis in positivity and are beneficial for employees and organizations.

# 2.8 Organizational Psychological Ownership

Third variable of study is organizational psychological ownership. Following section have covered the concepts regarding organizational psychological ownership. The psychological ownership construct has emerged as positive psychological resource and it can be developed and measured. Moreover, it affects people, groups and organizational performance. Organizational psychological ownership can be developed in workforces that lead organizations to become greater job places confirming sustainable performance. The psychological ownership helps organizations to retain talent and skilled employees (Olckers, Zyl, & Vaart, 2017). Moreover, Zyl, Stander and Odendaal (2016) said that positive organizational behavior and positive psychology both fields are paying attention on mechanisms that are essential for optimal performance of organizations. Moreover, psychological ownership is mechanisms that can enhance the organizational performance. Further they define psychological ownership deals with the psychological or physical attachment to explicit and implicit artefacts at workplace. The psychological ownership construct emerged as psychological resource. It fulfills the requirements of criteria of POB as it can be measured, based on research and theory, open to development and change and affects organizational as well individual performance (Avey et al., 2009). Psychological ownership enhances and ensures sustainable performance. This is also helpful in retaining talent in organization. Psychological ownership is individuals feeling of ownership (Olckers, zyl &Vaart, 2017). The ownership notion is oldest and enduring concept in human. In simplest sense, it is to own or possess something. This possession may be physical in nature, for example objects, currency or property. Although, work ownership has different meaning. That is why this is termed as psychological ownership (Liu et al., 2012). Psychological ownership is an individual's affective-cognitive state that explains feelings of ownership of target such as organization or job (Pierce, Kostova & Dirks, 2003). There are research studies that link PO with many desirable attitudes and behaviors of employee. Brown, Crossley and Robinson (2014) explained that ownership includes intangible and tangible targets, for example job and organization or work characteristic such as novel idea, specific project, and strategic initiative.

Psychological ownership is state-like, unidimensional concept that is originated from the three roots (human motives), that is, self-identity (personal identification of individual with target of ownership), self-efficacy (belief in personal abilities to complete task), and belongingness (feelings of 'at home' at work), routes that are the reason of psychological ownership. Psychological ownership describes connection among objects and individual that can be immaterial or material in nature, wherein object becomes part of individuals extended self. The person experiences object as mine when object befits psychologically grounded because now individual finds himself or herself present in object (such as one's job, a work project, one's organization). This object or target of ownership has now developed close association with person's identity (Pierce & Jussila, 2011).

Olckers (2013) psychological ownership is significant job resource as it is linked with numerous positive individual outcomes such as happiness / engagement at workplace and many organizational outcomes such as company performance. Moreover, Serenko and Bontis (2016) discussed that it acts as barrier against counterproductive behaviors at work. The concept psychological ownership is interdisciplinary. Present research also hypothesized that PO is related with individual outcomes of psychological capital and workplace flourishing. According to Chang, Tseng and Tung (2016), psychological ownership has been studied in various field such as marketing management where it is applied as an instrument to develop attachment to a product or a service between clients. Likewise, Zohar (2014) claimed that researchers in engineering has been related psychological ownership with risk aversion and safety consciousness.

Pierce and Jussila (2011) psychological ownership explain association among objects and individual, that can be immaterial or material in nature, wherein object is now part of self. Once ownership object develops psychological ground, person 1 experiences object as 'mine' as person feel that object is present in it such as one's organization, one's job. Now the ownership of object or target has developed association with person's identity. The psychological ownership roots are essential motivation for persons to develop possession need. Psychological ownership roots have three-folds of efficacy, belongingness and efficacy (Pierce et al., 2001). Efficacy describes individual's motive to be within control of environment. Possession of resources permit individuals to change and influence their surrounds that eventually satisfies the innate need of to be efficacious. Identify explains individual's need of self-definition and sharing of self-identity with other people. Ownership supports individual to meet need of identity and artefacts /resources helps to communicate identify and make sense of it. Belongingness need is owning a place or have a home wherein person want to dwell. Belonging is an innate need that can be fulfilled by developing ownership feeling over targets. The nine broad following categories of feelings of ownership were identified through discussion with employees (Pierce & Jussila, 2011), namely:

- 1. Peoples personal attributes (for example skills, knowledge, competencies, experience);
- 2. Material objects (for example computers, coffee cups, books, files);
- 3. Mental processes (for example ideas, beliefs, understandings);
- 4. People and relationships (for example supervisors, teams, subordinates, clients);
- 5. Responsibilities (for example job, workload, task, programs);
- 6. Spaces (for example office, cubicle, parking lot);
- 7. Work outcomes (for example accomplishments, performance, plans, failures);
- 8. Social systems (for example organization, division, department, committee); and
- 9. Actions (for example leadership, speaking up, helping).

Although workers can sense possession of all or any of these objects or targets. Employees want to recognize with those that are impactful, dynamic, and great in scope. Moreover, organization and job both are predominantly dynamic, broad and impactful. Brown et al. (2011) discussed that studies have focused on both organization–based and job-based ownership. Jami, Kouchaki, and Gino (2021) said that psychological ownership boost self-esteem that encourages altruistic individuals.

#### 2.8.1 Motives of Psychological Ownership

Psychological ownership serves intra-individual motives that act as glue or reason for individual attachment to object. Moreover, these motives are not cause of psychological ownership. These motives facilitate development of psychological ownership state (Pierce, Jussila & Cummings, 2009). The feeling of ownership is rooted in motives set. People may develop ownership feelings for many objects on condition that objects of ownership allow motives set to be satisfied and operate. Furthermore, one motive can lonelily play helpful part in psychological ownership development. Effectance, self-identity and belonging are motives of ownership (Pierce &Jussila, 2011).

One of motive of PO is efficacy and effectance motive. People want to manipulate and explore their environment. Efficacious control of environment results in sense of personal efficacy and competence. Simultaneously individual experience ownership and possession feelings towards objects. Self-identity is another motive of PO. The targets or possessions of ownership help people in defining themselves. People become psychologically attached and attribute meaning to targets and objects that please and comfort them. People also publicly show possessions as an expression of self-identity. Another motive of PO is belonging. People are inherently territorial; they want place like home. Their environments may help them to develop a feeling at home and surroundings does not means only physical space. People also develop psychologically attached with objects such as their countries, their things, their organizations and they feel personal security.

Van Dyk (2015) recommend that powerful strategy to motivate, attract, retain and talent in organization is to do investment in wellbeing and development of workers. Nawrin (2016) said that those organizations who invest in development of their employees, their employees are more empowered, engaged, satisfied, and responsible and resultantly have emotional association with their work organization. Therefore, Seligman (2011) suggests that investment in wellbeing of people is important aspect for retaining top skilled talent. Moreover, Robertson (2012) suggested that investment in psychological ownership development at workplace result in higher individual work-performance, innovative work behaviors, lower presenteeism / absenteeism and improved efficiency that helps in navigating the stressful environment of work. PO is mechanism between individual wellbeing and personal development. Additionally, Pierce, Kostova and Dirks (2003) claimed that those people who experience or exert ownership behaviors at workplace are healthier, motivated, productive and stay in organization as compared to those who are disengaged and detached. Thus, organizations need to help workers to develop psychological ownership with immaterial and material objects within work contexts to retain top talent in organization. PO is a personal resource that help people to manage the effect of demands related with job and an effective approach to retain and engage skilled people. PO is a state in which people feel that ownership target or object is theirs. It is a meta-affective psychological connection to targets or artefacts and described by possessiveness feelings (Olckers, 2013). The ownership targets can be tangible, meta-ideas and intangible. At meso-level, workers feel psychological ownership of organization, at micro people feel ownership with things such as laptop. Moreover, at macro level people feel psychological ownership of their country. People with high psychological ownership exert sense of responsibility, positive attitudes, and extended self-concept to artefacts. Psychological ownership is responsible for five kinds of behaviors: (a) belonging, (b) high self-efficacy, (c) sense of self-identity, (d) territorial behaviors and (e) accountability (Olckers & van Zyl, 2016).

#### 2.8.2 Psychological Ownership Drivers

Pierce et al. (2003) highlighted three basic routes or paths that are source of psychological ownership experience. For this purpose, people need to personally know ownership target, get control over ownership target and invest inner selves in target of ownership. Each of these routes play vital role in achieving success in career. Pierce and Jussila (2011) said that people can develop attachment of object to self through more knowing about object, more control over object, more investment on object.

### 2.8.2.1 Control over Ownership Target

Getting control over ownership target is important in many ways. Owning object means that person can use, manipulate or control target. Exercising influence and control over object helps individuals in making object part of self. The targets over which people exercises more control are taken as mine. People usually experience objects ownership when they feel that they can control the object. If they feel more influence and control over object, they will feel more possessiveness about object and thus object will become part of self. Due to this, people experience object as 'mine'. Pierce et al. (2009) said that feelings of control and manipulation of object develops feeling of self towards object. Moreover, supportive environmental conditions contribute in satisfying need for competence, effectance, and control. This can happen by providing opportunities to employees to experience and exercise personal control over objects in organization. Pierce and Jussila (2010) said that people want to become the reason of constructive progresses. Organizations may provide opportunities to employees to make their career development decisions. This will increase self-efficacy and promote psychological ownership feelings (Fuchs, Prandelli & Schreier, 2010). The modern workplaces allow numerous opportunities to employees to employ control over occurrences and developments in their work. For example, organizations can offer employees enough opportunities of career development. These opportunities can be in form of supervisor support, honing and training of skills and made available company resources for career development. Colakoglu (2011) further added that ultimately, employees must take control of and manage their career. Thus, career of individuals can be viewed as ownership target.

It is the responsibility of employees to develop their adaptability and selfknowledge of their job. There is a need to involve employees in continuous growth and learning in chasing their goals about career. This can be done by enhancing their competencies, abilities and skills. People should play proactive role and take over their human capital by advancing their education and skills. Colakoglu (2011) said that people with having necessary work-related knowledge, understanding and skills can take control of their occupation. Enache et al. (2011) said that those individuals who are equipped with skills easily grasp the self-concept and use it for taking career decisions. Additionally, those employees who have control of their career experience enhanced self-efficacy, well-being and satisfaction in profession. Additionally, Park (2010) added that employees may adopt strategy of creating-opportunity in career through enriching work experiences and enhancing job skills. This process helps employees to internally evaluate their career success. Creating opportunities includes looking for experiences and developing skills that are important for career success of individual. O'Driscoll et al. (2006) suggest that ability of individual to shape things and exert influence according to own perceptions, build positive impact on object of ownership. When an employee experience control over organization, the employee feels that organization is part of extended self. Control over target is a core idea in experience of psychological ownership. Controlling target is a central

mechanism in psychological ownership development. On the other hand, less control over object may impede the process of psychological ownership development.

#### 2.8.2.2 Knowledge about Ownership Target

Intimately knowing about ownership target is vital. Over a period, ownership targets such as ideas, job, equipment and organization, psychologically become mine or theirs. The ownership feelings arise when knowledge develops active relationship or association with objects. The more personal association among individual and object can be developed through gathering more information about ownership object, ultimate object become part of person's self. The possessions and personal knowledge about objects are necessary for making it part of self (Pierce et al., 2003). Jussila et al. (2015) further explained that through association or active participation with objects, people gain knowledge about target and become familiar with usage and nature of object. The additional knowledge persons gather about object, for instance their career possibilities and opportunities, the closer relation people develop with object. This also helps the person to get awareness about themselves, their expectations and identity.

DeVos, DeHauw, and Vander Heijden (2011) added that trainings, careerdevelopment practices and on-the-job learning can improve knowledge of employees about their career or job. For this, people must develop self-knowledge and insight about their career which will help them in making meaningful choices. Ballout (2007) clarifies that understanding of knowing-how, knowing-whom and knowing-why is required for career success. Knowing why implies that there is need to understand motivation behind career and personal meaning of job. Moreover, there is also a need to develop understanding about weaknesses and strengths and envision career goals. Employees must work on achievement of career related goals and realize the successes they struggle for gaining success in workplace. Knowing whom requires that persons need to maintain and build relations with other people such as mentor. These mentors provide knowledge (information), emotional support, career opportunities and choices to employees. Networking makes things easy and enhance subjective career success. Moreover, knowing how advises that employees must engage themselves in continuous growth and learning to pursue their goals related to career. This can be accomplished by enhancing their abilities, competencies and skills (Ballout, 2007). Therefore, it is important for person to get more knowledge about target through strategies of know-why, know-how and know-whom to develop personal connection between person and career.

Individuals' close association with target is also helpful in development of psychological ownership feelings. Knowledge of target develops long-lasting and close connection of individua with target. Pierce, Kostova and Dirks (2003) said that with the passage of time, closeness of individual with target converts into ownership. Intimate knowledge of individual about processes, structure, characteristics of organization, develops the intimacy feelings with organization. Moreover, due to this individual-self get closer to organization and this leads to psychological ownership.

# 2.8.2.3 Investment in Target of Ownership

The investment of self in target is another route through which psychological ownership develops. A positive bond was found among level of personal investment of individual in object and ownership feelings towards target. Here the meaning of investment is energy, skills, time, ideas, effort and values of individual. When a worker invests her or his extended self into organization in form of ideas, personal energy and effort, the organization becomes the part of person's self and person experiences ownership feeling towards organization (Pierce et al., 2001). The idea here is that when individual invests effort, energy (intellectual physical and psychological), time, ideas, skills and attention in an object, a union or link is established between object and self, resulting in ownership feelings toward object. Jussila et al. (2015) explains that when individual invest on product production, the product becomes part of individual's self and individual becomes the owner of product because individual has now developed the link with target.

People may develop ownership feelings towards their work, machines, the products, their career and other individuals. For this purpose, individuals should invest their selves and know their target. Pierce et al. (2009) further added that this process may help people to satisfy their self-identity and belongingness needs. The control over and self-investment in target build self-efficacy feelings. Employees need to fully concentrate on their career for experience success and getting progress in workplace. This required investing effort, energy and time in advancing skills. According to Ng and Feldman (2010), employees gain more experience when they invest time by staying in organization for longer period. Experienced workers perform job skillfully that increases their self-efficacy feelings and eventually help employees to feel more efficacious in career. To review, employees need to invest in their career development by improving their education and skills, spending additional time at job and remain in organization for longer time. This will increase the self-efficacy and career satisfaction of employees.

Employees can develop PO by getting control over target such as control of career, knowing target by close association such as knowing-why, knowing-how and knowingwhom and by engrossing themselves into shaping and creating their ownership targets. These three routes are additive and complementary. One or two routes can also increase the psychological ownership. For fostering psychological ownership in employees, organization may promote the individual's control over object, knowing of object and investment in target.

### 2.8.3 Job-Based and Organizational-Based Ownership

Job-based and organizational-based ownership are distinct foci of psychological ownership in organization. Organization-based ownership explains that employees have possession feelings and psychological connection to their organization. Job-based ownership explains the psychological connection of employees with their specific role or job.

Peng and Pierce (2015) explained that both job and organization based ownership describe experience of mine. Employees having strong PO exhibit loyalty with organization. Job based ownership focus on stronger connection with job. Sometimes it is difficult for employees to delegate some aspects of job due to individuals' strong feeling towards job. Job satisfaction and citizenship behavior have association with job ownership and organization ownership. Dawkins, Tian and Newman (2015) claimed that factors like autonomy, profit-sharing, leadership, participative decision-making and workplace structure enhance psychological organizational-based ownership. Psychological ownership level of employees depends on ownership target. Lee and Suh (2015) explained that autonomy over job and work environment is also a cause of higher level of psychological ownership. The autonomy to share opinions and knowledge is vital for virtual teams' psychological ownership. The control over job or work also increase job and organizationalbased ownership of employees. Moreover, organizational PO has negative connection with the withholding and hiding of information.

# 2.8.4 Darker Side of PO and Strategies to Overcome

People who possess higher level of psychological ownership also have higher level of job satisfaction, psychological empowerment, organizational commitment and low turnover rate. There are research studies that report negative impact of PO. Numerous research studies have proven that psychological ownership is good for organization. Although too much involvement of teams or / and individuals in the expression and experience of PO results in appearance of a darker side. The dark side of PO act as shadow and in extreme cases, it can lead to the deviant behavior.

Moreover, Pierce and Jussila, (2010) said that PO is a cause of resistance to change among employees. As workers defend territory or target, feel more responsibility, personal sacrifices, take more fatigue and stress might be a consequence of PO. Additionally, feelings for instance, unwillingness to share, selfishness, not letting go and preoccupation with control are all results of individual. Dawkins et al. (2015) added that people spend their energies for fulfilment of motives of ownership and because of this, they have less level of energy to participate in organizational or team goals. Very low or high levels of PO might be negatively connected to happiness. All these are darker sides of PO and burnout and workaholism theories could be helpful in exploring the darker side of PO.

Pierce et al. (2009) added that by taking responsibility as burden leads people towards anger and fatigue feelings. When ownership feelings to target become very strong then employees start disregarding organizational rules to keep target safe. Person's fear of losing object/target also results in workplace deviant behavior for example theft or sabotage. More importantly, dark side of PO can be minimized by using different strategies. One way is to develop shared ownership in interdependent employees. This will reduce the controlling behavior of employees. It is easy to handle the loss of targets in groups as group absorbs the harmful effects.

# 2.8.5 Psychological Ownership Features

### 2.8.5.1 Connection with self-Identity

The possessiveness feelings are at center of PO that develops when individual's psychological bonds to target/object causes owner to experience object as extended selfidentity. Identity is influenced, formed and developed in some social contexts when people identify and interact with external objects. The targets can be in form of tangible as well as abstract. Due to act of possession, external targets incorporated into the person's extended self.

Pierce and Jussila (2011) discussed that PO is complex experienced state which is different from other phenomenon such as identification (it is sense of oneness with organization or job), engagement (it is positive state of individual that is characterized by absorption vigor, and dedication), commitment (it is need, obligation or desire to continue attachment with organization) and satisfaction (it is positive attitude of employees towards organization or job). Moreover, Pierce and his colleagues explained that PO is sometimes confused with the concept of identification due to its focus on the identity. Both constructs explain that how individuals identify with their organizations and are linked with many positive results such as job satisfaction (Mayhew et al., 2007). Although, identification is rooted in theory of social identity and focusses on cognitive factor that explain how individuals identify themselves in context of objects, things or targets they own in organization. The words used to express ownership such as my and mine are related with words that are used to express ourselves such as me and myself.

# Table 2.5

# PO and Other Concepts

Distinction Areas	РО	Job Satisfaction	Employee's Engagement	OI	OC
Main idea	feel like organization /job is mine	Positive feelings about organization / job	Invigorated and absorbed in work	Who am I regarding this organization?	Remain with organization / job
States these constructs represent	Affective- Cognitive	Affective- Cognitive	Motivational Cognitive– Affective–	Cognitive	Affective
Characterized by:	Sense of possession	Pleasurable mood and positive feelings	Vigor, absorption and dedication	Sense of oneness to organization	Feelings of and belonging attachment
Developed by:	Dynamically imposing self on organization / job	Positive appraisal of job situation	Personal resources and job	Associating with positive organizationa l attributes	Choosing to maintain association
Theoretical basis	Psychological possession theories	Attainment /value and disposition theories	Job demands– resources model	Theory of social identity	Group and social membership theories

*Note.* PO= Psychological Ownership, OI= Organizational Identification, OC = Organizational Commitment.

*Table 2.5.* PO and other concepts. Adopted from "The Development of Job-Based Psychological Ownership" by R. B. Bullock, 2015, Industrial-*Organizational Psychology Dissertations.* 5. p. 9

# 2.8.5.2 Affective and Cognitive

Olckers and Du Plessis (2012) discussed that PO is both affective and cognitive as it includes owner's feelings and thoughts towards ownership target. The cognitive aspect of ownership reflects the possessor's beliefs, thoughts and assessments of target such as their organization or one's job. The cognitive component is knotted with affective while affective side of ownership deals with pleasurable feeling such as feeling good about own thing whereas emotional attachment of individual is among target and owner such as feelings of loss in case someone has taken the thing. Job commitment and satisfaction also show some commonalities with PO. For instance, job satisfaction and psychological ownership both are affective–cognitive concepts and commitment and psychological ownership both represent attachment among job or organization and employee. But Mayhew et al. (2007) explained that PO is different from other concepts.

### 2.8.5.3 Directed Towards Objects/Targets

PO exists within owner and depend on relationship and perceptions of owner with target. The ownership feelings can be directed to targets that are tangible, owner legally possesses and could never own legally. It is different from the formal ownership which explains legal custody of things and intellectual capital while PO focus is on ownership feeling. Pierce and Jussila (2011) suggests that targets of ownership can be intangible such as function, job, business, idea and tangible such as desk, computer, office, parking space. In organizational settings, individuals develop ownership feelings towards two targets– the organization and/or their job where they work.

### 2.8.5.4 Experienced by All

PO is not enduring personality trait, but PO exists in broader context. The ownership feelings can be practiced by anybody in any context. This PO feature has three vital implications. Firstly, PO is independent of personality, ethnicity, age or other characteristics of individual. While, individual difference aspects that are stable such as personality or disposition are expected to work as moderators or boundary conditions for development of feelings of ownership. Personal characteristics are not limiting the psychological ownership. PO can be nurtured and grown almost at anyplace if individuals are offered with right type of experiences.

Thirdly, due to lack of causal relationship of PO with individual characteristics, PO cannot be taken as predictor for employee selection. PO should be focused in many areas for example work environment structure, employee involvement, retention and job design (Brown et al., 2014; Liu et al., 2012; Olckers & du Plessis, 2012). In short, Pierce and Jussila (2011) said that PO is complex affect –cognitive state of individual that is distinct from other areas and develops when individuals experience targets as part of his or her extended self– identity. Psychological ownership experience can be promoted by providing required conditions. Now a day's organizations are working in their own interests and in addition to this they are helping employees in developing positive self– conceptions. PO shares feelings of striving and positivity with other positive organizational concepts for instance psychological capital and psychological well–being. Due to its role as positive resource that help workers to develop positive association among themselves and organizations. It is assumed that research studies in field of PO will grow continually in its importance and prominence in both applied settings and academic field (Avey et al., 2009).

# 2.8.6 Enhancing Psychological Ownership

PO is an individual characteristic that can be directed to intangible and tangible artefacts (objects) and has significant attitudinal, emotional and behavioral results. Efficacy, identity and belonging feelings are basic needs of people that can be achieved with the help of ownership feelings. The feeling of belongingness explains the belonging of person with organization. These are feelings about having a place that help individual to meet psychological needs (Pierce et al., 2003). Self-efficacy is a need of individual to feel capable and in the control of situation that results in ownership of target and

accomplishments. Self-identity explains that persons become psychologically involved with target so that the target becomes the self-extension and people describes themselves by object. Fostering and developing employees' PO is an important motivating force for organizations and has positive organizational consequences and implications for the talent management (Van Zyl & Stander, 2014). Organizations should do some effort for development of efficacious behaviors, building feelings of belongingness, encouraging positive self-identity, and introducing accountability for performance and actions. In the same way, organization should actively manage and intervene negative outcomes that increase turnover and inhibit performance for instance territorial behaviors.

## 2.8.6.1 Psychological Ownership Development through PPIs

PO could be optimized and developed through positive psychological interventions (PPIs). Bolier and Abello (2014) suggested that PPIs are methods, intentional activities and approaches to nurture positive behaviors, cognitions and emotions of workers through increasing strengths at workplace. These interventions help in development of work psychological ownership through helping employees in their professional and personal development. Developing employees' psychological ownership is important for organizations. Organizations should attempt for nurturing positive self-identity, development of self-efficacy and promoting belongingness sense.

### **2.8.6.1.1 PO Belongingness**

Pierce et al. (2003) said that PO has its origins in belonging need of people. Brown and Zhu (2016) said that when employees invest considerable energy or time into an object, they feel psychological and physical security and belonging with thing, person or idea. For developing sense of belonging in employees, organization must provide opportunity to employees to control over target and invest in target. The belongingness need involves social domain and social support can satisfy belonging need at all levels.

Table 2.6

Individual level	Group / Team Level	Organizational level
Exhibit gratitude and appreciation	celebrate and appreciate individual diversity	Create an identity and shared vision
Facilitate shared self- disclosure	Recognize the function and role of every team participant	Fostering positive leadership
Find time for other people	Encouraging mutual respect among members of team	Break down workplace silos with the help of motivating teamwork, across and within teams
Act as mentor for inexperienced individuals and younger	Celebrate team and individual successes	Encourage direct participation of employee in decision-making process
Provide positive feedback	Encourage and promote two-way communication	Promote environment of support and trust
Learn about skills of cross- cultural communication	Share personal successes stories with others	Develop values of organization and align organizational values with overall business strategy
Display sympathy towards others people even in high stress times	Develop awareness about composition of team	
Limit technology use when engage with colleagues and focus on direct interaction	Implement initiatives of peer-coaching	

*Table 2.6.* Building PO Belongingness. Adapted from "Positive psychological interventions aimed at enhancing psychological ownership" by L. Van Zyl, L. van der Vaart, and L. Stemmet, (p 125) 2017, *Theoretical orientations and practical applications of psychological ownership*, Springer, Cham.

Olckers and Du Plessis (2015) discussed that those employees who have feelings of belongingness are more likely to stay. It is recommended that opportunity should be provided to the employees to experience feelings of belongingness or having a place as part of PO for enhancing the career success.

#### 2.8.6.1.2 PO Self-Efficacy

Organizations want self-efficacious employees. Self-efficacy is a motivational cognitive-emotive determining factor of behavior that describes personal evaluations of effectiveness of working behavior. It also explains that how well person perform activities when confronted tough tasks (Alessandri et al., 2015). Specifically, people with higher selfefficacy level will exercise sustained and higher energy levels while accomplishing task. While people with lesser level of self-efficacy hastily cease their hard work and thus fail at task. This cognitive-evaluative subjective element of self-efficacy directly affect tasks completion. Once believe on his/her ability to reach goals or complete tasks is a characteristic of individual. Carter et al. (2016) further added that organizations and individuals may face major consequences in terms of performance and retaining talented employees while dealing with this subjective believe. A very competent and skilled individual when function in toxic environment may develop lower self-efficacy level due to no feedback and discouraging attitude of leadership. Likewise, a positive organizational environment may encourage a poorly skilled worker to develop skills to enhance selfefficacy feelings. Therefore, organizations can provide activities for the enhancement of self-efficacy. Table 2.7 explained some practices that organizations may employ to establish or enhance self-efficacy among employees.

### Table 2.7

Individual level	Group / Team level	Organizational level
ask and give constant developmental feedback to employees	Modelling the successful team design that other effective teams are following	Reinforce those positive experiences of past which gave good results in similar field
Model behaviors of people who are successful	Set measurable, specific, attainable, time bound and realistic goals	Give reward on achievement of goal
Dealing with physiological effects related with the fear of failure	Develop people thorough the project plans and provide regular feedback on progress of project	Provide experienced trainer to the new workers
Engage employees in learning of new skills through mentoring and training	Give some autonomy to team members	Provide development and training opportunities to employees
Visualize achievement of goals	Focus on strengths of your team-members and align projects according to work-preferences of team members	Make available adequate job resources to employees
Communicate goals to Others in organization		Implement a culture of management by objectives
Intermittently check goals progress		

Strategies For Enhancing Po Self-Efficacy

Ask for assistance

*Table 2.7.* Strategies for enhancing PO self-efficacy. Adapted from "Positive psychological interventions aimed at enhancing psychological ownership" by L. Van Zyl, L. van der Vaart, and L. Stemmet, (p. 126) 2017, *Theoretical orientations and practical applications of psychological ownership*, Springer, Cham.

# 2.8.6.1.3 Self-Identity

The self-identity of individual is developed by objects people own. Another component of PO is self-identity that is psycho-cognitive development of self and is related

to explicit and implicit artefacts at workplace. It explains that how artefacts impact believes of person about self at workplace. These artefacts help employees to describe and express themselves at workplace to others. The information like level of education, character, accomplishments and personal values of individuals act as mechanism for maintaining or continuing identity over time. Following are some practices for enhancing the self-identity in work-related context.

Table 2.8

Individual level	Group / Team level	Organizational level
Align tasks, responsibilities and roles in various	Involve workers in the decision-making process	Provide degree of freedom to employees in personal
life-spheres such as home, work, leisure		workspace
Avoid social comparison	Find and permit for use of individual work preferences and signature strengths	Offer structured mentorship program to instill and transfer organizational values
Find significant	Managers should reward	Provide platforms to leaders
performance areas and train employees in these	and encourage execution of organizational values	and employees. so, they can share their personal stories
areas		with each other
Identify employees' unique	Allow Individuals to	Communicate and develop
abilities and help them to polish these	express autonomy in the workplace	clear organization's structure
Match people to	-	Formulate detailed induction
organizational and team		program for new workers
beliefs		

Crafting PO Self-Identity

*Table 2.8.* Crafting PO self-identity. Adapted from "Positive psychological interventions aimed at enhancing psychological ownership" by L. Van Zyl, L. van der Vaart, and L. Stemmet, (p. 127) 2017, *Theoretical orientations and practical applications of psychological ownership*, Springer, Cham.

Concludingly, psychological ownership is a feeling of possessiveness. Psychological ownership is important and giving fruitful results for enhancing the organizational productivity. Research studies also claimed that this is another psychological resource. This is another positive construct. Psychological ownership has two aspects. Out of these two, one is organizational ownership. People psychologically own their organizations while another is job ownership. Present research conceptualized both job as well as organizational ownership as part of organizational psychological ownership. Another important aspect of organizational ownership is that it can be developed. Organizations may use positive psychological interventions for development of positive resources, wellbeing and psychological ownership among their employees. Although psychological ownership concept has been discussed more in management disciplines and in organizational context but present research felt the need of psychological ownership study in teaching profession as it is of equal weightage in teaching as in other fields.

# **2.9 Chapter Summary**

The second chapter is consisted of literature review that covers the context and purpose of research, theoretical basis of variables of psychological capital, workplace flourishing and organizational psychological ownership. These three constructs have their foundation in positivity and are important for individual as well for organization due to their numerous positive outcomes. Moreover, literature supports that these variables have been studied with other variables. Current research work bridges this gap by exploring the interrelationship of these three positive constructs. The present chapter also discusses the role of these variables at a workplace and the ways to enhance these variables at a workplace. Next chapter of methodology will explore the methodological framework of research.

# CHAPTER 3

# **RESEARCH METHODOLOGY**

The research methodology chapter explains the nature of research, research design which includes research philosophical paradigm, research approach, research strategy, instrument details with its reliability. This chapter also explains the information about population, sample, sampling technique and data collection and brief information about the data analyses techniques used in the next chapter. Moreover, methodology section also contains information about reliability of instruments. The research study explores the interrelationship between psychological capital, workplace flourishing and organizational psychological ownership in the context of college teachers. The present research further seeks the differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers due to demographics.

# **3.1 Research Design**

Present research study has three variables of psychological capital, workplace flourishing and organizational psychological ownership with the aim to identify interrelationship between these three variables. As research design is a framework which explains the research process of how research will be done. Thus, research design of present study also included appropriate methodology, selection of respondent and data analysis techniques, clear objectives, data collection sources, statistical analysis and ethical issues. Present research study took a help of Saunders's research design for answering different components of research process. This research design included information of research philosophy, approach, methodology, strategy, data collection techniques and analysis procedures.



Figure 3.1 The Research Onion adapted from Saunders, Lewis, & Thornhill (2016)

# 3.2 Research Philosophy, Approach and Methodological Choice

As far as, philosophical underpinning of research was concerned, present research called for the quantitative paradigm of research. As, quantitative research paradigm was linked with positivism and used highly structured and predetermined research data collection techniques in which researcher may take help from the theory to formulate hypotheses which further would be confirmed. Present research also followed questionnaire as data collection tool and explored interrelationship of psychological capital, workplace flourishing and organizational psychological ownership of college teachers. Furthermore, quantitative research approach is associated with deductive approach which helps the researcher to test the theory and identify the relationship among the variables through statistical analysis. Thus, present research followed the positivism philosophy with deductive approach through quantitative methodological choice.

# **3.3 Research Strategy and Time Horizon**

From different strategies of research, correlational research design was adopted to carry out the research procedure. As Creswell (2012) in his book described that correlational research design explained and predicted relationship among different variables through correlational statistical tests. Correlational tests explained the degree of relationship (association) among variables. Present research explored the interrelationship of psychological capital, workplace flourishing and organizational psychological ownership variables. The data were collected in natural environment instead of manipulation of the variables. As Creswell explained that one of the objectives of educational research may be to predict outcome or relate variables. Present research study worked on relationships. Present research also employed cross-sectional time horizon. Cross- sectional design explain the exploration of phenomenon through collection of data at particular point in time.

Moreover, previous research studies conducted in the field of psychological capital followed the quantitative research design and found that quantitative approach is one of the appropriate approaches for assessment of psychological capital. Same is the case with organizational psychological ownership, previous research studies found quantitative approach as most appropriate way of exploring the organizational psychological capital. Therefore, present research also followed quantitative research approach.

This research study is non-experimental in nature. The purpose of research was not to manipulate the variables but to explore the interrelationship among variables which were already present. Correlational research design was chosen because present research investigated the interrelationship of these variables and correlational design is most appropriate design for investigating the interrelationship between variables. In short, present research study followed quantitative research approach for identifying the interrelationship of positive constructs of present study. For this purpose, sample of college teachers working in public colleges of Islamabad were selected. Keeping in view, the approach and research design, standardized scales for assessing psychological capital, workplace flourishing and organizational psychological ownership were adopted with due permission. Pilot testing was done before collecting the data to assess the reliability and validity of research instruments. After acceptable ranges of reliability, research instruments were used for collecting the research data.

# **3.4 Population of Research**

Public colleges in Islamabad are working under the control of Federal Directorate of Education (FDE). The faculty working at the public colleges of Islamabad were population of present research study. There were total 32 public colleges working in Islamabad city. Out of which 20 colleges were under the category of Model Colleges with teaching faculty of 1,678 while 12 colleges were under the category of degree colleges with 679 teaching faculty members. Therefore, a total of 2,357 teachers were working in Islamabad colleges. Data of these teachers, working in colleges of Islamabad, was taken from the FDE.

There were diversified justifications and reasonings for conducting research in this arena. In educational context of Pakistan, college level encompasses intermediate, bachelors and masters' level students. Therefore, public sector colleges have the capability to enroll significant number of students in their study programs. Teaching faculty, performing their teaching assignments in these colleges is equally significant as in other educational levels. As far as territorial jurisdiction of Islamabad Capital Territory is concerned, these public colleges have large number of teaching faculty members as well as students enrolled therein. In addition to this, review of related literature also revealed that college level teachers is a less researched group, which inclined the researcher to conduct this study. These foundations of this research study also enhanced the scope of its generalizability.

Table 3.1

**Research Population Details** 

	Model Colleges	Degree Colleges	Total
No of Institutes	20	12	32
Male Teachers	833	289	1122
Female Teachers	845	390	1235
Total Teaching Posts	1678	679	2357

# 3.5 Sample Size

Selection of sample and sample size has always been of great value in research. According to Gay et al. (2012) it is a group of items, events or individuals that are representatives of large group. In quantitative studies it helps researcher in making inferences about large group performance. For that reason, careful selection of sample and appropriate sample size is needed. In present research study firstly, sample size was identified from the table explained by Cohen, Manion and Morrison (2017). Secondly, sample size calculation was done through the sample size calculator. Cohen et al. (2007, 2018) recommended different websites for the calculation of sample size.

The websites of <u>http://www.pearsonncs.com/research/sample-calc.htm</u> and http://www.macorr.com/sample-size-calculator.htm were used for calculating the sample size. They also discussed that conventional sampling strategies uses 95% CL with 3%, 4%, 5% CI respectively. As, Saunders at al. (2016) also explained that in most researchers estimate sample size at CL 95% to within the range of  $\pm 3$  to 5%. The following statistical formula was helpful and used by the previously explained websites for calculation of sample size.

$$SS = \frac{Z^{2*}(p)*(1-p)}{C^{2}}$$

In formula the Z value represents confidence level (as 1.96 value is used for 95%), p represents percentage of picking choice and is always used in decimals (.5 used for the needed sample size) while c is confidence interval, is expressed in decimal (e.g.,  $.03 = \pm 3$ ). Table 3.2

Calculated Sample Size, Rate of Return and Rate Of Response

Variables	Total Population	Calculated Sample Size	Returned responses
			(Response Rate)
Teaching Posts	2357		
Males	1122	391	205
Females	1235	404	306
Total Sample Size	Continued for Furthe	er Analysis	511 (22%)

Total research population was 2357, while calculated sample size was 479. Sample was also further calculated within the stratum of men teachers (1122) and women teachers (1235) for getting representative sample. Moreover, sample size was again calculated in each stratum of men (391) and women (404) through same procedure. From 511 teachers (22% of the total population), 205 were men and 306 were women. Gay, Mills and Airasian (2012) explained that for survey research 10 to 20% of sample is representative. Additionally, the response rate of questionnaires is also reasonable as Baruch and Neuman (2014) justified that in academic research studies while using the questionnaire as tool the response rate between 10 to 50 % is considered reasonable.

# **3.6 Sampling Technique**

Stratified random sampling technique was found most appropriate for selection of sample size in present research study. Initially two strata were made, based on degree colleges and model colleges. Total number of colleges in each stratum were identified with number of men and women in each stratum. Further, total 16 colleges, eight men and eight women colleges were selected. For getting a representative sample, both male and female college teachers were taken as sample of research. The stratified random sampling technique was used, and data were collected from each stratum of men teachers and women teachers. Previously explained formula was applied on overall population and each stratum of population to select the targeted number of samples from population.

# **3.7 Research Instruments**

The research study was planned to determine the interrelationship of psychological capital, workplace flourishing and organizational psychological ownership variables. Three instruments were selected to carry out the research as present research followed the quantitative paradigm of research. Instrument is a term widely used alternately for questionnaire (Ekinci, 2015). Paper based research instrument was administered in public colleges of Islamabad. Research ethics were considered while collecting data. Research instrument consisted of two main sections. First section was about the respondents' demographic information which includes the gender, faculty development program/workshops attended, job nature, job positions and age. Second part of questionnaire was about variables of study psychological capital items, workplace flourishing items and organizational psychological ownership items. Psychological capital, and workplace flourishing questionnaires were adopted while organizational psychological ownership questionnaire was adapted by the researcher. Moreover, researcher also analyzed diversified opinions of various experts and accommodated those which were found more meaningful and relevant.

In addition to the above arguments and summarizing the aspect of population and sample, standardized scales for assessing psychological capital, workplace flourishing and organizational psychological ownership were adopted with prior permission and approval of the authors of these scales. In order to further grasp the scales, pilot testing was also conducted before collecting large scale data in order to assess the reliability and validity of research instruments. After ensuring acceptable ranges of reliability, research instruments were used for collecting the data. Furthermore, as quantitative research tool was used for assessing present research variables, therefore, usage of questionnaire was found to be most appropriate tool for the purpose of date collection. Additionally, previous research studies conducted on these variables also used questionnaire as research tool for assessing these variables. Therefore, concludingly, adoption of questionnaire was found to be most appropriate date collection tool in the context of present research study.

# 3.7.1 Psychological Capital Scale

Psychological capital theory was introduced by Luthans et al. (2007) and Luthans et al. (2017). The recognized essential construct of psychological capital has its basis in disciplines of positive psychology and POB. Psychological capital construct explains the psychological resources of individual. These psychological resources are optimism, resilience, hope, and self-efficacy. Assessment of psychological capital in present research study was done through CPC-12. Researcher adopted the scale of CPC-12 developed by Lorenz et al. (2016). It consists of 12 items. Three items in each domain of optimism, resilience, hope, and self-efficacy. Rationale behind using the CPC-12 was that it can be used to assess the psychological capital in many areas of life including education and specially teachers. Other measures are available, but these are contextual, and wording of these instruments are not suitable in other domains. (Lorenz et al., 2016). Most of the other instruments are suitable for assessing psycap in business context. Secondly instrument used in this research followed the same basic instruments (optimism, resilience, hope, and self-efficacy) used in other research studies with the additional quality of wording of items convenient to assess psychological capital of college teachers. Moreover, the reliability and validity of the instrument used in study was also assessed in context of teaching and Pakistan before collecting the final data.

#### **3.7.1.1 Interpretation of Psychological Capital Results**

Six-point Likert scale strongly disagree (SD) =1, disagree (D) =2, somewhat disagree (SWD) =3, somewhat agree (SA) =4, agree(A) =5, strongly agree (SA) =6 was used for measuring psychological capital. The flowing interpretation was carried on assessing the psychological capital of teachers.

High psychological resources = 5.00 - 6.00

Moderate psychological resources=3.6 - 4.9

Low psychological resources=1.00 - 3.5

The mean score (average) was used for interpreting the psycap psychological resources. There are four psychological resources of optimism, resilience, hope, and self-efficacy. Those teachers who fall within the mean score range of 1.00 to 3.5 possess a low level of psychological resources while teachers who fall within the mean score range of 3.6 to 4.90 possess a moderate level of psychological resources. Moreover, teachers who fall within the mean score range of 5.00 to 6.00 possess a high level of psychological resources.
# 3.7.2 Workplace Flourishing Scale

Flourishing theory was introduced by Seligman, one of the pioneers in field of positive psychology, in his book Flourish (2011). The concept of flourishing consists of five elements containing meaning, accomplishment, engagement, positive emotions and positive relationships. Kern (2014) developed a scale based on Seligman's flourishing theory. It is twenty-three items measure. Researcher adopted this scale. From these twenty-three items, sixteen items were included for assessing workplace flourishing. From these sixteen items, fifteen items were core of flourishing scale and one item of happiness recommended by developer were included. Rest of seven items were treated as fillers. All items were positively worded. Butler and Kern (2016); Kern (2014) discussed that the item of happiness is also part of flourishing and included in different surveys. They also included demographics like age, gender, occupations. Therefore, demographic information of sample was also added in demographics section. A total of sixteen items were included in workplace flourishing scale.

Flourishing was taken as multidimensional in nature. The rationale behind using the workplace flourishing scale was due to its applicability across large and diverse international samples. It has also shown good reliability in the present research sample. Instead of measuring flourishing in generic form, its measures flourishing at workplace. Secondly, most of the wellbeing / flourishing instruments were general measure of flourishing like Diener et al. (2009) and many other wellbeing measures which are reliable measures, but these were not contextual to work. Five pillars of flourishing given by Seligman (2011) provides multidimensional measure. Instrument given by Butler and Kern (2016) based on these five pillars is useful for assessing flourishing (Cameron, 2021). MacIntyre et al. (2019) used this instrument for assessing flourishing / wellbeing of university teachers. Moreover, Sharifian et al. (2019) also used this instrument for assessing

the teachers flourishing and reported that Workplace PERMA instrument which was developed by Kern has been used in many countries for assessing flourishing such as Japan, Australia, United States of America and Hong Kong. Kun and Gadanecz (2019) also used workplace wellbeing instrument in their research study for assessing teachers' workplace wellbeing. This high rate of world-wide usage and adaptability of this scale further helped the research to confidently use this scale in the present research study.

# 3.7.2.2 Interpretation of Workplace Flourishing Results

Workplace flourishing is 11-point Likert scale and items were positioned on 0 to 10 points. 0 indicates extreme low level and 10 shows extreme high level in each element of flourishing. Following explanation has been used for interpreting the results. Very high functioning / flourishing = 9 and above High functioning / flourishing = 8-8.9 Normal functioning / flourishing = 6.5 to 7.9 Sub-optimal functioning / flourishing = 5 to 6.4 Languishing = below 5

Those teachers who have mean score below 5 are languishing while teachers who fall within the mean score range of 5 to 6.4 are at the level of sub-optimal functioning / flourishing. Moreover, teachers who fall within the mean score range of 56.5 to 7.9 have normal functioning / flourishing. The teachers who fall within the mean score range of 8 to 8.9 have high functioning / flourishing whereas teachers who have the mean score of 9 and above have very high functioning / flourishing.

# 3.7.3 Organizational Psychological Ownership Scale

Organizational psychological ownership was assessed by using two scales. First was job-based ownership and second was organization-based ownership. Brown, Pierce,

and Crossley (2014) developed the scale of job-based ownership while Van-Dyne and Pierce (2004) developed the organization-based ownership scale. Job-based ownership scale contained 6 items while organization-based scale contained 4 items. Ownership scales focused on possession as an attitudinal measure of psychological ownership. The job-based ownership scale was patterned on organization-based ownership scale (Brown, Pierce & Crossley, 2011). Researcher adapted these scales. Rationale for use of psychological ownership scales was that scales had been used for assessing the ownership of employees doing variety of jobs and in different types of organization in different countries across different cultures including Asia and Europe. In addition, instrument potential generalizability is high with strong instrument performance (Pierce & Jussila, 2011). Psychological ownership questionnaire has been used in various research studies for assessing the teachers' psychological ownership working at university and school level. Yim, Moses, and Azalea (2018) used Psychological Ownership Scale developed by Brown et al. (2014) for assessing teachers' psychological ownership in their research study. Moreover, Psychological ownership instrument developed by Van-Dyne and Pierce (2004) was used by Ugwu, and Amazue (2014) in their study for assessing teachers' psychological ownership.

# 3.7.3.1 Interpretation of Organizational Psychological Ownership Results

Organizational psychological ownership is seven-point Likert-scale. These are 7 = Strongly Agree, 6 = Agree, 5 = Slightly Agree, 4 = Neither Agree nor Disagree, 3 = Slightly Disagree, 2 = Disagree and 1 = Strongly Disagree. High organizational psychological ownership = 5.9-7

Moderate organizational psychological ownership = 4.00-5.8

Low organizational psychological ownership = 1-3.9

The mean score was used for interpreting the organizational psychological ownership of teachers. Those teachers who fall within the mean score range of 1 to 3.9 possess low level of organizational psychological ownership while teachers who fall within the mean score range of 4.00 to 5.8 possess moderate level of organizational psychological ownership. Moreover, teachers who fall within the mean score range of 5.9 to 7 possess high level of organizational psychological ownership.

# **3.8 Pilot Testing**

Reliability and validity of questionnaires were assessed through pilot testing as Saunders et al. (2016) said that pilot testing is important prior to collect data as it helps in assessing questionnaire reliability and validity. The sample of 99 public college teachers of Islamabad was selected for the pilot testing for assessing the reliability and validity of the scales. Pilot testing is important before administering the questionnaire to collect data and it is useful to bring refinement in instrument and check the difficulties faced by respondents in answering the items (Saunders at al., 2016). As far as sample size of pilot testing is concerned, Fink (2013) said minimum it should be 10 while De Vaus (2002) suggested, it should be within the 75-100 and Dillman et al. 2014 recommended that for survey, it should be between the ranges of 100-200. Keeping in view the suggestions of above researcher, total 120 questionnaires were distributed. From these, 99 questionnaires were qualifying the criteria of inclusion. Therefore, pilot testing was done with the data of 99. Different procedures were also followed for pilot testing of the instrument. Initially, researcher and supervisor gone through the questionnaires. Furthermore, experts in the relevant fields were also consulted for analyzing the validity of instruments.

# 3.8.1 Accommodation of Suggestions

The validity of scales was assessed by area experts' teachers. They suggested few changes. In scale of organizational psychological ownership, in front of words organization and company, the word college was used in brackets. Secondly, in the psychological capital questionnaire, instructions were given in the following manner:

- a. Describe your feelings in your work situation in the below statements.
- b. How you may think about yourself right now in your college job.

# 3.8.2 Instrument Sections and Pre-Coding

Instrument's items were pre-coded before administering for pilot testing for entering data into software. Following table depicts the details of instrument items, total number and their pre-coding.

Table 3.3

Sections	Variables Names	No. of items	Items coding
Section I	Demographics		D1, D2, D3, D4, D5
Section II	Psychological Capital	12	
	Optimism	3	PCO1, PCO2, PCO3
	Resilience	3	PCR1, PCR2, PCR3
	Норе	3	PCH1, PCH2, PCH2
	Self-Efficacy	3	PCSE1, PCSE2, PCSE3
Section III	Workplace Flourishing	16	
	Meaning	3	WFM1, WFM2, WFM3
	Accomplishment	3	WFA1, WFA2, WFA3
	Engagement	3	WFE1, WFE2, WFE3
	Positive Emotions	3	WFP1, WFP2, WFP3
	Relationship	3	WFR1, WFR2, WFR3
	Happiness	1	WFHap
Section IV	Organizational Psychological	10	
	Ownership		
	Organization-Based	4	POOB1, POOB2, POOB3
	-		POOB4
	Job-Based	6	POJB5, POJB6, POJB7
			POJB8, POJB9, POJB10

Research Instruments Details and Coding

There were four section of research instrument. Section one contains the information regarding demographics. Section two includes the details of psychological capital scale. While section three and four discussed the details of workplace flourishing and psychological ownership scales respectively.

# **3.9 Reliability and Validity**

Pilot testing was done before collecting the data from participants of research. Purpose of pilot testing was to assess the relevancy and appropriateness of research instruments in educational context of Pakistan. At first stage, validity of instrument was assessed by experts and afterwards reliability analysis was conducted. These procedures helped to make research instruments culture fair. Moreover, reliability and validity of psychological capital, workplace flourishing, and organizational psychological ownership scales were assessed by McDonald's  $\omega$ , Cronbach's  $\alpha$ , Gutmann's  $\lambda 6$ , item-rest correlation and factor loading. Validity of the questionnaires were also taken from the relevant field experts. Reliability analysis of questionnaire is useful as it measures that questionnaire is consistently reflects measuring variable/ construct (Field, 2009, 2013).

Table 3.4

	М	SD	McDonald's	Cronbach's	Gutmann's
			ω	α	λ6
Optimism	4.976	0.108	0.852	0.844	0.796
Resilience	4.694	0.222	0.708	0.697	0.618
Hope	4.764	0.082	0.753	0.747	0.671
Self-Efficacy	4.825	0.180	0.772	0.767	0.694
Psychological Capital	4.815	0.173	0.876	0.866	0.893

Psychological Capital Scale Reliability Statistics

# Note. M=Mean, SD=Standard Deviation

One of the popular measures of reliability is Cronbach's alpha in behavioral, educational and social sciences. Zhang and Yuan (2015) claimed that other than  $\alpha$ , robust

measures are available like omega. Andrew & Jacob (2020) also justified that McDonald's omega is a reliable measure and argued that use omega reliability instead of only Cronbach's  $\alpha$ . Instead of relying on one type of reliability analysis, present research study calculated the reliability of the scales with the help of McDonald's  $\omega$ , Cronbach's  $\alpha$  and Gutmann's  $\lambda$ 6. All three statistics are useful for estimating the reliability. Moreover, overall scale reliability of psychological capital is excellent and shows good reliability as its value is above 0.80 in all three McDonald's  $\omega$ , Cronbach's  $\alpha$  and Gutmann's  $\lambda$ 6 measures. Field (2013) explained that .80 and above value of reliability shows good reliability. Reliability analysis of sub scales of psychological capital also indicates acceptable value of reliability in all three McDonald's  $\omega$ , Cronbach's  $\alpha$  and Gutmann's  $\lambda$ 6 reliability measures. It is mostly above 0.70. The value of reliability is acceptable when it is between the range of 0.45–0.98 (Taber, 2018).

Table 3.5

Scale Items	Mean	SD	Item-Rest	Factor
			Correlation	Loading
PCO1	5.101	0.707	0.608	.544
PCO2	4.909	0.959	0.624	.611
PCO3	4.919	0.829	0.611	.655
PCR1	4.465	0.951	0.345	.703
PCR2	4.869	0.791	0.515	.702
PCR3	4.768	0.988	0.359	.657
PCH1	4.707	0.950	0.545	.461
PCH2	4.727	0.855	0.575	.750
PCH3	4.859	0.769	0.677	.525
PCSE1	4.747	0.885	0.670	.711
PCSE2	5.030	0.762	0.723	.651
PCSE3	4.697	0.851	0.482	.550

Item Reliability Statistics of Psychological Capital Scales

*Note.* PC= Psychological Capital, PCO1= PC Optimism-1, PCO2= PC Optimism-2, PCO3= PC Optimism-3, PCR1= PC Resilience-1, PCR2= PC Resilience-2, PCR3= PC Resilience-3, PCH1=PC Hope-1, PCH2=PC Hope-2, PCH3= PC Hope-3, PCSE1= PC Efficacy-1, PCSE2= PC Efficacy-2, PCSE3= PC Efficacy-3

The psychological capital scale's internal consistency was evaluated with item-rest correlation. Item-rest correlation shows that how items/ questions correlate between questions/ items and scale (JASP Team, 2019). Field (2009) described that all question items should be correlated with total score in reliable scales. Those items which have less than 0.3 correlation are problematic and may be dropped. Cristobal et al. (2007) said that items with correlation less than 0.30 are not satisfactory. Moreover, Zijlmans et al. (2018) in their research study discussed that minimum value for item-rest correlation should be .30 while for the cognitive or performance test it should be .40. All items-rest correlation is above 0.3. Results of mean statistics about psychological capital scale revealed that teachers working in colleges of Islamabad were having moderate level of hope in all hope items of PCH1, PCH2, PCH3. The responses fall within the range was between the 4.7 to 4.8 which is somewhat agree and showed moderate level of hope. Likewise, teachers were having moderate level of resilience in all resilience items of PCR1, PCR2, PCR3. In addition, teachers were having moderate level of efficacy in efficacy items of PCSE1, PCSE3 and high level of efficacy in PCSE2. Moreover, college teachers were having high level of optimism in optimism items of PCO1, PCO3 and moderate level of optimism in PCO2. Factor loading was also calculated through OMEGA macro. According to Hayes and Coutts (2020) estimates of  $\omega$  are identical to CFA-based item loadings estimates. The factor loading of all values were above 0.3 as recommended by Field (2013). Rahn (2021) said that variable is considered meaningful and important when it has at least 0.4 factor loading.

# Table 3.6

Scale/s	Mean	SD	McDonald's	Cronbach's	Gutmann's
Scale/s			ω	α	λ6
Meaning	8.047	0.092	0.855	0.852	0.800
Accomplishment	7.933	0.192	0.840	0.834	0.782
Engagement	7.562	0.447	0.715	0.703	0.623
Positive emotions	7.704	0.412	0.858	0.858	0.802
Relationship	7.316	0.338	0.821	0.813	0.755
Workplace Flourishing	7.730	0.379	0.931	0.927	0.953

Workplace Flourishing Scale Reliability Statistics

The overall scale reliability of workplace flourishing shows excellent reliability as its value is above 0.9 in all three McDonald's  $\omega$ , Cronbach's  $\alpha$  and Gutmann's  $\lambda 6$  measures. Field (2013) and George and Mallery (2016) explained that .9 and above value of reliability shows excellent reliability. Reliability analysis of sub scales of workplace flourishing also indicates acceptable value of reliability in all three McDonald's  $\omega$ , Cronbach's  $\alpha$  and Gutmann's  $\lambda 6$  reliability measures. It is mostly above 0.7.

# Table 3.7

Variables	Mean	SD	Item-Rest	Factor
			Correlation	Loadings
WFM1	8.152	1.705	0.644	.720
WFM2	8.010	1.764	0.722	.830
WFM3	7.980	1.767	0.606	.820
WFA1	7.919	1.718	0.682	.699
WFA2	7.747	1.593	0.514	.641
WFA3	8.131	1.549	0.717	.781
WFE1	7.879	1.493	0.466	.723
WFE2	7.758	1.623	0.685	.858
WFE3	7.051	1.637	0.487	.441
WFP1	7.545	1.573	0.698	.732
WFP2	8.172	1.616	0.779	.800
WFP3	7.394	1.570	0.739	.749
WFR1	7.202	1.796	0.550	.537
WFR2	7.051	2.022	0.442	.484
WFR3	7.697	1.687	0.738	.739
WFHap	7.990	1.644	0.692	.819

Item Reliability Statistics of Workplace Flourishing Scale

*Note.* WF= Workplace Flourishing, WFM1= WF Meaning-1, WFM2= WF Meaning-2, WFM3= WF Meaning-3, WFA1= WF Accomplishment-1, WFA2= WF Accomplishment-2, WFA3= WF Accomplishment-3, WFE1= WF Engagement-1, WFE2= WF Engagement-2, WFE3= WF Engagement-3, WFP1= WF Positive Emotions-1, WFP2= WF Positive Emotions-2, WFP3= WF Positive Emotions-3, WFR1= WF Relationships-1, WFR2= WF Relationships-2, WFR3= WF Relationships-3, WFHap= WF Happiness

The internal consistency of workplace flourishing scale was calculated with itemrest correlation. Field (2009) described that all question items should be correlated with total score in reliable scales. Those items which have less than 0.3 correlation are problematic and may be dropped. Cristobal et al. (2007) said that items with correlation less than 0.30 are not satisfactory. Moreover, Zijlmans et al. (2018) in their research study discussed that minimum value for item-rest correlation should be .30 while for the cognitive or performance test it should be .40. All items-rest correlation is above 0.40. The descriptive statistics results of pilot testing revealed that high workplace flourishing / functioning was found in WFM1, WFM2, WFA3, WFP2, WFM3 and WFHap while normal workplace flourishing / functioning was found in rest of the scale items. Factor loading was also calculated through OMEGA macro. According to Hayes and Coutts (2020) estimates of  $\omega$  are identical to CFA-based item loadings estimates. The factor loading of all values were above 0.3 as recommended by Field (2013). Rahn (2021) said that variable is considered meaningful and important when it has at least 0.4 factor loading.

# Table 3.8

Scale/s	Mean	SD	McDonald's ω	Cronbach's α	Gutmann's λ6
Organization- based	6.038	0.160	0.898	0.893	0.873
Job-based Organizational	6.199	0.130	0.906	0.888	0.918
Psychological Ownership	6.134	0.158	0.925	0.921	0.960

Organizational Psychological Ownership Scale Reliability Statistics

The organizational psychological ownership scale reliability is excellent reliability as its value is above 0.9 in all three McDonald's  $\omega$ , Cronbach's  $\alpha$  and Gutmann's  $\lambda 6$ measures. Field (2013); George and Mallery (2016) explained that .9 and above value of reliability shows excellent reliability. Reliability analysis of sub scales of organizational psychological ownership also indicates good reliability value in all three McDonald's  $\omega$ , Cronbach's  $\alpha$  and Gutmann's  $\lambda 6$  reliability measures. It is above 0.8 which is good.

Table 3.9

Item Reliability Statistics of Organizational Psychological Ownership Scales

Items	Mean	SD	Item-Rest	Factor
			Correlation	Loading
POOB1	6.182	0.993	0.664	.748
POOB2	6.152	1.034	0.736	.791
POOB3	5.838	1.007	0.790	.841
POOB4	5.980	1.301	0.720	.776
POJB1	6.152	1.224	0.739	.863
POJB2	6.010	1.111	0.701	.851
POJB3	6.303	0.874	0.777	.896
POJB4	6.323	0.819	0.702	.851
POJB5	6.101	1.074	0.633	.815
POJB6	6.303	0.851	0.643	.843

*Note*. PO= Psychological Ownership, POOB1= PO Organization-Based-1, POOB2= PO Organization -Based-2, POOB3= PO Organization -Based-3, POOB4= PO Organization - Based-4, POJB1= PO Job-Based-, POJB2= PO Job-Based-2, POJB3= PO Job-Based-3, POJB4= PO Job-Based-4, POJB5= PO Job-Based-5, POJB6= PO Job-Based-6.

The internal consistency of organizational psychological ownership scale was calculated with item-rest correlation. In reliable scales items with correlation less than 0.30 are not satisfactory and may be deleted (Cristobal et al., 2007; Field, 2009). Moreover, Zijlmans et al. (2018) in their research study discussed that minimum value for item-rest correlation should be .30 while for the cognitive or performance test it should be .40. All items-rest correlations are above 0.6. The results of mean score revealed that college teachers were having high level of organization based and job based PO. OMEGA macro calculates  $\omega$ , conducts factor analysis and then extracts factor loadings (Hayes, & Coutts, 2020). Factor loading was also calculated through OMEGA macro. According to Hayes and Coutts (2020) estimates of  $\omega$  are identical to CFA-based item loadings estimates. The

factor loading of all values were above 0.3 as recommended by Field (2013). Rahn (2021) said that variable is considered meaningful and important when it has at least 0.4 factor loading.

# **3.10 Data Collection Procedure**

Research instrument was administered to the public college teachers though repeated personal visits. Prior permission was taken from the FDE which is controlling body of public colleges of Islamabad. Contact information of these public colleges was also taken from the FDE with other details of population and sample. Firstly, telephonic and WhatsApp contacts were used for getting permission of instrument administration from the principals alongwith provision / handing-over of written permission of FDE to these principals. Secondly, questionnaires were distributed in college teachers directly as well as through offices of the principals. Total 800 questionnaires were distributed among these faculty members. Returned questionnaires were 533, from which after data screening 511 questionnaires were finalized for further analysis. All important steps of data screening were also followed before entering in the phase of statistical procedure. For this purpose, those questionnaires which were incomplete were not included for further analysis. Reliability and normality of research instruments were also assessed, in order to ensure quality of data analysis.

# **3.11 Statistical Tests**

Objectives and hypotheses of the study formed the bases of taking decision of statistical tests. Descriptive and inferential statistical techniques of mean, SD, McDonald's  $\omega$ , Cronbach's  $\alpha$  and Gutmann's  $\lambda$ 6, Kurtosis, Skewness, correlation, t-test and ANOVA were used for data analysis and interpretation.

#### **3.11.1 Reliability Analysis**

There are numerous tests of calculating reliability of composite scores. McDonald's  $\omega$ , Cronbach's  $\alpha$ , Gutmann's  $\lambda 6$  and item-rest correlation tests were carried out for analyzing the reliability.

### **3.11.2 Descriptive Statistics**

Descriptive statistics included the tests of mean score, SD, Kurtosis, Skewness. Mean is measure of central tendency and shows average value of distribution, SD represents the variability of data around mean and is most used variability measure. While Kurtosis and Skewness measures the deviation from the normality. Kurtosis measures the flatness and peakness of distribution while skewness shows the extent to which values deviates from the symmetry. The values of Kurtosis, Skewness within  $\pm 1.0$  is excellent for psychometric purposes while values between  $\pm 2.0$  is also acceptable (Field, 2013; George & Mallery, 2016).

# **3.11.3 Inferential Statistics**

Statistical tests of correlation, t-test and ANOVA were calculated. McCormick, Salcedo, & Poh, (2015) described in their statistical analysis book that t-test is used to measure the mean differences in two groups. Comparison of two groups, continuous dependent variable and normality of data are few assumptions of t-test. Present research also fulfilled these assumptions and calculated the t-test for comparison in gender and faculty development program attended. ANOVA test was calculated for comparison of mean differences among three and more groups. Another test used in research was Pearson Correlation. It is a statistical technique used for calculating relationship/ association between continuous variables. Its values fall with the range of + 1 and - 1. The value closer to 0 indicates the weak relation while value close to 1 indicates the strong relationship. The

+ values indicated positive while – values indicate negative relationship. There are three assumptions of Pearson Correlation. Variables should be continuous. They should be linearly related along with normal distribution of data. Field (2013) described that correlation coefficient is measure of effect size. The *r* value of  $\pm$ .10 describes small effect. The *r* value of  $\pm$ .30 describe medium effect and *r* value of  $\pm$ .50 describe large effect. The following interpretation of correlation coefficient values were used for interpreting the results explained by Saunders et al. (2016).



The signs of +1 and -1 indicates the perfect positive and perfect negative relationship while 0 indicated perfect interdependence of variables.

# Table 3.10

Brief of Alignment	in Objectives,	Hypotheses	and Statistical Tests
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Objectives	Hypotheses	Statistical Tests
<b>Objective 1</b> Determine relationship between psychological capital and workplace flourishing of college teachers.	<b>H1:</b> Psychological capital is positively and significantly correlated with workplace flourishing.	Pearson Correlation
<b>Objective 2</b> Assess relationship between psychological capital and organizational psychological ownership of college teachers.	H2: Psychological capital is positively and significantly correlated with organizational psychological ownership.	Pearson Correlation

#### H3: Pearson Organizational psychological Correlation ownership is positively and significantly correlated with workplace flourishing. H04: There is no mean score Independen differences in groups of male and t samples tfemale teachers' psychological capital test level. H05: There is no mean score Independen differences in male and female t samples tteachers' workplace flourishing level. test H06: There is no means score Independen differences in male and female teachers t samples torganizational psychological ownership test level. **H07:** There is no significant mean Independen score difference in teachers' Examine differences in t samples tpsychological capital due to their test participation in faculty development programs/workshops. H08: There is no significant mean Independen score difference in teachers' workplace t samples tflourishing due to their participation in test faculty development programs/workshops.

**H09:** There is no significant mean Independen score difference in teachers' t samples torganizational psychological ownership test due to their participation in faculty development programs/workshops.

	H010: There is no significant mean	One-way
	score difference in teachers'	ANOVA&
	psychological capital due to their	Post Hoc
	nature of job.	test
	H011: There is no significant mean	One-way
5	score difference in teachers' workplace	ANOVA&
	flourishing due to their nature of job.	Post Hoc
	H012: There is no significant mean	test
	score difference in teachers'	

Investigate relationship between organizational psychological ownership and workplace flourishing of college teachers.

# **Objective 4a**

Analyze gender-wise differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers.

# **Objective 4b**

psychological capital, workplace flourishing and organizational psychological ownership of college teachers due to attendance/ nonattendance in faculty development programs/workshops.

# **Objective 4c**

Find out differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers in different groups based on their nature of job.

	organizational psychological ownership due to their nature of job.	One-way ANOVA& Post Hoc test
<b>Objective 4d</b> Examine differences in psychological capital, workplace flourishing and	<b>H013:</b> There is no significant mean score difference in teachers' psychological capital of different job positions/titles.	One-way ANOVA
organizational psychological ownership of college teachers in different groups based on their job positions/titles.	<ul> <li>H014: There is no significant mean score difference in teachers' workplace flourishing of different job positions/titles.</li> <li>H015: There is no significant mean score difference in teachers' organizational psychological ownership of different job positions/titles.</li> </ul>	One-way ANOVA One-way ANOVA
<b>Objective4e</b> Identify differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers in different age groups of	<ul> <li>H016: There is no significant mean score difference in teachers' psychological capital of different age groups.</li> <li>H017: There is no significant mean score difference in teachers' workplace</li> </ul>	One-way ANOVA & Post Hoc test One-way ANOVA&
teachers.	flourishing of different age groups. <b>H018:</b> There is no significant mean score difference in teachers' organizational psychological ownership of different age groups.	Post Hoc One-way ANOVA& Post Hoc

# **3.12 Research Ethics**

Confidentiality and anonymity are basic ethics of research. Research ethics were also considered while collecting data and throughout the research procedure. Formal permissions from FDE were taken. Permission from principals were also taken. Topic and purpose of research was also explained. Respondents were not asked to mention their names. Willingness of respondents were also considered. Proper referencing and citations were given to the researchers' works.

# 3.13 Chapter Summary

The chapter of research methodology describe the framework of research design. Initially research design of present research was explained. Present research followed the quantitative research approach with correlational research approach. The questionnaires of psychological capital, workplace flourishing and organizational psychological ownership were used for collecting data from the teachers. Ninety-nine public college teachers of Islamabad were chosen for the pilot testing. Overall reliability of each instrument was ranged from 0.87 to 0.96 which showed good reliability. Stratified random sampling technique was followed for the selection of sample of study. Two strata of male and female teachers were made. In addition, methodology chapter also covered brief information about statistical tests of correlation, t-test, and ANVOVA that were used for analyzing the data. Next chapter is data that will explain the results of this research study.

# **CHAPTER 4**

# **DATA ANALYSIS**

The core purpose of this research is to identify the interrelationship of psychological capital, workplace flourishing and organizational psychological ownership of college teachers. The chapter of data analysis contains the information about appropriate statistical tests used for testing hypotheses and for achieving objectives. For this purpose, descriptive and inferential statistical tests were applied including frequencies, percentages, maximum score, minimum score, skewness, kurtosis, reliability, correlation, t-test, ANOVA and post hoc tests. Sample of 511 teachers working in Islamabad colleges with different gender, age groups, job natures and job positions took part in the current research. Organization of this chapter is based on objectives and hypotheses of the study. Quantitative research paradigm with correlational research design was selected keeping in view the nature of research. Structured questionnaires were used as tools of study. Psychological capital questionnaire had 16 items, in 5 dimensions. Organizational psychological ownership questionnaire had 10 items in 2 dimensions. There are four sections in data analysis chapter.

### Section 1: Participants Demographic Information

Section 2: Descriptive Statistics

Section 3: Interrelationship between Psychological Capital, Workplace Flourishing and Organizational Psychological Ownership

**Section 4:** comparative analysis of teachers' psychological capital, workplace flourishing and organizational psychological ownership across participants' demographic information.

# **4.1 Participants Demographic Information**

First section gives a picture of participants demographics which includes different categories of gender, faculty development programs attended, job nature, job positions and age.

Table 4.1

Demographic Information of College Teachers' Gender, Faculty Development Programs Attended, Job Nature, Job Positions and Age.

Variables	Categories	Frequencies	Percentages
Gender (D1)	Males	205	40.1
	Females	306	59.9
Faculty Development Programs Attended (D2)	Yes	174	34.1
	No	337	65.9
Job Nature (D3)	Permanent	413	80.8
	Contract	33	6.5
	Daily wages	65	12.7
job Positions (D4)	Lecturers	338	66.1
	Assistant professors	112	21.9
	Associate professors	59	11.5
	Professors	1	.2
	Ant other	1	.2
Age (D5)	less than 25	6	1.2
	25-35	131	25.6
	36-45	262	51.3
	46-55	86	16.8
	56-65	26	5.1
	66+	-	-

Table 4.1 describes college teachers' demographic information who took part in the study. Total 511 college teachers contributed. Results explain that 205 males' college teachers with percentage of 40.1 and 306 female college teachers with percentage of 59.9 were participated. In response to faculty development program / workshop attended, 174

teachers with frequency of 34.1 responded yes while 337 college teachers responded no with percentage of 65.9. This shows that more than half of the sample didn't attend any faculty development program. Job nature was another demographic information asked from college teachers which comprised of three domains: permanent, contract and daily wages faculty. From the sample of 511, 413 teachers with 80.8% working in colleges, were permanent member while 33 teachers with 6.5% were on contract basis and 65 teachers with 12.7% were on daily wages.

Another demographic information collected from college teachers was job positions. Teachers were asked to respond in the categories of lecturer, assistant professors, associate professors, professor and with another option any other. Majority of teachers with frequency of 338 (66.1%) were falling in the category of lecturers, 112 teachers with 21.9% were falling in the category of assistant professor and 59 teachers with 11.5 % were associate professors. Least sample size was found in category of professor and any other with frequency of 1(.2 %) in each category. Information of different age group categories of teachers were also collected. 6 teachers with 1.2 % were falling in age group category of less than 25, while 131 teachers with 25.6% were falling in age group category of 25.35. Majority of the teachers were falling in the age group category of 36-45 with frequency of 262 (51.3%). As 86 teachers with 16.8 % were in age group category of 46-55 and 26 teachers with 5.1% were in age group category of 56-65. Moreover, in present research no teacher was found in age group category of 66 and above.

# **4.2 Descriptive Statistics**

The section of descriptive statistics contains the information about variables of psychological capital, workplace flourishing and organizational psychological ownership. For capturing the complete information about these variables and sub variables, maximum score, minimum score, mean score, percentages, skewness, kurtosis tests were applied in each dimension. Additionally, whole scale reliability was also assessed.

### Table 4.2

Descriptive Statistics of Variables Psychological Capital, Workplace Flourishing and Organizational Psychological Ownership (N=511)

Variable/sub-variables	Min	Max	Mean	SD	Skewness	Kurtosis	α
Psychological Capital	3.0	6.0	5.08	.580	504	051	.881
Optimism	3.0	6.0	5.30	.646	778	.226	
Resilience	2.0	6.0	4.91	.719	716	.594	
Hope	2.3	6.0	4.99	.745	853	.714	
Self-Efficacy	3.0	6.0	5.12	.690	642	078	
Workplace	4.1	10	8.10	1.23	722	034	.937
Flourishing							
Meaning	3.67	10	8.39	1.44	985	.343	
Accomplishment	2.67	10	8.21	1.29	883	.857	
Engagement	3.00	10	7.92	1.41	618	155	
Positive	3.33	10	8.12	1.42	697	101	
Emotions							
Relationship	3.33	10	7.76	1.43	498	196	
Happiness	2.67	10	8.40	1.63	-1.021	.579	
Organizational	2.0	7	6.36	722	1 1 6 9	705	055
Organizational	3.9	/	0.30	.733	-1.168	.785	.955
Psychological Ownership							
1	2.5	7	6.30	.830	-1.276	1.312	
Organization based	2.3	1	0.30	.030	-1.270	1.312	
Job based	4.0	7	6.39	.737	-1.215	.793	

Table 4.2 gives the description of descriptive statistics of study variables psychological capital, workplace flourishing and organizational psychological ownership which includes minimum score, maximum score, mean, standard deviation, Kurtosis, skewness and reliability. Respondents mean score value was further analyzed in percentage score form for explaining the variables.

Psychological capital reflects psychological resources which are optimism, resilience, hope, and self-efficacy. Scale used for assessing the psychological capital was six points ranged from strongly-disagree to strongly-agree. Results of mean statistics about psychological capital scale revealed that teachers working in colleges of Islamabad were having higher level of hope (M=4.99, 83.1%), optimism (M=5.30, 88.33%), resilience (M=4.91, 81.83%), and self-efficacy (M=5.12, 85.33%). Total score of psychological capital (M=5.08, 84.66%), also predicted higher psychological capital/resources in college teachers.

Values of kurtosis and skewness between  $\pm 1.0$  is considered as excellent but values between  $\pm 2.0$  are also acceptable (George & Mallery, 2010) Furthermore, the values of skewness and kurtosis for variable of psychological capital (skewness= -.504, kurtosis= -.051) including its dimensions of hope(skewness=-.853, kurtosis=.714), optimism (skewness=-.778, kurtosis= .226), resilience (skewness=-.716, kurtosis=.594)and self-efficacy (skewness=-.642, kurtosis=-.078) fall within acceptable range of  $\pm 1.0$  which is excellent and acceptable range for further analyses of variables.

Results of mean statistics about teachers' responses in workplace flourishing scale revealed that college teachers were having high level of flourishing at their workplaces (M=8.10, 73.6%) in its dimensions of meaning (M=8.39, 76.27%), accomplishment (M=8.21, 74.63%), positive emotions (M=8.12, 73.81%) and happiness (M=8.40, 76.36%). Results also depicted that college teachers were having normal functioning in engagement (M=7.92, 72%), and positive relationship (M=7.76, 70.54%). Moreover, total mean score of teachers on workplace flourishing scale (M=8.10, 73.6%) also explained high level of teachers' functioning at their workplaces.

The values of skewness and kurtosis for variable of workplace flourishing (skewness= -.722, kurtosis= -.034) including its elements of meaning (skewness= -.985,

kurtosis= .343), accomplishment (skewness=-.883, kurtosis=.857), engagement (skewness= -.618, kurtosis= -.155), positive emotions (skewness=-.697, kurtosis= -.101), and positive relationships (skewness= -.498, kurtosis= -.196), fall within acceptable range of  $\pm 1.0$  which is excellent and acceptable range for further analyses of variables. The value of kurtosis and skewness about variable happiness (skewness= -1.021, kurtosis=.579) also comes within range of  $\pm 2.0$  which is acceptable for range of variable for further analysis.

Organizational psychological ownership scale 7-point scale was based on responses ranged from strongly-disagree to strongly-agree. Results of above table regarding organizational psychological ownership revealed high level in organization based (M=6.30, 90%), job based (M=6.39, 91.2%) and overall organizational psychological ownership (M=6.36, 90.8%) of teachers working in colleges. Results of Kurtosis, skewness about organizational psychological ownership (skewness=-1.168, kurtosis=.785) including its dimensions job based ownership (skewness=-1.215, kurtosis=.793) and organization based ownership (skewness=-1.276, kurtosis=1.312) scale portray that all values come within the range of -2 + 2. The data are considered normally distributed when Kurtosis, skewness values comes within range of -2 + 2 (Field, 2009; George & Mallery, 2010).

Reliability analysis of the scale was already done in chapter 3 while reliability of whole scale was again analyzed. Results of reliability statistics also revealed that these are under the acceptance range. The value of reliability is reasonable when it is between 0.67–0.87 and it is acceptable when it is in the range of 0.45–0.98 (Taber, 2018). Overall reliability of the all total scales are higher. As psychological capital scale has  $\alpha = .881$ . Workplace flourishing scale has  $\alpha = .937$  and organizational psychological ownership has  $\alpha = .955$ .

# 4.3: Interrelationship between Variables

This section of data analysis chapter covers tests important for finding out the interrelationship between psychological capital, workplace Flourishing and Organizational Psychological Ownership. Further relationship between sub variables of psychological capital, workplace flourishing and organizational psychological ownership was also explored.

**Objective 1:** Determine relationship between psychological capital and workplace flourishing of college teachers.

**H1:** Psychological capital construct is positively and significantly correlated with workplace flourishing.

Table 4.3

Psychological Capital Relationship with Workplace Flourishing (N=511)

Variables	r	Sig.	
Psychological capital <> workplace Flourishing	.707***	.000	
*** p < .001, ** p < .01, * p < .05			

Result depicts that psychological capital and workplace flourishing are significantly and positively correlated with each other. The value of correlation is  $.707^{***}$  which shows strong positive correlation because the correlation coefficient value lies between 0.6 to0.79 which shows strong positive correlation (Saunders, Lewis, & Thornhill, 2016). According to Field (2009, 2013), correlation coefficient values of  $\pm .5$  shows large effect. Triple asterisk indicates that correlation coefficient value is significant at level of 0.001. Table 4.3 analyze the objective 1 and hypothesis H1. These findings support hypotheses H1 that psychological capital construct is positively and significantly correlated with workplace flourishing. Moreover, further analysis was also done to identify the relationship between sub-variables of psychological capital and workplace flourishing.

	1	2	3	4	5	6	7	8
1. Optimism	1							
2. Meaning	.54***	1						
3. Accomplishment	$.48^{***}$	.82***	1					
4. Engagement	.53***	.71***	.67***	1				
5. Positive Emotions	•••	.77***	.77***	.73***	1			
6. Relationship	.49***	.62***	.62***	$.60^{***}$	.69***	1		
7. Happiness			.68***	.62***	.77***	.60***	1	
8.Workplace Flourishing	.58***	.90***	.88***	.85***	.91***	.81***	.78***	1

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

The table 4.4 explains relationship of psycap optimism with elements of workplace flourishing. Results depict that optimism dimension of psychological capital is positively and significantly related with meaning ( $r = .54^{***}$ ), accomplishment ( $r = .48^{***}$ ), engagement ( $r = .53^{***}$ ), positive emotions ( $r = .47^{***}$ ), relationship ( $r = .49^{***}$ ), and happiness ( $r = .44^{***}$ ) elements of workplace flourishing. Optimism is also positively and significantly related with overall workplace flourishing ( $r = .58^{***}$ ). Moreover, Psycap optimism shows moderate positive relationship with meaning, accomplishment, engagement, positive emotions, relationship, and happiness elements of workplace flourishing as Saunders, Lewis, & Thornhill (2016) described that correlation values which comes within the range of 0.35 to 5.9 shows moderate and positive relationship between variables. Field (2009, 2013) also explain correlation coefficient values of  $\pm .5$  shows large effect. Triple asterisk indicates that correlation coefficient value is significant at level of 0.001.

	1	2	3	4	5	6	7	8
1. Resilience	1							
2. Meaning	.51***	1						
3. Accomplishment	.45***	.82***	1					
4. Engagement	.53***	.71***	.67***	1				
5. Positive Emotions	.46***	.77***	.77***	.73***	1			
6. Relationship	.44***	.62***	.62***	$.60^{***}$	.69***	1		
7. Happiness					.77***	.60***	_	
8. Workplace Flourishing	.55***	.90***	$.88^{***}$	.85***	.91***	.81***	$.78^{***}$	1

Relationship of Psycap Resilience with Elements of Workplace Flourishing

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

Results depict that resilience dimension of psychological capital is positively and significantly related with meaning ( $r = .51^{***}$ ), accomplishment ( $r = .45^{***}$ ), engagement ( $r = .53^{***}$ ), positive emotions ( $r = .46^{***}$ ), relationship ( $r = .44^{***}$ ), and happiness ( $r = .44^{***}$ ) elements of workplace flourishing. Resilience is also positively and significantly related with overall workplace flourishing ( $r = .55^{***}$ ). Psycap resilience shows moderate positive relationship with meaning, accomplishment, engagement, positive emotions, relationship, and happiness elements of workplace flourishing as Saunders, Lewis, & Thornhill (2016) described that correlation values which comes within the range of 0.35 to 5.9 shows moderate and positive relationship between variables. Field (2009, 2013) also explain correlation coefficient values of  $\pm .5$  shows large effect. Triple asterisk indicates that correlation coefficient value is significant at level of 0.001.

	1	2	3	4	5	6	7	8
1. Hope	1							
2. Meaning	.55***	1						
3. Accomplishment	.50***	.82***	1					
4. Engagement	.53***	.71***	.67***	1				
5. Positive Emotions	.51***	.77***	.77***	.73***	1			
6. Relationships	.51***	.62***	.62***	.60***	.69***	1		
7. Happiness	.49***	.72***	.68***	.62***	.77***	.60***	1	
8. Workplace Flourishing	.59***	.90***	.88***	.85***	.91***	.81***	.78***	1

Relationship of Psycap Hope with Elements of Workplace Flourishing

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

Results depict that hope dimension of psychological capital is positively and significantly related with meaning ( $r = .55^{***}$ ), accomplishment ( $r = .50^{***}$ ), engagement( $r = .53^{***}$ ), positive emotions ( $r = .51^{***}$ ), relationship( $r = .51^{***}$ ), and happiness ( $r = .49^{***}$ ) elements of workplace flourishing. Hope is also positively and significantly related with overall workplace flourishing ( $r = .59^{***}$ ). Psycap hope shows moderate positive relationship with meaning, accomplishment, engagement, positive emotions, relationship, and happiness \_\_elements of workplace flourishing as Saunders, Lewis, & Thornhill (2016) described that correlation coefficient values which comes within the range of 0.35 to 5.9 shows moderate and positive relationship between variables. Field (2009, 2013) also explain correlation coefficient values of  $\pm .5$  shows large effect. Triple asterisk indicates that correlation coefficient value is significant at level of 0.001.

	1	2	3	4	5	6	7	8
1. Self-Efficacy	1							
2. Meaning	.57***	1						
3. Accomplishment	.53***	.82***	1					
4. Engagement	.53***	.71***	.67***	1				
5. Positive Emotions	.55***	.77***	.77***	.73***	1			
6. Relationship	.47***	.62***	.62***	.60***	.69***	1		
7. Happiness	.45***	.72***	.68***	.62***	.77***	.60***	1	
8. Workplace Flourishing	.61***	.90***	.88***	.85***	.91***	.81***	.78***	1
*** p < .001, ** p < .01, *	p < .05							

Relationship of Self-Efficacy with Elements of Workplace Flourishing

Results depict that self-efficacy dimension of psychological capital is positively and significantly related with meaning ( $r = .57^{***}$ ) accomplishment ( $r = .53^{***}$ ), engagement ( $r = .53^{***}$ ), positive emotions ( $r = .55^{***}$ ), relationship ( $r = .47^{***}$ ), and happiness ( $r = .45^{***}$ ) elements of workplace flourishing. Self-Efficacy is also positively and significantly related with overall workplace flourishing ( $r = .61^{***}$ ). Psycap self-efficacy shows moderate positive relationship with meaning, accomplishment, engagement, positive emotions, relationship, and happiness elements of workplace flourishing as Saunders, Lewis and Thornhill (2016) described that correlation values which comes within the range of 0.35 to 5.9 shows moderate and positive relationship between variables. Furthermore, self-efficacy shows strong positive relationship with whole scale of workplace flourishing. Field (2009, 2013) also explain correlation coefficient values of  $\pm .5$  shows large effect. Triple asterisk indicates that correlation coefficient value is significant at level of .001.

**Objective 2:** Assess relationship between psychological capital and organizational psychological ownership of college teachers.

**H2:** Psychological capital construct is positively and significantly correlated with organizational psychological ownership.

Table 4.8

Psychological Capital Relationship with Organizational Psychological Ownership (N=511)

Variables	r	Sig.
Psychological capital <> Organizational Psychological Ownership	.601***	.000

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

Result confirms that psychological capital and organizational psychological ownership are significantly and positive correlated with each other. The value of correlation is  $.601^{***}$  which shows strong correlation because the coefficient value lies between 0.6 to0.79 shows strong and positive correlation. Field (2009, 2013) also explain correlation coefficient values of  $\pm .5$  shows large effect. Triple asterisk indicates that correlation coefficient value is significant at level of 0.01. Table 4.8 analyze the objective 2 and hypothesis Ho2. Results confirm that psychological capital has relationship with organizational psychological ownership.

# Relationship of Psycap Optimism with Organizational Psychological Ownership and Its Dimensions

	1	2	3	4
1. Optimism	1			
2. Job based Ownership	.49***	1		
3. Organization based Ownership	.50***	.82***	1	
4. Organizational psychological Ownership	.52***	.95***	.95***	1

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

Results portray that psycap optimism dimension of psychological capital is significantly and positively related with job ownership ( $r = .498^{***}$ ) organizational ownership ( $r = .500^{***}$ ) and overall construct of organizational psychological ownership ( $r = .523^{***}$ ). Triple asterisk indicates that correlation coefficient value is significant at level of 0.001. Psycap optimism shows moderate positive relationship with job based ownership, organization based ownership and whole scale of organizational psychological ownership as Saunders, Lewis, & Thornhill (2016) described that correlation coefficient values which comes within the range of 0.35 to 5.9 shows moderate and positive relationship between variables.

Relationship of Resilience with Organizational Psychological Ownership and Its Dimensions

	1	2	3	4
1. Resilience	1			
2. Job based Ownership	.42***	1		
3. Organization based Ownership	.41***	.82***	1	
4. Organizational psychological Ownership	.44***	.95***	.95***	1

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

Results portray that resilience dimension of psychological capital is significantly and positively related with job based PO ( $r = .42^{***}$ ), organization based PO ( $r = .41^{***}$ ) and overall construct of organizational psychological ownership ( $r = .44^{***}$ ). Triple asterisk indicates that correlation coefficient value is significant at level of 0.001. Psycap resilience shows moderate positive relationship with job based ownership, organization based ownership and whole scale of organizational psychological ownership as Saunders, Lewis, & Thornhill (2016) described that correlation coefficient values which comes within the range of 0.35 to 5.9 shows moderate and positive relationship between variables.

Relationship of Psycap Hope with Organizational Psychological Ownership and Its Dimensions

	1	2	3	4
1. Hope	1			
2. Job based Ownership	.529***	1		
3. Organization based Ownership	.544***	.822***	1	
4. Organizational psychological Ownership	.562***	.952***	.957***	1

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

Results portray that psycap hope dimension of psychological capital is significantly and positively related with job ownership ( $r = .529^{***}$ ) organizational ownership ( $r = .54^{***}$ ). and overall construct of organizational psychological ownership ( $r = .56^{***}$ ). Field (2009, 2013) also explain correlation coefficient values of ±.5 shows large effect. Triple asterisk indicates that correlation coefficient value is significant at level of 0.001. Psycap hope shows moderate positive relationship with job based ownership, organization based ownership and whole scale of organizational psychological ownership as Saunders, Lewis, & Thornhill (2016) described that correlation coefficient values which comes within the range of 0.35 to 5.9 shows moderate and positive relationship between variables.

# Relationship Of Self-Efficacy with Organizational Psychological Ownership and Its Dimensions

	1	2	3	4
1. Self-Efficacy	1			
2. Job based Ownership	.43***	1		
3. Organization Based Ownership	.44***	.82***	1	
4. Organizational Psychological Ownership	.46***	.95***	.95***	1

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

Results portray that self- efficacy dimension of psychological capital is significantly and positively related with job based ownership ( $r = .434^{***}$ ) organization based ownership ( $r = .447^{***}$ ) and overall construct of organizational psychological ownership ( $r = .462^{***}$ ). Triple asterisk indicates that correlation coefficient value is significant at level of 0.01. Psycap self-efficacy shows moderate positive relationship with job based ownership, organization based ownership and whole scale of organizational psychological ownership as Saunders, Lewis, & Thornhill (2016) described that correlation coefficient values which comes within the range of 0.35 to 5.9 shows moderate and positive relationship between variables. **Objective 3:** Study relationship between organizational psychological ownership and workplace flourishing of college teachers.

**H3:** Organizational psychological ownership is positively and significantly correlated with workplace flourishing.

Table 4.13

Relationship Between Workplace Flourishing and Organizational Psychological Ownership (N=511)

Variables	R	Sig.
Organizational Psychological Ownership <>Workplace Flourishing	.640***	.000
*** p < .001, ** p < .01, * p < .05		

Result confirms that organizational psychological ownership and workplace flourishing are significantly and positive correlated with each other. The value of correlation is .640<sup>\*\*\*</sup>which shows strong correlation because the value fall between 0.6 to 0.79 shows strong and positive correlation. Triple asterisk indicates that correlation coefficient value is significant at level of 0.001. Table 4.13 analyze the objective 3 and hypothesis Ho3. Findings support the hypothesis H3 that organizational psychological ownership is positively and significantly correlated with workplace flourishing.

	1	2	3	4	5	6	7	8
1. Job based ownership	1							
2. Meaning	.59***	1						
3. Accomplishment	.57***	.82***	1					
4. Engagement	.52***	.71***	.67***	1				
5. Positive Emotions	.52***	.77***	.77***	.73***	1			
6. Relationship	.49***	.62***	.62***	.60***	.69***	1		
7. Happiness	.55***	.72***	.68***	.62***	.77***	.60***	1	
8. Workplace Flourishing	.62***	.90***	.88***	.85***	.91***	.81***	.78***	1
*** p < .001, ** p < .01, * p	0 < .05							

Relationship of Job Based Ownership with Elements of Workplace Flourishing

Results portrayed that job ownership dimension of Organizational Psychological Ownership is significantly and positively correlated with meaning ( $r=.59^{***}$ ), accomplishment ( $r=.57^{***}$ ), engagement ( $r=.52^{***}$ ), positive emotions ( $r=.52^{***}$ ), relationship ( $r=.49^{***}$ ), and happiness ( $r=.55^{***}$ ). Job ownership was also found significantly and positive correlated with overall workplace flourishing ( $r=.62^{***}$ ). Triple asterisk indicates that correlation coefficient value is significant at level of 0.001. Job based ownership shows moderate positive relationship with meaning, accomplishment, engagement, positive emotions, relationship, and happiness elements of workplace flourishing as Saunders, Lewis, & Thornhill (2016) described that correlation values which comes within the range of 0.35 to 5.9 shows moderate and positive relationship with whole scale of workplace flourishing.
	1	2	3	4	5	6	7	8
1. Organization Based	1							
2. Meaning	.57***	1						
3. Accomplishment	.54***	.82***	1					
4. Engagement	.49***	.71***	.67***	1				
5. Positive Emotions	.50***	.77***	.77***	.73***	1			
6. Relationship	.50***	.62***	.62***	.60***	.69***	1		
7. Happiness	.51***	.72***	.68***	.62***	.77***	.60***	1	
8.Workplace Flourishing	.60***	.90***	.88***	.85***	.91***	.81***	.78***	1
*** p < .001, ** p < .01, * p	p < .05							

Relationship of Organization Based Ownership with Elements of Workplace Flourishing

Results portrayed that organizational ownership dimension of Organizational Psychological Ownership is significantly and positively correlated with meaning (r =.57<sup>\*\*\*</sup>), accomplishment (r =.54<sup>\*\*\*</sup>), engagement (r =.49<sup>\*\*\*</sup>), positive emotions (r =.50<sup>\*\*\*</sup>), relationship (=.50<sup>\*\*\*</sup>), and happiness (r =.51<sup>\*\*\*</sup>). Organizational ownership was also found significantly and positive correlated with overall workplace flourishing (r=.60<sup>\*\*\*</sup>). Triple asterisk indicates that correlation coefficient value is significant at level of 0.001. Organization based ownership shows moderate positive relationship with meaning, accomplishment, engagement, positive emotions, relationship, and happiness elements of workplace flourishing as Saunders, Lewis, & Thornhill (2016) described that correlation values which comes within the range of 0.35 to 5.9 shows moderate and positive relationship between variables. Furthermore, Organization based ownership shows strong positive relationship with whole scale of workplace flourishing.

## **4.4 Comparative Analysis**

Section 4 is about comparative analysis of teachers' psychological capital, workplace flourishing and organizational psychological ownership across participants' demographic information. Participants' demographic information was also collected for further analysis. Therefore, differences in levels of psychological capital, workplace flourishing, and organizational psychological ownership of college teachers were analyzed in different categories of gender, faculty program attended, job nature, job positions and age.

**Objective 4a:** Analyze gender-wise differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers.

**Ho4**: There is no significant mean score difference in groups of male and female teachers' psychological capital level.

**Ho5:** There is no significant mean score difference in male and female teachers' workplace flourishing level.

**Ho6:** There is no significant mean score difference in male teachers and female teachers' organizational psychological ownership level.

Comparative Analysis of Male and Female Teachers' Psychological Capital, Workplace

		Groups								
Research	Male		Femal	e				95%	of CI	Cohen's d
Variables	(N=203	5)	(N=30	6)						
	М	SD.	М	SD.	t	df	р	LL	UL	
Psychological	5.12	.586	5.05	.575	1.24	509	.21	45	2.0	0.11
Capital										
Workplace	8.05	1.18	8.13	1.25	70	509	.48	-4.4	2.0	0.06
Flourishing										
Organizational	6.34	.678	6.37	.769	37	509	.70	-1.5	1.0	0.03
Psychological										
Ownership										

Flourishing and Organizational Psychological Ownership.

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

Table 4.16 analyze the objective 4i. The hypotheses Ho4, Ho5, and Ho6 were developed for this purpose. Results of mean values show that there is no significant difference (as t= 1.24, p > .05) in psychological capital of male teachers (M=5.12) and female teachers (M=5.05). Both male teachers and female teachers were having the high level of psychological capital. Results clarify that gender does not play any role in psychological capital resources of teaching community.

Results of mean value show that there is no significance difference (as t= .70, p > .05) in workplace flourishing of male college teachers and female college teachers. Male and female teachers were having high flourishing at workplace. Results clarify that gender does not play any role in the flourishing at workplaces. As results shown in table, the mean value of male college teachers is M= 8.05 and female college teachers is M=8.13. Organizational psychological ownership results depict that male and female college teachers do not differ significantly (as t= .37, p > .05). Both male and female college

teachers were having higher level of organizational psychological ownership. Mean value of male teachers is M=6.34, and female college teachers is M=6.37. Results elucidate that gender does not play any role in the organizational psychological ownership. Results supported hypotheses Ho4, Ho5, and Ho6.

**Ho7:** There is no significant mean score difference in teachers' psychological capital due to their participation in faculty development programs/workshops.

**Ho8:** There is no significant mean score difference in teachers' workplace flourishing due to their participation in faculty development programs/workshops.

**Ho9:** There is no significant mean score difference in teachers' organizational psychological ownership due to their participation in faculty development programs/workshops

Table 4.17

Role of Faculty Development Program in Teachers' Psychological Capital, Workplace Flourishing and Organizational Psychological Ownership.

	Faculty	Develo	pment Pr	ogram						
Research	FDP Y	es	FDP N	O				95%	of CI	Cohen's
Variables	(N=174) (N=337)		')						d	
	М	SD.	М	SD.	T	df	р	LL	UL	
Psychological	5.081	.500	5.087	.617	10	509	.92	11	.10	0.01
Capital										
Workplace	8.287	1.12	8.013	1.27	2.39	509	.01	.04	.49	0.22
Flourishing										
Organizational	6.41	.707	6.334	.746	1.13	509	.25	05	.21	0.10
Psychological										
Ownership										

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

The results of table 4.17 describe significant difference in the workplace place flourishing due to faculty development program (t= 2.39, p < .05). Workplace flourishing level is high in both groups but college teachers with faculty development program attended possessed higher level as compared to the teachers who did not attend faculty development program. Results portray that no significant difference exists in possessing psychological capital (t=.10, p > .05) and organizational psychological ownership (t= 1.13, p > .05) due to faculty development program. **Ho10:** There is no significant mean score difference in teachers' psychological capital due to their nature of job.

#### Table 4. 18

Comparative Analysis of Teachers' Psychological Capital Working on Permanent, Contract and Daily Wages Positions.

Nature of Job	Ν	Mean	SD	F	р
Permanent	432	5.11	.576		
Contract	14	5.23	.344	6.27	.002
Daily wages	65	4.85	.595		
***					

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

The results of table 4.18 confirm the significant difference in teachers' psychological capital working in colleges on permanent, contract and daily wages positions (as F=6.27, p < .05). Permanent and contract college faculty members possess high psychological resources while teachers working on daily wages possessed moderate level of psychological capital. Findings did not support the hypothesis Ho10 that there are no mean scores differences in teachers' psychological capital due to their job nature. Since significant difference is found in different positions regarding psychological capital, therefore, post hoc bonferroni test was conducted for multiple comparison.

Multiple Comparative Analysis of Teachers' Psychological Capital Working on Permanent, Contract and Daily Wages Positions.

Nature of Job (I)	Nature of Job(J)	Mean Differenc	Std. Error	Sig.	95% Interval	Confidence
		e (I-J)			Lower Bound	Upper Bound
Permanent	Contract	.248*	.103	.050	.0003	.4967
	daily wages	$.282^{*}$	.076	.001	.0992	.4654
Contract	permanent	248*	.103	.050	4967	0003
	daily wages	.033	.122	1.00	2595	.3270
Daily	permanent	282*	.076	.001	4654	0992
Wages	Contract	033	.122	1.00	3270	.2595

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

Dependent Variable: teachers' Psychological Capital

Further post hoc test was applied for purpose of multiple comparison to identify true differences. Results showed that psychological capital of teachers working on permanent positions were significantly different form daily wages (MD= $.282^*$ , p=.001) and contract job positions (MD=.248, p=.05) while no difference was existing between the teachers working on daily wages and contract basis positions about psychological capital. The Single asterisk in table shows that mean difference value is significant at the value of 0.05.

**Ho11:** There is no significant mean score difference in teachers' workplace flourishing due to their nature of job.

#### Table 4.20

Comparative Analysis of Teachers' Workplace Flourishing Working on Permanent, Contract and Daily Wages Positions.

Nature of Job	Ν	Mean	SD	F	р
Permanent	413	8.1998	1.19275		
Contract	33	8.0095	1.09588	7.72	.000
Daily wages	65	7.5673	1.39974		

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

Results presented in table 4.20 showed significant difference in permanent, contract and daily wages positions of teachers about their workplace flourishing (F=7.72, p < .05). Permanent and contract college faculty members were found within the range of high functioning which is between 8 to 8.9 while teachers working on daily wages were found within the category of normal functioning which is 6.5 to 7.9. Findings did not support the hypothesis Ho11 that there are no mean score differences in teachers' workplace flourishing due to their job nature. As significant difference was found in different positions regarding workplace flourishing, therefore, post hoc bonferroni test was conducted for multiple comparison.

Multiple Comparative Analysis of Teachers' Workplace Flourishing Working on Permanent, Contract and Daily Wages Positions.

Nature of Job (I)	Nature of Job (J)	Mean Difference	Std. Error	Sig.	95% Interval	Confidence
		(I-J)			Lower Bound	Upper Bound
Permanent	Contract	.190	.219	1.00	3377	.7182
	daily wages	.632*	.162	.000	.2430	1.0219
Contract	Permanent	190	.219	1.00	7182	.3377
	daily wages	.442	.259	.268	1816	1.0660
Daily	Permanent	632*	.162	.000	-1.0219	2430
Wages	Contract	442	.259	.268	-1.0660	.1816

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

#### Dependent Variable: workplace flourishing

Further post hoc test was applied for purpose of multiple comparison to identify true differences. The table 4.21 is about workplace flourishing of college teachers in permanent, contract and daily wages job positions. Results described significant difference about the teachers' job positions between the permanent and daily wages faculty in terms of workplace flourishing but teachers working on contract basis were not found significantly different from the permanent and daily wages teachers. **Ho12:** There is no significant mean score difference in teachers' organizational psychological ownership due to their nature of job.

#### Table 4.22

Comparative Analysis of Teachers' Organizational Psychological Ownership Working on Permanent, Contract and Daily Wages Positions.

Nature of Job	Ν	Mean	SD	F	р	
Permanent	413	6.42	.682			
Contract	33	6.30	.738	9.681	.000	
Daily wages	65	6.00	.929			

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

The results of table 4.22 described significant difference in organizational psychological ownership of teachers working on permanent, contract and daily wages (as F=9.681, p < .05). Although significant differences exist but results of mean values showed that all permanent, contract and daily wages teachers were having the high level of organizational psychological ownership. Permanent college teachers possessed higher level of ownership in all positions. Findings did not support the hypothesis Ho12 that there are no mean score differences in teachers' organizational psychological ownership due to their job nature.

Since significant difference was found in different positions regarding organizational psychological ownership, therefore, further post hoc bonferroni test was conducted for multiple comparison.

Multiple Comparative Analysis of Teachers' Organizational Psychological Ownership

Nature of Job (I)	Nature of Job (J)	Mean Difference	Std. Error	Sig.	95% Interval	Confidence
		(I-J)			Lower Bound	Upper Bound
Permanent	Contract	.11270	.130	1.00	2009	.4263
	Daily wages	.42179*	.096	.000	.1905	.6531
Contract	Permanent	11270	.130	1.00	4263	.2009
	Daily wages	.30909	.154	.137	0615	.6796
Daily	Permanent	42179*	.096	.000	6531	1905
Wages	Contract	30909	.154	.137	6796	.0615

Working on Permanent, Contract and Daily Wages Positions.

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

Dependent Variable: Organizational Psychological Ownership

Further post hoc test was applied for purpose of multiple comparison to identify true differences. The table 4.23 is about mean differences of organizational psychological ownership of college teachers in groups of permanent job positions, contract job positions and daily wages job positions. Results described significant difference in permanent faculty and daily wages faculty about their organizational psychological ownership but teachers working on contract basis were not found significantly different from the permanent and daily wages teachers.

- **Ho13:** There is no significant mean score difference in teachers' psychological capital of different job positions/titles.
- **Ho14:** There is no significant mean score difference in teachers' workplace flourishing of different job positions/titles.
- **Ho15:** There is no significant mean score difference in teachers' organizational psychological ownership of different job positions/titles.

Comparative Analysis of Teachers' Psychological Capital, Workplace Flourishing and Organizational Psychological Ownership in Different Job Positions

Variables	Job titles/ Positions	Ν	М	SD	F	Sig.
Psychological	Lecturer	338	5.120	.586	2.607	.051
Capital	Assistant Professor	112	4.975	.625		
	Associate Professor	59	5.117	.407		
	Professor	2	4.45	.058		
Workplace	Lecturer	338	8.068	1.301	1.133	.335
Flourishing	Assistant Professor	112	8.096	1.133		
	Associate Professor	59	8.366	.954		
	Professor	2	7.53	1.104		
Organizational	Lecturer	338	6.335	.774	2.164	.091
Psychological	Assistant Professor	112	6.317	.716		
Ownership	Associate Professor	59	6.581	.457		
	Professor	2	6.65	.494		

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

Results of table 4.24 explained that no significant difference existed in psychological capital (as F= 1.954, p > .05), workplace flourishing (as F= 1.051, p > .05) and organizational psychological ownership (as F= 1.736, p > .05) of different job positions. Results are not supporting hypotheses Ho13, Ho15, and Ho16.

Ho16: There is no significant mean score difference in teachers' psychological capital of

different age groups.

Table 4.25

Comparative Analysis of Teachers' Psychological Capital in Different Age Groups Categories

Psychological Capital	Ν	Mean	Std. Deviation	F	Sig.
less than 25	6	5.208	.4880		
25-35	131	4.934	.5386		
36-45	262	5.181	.6250	4.521	.001
46-55	86	5.045	.4735		
56-65	26	4.980	.4780		
66+	-	-	-		

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

Above table results depicted significant difference in teachers' psychological capital in different age group categories (as F= 4.52, p < .05). Although all categories of teachers possessed high psycap while from all, teachers with age group category of less than 25 possessed higher psychological capital in all. Findings did not support the hypothesis Ho16 that there are no mean score differences in teachers' psychological capital, due to their age.

Multiple Comparative Analysis of Teachers' Psychological Capital in Different Age

(I) Age	(J) Age	Mean	Std. Err	or Sig.	95% Confi	idence Interval
		Difference			Lower	Upper
		(I-J)			Bound	Bound
	25-35	.273	.238	1.00	399	.947
less than 25	36-45	.026	.236	1.00	639	.692
less than 25	46-55	.162	.241	1.00	518	.844
	56-65	.227	.259	1.00	503	.958
	less than 25	273	.238	1.00	947	.399
25.25	36-45	247*	.061	.001	419	074
25-35	46-55	111	.079	1.00	335	.112
	56-65	046	.122	1.00	392	.300
	less than 25	026	.236	1.00	692	.639
36-45	25-35	.247*	.061	.001	.074	.419
30-43	46-55	.136	.071	.562	064	.336
	56-65	.200	.117	.884	130	.532
	less than 25	162	.241	1.00	844	.518
46-55	25-35	.111	.079	1.00	112	.335
40-33	36-45	136	.071	.56	336	.064
	56-65	.064	.128	1.00	296	.425
	less than 25	227	.259	1.00	958	.503
56 65	25-35	.046	.122	1.00	300	.392
56-65	36-45	200	.117	.88	532	.130
	46-55	064	.128	1.00	425	.296

Groups Categories

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

Further post hoc test was applied for purpose of multiple comparison to identify true differences between groups. Results of multiple comparison revealed significant difference in the age group categories of 25-35 and 36-45 but no significant difference exists between other age group categories about the psychological capital. **Ho17:** There is no significant mean score difference in teachers' workplace flourishing of different age groups.

#### Table 4.27

Comparative Analysis of Teachers' Workplace Flourishing in Different Age Groups

Categories

Workplace Flourishing	Ν	Mean	Std. Deviation	F	Sig.
less than 25	6	8.593	.888		
25-35	131	7.710	1.335		
36-45	262	8.284	1.196	5.177	.000
46-55	86	8.139	1.084		
56-65	26	8.096	1.148		
66+	-	-	-		

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

The results of table 4.27 depicted significant difference in teachers' workplace flourishing in different age group categories (as F= 5.177, p<.05). Although all categories of teachers possessed high workplace flourishing except age group category of 25-35 while from all, teachers with age group category of less than 25 possessed higher workplace flourishing in all. Teachers with age group category of 25-35 possessed normal functioning and workplace flourishing. Findings did not support the hypothesis Ho17 that there are no mean score differences in teachers' workplace flourishing due to their age.

Multiple Comparative Analysis of Teachers' Workplace Flourishing in Different Age

Age (I)	Age (J)	Mean	Std. Error	Sig.	95% Confide	nce Interval
		Difference			Lower	Upper
		(I-J)			Bound	Bound
	25-35	.883	.505	.813	542	2.30
less than 25	36-45	.309	.500	1.00	-1.10	1.71
less than 25	46-55	.454	.511	1.00	987	1.89
	56-65	.497	.548	1.00	-1.04	2.04
	less than 25	883	.505	.813	-2.30	.542
25 25	36-45	574*	.129	.000	939	208
25-35	46-55	429	.168	.110	903	.044
	56-65	385	.260	1.00	-1.11	.347
	less than 25	309	.500	1.00	-1.71	1.10
36-45	25-35	$.574^{*}$	.129	.000	.208	.939
30-43	46-55	.145	.150	1.00	279	.569
	56-65	.188	.249	1.00	513	.890
	less than 25	454	.511	1.00	-1.89	.987
46-55	25-35	.429	.168	.110	044	.903
40-33	36-45	145	.150	1.00	569	.279
	56-65	.043	.271	1.00	720	.807
	less than 25	497	.548	1.00	-2.04	1.04
56 65	25-35	.385	.260	1.00	347	1.11
56-65	36-45	188	.249	1.00	890	.513
	46-55	043	.271	1.00	807	.720

Groups Categories

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

## Dependent Variable: Workplace Flourishing

Further post hoc test was applied for purpose of multiple comparison to identify true differences between groups. Results of multiple comparison revealed significant difference in the age group categories of 25-35 and 36-45 but no significant difference exists between other age group categories about the workplace flourishing. **H018:** There is no significant mean score difference in teachers' organizational psychological ownership of different age groups.

#### Table 4.29

Comparative Analysis of Teachers' Organizational Psychological Ownership in Different

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$\Delta \alpha \rho$	Groups	( atom	MADE
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Organizational Psychological Ownership	Ν	Mean	Std. Deviation	F	Sig.
less than 25	6	6.40	.931		
25-35	131	6.14	.794		
36-45	262	6.40	.745	4.829	.001
46-55	86	6.56	.528		
56-65	26	6.31	.610		
66+	-	-			

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

Above table results depicted significant difference in teachers' organizational psychological ownership in different age group categories (as F=4.829, p<.05). Although all categories of teachers possessed high organizational psychological ownership while from all, teachers with age group category of 46-55 possessed higher organizational psychological ownership in all. Findings did not support the hypothesis Ho18 that there are no mean score differences in teachers' organizational psychological ownership due to their age.

## Multiple Comparative Analysis of Teachers' Organizational Psychological Ownership in

(I) Age	(J) Age	Mean	Std. Err	or Sig.	95% Confi	idence Interval
		Difference			Lower	Upper
		(I-J)			Bound	Bound
	25-35	.252	.301	1.00	598	1.10
less than 25	36-45	004	.298	1.00	846	.836
less than 25	46-55	163	.305	1.00	-1.02	.697
	56-65	.088	.327	1.00	835	1.01
	less than 25	252	.301	1.00	-1.10	.598
25 25	36-45	257*	.077	.009	475	03
25-35	46-55	416*	.100	.000	699	13
	56-65	164	.155	1.00	601	.273
	less than 25	.004	.298	1.00	836	.846
26.45	25-35	.257*	.077	.009	.039	.475
36-45	46-55	158	.089	.775	412	.094
	56-65	.093	.148	1.00	325	.512
	less than 25	.163	.305	1.00	697	1.02
16 55	25-35	.416*	.100	.000	.133	.699
46-55	36-45	.158	.089	.775	09	.412
	56-65	.252	.161	1.00	203	.708
	less than 25	088	.327	1.00	-1.01	.835
56 65	25-35	.164	.155	1.00	273	.601
56-65	36-45	093	.148	1.00	512	.325
	46-55	252	.161	1.00	708	.203

Different Age Groups Categories

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

## Dependent Variable: organizational psychological ownership

Further post hoc test was applied for purpose of multiple comparison to identify true differences. Results of multiple comparison revealed significant difference in the age group categories of 25-35 and 46-55, 25-35 and 36-45 but no significant difference exists between other age group categories about the organizational psychological ownership.

# Alignment of Objectives, Hypotheses and Results

Objectives	Hypotheses	Results	
<b>Objective 1</b> Determine relationship between psychological capital and workplace flourishing of college teachers.	<b>H1:</b> Psychological capital is positively and significantly correlated with workplace flourishing.	Results supported the Objective 1 and H1 as $r = .707^{***}$ which shows the relationship between psycap and workplace flourishing.	
<b>Objective 2</b> Assess relationship between psychological capital and organizational psychological ownership of college teachers.	H2: Psychological capital is positively and significantly correlated with organizational psychological ownership.	Results supported the Objective 2 and H2 as $r = .601^{***}$ which shows the relationship between psycap and organizational psychological ownership.	
<b>Objective 3</b> Investigate relationship between organizational psychological ownership and workplace flourishing of college teachers.	H3: Organizational psychological ownership is positively and significantly correlated with workplace flourishing.	Results supported the Objective 3 and H3 as $r = .640^{***}$ which shows the relationship between organizational psychological ownership and workplace flourishing.	
<b>Objective 4a</b> Analyze gender-wise differences in psychological capital, workplace flourishing and organizational	<ul> <li>Ho4: There is no mean score differences in groups of male and female teachers' psychological capital level.</li> <li>Ho5: There is no mean score differences in male and</li> </ul>	Failed to reject Ho4 Failed to reject Ho5	
psychological ownership of college teachers.	<ul><li>female teachers' workplace</li><li>flourishing level.</li><li>Ho6: There is no means</li><li>score differences in male and</li><li>female teachers</li></ul>	Failed to reject Ho6	

organizational psychological ownership level.	
<b>Ho7:</b> There is no significant mean score difference in teachers' psychological capital due to their participation in faculty development programs/workshops.	Failed to reject Ho7
<b>Ho8:</b> There is no significant mean score difference in teachers' workplace flourishing due to their participation in faculty development programs/workshops.	Ho8 was rejected. Workplace flourishing was high in teachers who attended FDP
<b>Ho9:</b> There is no significant mean score difference in teachers' organizational psychological ownership due to their participation in faculty development programs/workshops.	Failed to reject Ho9
<ul> <li>Ho10: There is no significant mean score difference in teachers' psychological capital due to their nature of job.</li> <li>H011: There is no significant mean score difference in teachers' workplace flourishing due to their nature of job.</li> </ul>	Ho10 was rejected. Psychological capital was high in permanent and contract teachers. Ho11 was rejected Workplace flourishing was high in permanent and contract teachers.
<b>Ho12:</b> There is no significant mean score difference in teachers' organizational psychological ownership due to their nature of job.	Ho12 was Rejected. Organizational psychological ownership was high in permanent and contract teachers.
	ownership level. Ho7: There is no significant mean score difference in teachers' psychological capital due to their participation in faculty development programs/workshops. Ho8: There is no significant mean score difference in teachers' workplace flourishing due to their participation in faculty development programs/workshops. Ho9: There is no significant mean score difference in teachers' organizational psychological ownership due to their participation in faculty development programs/workshops. Ho10: There is no significant mean score difference in teachers' psychological capital due to their nature of job. Ho11: There is no significant mean score difference in teachers' workplace flourishing due to their nature of job. Ho12: There is no significant mean score difference in teachers' organizational psychological ownership due

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## 4.5 Chapter Summary

This chapter of data analysis encompasses the statistical analysis and interpretation of results which are required for achieving the objectives and hypotheses. Initial phase of this chapter describes demographics of samples. Subsequent to this, descriptive statistics include mean score, SD, kurtosis, skewness, and reliability which were also presented in this chapter. For assessing the objective number 1, 2 and 3, pearson correlation statistics was used to find out the correlation among variables psychological capital, workplace flourishing and organizational psychological ownership of college teachers. The alternate hypotheses H1 to H3 were accepted and supported the correlation among variables. The t-test was applied for null hypotheses H04 to H09 and results supported and accepted all hypotheses except H08. Hypotheses H04 to H06 tested the mean differences in psychological capital, workplace flourishing, and organizational psychological ownership of college teachers based on gender and results supported that gender did not bring any change. While hypotheses H07 to H09 tested the mean differences based on participation of teachers in faculty development program and the results showed that participation in faculty development program did not bring any change in psychological capital and organizational psychological ownership of college teachers while due to the participation in faculty development teachers flourish at their workplaces.

The statistical test of ANOVA was conducted to assess the null hypotheses Ho10 to Ho18. Hypotheses Ho10 to Ho12 examined the mean differences in psychological capital, workplace flourishing, and organizational psychological ownership of college teachers based on the nature of job, while Ho13 to Ho15 tested the mean differences among variables based on job positions/titles. The level of psychological capital, workplace flourishing and organizational psychological ownership was found low in daily wages teachers. Job position/title did not bring any change in psychological capital, workplace flourishing and organizational psychological ownership of college teachers. Moreover, hypotheses Ho16 to Ho18 assessed the mean differences among variables based on different age groups. Moreover, psychological capital, and workplace flourishing level was high in teachers' age group which was less than 25 and organizational psychological ownership was high in teachers whose age group was of 46-55.

## CHAPTER 5

# SUMMARY, FINDINGS, DISCUSSION, CONCLUSIONS, AND RECOMMENDATIONS

## 5.1 Summary

The research area under study was interrelationship of psychological capital, workplace flourishing and organizational psychological ownership of college teachers. Leading objectives of study were to determine relationship between psychological capital and workplace flourishing of college teachers, assess relationship between psychological capital capital and organizational psychological ownership of college teachers and investigate relationship between organizational psychological ownership and workplace flourishing of college teachers. Moreover, further analysis was carried out to analyze the differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers in different groups based on their gender, participation in faculty development programs, nature of job, job positions/title and age.

There were three main variables of the present study. Psychological capital is positive psychological developmental state of individual in which individual possess four characteristics optimism, resilience, hope, and self-efficacy. Having positive attribution regarding achievement of success with effort in challenging tasks is optimism. Ability of bouncing back and sustainability of individual when beset by adversity and problem to achieve success is resilience. Determination and even redirecting paths towards goals for achieving success is hope. Ability to deal with and spend necessary effort which is helpful to succeed in challenging jobs/tasks is efficacy. (Luthans, & Youssef, 2017)

Psychological capital variable is consisted of optimism, resilience, hope, and selfefficacy dimensions. Psychological capital of college teachers was assessed by scale CPC-12 developed by Lorenz et al. (2016). CPC-12 questionnaire covered 12 questions, three in each dimension. The pilot testing results showed that overall scale reliability of psychological capital was above 0.8 in all three McDonald's  $\omega$ , Cronbach's  $\alpha$  and Gutmann's  $\lambda 6$  measures. Workplace flourishing variable is consisted of meaning, accomplishment, engagement, positive emotions, positive relationships, and happiness elements.

Workplace flourishing of college teachers was assessed by workplace Flourishing scale developed by Kern (2014). Flourishing is an optimal dynamic state of individuals' psychosocial functioning which rises from performing well in many psychosocial domains. (Butler & Kern, 2016). Seligman (2011) supports that flourishing rises from five pillars of wellbeing. These are meaning, accomplishment, engagement, positive emotions and positive relationship. Workplace Flourishing Scale is consisted of 16 items with three items falling in each category and one happiness item. In pilot testing, the overall scale reliability of workplace flourishing was .95.

Psychological ownership is a core feeling that individual experience at workplace. People have many opportunities to experience the feelings of psychological ownership in their works/jobs (Brown, Pierce and Crossley, 2014). It is a cognitive-affective concept based on possessiveness feelings which can be explained as psychological attachment of individual with material as well as immaterial objects (Pierce et al., 2001) and in organization it is individual's psychological attachment with organization like mine organization (Van Dyne & Pierce, 2004).

Organizational psychological ownership variable is consisted of job-based ownership and organization-based ownership dimensions. Organizational psychological ownership of college teachers was assessed by scale developed by Van Dyne and Pierce (2004). There are total 10 items from which job-based ownership scale is consisting of six items, while organization-based ownership scale is consisting of four items. Pilot testing results showed that the organizational psychological ownership scale reliability was 0.96.

In view of research nature, quantitative research paradigm with correlational research design was chosen. Total research population was 2357. Sample of 511 colleges' teachers working in Islamabad public colleges, participated in the study. From 511 teachers (22% of the total population), 205 were men and 306 were women. Statistical procedures included reliability, mean score, SD, skewness, kurtosis, correlation, t-test and ANOVA. Statistical software SPSS 21 and JASP were applied for application of these statistical tests. These statistical procedures helped in reaching at results and conclusions. Further recommendations were given based on results.

#### **5.2 Findings**

Findings of study were drawn based on results derived after giving statistical treatments to the data. These findings were helpful in reaching at conclusions and for recommendations. Findings of the study were based on objectives and hypotheses. There were total 511 teachers working in colleges in Islamabad who participated in the present study, including both males and females with the different nature of jobs and job positions and in different age groups.

#### Section One: Findings of Descriptive Statistics

 Teachers working in colleges were possessing higher level of psycap hope (M=4.99), psycap optimism (M=5.30), psycap resilience (M=4.91), and psycap self-efficacy (M=5.12). Total score of psychological capital (M=5.08), also predicted higher psychological capital/resources in college teachers.

- 2. Results of workplace flourishing scale were explaining that college teachers were having high level of flourishing at their workplaces (M=8.10) and in workplace flourishing dimensions of meaning (M=8.39), accomplishment (M=8.21), positive emotions (M=8.12) and happiness (M=8.40). Results were also unfolding that college teachers were possessing normal functioning in engagement (M=7.92), and relationship (M=7.76). Moreover, total mean score of teachers on workplace flourishing scale (M=8.10) also explained high level of teachers' functioning at their workplaces.
- 3. Results concerning organizational psychological ownership were showing high level of organization-based ownership (M=6.30), job-based ownership (M=6.39) and overall organizational psychological ownership (M=6.36) in teachers working in colleges.
- 4. Results of Kurtosis and skewness showed that all values in scales and subscales of psychological capital, workplace flourishing, and organizational psychological ownership were falling within the range of -2 + 2 which shows that data were normally distributed.
- 5. Overall reliability of the total scales is higher. As psychological capital scale has  $\alpha$  = .881. Workplace flourishing scale has  $\alpha$  = .937 and organizational psychological ownership has  $\alpha$  = .955

**Section Two:** Interrelationship between Psychological capital, workplace Flourishing and Organizational Psychological Ownership

**Objective 1**: Determine relationship between psychological capital and workplace flourishing of college teachers.

- 6. Result depicted that psychological capital and workplace flourishing were significantly and positively correlated with each other as  $r = .707^{***}$  which shows strong positive correlation. These findings supported that psychological capital construct is positively and significantly correlated with workplace flourishing.
- 7. Psycap optimism showed moderate positive relationship with meaning  $(r = .54^{***})$ , accomplishment  $(r = .48^{***})$ , engagement  $(r = .53^{***})$ , positive emotions  $(r = .47^{***})$ , relationship  $(r = .49^{***})$ , and happiness  $(r = .44^{***})$  elements of workplace flourishing. Optimism is also positively and significantly related with overall workplace flourishing  $(r = .58^{***})$ . Findings supported that psycap optimism is positively and significantly correlated with elements of workplace flourishing.
- 8. Psycap resilience has shown moderate positive and significant correlation with meaning  $(r = .51^{***})$ , accomplishment  $(r = .45^{***})$ , engagement  $(r = .53^{***})$ , positive emotions  $(r = .46^{***})$ , relationship  $(r = .44^{***})$ , and happiness  $(r = .44^{***})$  elements of workplace flourishing and with overall workplace flourishing  $(r = .55^{***})$ . Findings supported that Psycap resilience is positively and significantly correlated with elements of workplace flourishing.
- 9. Psycap hope has shown moderate positive and significant correlation with meaning  $(r = .55^{***})$ , accomplishment  $(r = .50^{***})$ , engagement  $(r = .53^{***})$ , positive emotions  $(r = .51^{***})$ , relationship  $(r = .51^{***})$ , and happiness  $(r = .49^{***})$  elements of workplace flourishing. Hope is also positively and significantly related with overall workplace flourishing  $(r = .59^{***})$ . Findings supported that Psycap hope is positively correlated with elements of workplace flourishing.
- 10. Psycap self-efficacy has shown moderate positive and significant correlation with meaning (r =.  $57^{***}$ ) accomplishment (r =  $.53^{***}$ ), engagement (r = $.53^{***}$ ), positive emotions (r =  $.55^{***}$ ), relationship (r =  $.47^{***}$ ), and happiness (r =  $.45^{***}$ )

elements of workplace flourishing. Self-Efficacy is also positively and significantly related with overall workplace flourishing ( $r = .61^{***}$ ). Findings supported that Psycap self-efficacy is positively and significantly correlated with elements of workplace.

**Objective 2:** Assess relationship between psychological capital and organizational psychological ownership of college teachers.

- 11. Psychological capital and organizational psychological ownership have shown strong and positive correlation as  $r = .601^{***}$ . Findings supported that psychological capital construct is positively and significantly correlated with organizational psychological ownership.
- 12. Psycap optimism exhibited moderate positive and significant correlation with job ownership ( $r = .498^{***}$ ) organizational ownership ( $r = .500^{***}$ ) and overall construct of organizational psychological ownership ( $r = .523^{***}$ ). Findings supported that psycap optimism is positively and significantly correlated with organizational psychological ownership and its dimensions.
- 13. Psycap resilience has shown moderate positive and significant correlation with job ownership ( $r = .425^{***}$ ) organizational ownership ( $r = .419^{***}$ ) and overall construct of organizational psychological ownership ( $r = .523^{***}$ ). Findings supported the hypothesis H2b that psycap resilience is positively and significantly correlated with organizational psychological ownership and its dimensions.
- 14. Psycap hope has shown moderate positive and significant correlation with job ownership ( $r = .529^{***}$ ) organizational ownership ( $r = .54^{***}$ ) and overall construct of organizational psychological ownership ( $r = .56^{***}$ ). Findings supported that Psycap hope is positively and significantly correlated with organizational psychological ownership and its dimensions.

15. Psycap self- efficacy has shown moderate positive and significant correlation with job-based ownership ( $r = .434^{***}$ ) organization-based ownership ( $r = .447^{***}$ ) and overall construct of organizational psychological ownership ( $r = .462^{***}$ ). Findings supported that psycap self-efficacy is positively and significantly correlated with organizational psychological ownership and its dimensions

**Objective 3:** Investigate relationship between organizational psychological ownership and workplace flourishing of college teachers.

- 16. Organizational psychological ownership and workplace flourishing has shown strong positive and significant correlation as  $r = .640^{***}$  Findings supported that organizational psychological ownership is positively and significantly correlated with workplace flourishing.
- 17. Job based ownership has shown moderate positive and significant correlation with meaning  $(r = .59^{***})$ , accomplishment  $(r = .57^{***})$ , engagement  $(r = .52^{***})$ , positive emotions  $(r = .52^{***})$ , relationship  $(r = .49^{***})$ , and happiness  $(r = .55^{***})$ . Job ownership was also found significantly and positively correlated with overall workplace flourishing  $(r = .62^{***})$ . Findings supported that job-based ownership is positively and significantly correlated with elements of workplace flourishing.
- 18. Organization based ownership has shown moderate positive and significant correlation with meaning  $(r = .57^{***})$ , accomplishment  $(r = .54^{***})$ , engagement  $(r = .49^{***})$ , positive emotions  $(r = .50^{***})$ , relationship  $(r = .50^{***})$ , and happiness  $(r = .51^{***})$ . Organization based ownership has also shown strong positive correlation with overall workplace flourishing  $(r = .60^{***})$ . Findings supported that organization-based ownership is positively and significantly correlated with workplace flourishing.

**Section 4:** Comparative Analysis of Teachers' Psychological Capital, Workplace Flourishing and Organizational Psychological Ownership Across Participants' Demographic Information.

**Objective 4a:** Analyze gender-wise differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers.

- 19. There were no mean differences present in male teachers (M=5.12), and female teachers (M=5.05) about psychological capital (as t=1.24, p>.05). Both male teachers and female teachers were having the high level of psychological capital.
- 20. There were no mean differences present in males' teachers (M= 8.05) and female teachers (M=8.13) flourishing at their workplace (as t=.70, p>.05). Both male teachers and female teachers were having the high level of workplace flourishing.
- 21. There were no mean differences present in male teachers (M=6.34) and female teachers (M = 6.37) about organizational psychological ownership (as t=.37, p>.05). Both male teachers and female teachers were having the high level of organizational psychological ownership.

**Objective 4b:** Examine differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers due to attendance/ non-attendance in faculty development programs/workshops.

- 22. There were no mean score differences present in teachers' psychological capital due to faculty development program/workshops attended (as t=-.10, p>.05).
- 23. There were differences present in teachers' flourishing at their workplace due to faculty development program/workshops attended ((as t=2.39, p<.05). Workplace flourishing is high in both categories of yes and no but college teachers with a

faculty development program attended possessed higher level of workplace flourishing as compared to the teachers with no faculty development program.

24. There was no mean score difference present in teachers' organizational psychological ownership due to faculty development program/workshops attended ((as t= 1.13, p>.05).

**Objective 4c:** Find out differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers in different groups based on their nature of job.

- 25. Results confirmed the significant differences in teachers' psychological capital working in colleges on permanent (M=5.11), contract (M=5.23) and daily wages (M=4.85) positions (as F=6.27, p< .05). Permanent and contract college faculty members possessed high psychological resources while teachers working on daily wages possessed moderate level of psychological capital.
- 26. Results showed significant differences in permanent (M=8.1), contract (M=8.0) and daily wages (M=7.5) positions of teachers about their workplace flourishing (F=7.72, p< .05). Permanent and contract college faculty members were found within the range of high functioning which is between 8-8.9 while teachers working on daily wages were found within the category of normal functioning which is 6.5 to 7.9.
- 27. Above results described significant differences in organizational psychological ownership of teachers (as F= 9.681, p< .05) working on permanent (M=6.42), contract (M=6.30) and daily wages (M=6.0). Although significant differences exist but results of mean values showed that all permanent, contract and daily wages teachers were having the high level of organizational psychological ownership. Permanent college teachers possessed higher level of ownership in all positions.

**Objective 4d:** Examine differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers in different groups based on their job positions/titles.

28. Results explained that no significant differences existed in psychological capital (as F=1.95, p>.05), workplace flourishing (as F=1.05, p>.05) and organizational psychological ownership (as F=1.73, p>.05) of different job positions.

**Objective 4e:** identify differences in psychological capital, workplace flourishing and organizational psychological ownership in different age groups of college teachers.

- 29. There were significant differences identified in teachers' psychological capital in different age group categories (as F= 4.52, p < .05). Although all categories of teachers possessed high psycap while from all, teachers with age group category of less than 25 (M=5.2) possessed higher psychological capital in all.
- 30. Results portrayed significant difference in teachers' workplace flourishing in different age group categories (as F= 5.177, p< .05). All categories of teachers possessed high workplace flourishing except age group category of 25-35(M=7.7) represents normal functioning) while from all, teachers with age group category of less than 25 (M=8.5) possessed higher workplace flourishing in all.
- 31. Results showed significant difference in teachers' organizational psychological ownership in different age group categories (as F= 4.829, p<.05). All age group categories of teachers possessed high organizational psychological ownership while from all, teachers with age group category of 46-55 (M=6.5) possessed higher organizational psychological ownership.

#### 5.2.1 Scope of Generalizability of Research Findings

The sample for the study was comprised of public sector college teachers. Public sector colleges in Pakistan almost share similar situation such as culture, educational level of classes and faculty recruitment criteria etc. Moreover, positive constructs of this research are universal in nature and may be studied in any field including education. Therefore, findings of present research are not only generalizable to teachers of public colleges of Islamabad but to all public sector teachers, sharing the same cultural and professional attributes.

#### **5.3 Discussion**

The research was conducted to explore the interrelationship of psychological capital, workplace flourishing and organizational psychological ownership of college teachers. Quantitative paradigm of research was approached due to nature of research. Within the paradigm of quantitative research, correlational research design was carried out. Public sector colleges were taken as population. Total 511 teachers participated in study as sample. Research objectives and hypotheses demanded statistical operations of mean score, SD, t-test, ANOVA and correlation.

Findings of descriptive research depicted that teachers working in colleges were possessing higher level of hope, optimism, resilience, and efficacy. Total score of psychological capital/resources in college teachers was also higher. Psychological capital is helpful in conceptualizing the human assets which is useful in realizing human potential. Psychological capital provides ways to individuals to thrive and cope effectively during adverse periods (Brent & Brett, 2015). Lorenz et al. (2016) indicated that people with high psychological capital spend flourishing lives and ultimately contribute to building flourishing society. Findings of workplace flourishing explained that college teachers were having high level of flourishing at their workplaces. In workplace flourishing elements, teachers possessed high functioning in meaning, accomplishment, positive emotions and happiness while normal functioning in engagement, and relationship. Avey, Luthans, Smith and Palmer (2010) in their research alluded the importance of wellbeing for todays' employees due to changes in organizational structure such as job complexity and long working hours. Wellbeing also helps to achieve positive outcomes in personal lives and works.

Findings of organizational psychological ownership showed high level of organization-based ownership, job-based ownership and overall organizational psychological ownership in teachers working in colleges. Psychological ownership has been recognized as employees' core feeling in their work experience. There are many situations in work and job context where employees experience ownership (Brown, Pierce, & Crossley, 2014). Moreover, Felix and Almaguer, (2019) said that psychological ownership is also related to desirable and positive organizational outcomes.

First research objective was to determine relationship between psychological capital and workplace flourishing of college teachers. Findings represented that psychological capital and workplace flourishing were significantly and positively correlated with each other. Yongzhan Li (2018) in his research study explored the psychological capital direct and indirect positive influences on wellbeing. Research study of Gibson and Hicks (2018) in their research explored that psychological capital dimensions optimism, resilience, hope, and efficacy also showed positive and strong correlation with psychological wellbeing. Okun (2020) also verified the association of wellbeing and psychological capital. Santisi et al. (2020) in their research study explored that psychological capital is a predictor of quality of life which has two dimensions flourishing and life satisfaction. King and Caleon (2021) conducted a research study on

students and said that psycap promotes optimal functioning of students. It is a beneficial psychological resource which energies high levels of flourishing among students. Results of Kun and Gadanecz (2019) research study matched with present research study results. They identified the correlation between psycap, workplace wellbeing and happiness with moderate level of correlation among sub variables.

Further analysis was carried to determine whether relationship exists between psychological capital dimensions (optimism, resilience, hope, efficacy) and workplace flourishing elements (meaning, accomplishment, engagement, positive emotions, positive relationships, and happiness) of college teachers. Gibson and Hicks (2018) also explored that efficacy and optimism strongly predicting the wellbeing more than resilience and hope. Choi and Lee (2014) explained that psychological capital may enhance the employees wellbeing and happiness because people with high psychological capital interpret and perceive their life experiences and work positively, overcome setbacks and difficulties in their lives and jobs and more importantly attain positive achievements.

Psycap optimism, psycap resilience, psycap hope and psycap self-efficacy showed moderate positive relationship with all elements of workplace flourishing. Ugwu and Amazue (2014) research study also found resilience and hope as significant predictor of work engagement in teachers. Peng et al. (2014) explored that resilience and positive emotions are positively connected. Cohn et al. (2009) explored the direct effect of positive emotions on resilience.

Knies and Hicks (2013); Luthans and Youssef, (2017) in their research studies also confirmed that construct of self-efficacy is associated with wellbeing and performance. Another research study confirmed that hope is correlate with accomplishment and meaning and other elements of flourishing (Butler & Kern, 2016). Results of different research studies revealed that resilience and optimism (He, at al., 2013), hope (Ciarrochi, Heaven, & Davies, 2007) and self-efficacy (Seggelen-Damen & Dam, 2016) influenced the wellbeing. Perera and McIlveen (2014) also provided evidence that optimism predicts the engagement in students. The results of Luthans, Luthans, and Palmer (2016) study proved that psycap predicts the engagement in students. Moreover, all four dimensions of psycap impact teachers' engagement work (Handoyo, Zainudin, & Priyatama 2018).

Second research objective was to assess whether relationship exists between psychological capital and organizational psychological ownership of college teachers. Results showed that psychological capital and organizational psychological ownership were strongly and positively correlated. Psychological ownership justifies the inclusion criteria of POB and has many commonalities with POB and psychological capital (Luthans, Youssef, & Avolio, 2007). Psychological ownership is related with positive psychological behavior (Lin et al., 2014)

Further analysis was carried to assess whether relationship exists between psychological capital dimensions (optimism, resilience, hope, efficacy) and organizational psychological ownership dimensions (job-based and organization based) of college teachers. Psycap optimism, psycap resilience, psycap hope and psycap self- efficacy exhibited moderate, positive and significant correlation with job-based and organization based ownership.

Third research objective was to investigate relationship between organizational psychological ownership and workplace flourishing of college teachers. Findings showed strong positive and significant correlation between organizational psychological ownership and workplace flourishing. Li (2018) in his dissertation identified that psychological ownership also
influences strongly on happiness as compared to legal ownership. Chen et al. (2020) discussed the influence of psychological ownership on wellbeing co-creation. They further talked about ownership of own and others wellbeing. Li and Atkinson (2020) said that psychological ownership act as an antecedent in raising psychological well-being of consumer.

Job-based ownership showed moderate positive and significant correlation with elements of workplace flourishing. Moreover, organization-based ownership also showed moderate positive and significant correlation with elements of workplace flourishing.

Additionally, further analysis was conducted to analyze differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers across respondents' demographics. As far as flourishing is concerned, different research studies explored influence of demographics of job variety, job characteristics, service years and tenure on wellbeing of individuals (Furnham et al., 2009). It was also found in research studies that personal factors like statutes, service period, roles, age, gender, and personality influence the psychological ownership feeling (Pierce, Kostova & Dirks, 2003).

Fourth research objective was to analyze differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers in groups of gender. There were no mean differences found in male and female teachers about psychological capital, workplace flourishing and organizational psychological ownership. Both male teachers and female teachers were having the high level of psychological capital workplace flourishing and organizational psychological ownership. Rehman, Qingren, Latif, and Iqbal (2017) explored that psychological capital of males group were higher than females' group and findings did not match with present research findings. Burke, Koyuncu, and Fiksenbaum (2009) findings matched with present research as both males and females' groups were found similar on psychological capital. Ozler, Yilmaz, and Ozler, (2008) research found that male employees possessed higher organizational ownership than females while present research does not match with this finding.

Fifth research objective was to examine differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers due to attendance/ non-attendance in faculty development programs/workshops. Results showed that there were no mean score differences present in teachers' psychological capital and organizational psychological ownership due to faculty development program/workshops attended. However, college teachers with a faculty development program attended possessed higher level of workplace flourishing as compared to the teachers with no faculty development program. Results of previous research studies proved that trainings help in development of psychological capital though PsyCap Intervention (Luthans et al., 2017), workplace flourishing through Well-being/Flourishing interventions in workplace settings (Watson et al., 2018) and organizational psychological ownership through Positive Psychological Interventions (Van Zyl, Vaart & Stemmet, 2017). All these trainings were specially designed for enhancing psychological capital, workplace flourishing and organizational psychological ownership, but present research talked about regular trainings of teachers related to content and pedagogy.

Sixth current research objective was to find out differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers in different groups based on their nature of job. Findings confirmed the significant differences in psychological capital, workplace flourishing and organizational psychological ownership of teachers working in colleges on permanent, contract daily wage positions. The psychological capital, workplace flourishing, and organizational psychological ownership was comparatively low in daily wages teachers as compared to permanent and contract teachers. Daily wages employees possessed the feelings of job insecurity. Job insecurity is cause of fears of losing job in employees (Gallie et al., 2017). Darvishmotevali and Ali (2020) reported that those employees whose psycap level is high can cope with Job insecurity. Moreover, Job insecurity also decreases the subjective wellbeing of employees.

Seventh research objective was to examine differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers in different groups based on their job positions/titles. Findings showed that no significant differences were present in psychological capital, workplace flourishing and organizational psychological ownership of different job positions.

Eighth research objective was to identify differences in psychological capital, workplace flourishing and organizational psychological ownership of college teachers in different age groups of teachers. Results portrayed significant difference in teachers' psychological capital, workplace flourishing and organizational psychological ownership in different age group categories. Ozler, Yilmaz, and Ozler, (2008) research results match with present research that psychological ownership is significantly different in different age groups. They further explored that psychological ownership is higher in older employees. McMurray et al. (2010) explored in their research study that older employees possess higher psychological capital score as compared to young employees. Another research study also revealed that age variable has positive relation with wellbeing and health and older people wellbeing is also high (Zheng et al., 2015). Mixed results were found about flourishing in different age groups in different countries. Seligman (2011) in his book flourishing mentioned that decline in flourishing was observed with age. He further explained that in some countries like Ireland people with age of 65 and above were found flourished.

## **5.4 Conclusions**

The conclusions are based on results of objectives and hypotheses.

Conclusions based on descriptive statistics reveal that teachers in colleges are owning higher level of hope, optimism, resilience, and efficacy. Total score of psychological capital/resources in college teachers is also high. Results have concluded that college teachers are having high level of flourishing/functioning at their workplaces. In workplace flourishing elements, teachers possess high functioning in meaning, accomplishment, positive emotions and happiness while normal functioning in engagement, and relationship. Findings of organizational psychological ownership show high level of organization-based ownership, job-based ownership and overall organizational psychological ownership in teachers working in colleges.

Results of objective one concludes that significant and positive relationship exists between psychological capital and workplace flourishing which shows that both psychological capital and workplace flourishing of college teachers are interrelated and increase or decrease with each other.

Results have also concluded that optimism, resilience, hope and efficacy dimensions of psychological capital show moderate positive relationship with meaning, accomplishment, engagement, relationship, positive emotions, and happiness which are elements of workplace flourishing. Dimensions of psychological capital are reason of increase or decrease in elements of workplace flourishing and vice versa.

Results of objective two concludes that psychological capital and organizational psychological ownership are strongly and positively correlated. Results also concludes that optimism, resilience, hope and self- efficacy dimensions of psychological capital exhibit moderate positive and significant correlation with job-based and organization-based

ownership. This shows that when teachers' psychological capital will increase or decrease, the teachers' organizational psychological ownership will also increase or decrease.

Findings of objective three shows strong positive and significant correlation between organizational psychological ownership and workplace flourishing. In dimension wise analysis, job-based ownership and organization-based ownership have also shown moderate positive and significant correlation with elements of workplace flourishing: meaning, accomplishment, engagement, relationship, positive emotions, and happiness. Dimensions of organizational psychological ownership are reason of increases or decreases in elements of workplace flourishing and vice versa.

Moreover, no difference is found in male and female teachers' psychological capital, workplace flourishing and organizational psychological ownership levels. Both male teacher and female teachers are having the high level of psychological capital, workplace flourishing and organizational psychological ownership. Thus, gender is not the reason of increase in teachers' psychological capital, workplace flourishing and organizational psychological capital, workplace flourishing and organizational psychological ownership.

The outcomes have further concluded that participation of teachers in faculty development program/workshops does not change the level of teachers' psychological capital and organizational psychological ownership. Moreover, participation of teachers in faculty development program/workshops enhances the teachers' workplace flourishing.

Findings have also confirmed the significant differences in psychological capital, workplace flourishing and organizational psychological ownership of teachers in permanent, contract and daily wage positions. This shows that nature of job can bring change in the level of psychological capital, workplace flourishing and organizational psychological ownership. As teachers working on daily wages were found moderate level of psychological capital, normal functioning level in workplace flourishing and high level organizational psychological ownership but low as compared to teachers working on permanent and contract basis.

Furthermore, teachers' job positions/titles do not bring any change in the level of psychological capital, workplace flourishing and organizational psychological ownership. Results have shown significant differences in teachers' psychological capital, workplace flourishing and organizational psychological ownership in different age group categories. As, level of psychological capital and workplace flourishing was high in young teachers while organizational psychological ownership level was found high in middle-aged teachers. Therefore, age can bring changes in the levels of teachers' psychological capital, workplace flourishing and organizational psychological ownership.

## **5.5 Recommendations**

The present research study suggests various practical recommendations based on results. The present research has also supported that working on the development of psychological capital may help colleges to enhance their teachers' workplace flourishing, organizational psychological ownership and vice versa. All positive constructs have their own place in an organization. Research studies have proved that psychological capital is malleable and can be increased through human resources interventions (Demerouti et al., 2011). As research study conducted by Joo, and Lee (2017) has also recommended that employees' wellbeing and happiness in career and work can be enhanced by psycap devolvement through training, staffing and development. Moreover, following are the recommendations for enhancing psychological capital, workplace flourishing and organizational psychological ownership of college teachers:

- The themes of psychological capital, workplace flourishing and organizational psychological ownership may be made regular feature for training and development of FDE teachers. National and international experts in these areas may be invited face to face / online. In addition to this, policy makers particularly working on training opportunities for public colleges may also get benefit from the findings of this study.
- 2. During FDE trainings, PsyCap Intervention (PCI) Model may be used for developing / enhancing psychological capital which includes SMART goals settings & pathways design, implementing scenario & obstacle planning (hope), experiencing achievement and modeling relevant successful people, positive feedback, persuasion and arousal (efficacy), identifying and developing assets, avoiding risks, influence processes (resilience), glass half full, attribute and interpret events positively and developing positive expectancy. This will eventually enhance workplace flourishing and psychological ownership of college teachers.
- At college level, principals may further help teachers in enhancing workplace flourishing. In this regard, principals may take following steps to enhance flourishing of their teachers at workplace which will help in boosting organizational psychological ownership;
  - i College principals may help teachers to reduce stressors and promote positive coping strategies through promoting help seeking behavior in meetings, setting clear expectations, appropriate use of language and solution focused discourse for developing positive emotions.
  - College principals may help teachers to enhance work engagement through generating meaningful opportunities by introducing strength-based leadership practices and setting realistic goals. Principals may also ensure

that teachers have regular opportunities to attain desired goals, based on their interests and strengths.

- iii College principals may help teachers in developing positive relations through promoting opportunities for interaction & collaboration, to enable them to mutually interact, connect and collaborate, both formally and informally.
- iv College principals may help teachers to gain capabilities to relate their thinking to purpose and promote reflection through establishing clear goals and priorities. Provide regular opportunities to teachers to reflect on and update their portfolios and educational development philosophy statements annually to envision that and where they are making a difference.
- College principals may help teachers in feeling autonomy so that they can celebrate their success. Accomplish them by sending acknowledgment emails and appreciation letters. Adopt a coach-approach of leadership with major focus on helping others in finding solutions of problems on their own.
- 4. Positive Psychological Interventions (PPI) may be used in FDE trainings and workshops for developing organizational psychological ownership. This in-turn may enhance psychological capital and workplace flourishing. In this regard, FDE may invite relevant experts for these trainings. These PPIs include gratitude & appreciation, self-disclosure, mentoring, constructive feedback, cross-cultural communication skills, empathic attitude (for building belongingness), modelling, developmental feedback, trainings for mastering new skills, ask for help, envision goal achievement & regularly check goal progress (for developing self-efficacious behavior), avoid social comparison, identify strengths and invest in professional development (for developing self-identity).

- 5. As regards administrative capacity of college principals is concerned, they may be provided with greater autonomy in their respective work assignments and through participative decision making to ensure their organizational psychological ownership.
- 6. Online resources, both free of cost and on payment, may be used for developing / enhancing these positive constructs. Teachers may be made aware of these online courses during FDE training sessions. Teachers may strive for improving their positive attributes by consulting following websites / free online resources:
  - i. The website of @PositivePsychology.com provides the science-based online resources including courses, tips, tools, and techniques to practice positive psychology into professional and everyday life.
  - ii. The Leaders Lab Michelle McQuaid also provides scientific and actionable assessments, programs, tools and talks that help to flourish/thrive.
  - iii. University of Pennsylvania offers online trainings / resources to improve flourishing/ well-being.
- 7. FDE may provide opportunity of trainings and workshops to all college teachers irrespective of their nature of employment and age groups.
- FDE may provide opportunities to daily-wages teachers for contractual/permanent jobs positions.

## 5.5.1 Recommendations for Future Researchers

1. Present research has explored the interrelationship of psychological capital, workplace flourishing and organizational psychological ownership. Future research studies may explore the relationship of these constructs with other individual and organization related factors.

2. The college teachers of Islamabad had participated in the present research. Research may be replicated at school and universality level teachers.

## **5.5.2 Theoretical and Practical Implications**

Current research work contributes significantly towards literature as it has studied the interrelationship between variables of psychological capital, workplace flourishing and organizational psychological ownership. College teachers flourishing may increase and decrease in psychological capital and psychological ownership and vice versa. Scant literature was found regarding these variables at college level. Current research study identified this gap and explored the interrelationship of these variables at college level. College teachers with higher psychological capital in turn may develop these resources in students and will give their best. Findings and recommendations of current research may be implemented by college principals for development of these useful positive variables. FDE may organize trainings and workshops for college teachers in this regard and may take help from the recommendations of current research study.

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## Appendix A



Samra Afzal, 697-PhD/Edu/F17

To:

NATIONAL UNIVERSITY OF MODERN LANGUAGES FACULTY OF SOCIAL SCIENCES DEPARTMENT OF EDUCATION

Dated: 26-02-2019

#### Subject: APPROVAL OF PHD THESIS TOPIC AND SUPERVISOR

1. Reference to Letter No. ML.1-2/2019-Edu dated 11-02-2019, the Higher Authority has approved your topic and supervisor on the recommendation of Faculty Board of Studies vide its meeting held on 5<sup>th</sup> Dec 2018.

i. <u>Supervisor's Name & Designation</u> Dr. Marium Din, Assistant Professor, Department of Education NUML, Islamabad.

ii. Topic of Thesis

Interrelationship of Psychological Capital, Workplace Flourishing and Organizational Psychological Ownership of College Teachers

2. You may carry out research on the given topic under the guidance of your Supervisor/s and submit the thesis for further evaluation within the stipulated time. It is to inform you that your Thesis & Published Research Article should be submitted within prescribed period by Sept 2022 positively for further necessary action please.

3. As per policy of NUML, all MPhil/PhD theses are to be run through Turnitin by QEC of NUML before being sent for evaluation. The university shall not take any responsibility for high similarity resulting due to thesis prior run by any other individual.

4. Thesis is to be prepared strictly on NUML's format that can be taken from MPhil & PhD Coordinator, Department of Education.

Telephone No: E-mail: 051-9265100-110 Ext: 2090 mdin@numl.edu.pk

Dr. Hukam Dad Malik Head, Department of Education

Cc to:

Dr. Marium Din (Supervisor) Individual Concerned.



### NATIONAL UNIVERSITY OF MODERN LANGUAGES Faculty of Social Sciences DEPARTMENT OF EDUCATION

Letter No: ML.1-3/Edu/2021

Date: 19th November 2021

# Subject: Approval of Change of PhD Thesis Topic

 Reference to Letter No ML.1-3/Edu/2021 dated 19.11.21, it is intimated that the 12<sup>th</sup> BASR in its meeting held on 18<sup>th</sup> November 2021 has validated the change of your Thesis Topic as under:

Interrelationship of Psychological Capital, Workplace Flourishing and Organizational Psychological Ownership: A Study of College Teachers

 You may continue with the formalities of submission of Hard bind copies as per NUML Format, which can be taken from Coordinator (MPhil /PhD) Dr Saira Nudrat.

Distribution: Ms. Samra Afzal (PhD Scholar) Dr Marium Din (Supervisor)

> Dr Wajeena Shahid Head Department of Education NUML, Islamabad



# Appendix B

# Questionnaires (for PhD Research Work to be filled by Faculty)

### Introduction

I am a PhD Scholar in National University of Modern Languages, Islamabad (NUML). I need your responses on the questionnaires attached with. All the data will be kept confidential and will only be used for the research purpose. Your cooperation in this regard will be highly appreciated and acknowledged. Thanks in anticipation.

Note: Please fill in the personal information.

Name of the Instit	ution:		
Department:			
Gender:	i. Male	ii. Female	
Nature of Job:	i. Permanent	ii. Contract_	iii. Daily Wages
Age (in Years):	i. Less than 25	ii. 25-35	iii. 36-45
	iv. 46-55	v. 56-65	vi. 66+
Position:	i. Lecturer	ii. Assistant	Professor
	iii. Associate Profes	ssor iv. Professor_	v. Any other
Faculty Developm	ent i. Yes	ii. No	

**Programs/ Trainings Attended:** iii. If yes, specify the training and duration

Below are the statements that describe how you may think about yourself right now. Use the following scale to indicate your level of agreement or disagreement with each of the statement.

	Statements	Strongly Disagree	Disagree	Somewhat disagree	somewhat Agree	Agree	Strongly Agree
	At My Workplace (College)			at	ıt		
1	If I find myself in a jam, I can think of many ways to get out of it	1	2	3	4	5	6
2	Right now, I see myself as pretty successful.	1	2	3	4	5	6
3	I can think of many ways to reach my current goals.	1	2	3	4	5	6
4	I am looking forward to the life ahead of me.	1	2	3	4	5	6
5	The future holds a lot of good in store for me.	1	2	3	4	5	6
6	Overall, I expect more good things to happen to me than bad.	1	2	3	4	5	6
7	Sometimes I make myself do things which I do not to do.	1	2	3	4	5	6
8	When I'm in a difficult situation, I can usually find my way out of it.	1	2	3	4	5	6
9	It's okay if there are people who don't like me.	1	2	3	4	5	6
10	I am confident that I can deal efficiently with unexpected events.	1	2	3	4	5	6
11	I can solve most of the problems if I invest the necessary effort.	1	2	3	4	5	6
12	I can remain calm when facing difficulties because I can rely on my coping abilities	1	2	3	4	5	6

S. No	Statements	0	1	2	3	4	5	6	7	8	9	10
1	To what extent is your work purposeful and meaningful?	0 = Not at all	1	2	3	4	5	6	7	8	9	10 = Completely
2	How often do you feel you are making progress towards accomplishing your work-related goals?	0 = Never	1	2	3	4	5	6	7	8	9	10 = Always
3	At work, how often do you become absorbed in what you are doing?	0 = Never	1	2	3	4	5	6	7	8	9	10 = Always
4	In general, how would you say is your health?	0= terrible	1	2	3	4	5	6	7	8	9	10 = excellent
5	At work, how often do you feel joyful?	0 = Never	1	2	3	4	5	6	7	8	9	10 = Always
6	To what extent do you receive help and support from coworkers when you need it?	0 = Not at all	1	2	3	4	5	6	7	8	9	10 = Completely
7	At work, how often do you feel anxious?	0 = Never	1	2	3	4	5	6	7	8	9	10 = Always
8	How often do you achieve the important work goals, which you set for yourself?	0 = Never	1	2	3	4	5	6	7	8	9	10 = Always
9	In general, to what extent do you feel that what you do at work is valuable and worthwhile?	0 = Not at all	1	2	3	4	5	6	7	8	9	10 = Completely
10	At work, how often do you feel positive?	0 = Never	1	2	3	4	5	6	7	8	9	10 = Always
11	To what extent do you feel excited and interested in your work?	0 = Not at all	1	2	3	4	5	6	7	8	9	10 = Completely
12	How lonely do you feel at work?	0 = Not at all	1	2	3	4	5	6	7	8	9	10 = Completely
13	How satisfied are you with your current physical health?	0 = Not at all	1	2	3	4	5	6	7	8	9	10 = Completely
14	At work, how often do you feel angry?	0 = Never	1	2	3	4	5	6	7	8	9	10 = Always

# Responses range from 0-10. Place a check mark ( $\checkmark$ ) in the box that best represents how often you have experienced or felt the following:

15	To what extent do you feel appreciated by your coworkers?	0 = Not at all	1	2	3	4	5	6	7	8	9	10 = Completely
16	How often are you able to handle your work-related responsibilities?	0 = Never	1	2	3	4	5	6	7	8	9	10 = Always
17	To what extent do you generally feel that you have a sense of direction in your work?	0 = Not at all	1	2	3	4	5	6	7	8	9	10 = Completely
18	As compared to others of your same age and sex, how is your health?	0 = Terrible	1	2	3	4	5	6	7	8	9	10 = Excellent
19	How satisfied are you with your professional relationships?	0 = Not at all	1	2	3	4	5	6	7	8	9	10 = Completely
20	At work, how often do you feel sad?	0 = Never	1	2	3	4	5	6	7	8	9	10 = Always
21	At work, how often do you lose track of time while doing something you enjoy?	0 = Never	1	2	3	4	5	6	7	8	9	10 = Always
22	At work, to what extent do you feel contented?	0 = Not at all	1	2	3	4	5	6	7	8	9	10 = Completely
23	Taking all things together, how happy would you say you are with your work?	0 = Not at all	1	2	3	4	5	6	7	8	9	10 = Completely

The following questions deal with a 'sense of ownership' that you feel for the
organization that you work for. Indicate the degree to which you personally agree
or <i>disagree</i> with the following statements.

	Statements	Strongly Disagree	Disagree	Slightly Disagree	Neither Agree nor Disagree	Slightly Agree	Agree	Strongly Agree
1	This is <b>my</b> organization.	1	2	3	4	5	6	7
2	I sense that this organization (College) is <b>our</b> company (College).	1	2	3	4	5	6	7
3	I feel a very high degree of personal ownership for this organization (College).	1	2	3	4	5	6	7
4	I sense that this is <b>my</b> company (College).	1	2	3	4	5	6	7
5	I sense that this job is MINE.	1	2	3	4	5	6	7
6	I feel a very high degree of personal ownership for this job.	1	2	3	4	5	6	7
7	I sense that this is MY job.	1	2	3	4	5	6	7
8	I sense that the work I do as part of my job is MINE.	1	2	3	4	5	6	7
9	I feel a very high degree of personal ownership for the work that I do.	1	2	3	4	5	6	7
10	The work I do at this organization (College) is MINE.	1	2	3	4	5	6	7

## Appendix C

# Request for the use of Psychological Capital Scale research work of phd

### Samra Afzal <safzal@numl.edu.pk>

Mon, Nov 12, 2018, 1:28 PM

to timo.lorenz

Dear Timo Lorenz, I am a teacher as well as a PhD scholar.

One of the variables of research is psychological capital. Firstly, I need your kind permission for the use of scales in my research study.Secondly, we also make the research instrument contextual, so, I also need your permission to make some changes according in the instrument to make it contextual.

SAMRA AFZAL Assistant Professor, Department of Education, NUML, Islamabad.

تنmo Lorenz MSB Berlin <timo.lorenz@medicalschool المحتاة المحطوع, 2018, 3:00 PM

to me

Dear Samra Afzal,

of course, we published it open access so it is free to use as long as you will cite us.

Kind regards

Timo

Von: Samra Afzal <<u>safzal@numl.edu.pk</u>> Gesendet: Montag, 12. November 2018 09:28:46 An: Timo Lorenz MSB Berlin Betreff: Request for the use of Psychological Capital Scale Permission for the use of scale

### Peggy Kern <Peggy.Kern@unimelb.edu.au>

Sep 6, 2018, 4:51 AM

and the state of the

to me

It depends on how you define workplace flourishing, but the survey does provide one measure of workplace flourishing. It's freely available for research and non-commercial purposes, and details are on my website. Best,

Dr Kern

Peggy Kern, PhD

Senior Lecturer, Centre for Positive Psychology

Melbourne Graduate School of Education | Level 2, 100 Leicester Street | University of Melbourne | Vic 3010 Australia

t: +61 (3) 8344 3402 | Peggy.Kern@unimelb.edu.au | education.unimelb.edu.au/ppcentre

www.peggykern.org | orcid.org/0000-0003-4300-598x

On Thu, Sep 6, 2018 at 3:03 AM, safzal@numl.edu.pk <no-reply@weebly.com> wrote:

You've just received a new submission to your Contact Form.

Submitted Information: Name Samra Afzal

Email safzal@numl.edu.pk

**Comment** Dear Madam, I am a PhD scholar as well as university teacher. One of the variables of my research is workplace flourishing. For the assessment of workplace flourishing can I use the scale developed by you.

#### research work of phd

### Samra Afzal (Lecturer) <safzal@numl.edu.pk>

Sun, Sep 2, 2018, 10:34 PM

to jpierce

Respected Sir,

I am a PhD scholar. One of the variables of my research is organizational psychological ownership.

I go through the articles written by you. I have few questions in my mind. Firstly, may I use the scale developed by you regarding the psychological ownership in my study. Secondly, I need permission for the use of scale in my research work. Thirdly, I also need details of organizational psychological scale.

SAMRA AFZAL Assistant Professor, Department of Education, NUML, Islamabad.

#### Jon Pierce <jpierce@d.umn.edu>

Tue, Sep 4, 2018, 5:45 PM

to me

Samra Afzai:

Thank you for your interest in psychological ownership. The scale accompanies this communication, and because it is in the public domain you are welcome to use the scale for research purposes. The instrument was designed so that different targets can be used, as we substitute the 'job' for the 'organization' as targets of ownership feelings.

Best wishes for your work. Sincerely,

Jon Pierce Jon L. Pierce, Ph.D. Horace T. Morse Distinguished Professor of Organization & Management Department of Management Studies Labovitz School of Business & Economics University of Minnesota Duluth Duluth, Minnesota 55812, USA Re: New Form Entry: Contact Form

research work of phd

# Appendix D



### CERTIFICATE OF VALIDITY

### INTERRELATIONSHIP OF PSYCHOLOGICAL CAPITAL, WORKPLACE FLOURISHING AND ORGANIZATIONAL PSYCHOLOGICAL OWNERSHIP OF COLLEGE TEACHERS

This is to certify that the instruments of Psychological Capital, Workplace Flourishing, and Organizational Psychological Ownership have been assessed by me. I find these instruments culturally adequate to asses psychological capital (optimism, resilience, hope, and self-efficacy), workplace flourishing (meaning, accomplishment, engagement, positive emotions, and positive relationships) and organizational psychological ownership (job-based and organization-based ownership). The PhD scholar, Ms. Samra Afzal, Reg No. 697-PhD/Edu/F17 may collect data with fair amount of confidence on the above-mentioned constructs.

Name\_Dr. Quiratul- Ain - Hina Designation\_Assistant Professor Institution MUML gs.lamabad Signature\_\_\_\_

-



### CERTIFICATE OF VALIDITY

### INTERRELATIONSHIP OF PSYCHOLOGICAL CAPITAL, WORKPLACE FLOURISHING AND ORGANIZATIONAL PSYCHOLOGICAL OWNERSHIP OF COLLEGE TEACHERS

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Dr. Hubambad Name Designation Associate Professor Institution Signature



### CERTIFICATE OF VALIDITY

### INTERRELATIONSHIP OF PSYCHOLOGICAL CAPITAL, WORKPLACE FLOURISHING AND ORGANIZATIONAL PSYCHOLOGICAL OWNERSHIP OF COLLEGE TEACHERS

This is to certify that the instruments of Psychological Capital, Workplace Flourishing, and Organizational Psychological Ownership have been assessed by me. I find these instruments culturally adequate to asses psychological capital (optimism, resilience, hope, and self-efficacy), workplace flourishing (meaning, accomplishment, engagement, positive emotions, and positive relationships) and organizational psychological ownership (job-based and organization-based ownership). The PhD scholar, Ms. Samra Afzal, Reg No. 697-PhD/Edu/F17 may collect data with fair amount of confidence on the above-mentioned constructs.

Name Dr. Farklanda Jabassum Designation Assistent Professor 1Samabool NUME Institution de Signature

## **Appendix E**



Ret. No. All 1-3/2219 1 11

National University of Modern Languages Sector H-9, P.O. Shaigan, Islamabad Tel : 092-051-9265100-09 Fax: 092-051-9265076 Email: info@numl.edu.pk Web: www.numl.edu.pk

Date: 22-05-201)

The Director General, Federal Directorate of Education, SectorG-9/4, Islamabad.

Subject: Request/Permission for Collection of PhD Research Data from Colleges under Administrative Control of FDE

Dcar Sir,

Ms. Samra Afzal, Assistant Professor, Department of Education NUML, Registration No # 697-PhD/Edu/F17, is a student of PhD in the Department of Education at National University of Modern Languages (NUML), Islamabad.

Currently, she is working on her research thesis titled "Interrelationship of Psychological Capital, Workplace Flourishing and Psychological Ownership of College Teachers". In this regard, she needs to collect data from the faculty members / teachers of colleges under administrative control of FDE.

You are, therefore, requested to allow her to collect data and facilitate her in doing research. The information shall not be divulged to any unauthorized person or agency. It shall be kept confidential. Your kind cooperation would be highly appreciated.

Profound Regards,

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Dr. Hukam Dad Malik, Head, Department of Education, NUML, Islamabad.

Main Di-

Dr. Marium Din, Supervisor / Assistant Professor, NUML, Islamabad.

### **Appendix F**

### No. F.1-1/2018/MC/MISC/FDE GOVERNMENT OF PAKISTAN FEDERAL DIRECTORATE OF EDUCATION

Islamabad, the May 23, 2019.

The Principals: Islamabad Model Colleges (IMCs) F.G. Colleges.

#### PERMISSION FOR PHD\_RESEARCH\_DATA\_FROM\_COLLEGES Subject: UNDER ADMINISTRATIVE CONTROL OF FDE.

I am directed to refer to NUML's letter No. ML1-3/2019-Edu, dated 22.05.2019 on the captioned subject and to say that Ms. Samra Afzal, Assistant Professor, student of PhD in the department of Education at National University of Modern Language (NUML) Islamabad may be permitted to collect the data for her research theises titled (Interrelationship of psychological capital workplace flourishing and psychological ownership of college teachers) in your institutions, please.

2.

This is issued with the approval of Director (Colleges).

Encl: As above :

#### (MUHAMMAD LUQMAN) DEPUTY DIRECTOR (COLLEGES)

Copy to:

- P.S to Director General (Edu) A.P.S to Director (Colleges), FDE. AA



	Ex-FG Degree Colleges	
S No	INSTITUTE	PHONE
1	IMCB, SIHALA	514486623
2	IMPC, H-8,	9250327
3	IMCB, F-10/4,	51.926646
4	IMCB, H-9,	9258192
5	IMPCC (B), H-8/4,	9269701
6	IMCG (PG), F-7/2,	519102528
7	IMCG (PG), G-10/4,	9266388
8	IMCG (MT) Humak	514493301
9	IMCG, I-8/3	9101806
10	IMCG (PG), F-7/4,	9100017

 10
 IMCG (PG), I

 11
 IMCG I-14/3

12 IMCG Bharakau

# Appendix G

# Islamabad Model Colleges

S No	INSTITUTE	PHONE
1	Islamabad Model College for Boys, IMCB, F-10/3	519266049
2	Islamabad Model College for Boys, IMCB, F-11/1	9266169
3	Islamabad Model College for Boys , IMCB, F-11/3	9266032
4	Islamabad Model College for Boys, IMCB, F-7/3	519102463
5	Islamabad Model College for Boys, IMCB, F-8/4	519261801
6	Islamabad Model College for Boys, IMCB, G-10/4	9106371
7	Islamabad Model College for Boys, IMCB, G-11/1	9267107
8	Islamabad College for Boys, ICB, G-6/3	519208006
9	Islamabad Model College for Boys, IMCB, I-10/1	051-9258989
10	Islamabad Model College for Boys, IMCB, I-8/3	519101751
11	Islamabad Model College for Girls, IMCG (COM), F-10/3	9266674
12	Islamabad Model College for Girls, IMCG, F-6/2	9202222
13	Islamabad College for Girls ICG, F-6/2	9203240
14	Islamabad Model College for Girls IMCG, F-7/4	9100025
15	Islamabad Model College for Girls IMCG, F-8/1	9261954
16	Islamabad Model College for Girls IMCG, G-10/2	518313595
17	Islamabad Model College for Girls IMCG, I-10/4	519258611
18	Islamabad Model College for Girls IMCG, I-8/4	519101790
19	Islamabad Model College for Girls IMCG, F-10/2	519267064
20	Islamabad Model College for Girls IMCG, KORANG TOWN	5958539

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