

***Impact of Psychological Capital and Intellectual Capital on Organizational Commitment with the mediating role of Employee Engagement; Evidence from Higher Educational Institutions of Pakistan.***



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## **TOPIC OF RESEARCH:**

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## Abstract

The aim of this study is to investigate the impact of psychological capital and intellectual capital on organizational commitment with the mediating role of employee engagement in the context of universities of Islamabad, Pakistan. The quantitative approach is adopted to carry out the research. For data collection several universities were approached as per the requirement of the study and approximately 320 responses have been gathered through questionnaires. Correlation and regression analysis is performed on the data to study the relationship among the variables. The results have confirmed that intellectual capital and psychological capital have a positive and significant impact on organizational commitment. The mediating role of employee engagement was proved as well. The result signifies that organizations should emphasize the psychological well-being of employees. They should also consider the importance of provision of adequate job resources. The findings could help organizations in maintaining a healthy environment where human assets could thrive and grow as a team and contribute towards the overall organizational performance. The study also provides various measures organizations can take to enhance the commitment of its employees such as confidence development programs, cultivation of learning and knowledge sharing culture, and need based training programs. Overall the research has contributed substantially to the existing literature of organizational commitment.

**Keywords:** *Intellectual Capital, Organizational Commitment, Psychological Capital, Organizational Performance, Employee Engagement.*

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# 1. Introduction

## 1.1 Background

Educational sector plays a vital role in the sustainable development and growth of a country. It can be considered as the basis for future success. Education leads to the development of a skilled workforce which is required for the economic and social progress of the country.

Pakistan is no different from other countries in this regard. With only 60% literacy rate and poor quality of education, Pakistan has been suffering from several major issues like low GDP, unemployment, stagnant growth, poverty, and poor standards of living. (PSLM district-level survey, 2019-20). Since education is strongly linked with skilled workforce, and skilled workforce is related to factors like employment, success, and quality of life; it is safe to conclude that it is the consequence of poor education that the country has been suffering from such issues.

To elaborate the significance of education further, the students that graduate from a system of poor standard, they are not knowledgeable about their work. They are not properly skilled and are not able to perform their job effectively. It eventually leads to poor performance of the organizations, decreasing interest and motivation of the employees themselves, higher turnover and several other factors that impacts the performance of the whole economy when happens at a large scale. Hence, education rightly deserve proper funding, attention, effective human resources, and efforts to promote better quality and standards.

Lack of education is one of the main reasons for the increasing crimes and social issues across the country as well. Not only is the country suffering from lower literacy rate, but the quality of education is below the acceptable level. The proof of low standards of education is very clear from the recent statement of former Higher Education Commission chairman Dr. Tariq Banuri. He said “Our education system can produce neither good students nor good citizens”, which clearly shows that educational sector of Pakistan is in dire need to improve its performance. Although the whole system including the primary and secondary schools, the colleges and the universities comes under this definition, however, the chairman was mainly pointing towards the universities. Universities are the foundations which train the students to become better humans and skilled workers.



Considering the bigger role they play in developing the future of youth, it is crucial to increase the involvement of teachers and instructors with their work and their students in order to increase the overall performance of the education institutions.

There are several major issues faced by the educational sector of Pakistan, which has led to poor performance and results. Lack of proper teaching materials, lack of training programs for teachers, poor compensation packages for faculty, and lack of support from the organizations are just few of them. These factors lead to poor commitment and dedication of teachers towards their work. Teachers are supposed to teach and engage with students in order to prepare them for their future endeavors. They should be properly trained, qualified, experienced, and motivated to do the job efficiently. (Memon, Joubish & Khurram, 2010)

The performance of teachers lead to better educated students. Since these issues impact the performance of the whole sector, the professors and teachers should be the subject of study to analyze the factors which can enhance their engagement and performance. The findings can be very useful for the organizations in order to enhance their overall organizational performance by refining their human assets. Hence this study will look into the factors that contribute towards better employee behavior in the educational sector of Pakistan.

## **1.2 Problem Statement**

With increasing competition and growing globalization, companies are finding it difficult to survive and grow with the limited resources available. Dedicated and engaged human resources are great assets, which companies can utilize to gain competitive edge over others in the industry. According to a recent statistic by Gallup report, 51% of the employees are not engaged/committed at work and disengaged employee are unhappy, become less productive and affect the work environment negatively. Companies have experienced high turnover and suffered around \$ 450-550 billion worth of loss with reference to a recent study on employee engagement. Hence, it has become crucial to further the research on employee engagement and commitment. This will not only facilitate companies with the knowledge through which they can increase their employees' engagement and dedication, but will also help them move towards their goals and vision.

Psychological and Intellectual Capital have been the focus of great attention for researchers recently due to its strong influence on the employee attitudes and behaviors which eventually impact the overall performance of the organization. As organizations are looking for different ways to gain more competitive advantage, they realized that engaged and committed employees

are one of the resources to achieve that. In organizations, research has shown the tremendous effect of psychological and Intellectual capital on employee attitudes and behaviors (Newman, 2014; Tastan, 2015).

Academic sector of Pakistan needs teachers who could dedicate themselves towards the development of the youth. They must be enthusiastic and devoted to their duties in order to perform them well. Therefore, further research is required in academia to evaluate the impact on teachers and professors to establish whether it has the same impact as in the corporate sector. As per previous research, employee engagement also plays a role in the commitment of employees. (Shoko, 2014)

Hence to address the issues of Pakistan academic sector and the poor performance of higher education institutions, it is important to study the factors that can help in improving the behaviors and attitudes of employees which will eventually lead to better results and higher levels of success. The emerging factors like psychological capital and intellectual capital which are still relatively new and require extensive research in order to motivate the employees must be analyzed and tested. This specific study aims to analyze the impact of psychological and intellectual capital on organizational commitment of university teachers and professors, with the mediating role of employee engagement.

### **1.3 Objectives of Research**

On the basis of the introduction, and problem statement, the main objective of this research is to analyze and to investigate the relationship between psychological capital, intellectual capital, work engagement and organizational commitment amongst employees in educational sector.

Precisely, the objectives can be defined as:

- To investigate the relationship between psychological capital and organizational commitment.
- To investigate the relationship between intellectual capital and organizational commitment.
- To investigate the role and impact of psychological capital, Intellectual capital, and employee engagement on employee commitment.
- To determine whether employee engagement mediates the relationship between psychological capital and organizational commitment; and between intellectual capital and organizational commitment.

## 1.4 Research Questions

The current research is going to address the following questions. Through the analysis and study these questions will be answered:

- Does psychological capital effect the organizational commitment of an individual?
- What is the relation between intellectual capital and organizational commitment?
- What role does employee engagement, psychological capital, and intellectual capital play in enhancing the sincerity and dedication of employees towards their organization?
- Does employee engagement mediates the relationship between psychological capital and organizational commitment? Similarly, does it mediate the relation between intellectual capital and organizational commitment?

## 1.5 Research Gap

A substantial amount of research took place to investigate the relationship between psychological capital, intellectual capital, work engagement, and organizational commitment (Simons, 2013; Paek, 2015; Muasavi, 2014). However, the research have several limitations and gaps that are needed to be addressed. For the very purpose, further research is required.

### 1.5.1 Knowledge Gap

The relation between intellectual capital, psychological capital, employee engagement, and organizational commitment have not been previously studied together. This creates a unique framework between the variables which is required to be analyzed and tested. (Paek, 2015; Mousavi, 2014)

Moreover, the impact of employee engagement as a mediating variable between intellectual capital and organizational commitment has not been studied extensively either.

### 1.5.2 Methodology Gap

Several research studies conducted to study the impact of psychological and intellectual capital on employee behaviors. (Tastan, 2015; Chen et. Al, 2012; Simons & Buitendach, 2012)

However, these studies are conducted in different countries like South Africa, Turkey and Taiwan. The relationship between these variables have not been examined in Pakistan. The theoretical framework created due to the assumed relation between these variables is not analyzed in this country either. Hence, it is still unknown whether the relation between the variables would be similar as other countries or cultural and other factors impact their relations

significantly in developing countries like Pakistan. Moreover, the data analysis is done on Smart PLS, which generates more accurate results but not commonly used in Pakistan

The study is conducted using stratified random sampling, suggested by Gota (2017) to further the research on the relation between psychological capital and organizational commitment. He conducted the research using convenience sampling, which affected the generalizability of the research.

### **1.5.3 Population Gap**

Chen et.al (2012) analyzed the relationship between intellectual capital and organizational commitment in small and medium enterprises. The study elaborates that due to lack of inclusion of large organizations, the generalization is compromised. Hence the research cannot justify the findings to be applicable for larger firms, as firms of different sizes have different dynamics. It signifies that further research is required to test the results and confirm whether the relationship between the two variables is equally strong and significant in large firms as well, or the dynamics of large firms affect the results.

Moreover, the impact of intellectual capital on organizational commitment needs to be investigated more, as there are only few studies which evaluate their relation. Tastan (2015) investigated their relation, however the sample size of the study was too small and restricts the generalizability of the analysis results.

### **1.6 Research Significance**

Since the relation between the variables have not been studied together, specifically in Pakistan, this study can contribute significantly towards the research about determinants of employee engagement and commitment.

Pakistan has yet to go a long way to achieve the desired level of quality and standard of higher education. For this very purpose, the management of higher education institutions are looking for different techniques and ways to increase the dedication and involvement of their employees, more specifically the teachers who play the most important role in the success and effective performance of the organization. Furthermore, the corporate firms are looking for ways to increase the engagement and commitment of their employees. Hence, the results of the study can also be applied to the corporate sector in order to assist the employers in increasing the productivity of the organization, enhancing the performance of the employees, and decreasing the turnover of employees. The research will mainly analyze the factors related to

such positive outcomes. Factors like psychological capital and intellectual capital are relatively new and found to predict desirable results. Firms have not focused much on these factors for the purpose of improving employee's behavior, attitudes, and organizational outcomes, as they are not aware of the value and importance of them and not much research is done on them. This study will evaluate and highlight how these factors can be utilized in the favor of the organizations to generate positive results and implement the knowledge generated by the results of the research.

Moreover, the study will include the large organizations in the sample, which will make the results more generalized. Hence they will be applicable to a larger amount of firms. Furthermore, the study will include the cultural factors of Pakistan which makes it more useful for the firms. As each country have a different culture and most of the studies conducted on this topic were done in other countries, the result may not be as significant in Pakistan. Hence it is important to analyze whether the cultural factors do have an impact on the study or not. Similarly in different countries the factors that motivate employees are different. In developed countries, other than good compensation packages, the employees look for recognition, achievement, support, and several other factors. However, in developing countries, the major motivator is found to be financial rewards. But as these factors are not evaluated much, they may be able to contribute towards employee motivation which can lead to better performance and other positive outcomes.

## **1.7 Limitations**

The study will focus on the psychological capital in general and its impact on employee commitment. However, the further domains of psychological capital namely self-efficacy, optimism, and resiliency as discussed by Luthans et.al in 2015 will not be separately analyzed. Moreover, this study will not consider the different components of organizational commitment separately. The study is conducted over a short period of time. Due to shortage of time the sample size taken was not huge. Only 4 institutions was included in the sample. Larger sample size could be taken for further studies to generate more accurate results.

## **1.8 Scope**

The given study is going to investigate the impact of psychological and intellectual capital on organizational commitment with employee engagement playing the mediating role in the equation. It is conducted in the educational sector of Pakistan over a period of 4 months. The data is collected from approximately 250-300 teachers and professors from around the

universities located in Pakistan Capital region. It is going to discuss how employee commitment can be enhanced among teachers and professors through specified factors.

## **2. Literature Review**

### **2.1. Organizational Commitment**

In order for organizations to maintain effective performance, adequate levels of organizational commitment in employees is crucial. Organizational commitment has been studied extensively due to its significant influence on desirable outcomes and behaviors. Organizational commitment has been defined differently by different researchers. It was initially defined in 1973 by Alutto et al. He referred it as a concept which is defined by reciprocity principle. Individual join a company and tend to dedicate their time and efforts to that organization in exchange of some kind of rewards or compensation. This can be referred to as organizational commitment. In 1991, the concept of organizational commitment was revisited and redefined. John Meyer and Natalie Allen analyzed organizational commitment and presented a three-component model. According to the model, organizational commitment is composed of three components. The components are affective commitment, normative commitment, and continuance commitment. Affective commitment is defined as the degree to which an employee is attached emotionally to his/her work and how loyal the person is towards the organization. He wants to be a part of the organization and proud of it. However, normative commitment is more related to the morality of the individual. The employee remain employed in the same organization because he believes he is morally responsible to. Continuance commitment is the kind of commitment that is based on an employees' belief that the cost of leaving the current employment is going to be much higher than staying. He does not do it out of desire or emotion. However, the definitions did not end there. Some have also defined this concept as an attachment or bond that exists between organization and its employee. The author believed that it is mutually beneficial for employee as well as the employer. (Fulford and Rothman, 2007). Recently it is also described as psychological affection and dedication of employees towards their organization (Farahani et al., 2011).

Organizational commitment has been a desirable quality of employees for all organizations as it has served them well. Several studies show the significant and positive impact of organizational commitment on overall organizational performance. It has also been found to be significantly related to other variables which influence the outcomes of the organization. Research suggests that less committed employees are found to be positive related to less

productivity, counterproductive behaviors, and lower retention rate. Organizations suffer high costs when employees leave not only in expenses but in time as well. The company invests in their employees in terms of time, money, and training. Due to high turnover, they lose the experience, the financial investments, and the skills. Further, the employees take a good amount of time understanding the culture and environment of the organization. Recruiting new employees requires repeating the whole process. The new employees are oriented and trained. They take time to understand the company culture, norms, and values. In order for them to be truly productive it takes them to socialize with their co-workers, understand the acceptable practices, the specific duties of their role, and how to accomplish the work objectives (Dalal, 2005). Hence, it is conclusively proven that organizations require committed and skilled employees to increase their profitability and growth. Moreover, committed employees are the source of competitive advantage for organizations. In order for organizations to survive against their competitors in the industry, they are required to gain competitive advantage through skilled and committed employees. Hence good organizations look for techniques and methods to increase the commitment of their employees. (Yao, 2019). Moreover, educational institutes rely more on the commitment and engagement of their employee for success and survival. As teachers are the sole source for the delivery of quality education, it implies the importance of commitment in educational sector. (Nazir, 2017)

Organizational commitment is also the source of various attitudes that drives organizational change. (Nafei, 2014). When employees are provided with training opportunities and empowerment practices, they tend to develop higher commitment and motivation (Noor, 2009). Such employees who are empowered and committed are found to deal effectively with adverse situations and are more adaptable and flexible to new experiences. (Fatima, 2013)

Another study by Lambert (2020) discussed about the impact of perceived fairness on commitment. When the employees perceive the system is fair, the work environment become more positive and healthier. This leads to employees being satisfied and intrinsically motivated; and devote themselves to the organization and contribute more towards the goals of the organization. There are several more studies that analyze the antecedents of organizational commitment. For instance, it is found that perceived organizational support is significantly related to organizational commitment. As the employee feel supported and included by the organization, they tend to become more committed and dedicated towards the organization (Andriyanti, 2021). As an employee get more devoted and sincere towards the organization, they tend to perform more efficiently and effectively to achieve the goals of the organization.

(Hendri, 2019). Steer conducted a study in 1977 testing several hypotheses related to determinants and consequences of organizational commitment. He found that job characteristics, personal characteristics, and work experiences of employees impact their commitment. The job characteristics include opportunities for social interaction, challenging tasks, and feedback. Personal characteristics include education, desire of achievement, and age. Organizational trust, dependability, how much the person value the organization, group attitude toward the company, all comes under the domain of work experience. Among the consequences, job performance, intent to stay, absenteeism, and turnover are found to be related to commitment. With employees being committed, they try to be more present in their jobs, put more effort, less likely to leave the organization, and tend to stay for longer tenure.

Some of the early researches on organizational commitment also focused on the effect of job satisfaction on employee's commitment. One study by Yousef (2002) suggests that as employees perceive that there are good career growth opportunities available in the organization, the tasks and duties of the job are adequate and the workload is not too much, then the employees experience less job stress. Due to less job stress, the employees get more committed to the organization. Organizations in order to maintain the commitment of their employees, must take measures to reduce their stress. It can be accomplished through reduction of workload or arranging activities that lowers the stress of employees. The employees should be provided with several opportunities to grow in their career in order to retain them and enhance their involvement.

One of the newer concepts known as corporate social responsibility is gaining attention from the researchers due to its increasing importance and several benefits. Out of several outcomes of corporate social responsibility, one is organizational commitment. Employees tend to become more committed when they perceive that higher CSR practices are implemented by the organization. One of the researchers through his study which aimed to analyze the influence of CSR on organizational commitment of employees, found that both genders prefer different CSR strategies which lead to enhancement of their commitment. Female employees focus more on procedural justice and with the perception of higher procedural justice, they tend to become more dedicated. Whereas male employees focus on training opportunities provided by the firm (Brammer, 2007).

Karadag (2015) studied the relation between leadership and organizational commitment. He found significant results especially in the educational sector. According to him, effective



leaders create an environment that initiates change. Moreover, good leaders have great impact on employees' attachment and involvement in their work. Several other factors can also contribute to the development of employee's commitment. The study by Hanaysha (2016) suggests that a healthy and learning environment plays a very important role in increasing the commitment of employees in educational sector. Organization can take various measures like training sessions and exchange of knowledge to achieve this goal.

Researchers also looked into the outcomes of the organizational commitment through large scale research. For instance, Rifai's (2005) research evaluated the impact of affective commitment on organizational citizenship behavior. The significant results imply that the employees who are emotionally attached to the organization do not only contribute towards the organization by achieving assigned tasks and duties effectively, but also volunteer to perform tasks unrelated to their job descriptions in order to assist the organization in achieving their goals. They feel proud being the part of the organization and are willing to give more than just fulfilling their responsibilities for the success of the organization.

Jun Jo (2011) attempted to analyze the relation between learning organizational culture and organizational commitment. He found that organizational citizenship behavior fully mediates the relation between knowledge sharing intention and organization commitment. Organizations try to build a learning culture in order to increase the efficiency and competency of the organization. As the employees perceive that there is a high learning organizational culture and develop higher organizational citizenship behavior, they tend to develop higher knowledge sharing intention. Employees who have higher commitment and develops higher levels of organizational citizenship behavior tends to develop higher level of knowledge sharing intention.

One of the main reasons due to which organizational commitment received so much attention earlier is its significant impact on employee's performance. Al Zefeiti (2017) tested the hypothesis again in the public sector of Oman. He found similar results. When an employee does not want to leave the organization willingly, and when he feels an emotional connection with the organization and takes pride in being a part of it, he tends to get more devoted towards his work and delivers effective performance.

Wright (2008) extensively researched the relation between human resources practices and organizational commitment. He discussed various practices that lead to organizational commitment, mainly those which increases the ability and motivation of employees. Practices

which include two-way communication and participative decision making develops employee's interest and motivates him to contribute more to the organizational goals, as the employees themselves were involved in organizational goal setting. Similarly providing employees with financial and non-financial rewards with each appraisal period based on their performance keep them highly motivated and committed to the organization. Training opportunities, colleague's support, work hours flexibility, and employee empowerment practices, all such factors contribute to the commitment and improved performance of employees.

## **2.2. Psychological Capital**

Psychological Capital refers to a positive mental state of a person's development. The core components of psychological capital are self-belief, positivity, hope, and flexibility (Luthans, 2006). In order to understand these components, their definitions are to be considered. Flexibility here refers to resilience of a person, his/her ability to go through uncertain and stressful situations, failures, risks and yet recover and overcome it to move towards success. (Masten, 2002; Tugade, 2004). Hope refers to a state which is constructively motivational, built on objective oriented energy and the path to achieve the objective in order to succeed (Sweetman, 2011). Self-belief or efficacy can be defined as a person's belief in one's ability to perform well through their mental capabilities, their strategies and motivation. A person with higher self-esteem or belief may lead them to better deal with difficult situations and challenges (Bandura, 2012). Positivity is a person being optimistic about the success and achievement of goals in present and future (Luthans, 2015). Several studies were conducted in the past to analyze the relation between psychological capital and organizational commitment. The findings clearly suggests that the relation between the two factors is strong and significant. Psychological capital is an important factor, as it is predictor of several positive outcomes. Larson (2006) discusses in his study that in order for organizations to utilize their human resources to an optimum level, and take advantage of their potential, they are required to invest in developing them. In order to achieve that, the organizations will have to find ways to improve the psychological well-being of the employees. They have to improve the psychological capital to gain positive and required outcomes in return. One of the research by Xanthopoulou (2009) mainly examined the relation between job resources, personal resources, and work engagement in electronics companies in Netherlands. The study suggests that psychological capital is one of the strong predictors of employee engagement. The author discusses that as an employee gets motivated intrinsically and externally, they tend to achieve a more positive psychological

state. This happens due to the fact that his/her different needs are fulfilled through factors like supervisor's support, bonus, financial reward etc. The relation can be justified and supported by the conservation of resources theory. As an employee is provided the job resources adequately, he get motivated towards his work. He get more optimistic about the results, more hopeful about the outcomes, and due to constant support and availability of personal growth opportunities; tend to have higher self-efficacy. The individuals therefore as a result of a better psychological well-being, get highly motivated to achieve their goals and hence gets more engaged in their work. This results in positive behavioral outcomes like organizational commitment. Moreover, psychological capital has been found to be negatively correlated with behaviors and outcomes that are not desirable like counterproductive behaviors. Employees with higher psychological capital also tend to show lower levels of absenteeism (Avey, 2009). In poor economic conditions and higher unemployment, employees show deviant behaviors in order to take an advantage and gain resources like promotions, bonus, assignment and get ahead of their co-workers. They don't engage in organizational citizenship behaviors and do not coordinate with other to achieve the goals. Instead, they think about their own financial needs and status. However, the employees who have higher levels of psychological capital tends to show less deviant behavior and more citizenship behaviors. (Norman, 2010). Furthermore, positive behaviors related to problem solving and innovation are correlated with high levels of psychological capital. (Luthans, 2011)

Some studies also found the relation between psychological capital of employees and supervisors. For instance, Walumba (2010) concluded through his study that if a leader shows high levels of psychological capital, their employees tend to show high levels of psychological capital as well. Culbertson (2010) found through his study that there is a significant relation between psychological capital and well-being of an employee. An employee with psychological capital tends to have high life satisfaction. If organizations want to increase their employees' effectiveness, they should take measures to increase the well-being as well as the psychological capital of employees.

Avey et al. (2011) conducted meta-analysis of the outcomes of psychological capital. The study highlights that psychological capital is responsible for several employee attitudes which are demanded by HR department of any organization. The authors found that psychological capital is positively associated with the desirable behaviors and attitudes like job satisfaction, organizational citizenship behavior, employee commitment, and their well-being. The analysis also highlights that psychological capital negatively impacts undesirable behaviors such as

turnover, employee stress and anxiety. Overall enhancing the psychological capital of employees would work in favor of the company and increase their probability to achieve their goals and survive in a competitive environment.

Liu (2013) examined the psychological capital and its effects. The study was conducted among Chinese correctional officers. It discusses that the employees with high psychological capital are better able to deal with issues like job stress, depression, and burnout. Components of psychological capital such as self-efficacy and resilience are linked with better work attitudes and performance. In situations where there is high uncertainty and less control, the employees with high hope, feel less anxious as the hope protect them from having negative perceptions related to the situation. Such individuals are more likely to get involved in voluntary behaviors. Similarly, in case of adverse situations, emotional stability is very beneficial resource which is a quality of resilient individuals. Optimistic individuals are more positive about successful results and are motivated to work towards them. They experience less stress in work setting. The study goes on to study the relation between psychological capital and perceived organizational support. The results revealed that as an employee perceive higher level of support from his supervisor, his psychological capital will increase as well as his commitment and performance. Hence the author concluded that firms can no longer rely only on financial and social capital. They must invest in psychological capital even if it is considered as different and unique form of capital investment.

One of the recent studies by Epitropaki (2013) identified that as an employee experience higher uncertainty regarding their jobs, they tend to have low levels of psychological capital and high levels of stress. With the presence of high psychological capital and authentic leadership, the employees handle situations like employment uncertainty and work stress more efficiently. Employees who exhibit high levels of psychological capital are optimistic about the future results and have more belief in self, tend to put more effort in their work which increase their performance and satisfaction with their job. Hence, job satisfaction is a significant predictor of organizational commitment, it indicates that higher psychological capital does lead to higher commitment. (Luthans, et al., 2007).

Paek's (2015) study generated similar results regarding the relation of psychological capital with employee behaviors. He conducted the study in hospitality industry among the front line staff members. In hospitality industry, the front line staff can contribute towards the competitive advantage of the firm by developing and maintaining good relation with the guests

and provide them with quality services. Similar to professors in academic industry, front line staff members who deals directly with customers are crucial for the effective performance of the organization. In order to achieve that, the workers should be truly engaged and genuinely motivated in providing the services and dealing with the customers on behalf of the organization. The study found that work engagement partially mediates the relation between psychological capital and organizational commitment. The mediation makes the correlation stronger between the two variable. The study is supported by the conservation of resources theory, which implies that employees attempt to acquire, manage, and conserve some resource that they consider valuable. Such resources can be considered as the situations, personal characteristics, or any such thing which individuals consider valuable or these resources can also be the mains to gain these things. Individuals strive to invest in them as these resources can deplete and in order to make a profit or avoid loss, it is important to use them effectively and gain more resources as well when required. Acquisition of more resources leads to desirable outcomes. Furthermore, some of these resources tend to develop other resources, so employees may have some resources that can develop one resource that is associated with another one. Resources such as organizational social support are considered job resources which can replace personal resources like self-efficacy or optimism (components of Psychological capital). This is associated with Job demands- resources model, which is divided into job demands and job resources. Job demands can be considered as the aspects of job which demands effort out of an employee, such as mental, physical, and social aspects which requires an individual to consistently put in efforts which could be physical, mental, or emotional. Some job resources could be organizational support, job autonomy, tools to perform the job, feedback etc. Whereas demands could include work stress, physical demands, mental concentration for long periods of time etc. However, the job resources could also include personal resources like hope, resilience, optimism, and self -efficacy which are known as psychological capital. The JD-R model implies that job resources could influence the motivation of employees. It can increase their engagement in work and enhance their job performance. The resources in the form of internal motivators like co-worker support, supervisor support, financial resources, training opportunities etc., enhance the well-being of the employees, whereas external ones improve the well-being indirectly leading to accomplish their job tasks. With higher amount of job resources, higher levels of positive psychology is generated in the individuals, hence such employees have higher alignment between themselves and their goals. Being highly motivated internally and externally, they tend to engage more in their work which results in desirable outcomes. The model thus signifies that employee engagement acts as a mediator between job

resources (which includes psychological capital) and desirable and positive outcomes such as organizational commitment.

Recently, a study conducted by Liu & Huang (2019) investigates the relation between self-efficacy (a component of psychological capital), organizational commitment and employee engagement. The study was conducted in China among part time MBA students. Liu found that self-efficacy gained through one's profession, is a requirement to enhance the effort and involvement of an employee towards their work. Organizations which provide training opportunities to their employees with an aim to build their self-efficacy through it, tends to improve their employees' commitment as well as their engagement. The study provides evidence that proves the direct and significant impact of self-efficacy of employees related to their work settings on their work engagement. As discussed in previous studies, psychological capital is a significant predictor of employee well-being. It is indirectly related to the development of organizational commitment. Ribeiro (2021) analyzed the relationship in depth and found that when employees are happy and positive at work, they tend to develop a positive attitude towards the organization which is mainly affective type of organizational commitment. Happy employees consider their work as more meaningful and hence get affectively attached to the organization.

**H1: Psychological capital has a positive impact on organizational commitment.**

**H2: Psychological capital has a positive impact on employee engagement.**

### **2.3. Intellectual Capital**

In early 1990s, researchers and scholars began to focus on the topic of Intellectual Capital, realising the importance of intangible assets to the business organizations and their competitive advantage. It is strongly linked with the growth of organizational performance. As the research progressed, many researchers formulated different definitions of Intellectual capital. Simply it can be described as the total knowledge-based capital owned by the company. It can be the consequence of a process of knowledge change or the knowledge that changed into a firm's Intellectual property. Intellectual capital includes intellectual property, information, experience which can be utilized to gain money etc. Intellectual capital is an essential factor while finding the value of the firm. (Moon, 2006) Intellectual capital were mainly based on three component, namely human capital (related to employee knowledge, skills and capabilities), customer capital/relational capital (related to relations with stakeholders), and structural capital (organizational infrastructure, patents, trademarks). However, the components evolved and new models included several new types such as technological, spiritual capital, and social

capital. The different advanced components are suitable for different industries in order to identify their drivers of intellectual capital. For academic organizations, the intellectual capital can be defined through three components namely human capital, structural capital, and social capital. As far as Human capital is concerned, it can be considered as the total value of investments on human resources. It is an asset of the company and it includes employees' education, training, experience, and competence. The "value" here means the total value an employee can generate, so it is the value of an employee in the sense of economy. In academic sector, the interactive relation between social and human capital leads to student achievement. Hence it is necessary for teachers to have skills in personal and professional development, and they should be willing to do it. The existence of social capital lies within relations. It is the value that is obtained from good associations among people, like interdependence, spirit, and trust. In the literature of Intellectual capital, the terms "social capital", "relational capital" and "customer capital" are used in similar meanings. In fact, they are used interchangeably. However, there are some differences between relational and social capital. Relational capital exists within the relations that are developed between organization and external entities or stakeholders. Whereas social capital comes from the relations within the organization. Social capital in context of educational setting, can be described as the trust, spirit, and other positive aspects that are generated from the good relations between leader, teachers, and students. These three constructs, namely relational capital, social capital, and customer capital are considered as the coordination among the members within and outside of the organization. They develop good networks and share ideas that adds to the organizational value. Structural or organizational capital is the suitable infrastructure and supportive environment that is required for human capital to develop and function effectively. It includes organizational policies, strategies, organizational charts, trademarks, patents, database, organizational culture, software, training courses, technology, and inventions etc. which contribute to the capability of the organization. It is the bundle of knowledge that can be accessed from different sources and facilitate the creation and sharing of knowledge among the users. Research suggests that the impact of organizational capital on human capital results in effective performance of the organization. Structural capital is different in different organizations. (Niqab, 2020).

Several researches were conducted around Intellectual capital and its consequences. Effective employee performance is one of the results of Intellectual capital. In one research, intellectual capital in the shape of creative innovation and leader support was provided to employees which led to improvement in their performance. Co-worker support is another aspect of intellectual

capital which can enhance performance. Intellectual capital is an asset of knowledge which impacts company's performance through provision of information and resources that are necessary for decision making and achieving future goals. Moreover, the managers who manage to maintain a collaborative relation and culture of knowledge sharing contributes to the development of intellectual capital and the performance of employees. Similarly, implementing a knowledge management strategy to obtain knowledge and enhance competencies promote employees' and firm performance. (Muwardi, 2020)

One of the studies analyze the impact of social capital on organizational commitment. The study found that employees who have low social capital are more effected by low distributive justice and hence their organizational commitment gets decreased as well. As these employees focus more on their personal interest rather than organization, they get more effected when their own welfare is affected. However, the employees with higher social capital tend to build relations with others and build emotional bonds like friendship which impact their commitment positively and the impact of low distributive justice is not as high. Similarly the study also found that the impact procedural justice on organizational commitment is high when the social capital of the employees is low. Hence the low procedural justice does not impact their commitment as much (Tjahjono, 2019).

As organizational commitment is an important outcome, researchers start focusing more on how intellectual capital can contribute to this variable. Kwantes (2007) discussed in his study that a cooperative corporate culture being a part of intellectual capital positively impacts the organizational commitment of employees. Cooperative and collaborative culture is a part of structural capital, and it enhances social capital. It paves the path to build trusting and interdependent relations between the members which makes employees emotionally attach to the organization namely affective commitment. Moreover, better socialization practices also make new employees feel like a part of organization since the beginning, they also feel supported and wanted. This also leads to higher commitment. Further, when practices related to knowledge sharing become a part of culture, it improves the capability of employees and develop human capital. It increase their self-efficacy as well as their commitment. Another research conducted by Zeinoddini (2015) investigated the impact of all components of intellectual capital on organizational commitment. He suggested that managers should focus on information system of organization as it can help in decision making and with improving the organizational commitment.



Human capital has been found to be linked with long term productivity by several studies. Hence firms need to invest in human capital for sustainable competitive advantage. Employee value it as well, because investment on their training and development make them more competent and skilled. This lead to increase in their long term job security. The employees as a consequence develop emotional attachment to firm and try to return the favor through more efforts and involvement, i.e. normative and affective commitment. Organizational capital includes organizational culture as well. If employees have cooperative relations and if they have similar values the creation, sharing, and storing of knowledge become easier and make employees perceive that organization support their needs. Both of these factors contribute to commitment. Communication and trust among employees also contribute to organizational commitment, and they are a part of social capital. Hence in this way all three components contribute to the development of organizational commitment of employees. (Chen et al. 2012)

Mirza et al. (2020) also studied the relation between intellectual capital and organizational commitment in higher education institutes of Lahore. The results implied that there exist a positive and significant relationship among them. Mousavi (2014) suggested that the predictive relation between intellectual capital and organizational commitment exists because employees tend to utilize their talents and skills by focusing on intellectual assets and knowledge, in order to accomplish job goals. His study also found that the impact of structural and human capital is more on organizational commitment than relational capital. In the perspective of educational institutions, they are knowledge intensive entities and intellectual capital is a very important factor as a knowledge asset. With changing needs and environment, teachers are supposed to improve their skills, abilities, and knowledge for better and more innovative performance. They also need to be more dedicated and motivated and search for more innovation solutions to improve overall organizational performance. Farsi et al. (2015) researched on these factors among teachers in Saveh. The findings show positive and significant impact of intellectual capital on organizational commitment with the mediating role of employee engagement.

While the impact of intellectual capital on employee engagement is not studied directly, however, the components of intellectual capital have been found to be positively associated with employee engagement. Social capital for instance, includes a good social structure, trust among the team members, respect and social support towards one another, communication and strength of attachment among the members of a social system. Several previous studies have found link between variables such as good working environments, supportive leadership, supervisor and co-worker support, team and co-worker relations, workplace well-being,

managerial trust & integrity, and communication; and outcomes such as employee engagement. Such variables can be considered as a part of social capital and these associations indicate a positive relation between social capital and employee engagement. Similarly, organizational culture and policies can be considered as a part of structural capital which predicts employee engagement. It indicates a positive association between the two variables as well. (Anitha, 2014; Altit, 2015). Meng et al. (2018) conducted a study in Danish dairy industry to investigate the impact of social capital on employee engagement. The author concludes that there is a positive and significant relation between social capital and employee engagement. He elaborates that the cooperation of overall management is very important for the work engagement on individual level. In dairy industry, production processes requires significant level of communication and coordination among the workers. Since high levels of social capital is linked with better coordination and communication, the process become more effective leading to higher employee engagement. Fujita et al. (2016) also concluded that cooperation and coordination among employees results in effective functioning of the unit resulting in increased self-efficacy of employees which leads to higher employee engagement. Human capital is also found to be associated with employee engagement by Ozyilmaz (2019). The study suggests that with increase in training, experience, abilities, skills, and education of employees, they experience their work as more meaningful which is strongly associated with employee engagement and performance. Moreover, since higher capabilities and skills enhances employee's self-efficacy, and self-efficacy predicts engagement, therefore human capital is also positively associated with employee engagement.

**H3: Intellectual Capital has a positive impact on organizational commitment.**

**H4: Intellectual Capital has a positive impact on employee engagement.**

## **2.4. Employee Engagement:**

Employee engagement can be considered as one of the factors that contribute majorly to the success of organization (Macey, 2009). Engagement has gained attention gradually but definitely due to its tremendous effects on outcomes and behaviors. Engagement has been analyzed and studied through different constructs and methods. Moreover, there is no one definition for employee engagement as different researchers defined it differently. This created some confusion about the concept of engagement. Some researchers even defined it as another name for commitment. However there are several differences pointed out by other scientists between organizational commitment and employee engagement. Since the confusion can create

a question mark on whether engagement is actually a separate concept that exists, there needs to be more research done around it. (Ferguson, 2007). Some researchers defined engagement as the employee's intellectual and emotional dedication and loyalty towards the firm (Baumruk, 2004). It is also referred to as employee's passion for the work (Truss, 2006). However, employee engagement is different from commitment, as it is more of involvement and attention of employee in work performance (Saks, 2006). Kahn (1990) was the first one to define engagement as a different construct than commitment and motivation. He claimed that engagement is related more as to how mental experiences of job mould the individuals and impact their presence and absence towards their work. According to him, it is a construct with several dimensions. The dimensions of engagement include emotional, cognitive, and physical engagement. Employees who are mentally and emotionally connected to their roles and their work are engaged. When the employees disassociate themselves from their work and role emotionally and mentally, they are disengaged. Such employees are not performing their role completely and were almost robotic in their delivery of work performance.

Employee engagement was found to be significantly related to profitability, performance, customer retention, and business growth. When years of lower levels of engagement of organizations are compared with years with higher levels of engagement, the difference in financial performance of the organizations in those years were significant. (Gallup Organization, 2004). It is also found to be linked with workload, autonomy, rewards and support. As employee perceive greater support, experience adequate workload, have good amount of autonomy and recognition in their workplace, they tend to develop higher engagement towards their work (Maslach et al. 2001). A study by Simons (2013) conducted among call center employees demonstrates that organizations should take initiatives to increase the psychological capital. This will eventually be beneficial for both the management and employees as the higher the psychological capital of employees, the greater will be their engagement in their work and greater will be their commitment. The author discusses that employees who experience positive emotions are more likely to function effectively as an individual as well as a part of organization. Furthermore, the experience of engagement can be considered as optimistic state of mind and positive work experience. Since positive experiences lead to positive outcomes, and engaged employees tend to have higher attachment towards organizations, tend to stay in the organization for longer periods. This proves the causal relationship between engagement and commitment as well as the strong predictive relation between psychological capital and engagement. The author further elaborate that optimism

which is component of psychological capital is positively related to individual's acceptance of organization's values and aims. It signifies that the employees with higher psychological capital are willing to help the organization in accomplishing its goals and wish to be a part of the organization and maintain their membership with it.

Employee engagement has been studied as a mediating variable by Biswas (2013). He found that employee engagement mediates the relationship between perceived organizational support and organizational commitment. His study elaborates that when an employee perceives high level of organizational support, they are motivated to put more efforts towards their work. A higher level of efforts and engagement results in more trust and loyalty of employees towards their organization and hence higher commitment. Similarly, the study also analyzed the relation between person organization fit, employee engagement and organizational commitment. Person organization fit is the alignment of the employees' goals with values and organization's goals and values. Right person-organizational fit can lead to positive and desirable outcomes like reduced anxiety and increased commitment and dedication. It makes the job more meaningful for the employees and they feel higher psychological safety in the workplace which results in higher engagement. Since the employees have values congruent with the organizational values, they are entrusted and handed over with big responsibilities which gives them more authority and freedom. The additional responsibilities and honor given to the employee increase their belief that their organization appreciate them and care about them. In return, employees try to put more efforts towards their performance and contribute highly towards the goals of the organization, which can be seen through their higher levels of engagement and consequently their higher level of commitment towards their work. There are several more studies conducted to analyze the mediating role of employee engagement between variables. Al-Tit (2015) for instance, conducted a study in academic sector of Jordan. He analyzed and concluded that employee engagement mediates the relation between work environment and outcomes such as confidence in teaching, quality of research and teacher's emphasis on student's well-being. This emphasize the importance of engagement in academic sector and how it can be utilized to enhance the performance of teachers. The study goes on to discuss the mediating role of employee engagement between variables like co-worker relations, career growth opportunities, employees' pride associated with the organization, manager's trust and integrity, rewards & recognition, supervisor support, internal CSR practices, organizational justice, psychological empowerment, organizational culture and desirable outcomes like job satisfaction and organizational commitment. Liu's (2019) study also

analyzed the mediating effect of engagement between self-efficacy and organizational commitment. He proposed that employees who have strong self-efficacy beliefs, shows more efforts, consistency, and give more thoughts to their work which implies higher engagement. Higher self-efficacy related to work also indicates one's higher trust in their organization. Since the trust towards the organization results in positive work related behavior, employee shows higher levels of loyalty towards the firm. The results of the study proved the designed hypothesis and framework correct.

Another study by Saks (2006) states that flexible work timings, financial rewards and training program are important factors in enhancing employee engagement. The research also implies that if an employee perceive that the organization system is fair than employee tend to develop higher engagement. Furthermore, the study proves the significant relation between employee engagement and other positive outcomes like organizational citizenship behavior, intention to stay, and organizational commitment. Factors like work environment, leadership, co-workers support, compensation, and organizational policies also contributes to the engagement of employees. A supportive environment motivates employees to develop new skills and focus more on their work. Good leaders inspire employees. They communicate the role of an employee's work on the overall success of the organization. In this way the employee gets motivated and encourage to work more effectively. Moreover, supportive co-workers and good environment make employees feel safe and make them concentrate more on their job.

One of the studies on employee engagement by Ashfaq (2021) argues that ethical leaders and their behavior inspires the employees to follow their leaders. They tend to learn and improve their abilities due the guidance of their leaders. In this way the employees get more self-confidence and belief based on the tasks achieved and the abilities developed through the coaching and help. The good work environment developed as a result of the good leader increases the employees' engagement and this engagement leads to increased commitment of the employees. (Anitha, 2014)

Sandhya (2020) argues that proper onboarding and orientation plays an important role in building the involvement of new employees towards work. Providing necessary guidance and resources in the beginning leads to improved engagement during the tenure of the employee in the organization. Setting early goals and a focus on developmental plan can play a crucial role in this regard. The new employees should also be made aware about how their goals contribute to the organization's overall goals. Inclusion of employees in organizational goal setting and

provision of adequate job resources also have their significance. These factors motivate employees to put more efforts and pay more attention to their work. The study also highlights that work-life balance can also be held accountable for a good amount of positive change in employee engagement. The employer can offer options like work from home or flexible work timings. These measures will fulfill the requirement of higher involvement and commitment from employee's end. It will also lead to lower turnover rate.

Few researchers have linked employee engagement and commitment with personality traits of employees. For instance, Albrecht (2017) have discussed in his study that individuals with lively and bold social personality tend to show higher commitment and engagement towards their work. Individuals who form strong emotional connection with others will also develop higher commitment, as they will identify themselves as a part of the organization and would feel emotionally connected. The personality traits discussed here are linked with the components of psychological capital, more specifically self-efficacy which is further strongly associated with affective commitment. This could assist organization in various ways. Organizations can provide employees with job resources like work autonomy and control over work processes as it will make the employee more enthusiastic and energetic about their work. They will feel more attached to the organization afterwards. Organizations can also focus on testing the traits like extraversion and emotional stability of candidates to determine if they are fit for the job and if they would develop higher commitment towards the organization. This hypothesis is supported by JDR model, which implies that as the job resources are provided to employees in abundance, they are more likely to get motivated and involved in their work activities. The framework of our study is supported by JDR model as well.

**H5: Employee Engagement has a positive impact on Organizational Commitment.**

**H6: Employee Engagement mediates the relationship between Psychological Capital and Organizational Commitment.**

**H7: Employee Engagement mediates the relationship between Intellectual Capital and Organizational Commitment.**

## 2.5 Relationship among all Variables

Organizational commitment is the extent to which employees feel loyalty and dedication towards their organization. There are several antecedents of organizational commitment (Meyer, 1991). In current study the causal relation between Intellectual capital, psychological capital, and organizational commitment, with employee engagement playing the mediating role in the equation is being analyzed. The relations among the variables can mainly be defined by reciprocity principle. Intellectual capital includes social capital (trust, interdependence, communication among the members of organization), human capital (knowledge, skills, abilities, competencies, education, experience of employees), and structural capital (organizational, structure, policies, culture). When employees are provided with the resources like knowledge sharing and collaborative culture, co-workers and supervisors support, friendly policies, training and development opportunities to enhance skills and knowledge, they tend to feel obligated to reciprocate. They get highly motivated and more involved in their work. They put higher efforts to contribute towards the organizational goals. They get more engaged in their work. They also get emotionally attached to the organization due to these factors. Hence, it define the relation between intellectual capital, employee engagement, and organizational commitment. (Chen et al., 2012)

Psychological capital is composed of hope, resilience, self-efficacy, and optimism. Employees who have higher hope in results tend to put more effort and get less anxious in uncertain situations, when they are resilient they are able to deal with difficult situations more effectively, when they are optimistic, they are more motivated to work towards the goals; and when they have high self-efficacy they tend to deliver better results. When employers invest on the psychological well-being of employees, they feel valued and cared for. Therefore they try to reciprocate for the resources. Hence due to these factors employees tend to give more attention to their work, they get more engaged and involved in their work and get more attached to the organization and their work. (Liu, 2013)

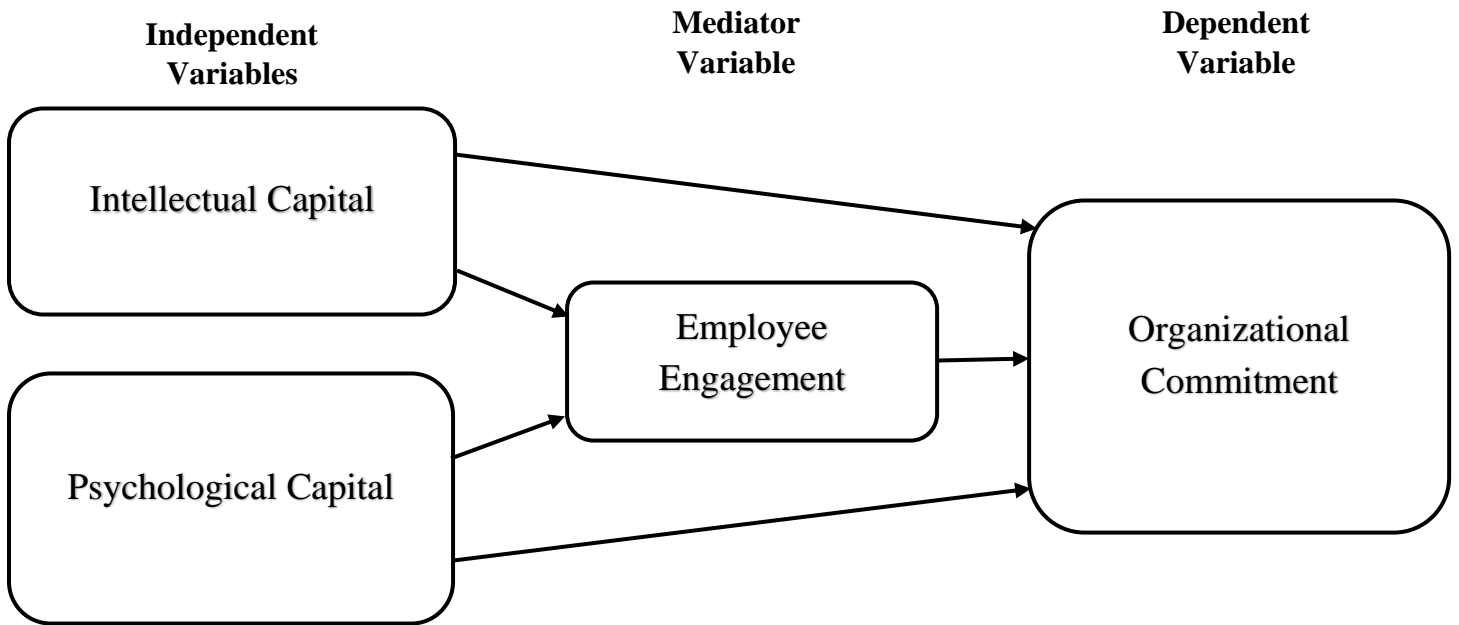
The mediation of engagement can be explained by the fact that the engagement of employees with work make them more attached to their work and increase their affective commitment as a result so it contributes to the relation between intellectual and psychological capital; and commitment. Intellectual capital and psychological capital are the job resources that employees received and with these resources they have the tools to perform better. Due to which they put more efforts and get more engaged. More engagement leads to more commitment. (Biswas, 2013).

## 2.6 Theory

The relationship among these variables can be explained by social exchange theory. Social exchange theory is the most effective and used theory that explains most of the workplace behaviors. It emerged back in 1920s. The theory mainly involves around the concept that social exchange includes a set of interactions that results in obligations. These interactions are mainly perceived as interdependent, where it is dependent on the action of other person. Reciprocal interdependence focuses on interpersonal exchange in which the action by one of them lead to the response by the other one. One party's action is dependent on other's behavior, as one of them take a step and other reciprocates. The relation between intellectual capital and organization commitment can be explained by this phenomenon. As the resources of intellectual capital are provided to employees in the shape of cooperative environment, training opportunities, knowledge sharing culture, and others, they feel obligated to reciprocate the action. They get more engaged in their work, they try to put more efforts in helping organization achieving its goals, and they get more emotionally attached to their work and organization as a result. Hence they develop higher levels of commitment. Similarly, through different techniques and tools, when organization invest in employees' psychological well-being, they are better able to perform and feel like they should also put efforts and value the organization as the organization valued them. Hence they get more engaged in their work and become more loyal towards the organization. (Cropanzano, 2005)



## 2.7 Theoretical Framework



**H1:** Psychological Capital has a positive impact on Organizational Commitment

**H2:** Psychological Capital has a positive impact on Employee Engagement.

**H3:** Intellectual Capital has a positive impact on Organizational Commitment.

**H4:** Intellectual Capital has a positive impact on Employee Engagement.

**H5:** Employee Engagement has a positive impact on Organizational Commitment.

**H6:** Employee Engagement mediates the relationship between Psychological Capital and Organizational Commitment.

**H7:** Employee Engagement mediates the relationship between Intellectual Capital and Organizational Commitment.

### **3. Research Methodology**

To study the relation between psychological capital, intellectual capital, organizational commitment, and employee engagement, the data collected from the sample is tested, analyzed, and evaluated.

The research methodology covers the methods and tools used to serve the purpose. It includes the unit of analysis, the sample frame, population, philosophy, strategy, etc. related to study which are used for the analysis and evaluation of the data collected for assessing the relation between the variables.

#### **3.1 Research Design**

##### **3.1.1. Type of study**

There are different techniques used to analyze the data collected from the subjects. The different techniques are used for different reasons. Qualitative research is more appropriate when a better understanding and knowledge about a concept is required, whereas quantitative is used when something is to be tested or analyzed.

The given research is carried out and analyzed through quantitative analysis. To test the hypothesis of the research, quantitative analysis was more suitable as it is more objective, acceptable, and fast. As the study was conducted over short period of time, it was more appropriate method. The research method used was cross-sectional method.

The study aims to analyze the relation between psychological capitals, intellectual capital, employee engagement, and organizational commitment. To analyze the strength and significance of the relation between them, correlational analysis will be performed on them.

It will be explanatory research as it will focus on gaining insight into the relatively new determinants of organizational commitment.

Furthermore, the study will evaluate the impact of psychological capital and intellectual capital on organizational commitment. Hence the study mainly relates to the cause and effect. For this purpose regression analysis will be done on the data collected from the sample.

### **3.1.2. Research strategy**

To test the formulated hypothesis, the data is collected through the primary source of the survey questionnaire. Questionnaires will be distributed among the teachers and PHD professors of universities across the capital city of Pakistan through physical visits to the institutions. Moreover, Google doc form of questionnaires are also sent through emails to professors for higher response rate. Questionnaires are more appropriate method for data collection here as it is time and cost efficient. It will generate more up-to-date and new information about the impact of psychological capital and intellectual capital on employee engagement and commitment as they are barely studied in Pakistan. The data is collected through stratified sampling.

### **3.1.3. Research philosophy**

There are several different philosophies of research that are applied for the gathering, analysis, and usage. Depending upon the belief, the current research is based on the observed and objectively defined reality. Hence here the research philosophy is positivism. The information will be gathered through objective methods like observations and well defined responses. Since the results are applicable to other organizations as well and can justify and explain the phenomenon under observation, as per the belief, the study can be considered as dualism researcher research.

### **3.1.4 Research approach**

As per the research philosophy, the current research uses a deductive approach. In deductive approach, the hypotheses are formulated based on previous theories and literature review. The existing information is evaluated to solidify or reject the ideas the author wants to pursue. Afterwards, the hypotheses are tested through specific research strategy designed such as questionnaires. This type of approach include review of literature, formulation of hypothesis, and designation of theoretical framework, data collection and analysis.

### **3.1.5. Data Analysis**

After data collection, the data is analyzed and evaluated through the statistical tool of Smart PLS software version 3. Regression analysis is done on the data to assess the impact of psychological capital on employee commitment and engagement. Correlation analysis is conducted to investigate the presence and strength of relationships among the variables.

### **3.2 Population & Sample**

Population is the whole group which the researcher attempt to draw conclusions about. The research aims to investigate the group for some purpose. Sample is the small portion of the population which is considered as the representative of the whole population. This is a small group from which the data is collected for analysis.

Therefore, the hypothesis and designed framework will be tested through the collection of data from the educational sector, more specifically from the PHD professors teaching in four of the universities across capital city of Pakistan. The universities are namely; Quaid e Azam University, Bahria University, Islamic International University, and National University of Science and Technology. The main reason of selecting these specific universities is the size. Large sized and medium sized universities are included to address the research gap in previous studies. The population of professors across Pakistani universities is approximately 37,397 according to the HEC website statistics. The population of PHDs in the selected universities are 1034. The aim of conducting the research in above mentioned universities is to further the research within large and medium sized organizations.

### **3.3. Sample frame**

The total PHDs in the four specified universities is 1034. According to Morgan sample size taker, the sample frame came out as 280. Therefore the data was aimed to be collected from at least 280 PHD professors from the universities.

### **3.4. Sampling technique**

The research will be conducted using stratified random sampling technique. Multi stage method is utilized for this study. After the division of population into sub-groups, simple random sampling is applied to the groups for the collection of data from the elements.

### **3.5 Operationalization of variables**

The questionnaire used for the current study is adopted from various authors' work. It is a simpler, more effective way to collect data from the sample. The questionnaire contains two sections. The first section is demographic section which includes age, gender, and organization name. For this section, nominal and ordinal scales were used. For the second section, the items of the questions related to the variables were included. In the second section, the items included are measured on 5 points Likert scale. The respondents were asked to indicate the degree of their agreement or disagreement with each item through choosing their response from these 5

points. The five points ranges from 1 as being “strongly disagree” which implies strongly disagreeing with the given statement, to 5 as being “strongly agree” implying strong agreement with the statement. In between there are 2 being “ disagree”, 3 being “ neutral”, and 4 being “disagree”. The items of the scales are differently numbered. The details of the scales adopted are mentioned below.

### ***3.5.1. Organizational Commitment (Dependent Variable)***

The scale of organizational commitment has 4-items which is adopted from Yoon and Thye (2002). Initially the scale was acquired from Mowday (1982).

### ***3.5.2. Intellectual Capital (Independent Variable)***

The scale of intellectual capital is adopted from Niqab et al. (2020).

### ***3.5.3. Psychological Capital (Independent Variable)***

The scale of the third construct, namely psychological capital is adopted from Lorenz et al. (2016).

### ***3.5.4. Employee Engagement (Mediating Variable)***

Lastly, the scale of mediating variable which is employee engagement is acquired from May et al. (2004). It is a 6-item scale including the dimensions of engagement, namely emotional, cognitive, and physical engagement.

## 4. Findings & Data Analysis

### Introduction

For the testing of designed framework and assumed hypotheses, the analysis was done of the data collected through 318 respondents by using Smart PLS. Correlation and regression analysis is done to analyze the relation between independent, dependent, and mediating variable. Regression analysis calculate the results of causal effect of independent and mediating variables on dependent variable. This section includes the tables, calculations, and explanations of the calculations generated through the analysis.

### 4.1 Frequency Tables and Demographics

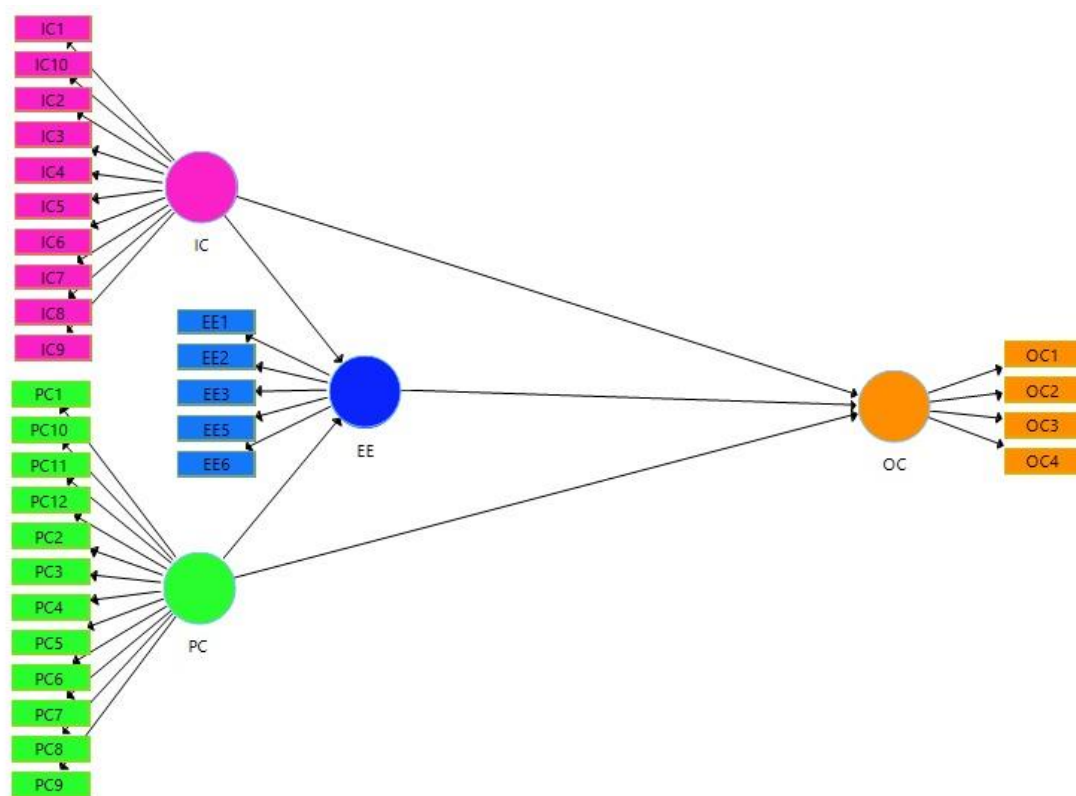
Demographic Variables	Type	Frequency	Percentage %
Gender	Female	166	52%
	Male	152	48%
Age	26-30	43	13.6%
	31-35	67	20.9%
	36-40	75	23.6%
	41-45	50	15.8%
	46-50	57	17.9%
	>50	26	8.2%
Organization Name	Bahria University, Islamabad.	80	25%
	Quaid e Azam University.	78	24.5%
	Islamic International University	74	23.5%
	National University of Science and Technology.	86	27%

The statistics of the demographic profiles of the respondents highlight that the ratio of males and female respondents are almost equal i.e. 52:48. The age of professors who made the highest contribution to the study is between 36-40 years, as the percentage of respondents from this category is 23.6%. Highest percentage (27%) of respondents belong to NUST University. This

is because the highest number of PHD professors belong to this university as compared to others.

## 4.2 Data Analysis using Smart PLS

Smart PLS is one of the relatively new softwares for the analysis of data and for examining the relationships among different variables. Structural Equation modelling is used to carry out the analysis. The SEM consists of two steps, namely structural model and measurement model. The structural model mainly assess the collinearity, coefficient of determinations ( $R^2$ ), and effect size ( $f^2$ ). Simply, the correlation and regression analysis are performed through this model. Measurement model assess the reliability, internal consistencies, composite reliability, convergent validity, and discriminant validity.



## 4.2.1 Reliability and Validity Analysis

For reliability analysis, firstly the PLS algorithm is used, and outer loadings are evaluated.

Outer loadings mainly explain the variable's item contribution towards its construct. The most acceptable range for outer loadings is above 0.6. It should exceed 0.5. (Maat et al., 2015)

Most of the values are above 0.6 which is a desirable range. The values implies that most of items contribute satisfactorily towards their construct. Some of the items whose values were not under acceptable range were deleted as they would affect the results adversely. The values are mentioned below in table no.4.

### 4.2.1.1. Convergent Validity

CV measures the extent to which a scale is related to other variables and other items of the same variable. In order to set up convergent validity, the factor loading, composite reliability, and average variance extracted are taken into consideration. Composite reliability summarize the internal consistency and reliability of variables. The desirable range of composite reliability is between 0.7 and 0.9. However, the ranges below 0.95 is also acceptable. The acceptable range of average variance extracted is above 0.5. (Lin et al., 2020; Hamid et al., 2017). The values given in the tables speak for itself. The variables have good internal consistency and they are reliable, as the values range within the acceptable range and are fairly above 0.7.

*Table no. 4 Factor Loading & Convergent Validity.*

Variables	Item Code	Factor Loading	Composite Reliability	Average Variance Extracted
Intellectual Capital	IC1	0.720	<b>0.933</b>	<b>0.608</b>
	IC2	0.748		
	IC3	0.770		
	IC4	0.797		
	IC5	0.823		
	IC6	0.781		
	IC7	0.792		
	IC8	0.796		



	<b>IC9</b>	<b>0.783</b>		
	<b>PC1</b>	<b>0.646</b>	<b>0.920</b>	<b>0.512</b>
	<b>PC2</b>	<b>0.760</b>		
	<b>PC3</b>	<b>0.725</b>		
	<b>PC5</b>	<b>0.753</b>		
	<b>PC6</b>	<b>0.729</b>		
Psychological Capital	<b>PC7</b>	<b>0.587</b>		
	<b>PC8</b>	<b>0.793</b>		
	<b>PC9</b>	<b>0.620</b>		
	<b>PC10</b>	<b>0.782</b>		
	<b>PC11</b>	<b>0.701</b>		
	<b>PC12</b>	<b>0.742</b>		
	<b>EE1</b>	<b>0.550</b>	<b>0.849</b>	<b>0.535</b>
	<b>EE2</b>	<b>0.682</b>		
Employee Engagement	<b>EE3</b>	<b>0.857</b>		
	<b>EE5</b>	<b>0.736</b>		
	<b>EE6</b>	<b>0.795</b>		
	<b>OC1</b>	<b>0.886</b>	<b>0.789</b>	<b>0.509</b>
Organizational Commitment	<b>OC2</b>	<b>0.891</b>		
	<b>OC3</b>	<b>0.576</b>		
	<b>OC4</b>	<b>0.560</b>		

#### 4.2.1.2 Discriminant Validity

It determines the degree to which one variable is different and distinct from other variables. There are three criteria to assess discriminant validity. Fornell-Lacker criteria, cross loading, and HTMT (Heterotrait-monotrait). The most recommended and trusted criteria is HTMT as it is considered more accurate/reliable than others. It is suggested that the values should not exceed more than 0.85-0.90. All the values of studied variables are below 0.85. It indicates that the variables of this study are not overlapping and are distinct. The values are given in table 5.

*Table no.5 Discriminant Validity with Heterotrait-Monotrait*

	Employee Engagement (EE)	Intellectual Capital (IC)	Organizational Commitment (OC)	Psychological Capital (PC)
Intellectual Capital	<b>0.662</b>			
Organizational Commitment	<b>0.720</b>	<b>0.762</b>		
Psychological Capital	<b>0.804</b>	<b>0.660</b>	<b>0.719</b>	

## 4.2.2. The Structural Model

For the assessment of developed structural model, and analysis of relation between the variables, the causal effect, and collinearity, the bootstrapping technique is utilized. It includes the collinearity assessment, path coefficient (Beta), R square, effect of f square.

To ensure that there is no multi-collinearity, VIF (variance inflation factor) is used in Smart PLS. The values below 3.3 are ideal and signifies that there no multi-collinearity between the variables. Multi-collinearity is unfavorably high correlation of an independent variable with other independent variables, which lowers the statistical significance of an independent variable.

*Collinearity Assessment table (Inner VIF Values)*

Organizational Commitment (OC)	
EE	<b>2.028</b>
IC	<b>1.693</b>
PC	<b>2.203</b>

The values in the table demonstrates that there is no multi-collinearity among the independent variables as the numbers are way below 3.3.

## 4.2.3 Regression Analysis

### 4.2.3.1 Path Co-efficient

For testing the hypotheses and confirming the significance of relation between the independent and dependent variables, bootstrapping technique generates the path co-efficient with beta values, t-values, and p-values. P values more than 0.05 shows the existence of insignificant relation. Hence, for the relations between independent and dependent variables to be significant, the p-values should be lower than 0.05. The beta shows the strength of relation. The beta value is the value which is the change in dependent values for every one unit change in predictor variable. As per the analysis, all the readings show significant results. Hence it implies that all our hypotheses are proven and there exists a significant and positive relation

among the independent and dependent variable. Moreover, the mediating role of employee engagement is also proved. However the direct impact of independent variables on dependent variable is stronger than indirect impact. The values are given in table no.6 and no.7.

***Table no.6 Path Co-efficient***

Hypothesis	$\beta$	<i>t-value</i>	<i>significance</i>
EE→OC	<b>0.154</b>	<b>2.372</b>	<b>0.018</b>
IC→EE	<b>0.227</b>	<b>3.905</b>	<b>0.000</b>
IC→OC	<b>0.413</b>	<b>6.741</b>	<b>0.000</b>
PC→EE	<b>0.551</b>	<b>9.987</b>	<b>0.000</b>
PC→OC	<b>0.348</b>	<b>6.359</b>	<b>0.000</b>

***Table no. 7 Mediation effect – Indirect effect***

Hypothesis	$\beta$	<i>t-values</i>	<i>significance</i>
IC→EE→OC	<b>0.035</b>	<b>2.026</b>	<b>0.044</b>
PC→EE→OC	<b>0.085</b>	<b>2.347</b>	<b>0.020</b>

*Table no.8 Summary of hypotheses*

<i>S#</i>	<b>Hypothesis</b>	<b>Results</b>
<b>H1</b>	Psychological Capital has a positive impact on Organizational Commitment.	<b>Confirmed/Significant</b>
<b>H2</b>	Psychological Capital has a positive impact on Employee Engagement.	<b>Confirmed/Significant</b>
<b>H3</b>	Intellectual Capital has a positive impact on Organizational Commitment.	<b>Confirmed/Significant</b>
<b>H4</b>	Intellectual Capital has a positive impact on Employee Engagement.	<b>Confirmed/Significant</b>
<b>H5</b>	Employee Engagement has a positive impact on Organizational Commitment.	<b>Confirmed/Significant</b>
<b>H6</b>	Employee Engagement mediates the relationship between Psychological Capital and Organizational Commitment.	<b>Confirmed/Significant</b>
<b>H7</b>	Employee Engagement mediates the relationship between Intellectual Capital and Organizational Commitment.	<b>Confirmed/Significant</b>

**4.2.3.2 Co-efficient of determination**

The R-square values ranges from 0-1. Higher values, which are close to 1 shows higher predictive power. The R-square value of dependent variable in this study is **0.478**, which shows moderate level of predictive accuracy. It indicates that **47.8%** of the change in organizational commitment is determined by psychological capital, intellectual capital, and employee engagement combined.

Dependent Variable	R2
Organizational Commitment	<b>0.478</b>

#### 4.2.3.3 Effect size (F2)

Effect size determines the extent of effect of these variables on independent variable. Few researchers have defined the criteria for  $f^2$  effect, it was suggested that  $f^2 \geq 0.02$  is considered small effect,  $f^2 \geq 0.15$  is considered medium effect, and  $f^2 \geq 0.35$  is considered large effect. (Selya et al., 2012). The analysis indicates that intellectual capital has a medium effect on organizational commitment, whereas psychological capital and employee engagement has a small effect organizational commitment.

*Table no.9 Effect size of f-square*

Variable	Effect on Organizational Commitment
EE	<b>0.022 (small effect)</b>
IC	<b>0.162 (medium effect)</b>
PC	<b>0.060 (small effect)</b>

## 5. Discussion and Conclusion

### 5.1. Discussion of the Findings

Organizational commitment plays an important role in the success and growth of organization. It can assist an organization in achieving long-term goals and gain sustainable competitive advantage. Hence, committed and dedicated employees are one of the most valuable assets that can be possessed by the company. The current study focuses on the determinants of organizational commitment. It analyzes the impact of intellectual capital, psychological capital, and employee engagement on organizational commitment, with employee engagement playing the mediating role. The given study was conducted in educational sector of Pakistan. The data was collected through questionnaires from different sized organizations around the capital of the country. The study aimed to find the significance of psychological well-being and provision of job resources on the development and enhancement of organizational commitment.

The first hypothesis that was formulated based on past literature, that psychological capital has a positive impact on organizational commitment has been proved. Based on the regression results generated through data analysis, it can be said that the significant and positive impact of psychological capital on organizational commitment has been proven. The results indicates that as an employee is valued through the provision of resources that enhances their psychological well-being, they tend to develop higher attachment towards the organization. They become more loyal and stay longer with the organization. Hence, it can be said that employees who become more hopeful about the future, develop higher self-efficacy, become genuinely optimistic, and resilient due to the measures taken by the organization tend to develop higher commitment towards the organization. The findings are consistent with the previous findings of Yalcin (2016), which implies that employees are more equipped to perform better when their psychological well-being is considered. Moreover, as they realize that their organization is considering them as an important part of their team, they feel proud to be part of the organization and contribute more towards the goals of the organization.

The second hypothesis which suggests that psychological capital has a positive impact on employee engagement is also proven. The results indicate a positive, strong, and significant relation between psychological capital and employee engagement. The findings are similar to the findings of previous research by Soni and Rastogi (2019). It suggests that with better psychological health, the employees are able to perform better, they deal with difficult situation in a more effective way and they put higher efforts as they believe in their capabilities. They

give more attention to their work and higher resources enable them to understand their work better and get more engaged. With the employer valuing the employees, they also get more engaged in return. They consider organizational goals as their goals and put more efforts in achieving them.

The third hypothesis states that intellectual capital has a positive impact on organizational commitment. This has also been proven through the results. The significant and positive relation suggests that employees when provided with useful job resources like cooperative environment, co-worker and supervisor support, knowledge sharing culture, and training and development opportunities to enhance their knowledge and skills, they tend to develop higher commitment towards the organization. As organization provides them with all the effective and required job resources in abundance, they feel included and valued. Therefore, they feel obligated to give a generous return in the form of more effective performance and higher loyalty. The results are in aligned with previous research of Zeinoddini et al. conducted in 2015.

The fourth hypothesis was also proven through regression analysis. The intellectual capital has a positive impact on employee engagement. As the employee receives value and importance from organization, and provided with all required job resources, employees are better equipped to get more involved in their jobs and get the work done more effectively. Hence their engagement increases.

The fifth hypothesis was confirmed as well given the result of regression analysis. As the employee gets more involved in their work, he/she tend to get attached to the organization. With higher engagement towards work and the efforts they put, they get more attached to work and tend stay longer in the organization. Moreover, as employee get highly engaged, they get better results and higher motivation to invest more, hence they get more committed to their work and organization. The results are consistent with the findings of Sutyem et al. (2020)

The sixth hypothesis, which states that employee engagement mediates the relation between psychological capital and organizational commitment is also proven. The results signifies that when employees' psychological capital increases, their psychological well-being enhances, their hope, optimism, resilience, and self-efficacy increase as a result of organization's efforts. Hence they feel obligated towards the organization. They as a result get more engaged and involved in their work. With more involvement in their work and as a result of importance received from organization, they get more attached towards the organization, want to be a part of it, and become more loyal towards it. (Simons, 2013)



The seventh hypothesis is also proved, indicating that employee engagement mediates the relation between intellectual capital and organizational commitment. With higher and more effective job resources provided to the employee, the employees are able to get more engaged in work. They feel obligated to be loyal and dedicated towards the organization, hence higher commitment is developed.

## **5.2. Conclusion of the Study**

The current study presented a unique framework with intellectual capital and psychological capital taken as independent variables and employee engagement plays the role of mediating variable, to study their impact on organizational commitment. The hypotheses of the study are proven through regression analysis. Overall the study reveals several findings that could be beneficial for the organizations in improving the commitment of their employees. The study supported by social exchange theory, signifies the high impact of various job resources on the commitment and loyalty of employees towards their organization. Organizations needs to consider and invest in these resources through different ways in order to achieve the target of higher loyalty and lower turnover rate. The study further highlights that these resources include psychological well-being, knowledge sharing and cooperative culture, more effective policies, provision of better IT resources required by the employees specific to their work, support and collaboration among members, and training facilities. The study can be utilized in educational sector to enhance the effectiveness of teachers, and in other industries as well. These factors may include aspects that are different in different industries, however, the results can be applied and replicated.

## **5.3. Limitations of the Study**

The research was conducted within a very small time period and limited sample size. Hence the generalizability of the study got affected. The study include a very limited area including the capital city of Pakistan. The study could include institutions from different cities to make the results more generalizable and include the differences exist between the cities. Moreover, only a single sector is included in the study, which could hinder the replicability and generalizability as well. The study is conducted using cross-sectional method, however it may require to be studied through longitudinal method. As cross-sectional method does not include the variability that can occur over time. The study is confined within a single country and cultural context is not taken into consideration. The components of organizational commitment are not studied separately. Although the results are significant, it is not specified which

component of commitment is influenced more through the intellectual and psychological capital.

## **5.4. Future Recommendations**

For further research, the same framework can be studied in different sectors to analyze if the results are applicable in all industries. Similarly, different countries can also be included to analyze if the cultural factors have a high impact on the results. The hypotheses can also be analyzed through longitudinal study to include the variability occurs over time in the studied factors. A study can also be conducted with each component of organizational commitment studied separately. In this way the impact on each component can be studied separately to analyze which factor is effected more. Similarly the impact of four separate components for psychological capital can also be studied separately. For future research, a larger sample size can also be included to increase the accuracy of results.

## **5.5. Implications for Practice**

### **5.5.1. Theoretical Implications**

The given study furthers the literature on intellectual capital, psychological capital, organizational commitment, and employee engagement in the context of educational sector. It proposes a unique model to define the factors which determine organizational commitment. On the basis of results, the given research make several theoretical contributions. Firstly, the results indicates that development of intellectual capital leads to organizational commitment. Secondly, it defines the role of psychological well-being play in building organizational commitment. Finally the study identifies the mediating role of employee engagement. Hence, Intellectual capital and psychological capital are important variables in determining the commitment of employees. This study concludes that educational sector can enhance the commitment of its employees and quality of education through sources other than job satisfaction and financial rewards.

### 5.5.2. Practical Implications

Through the help of findings of this study, organizations can take several measures to improve the commitment of their employees. Organizations can develop training programs to enhance their competencies and skills, which are components of human capital. Job rotation can also be used to increase experience as well as human capital. As job rotation give diverse and different experiences to employees in the organization. In order to increase commitment, the management should attempt to identify the characteristics of their staff. By identifying the staff characteristics, the management can find ways to enhance their performance and commitment.

To enhance the psychological capital, organizations can increase coaching and mentoring practices. Through such practices, employees can be regularly evaluated for their psychological well-being, and feedback can be provided to develop their positive and desired abilities. The organization can also introduce feedback system for employees regarding their superiors. It will not only enhance the performance of managers and superiors but will also improve the psychological well-being of employees. The employees who perform well should be awarded appreciation letter as well to increase their self-efficacy. Organizations should also aim to recruit employees who would fit in their knowledge sharing culture to increase their commitment and intellectual capital of the organization.

The organizations should also focus on enhancing their socialization process by arranging social events and team building activities. It can increase human capital as well as social capital which leads to better commitment. They should also focus on personal development of employees and degrade too much competition to improve workplace relations. Moreover, a more collaborative culture should be promoted for improved social capital.

For further betterment of human capital, requirement based trainings and developments are required. The organization can introduce motivational training program and confidence development exercises. This will also enhance the psychological capital as well as human capital. They can also design such programs, where they can take assistance of external expertise for training content, material, and trainers. Furthermore, the organizations should manage their information systems through data analysis bases for more accurate data and better decision making. A better structural capital can be built through implementing a learning and development culture in the organization. In order to build engagement, the organization can help employees in setting goals that are meaningful and aligned with the goals of the organization.

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## Appendix

### Section-I Demographics:

Personal Information	
<b>Age</b>	<ul style="list-style-type: none"><li><input type="radio"/> Less Than 25</li><li><input type="radio"/> 26-30</li><li><input type="radio"/> 31- 35</li><li><input type="radio"/> 36-40</li><li><input type="radio"/> 41-45</li><li><input type="radio"/> 46-50</li><li><input type="radio"/> 50 Or Above</li></ul>
<b>Gender</b>	<ul style="list-style-type: none"><li><input type="radio"/> Male</li><li><input type="radio"/> Female</li><li><input type="radio"/> Transgender</li></ul>
<b>Organizational Name</b>	<ul style="list-style-type: none"><li><input type="radio"/> Bahria University Islamabad</li><li><input type="radio"/> Islamic International University Islamabad</li><li><input type="radio"/> NUST University Islamabad</li><li><input type="radio"/> Quaid E Azam University Islamabad</li></ul>

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**Section Questionnaire:**

**Direction:** Please check (✓ ) and rate yourself honestly based on what you actually believe given in the given statements using the following scales:

Responses to each item are measured on a 5-point scale with scale point anchors labelled: (1) strongly disagree; (2) disagree; (3) Neutral; (4) Agree; (5) Strongly Agreed.

		<b>Strongly Disagree (1)</b>	<b>Disagree (2)</b>	<b>Neutral (3)</b>	<b>Agree (4)</b>	<b>Strongly Agree (5)</b>
<b>A. Organizational Commitment</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1.	I am proud to tell others I am an employee of this company.					
2.	I speak highly of the company to my friends.					
3.	I feel very little loyalty to this company.					
4.	I don't care about the fate of the company in which I work.					
<b>B. Intellectual Capital</b>		<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1.	Mutual trust among the teachers has led to co-operation in various activities					
2.	Decent behavior of our professors with directors, dean, and students reflects their good social relations in our university.					
3.	Good social relations among the teachers/professors have developed an effective social structure in our university.					
4.	Best practice of social relations among our dean, directors, professors, and students is a step towards societal change.					
5.	Our university is highly inclined towards technical trainings, like ICT trainings					

6.	Our university is highly inclined towards the provision of resources like ICT, Multimedia etc.					
7.	Our university spend a good amount of time on in-service trainings.					
8.	Our university spend a good amount of money on in-service trainings.					
9.	Continuous professional development of teachers is an integral part of our university.					
10.	Continuous professional development of teachers contributes to the performance of our university.					
11.	Our university encourages teachers to enhance their academic and professional qualification.					
	<b>C. Psychological Capital</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1	If I should find myself in a jam, I could think of many ways to get out of it.					
2	Right now, I see myself as being pretty successful.					
3	I can think of many ways to reach my current goals.					
4	I am looking forward to the life ahead of me.					
5	The future holds a lot of good in store for me.					
6	Overall, I expect more good things to happen to me than bad.					
7	Sometimes I make myself do things whether I want to or not					
8.	When I'm in a difficult situation, I can usually find my way out of it					
9.	It's okay if there are people who don't like me.					

10.	I am confident that I could deal efficiently with unexpected events.					
11.	I can solve most problems if I invest the necessary effort.					
12.	I can remain calm when facing difficulties because I can rely on my coping abilities.					
	<b>D. Employee Engagement</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>
1.	Performing my job is so absorbing that I forget about everything else.					
2.	I am rarely distracted when performing my job.					
3.	I really put my heart into my job.					
4.	I often feel emotionally detached from my job.					
5.	I exert a lot of energy performing my job.					
6.	I stay until the job is done.					

## maha sadaf

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- 5** AL-TIT, AHMAD, and Mohammad Hunitie. "The Mediating Effect of Employee Engagement between Its Antecedents and Consequences", Journal of Management Research, 2015.  
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- 6** Bader Yousef Obeidat, Ayman Bahjat Abdallah, Noor Osama Aqqad, Abdel Hakeem Oqlah M. Akhoershiedah, Mahmoud Maqableh. "The Effect of Intellectual Capital on Organizational Performance: The Mediating Role of Knowledge Sharing", Communications and Network, 2017  
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- 7** Changxian Sun, Yurong Xing, Yuting Wen, Xia Wan, Yaping Ding, Yan Cui, Wenhui Xu, Xiaoxiao Wang, Hongling Xia, Qian Zhang. "Association between career adaptability and turnover intention: the mediating role of psychological capital", Research Square Platform LLC, 2022  
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