The Impact of Intellectual Capital on Task Performance in Educational Sector of Lahore: Mediating role of Organizational Learning, and Innovative Work Behavior

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Abstract

This research looks at the impact of intellectual capital (IC) through the intervening mechanism of organizational learning (OL) and innovative work behavior (IWB) on task performance (TP) in the education sector of Lahore, Pakistan. To accomplish the purpose, a theoretical framework has been made in line with literature review, using resource orchestration theory. Pretested investigative tool was used to accomplish a survey from public/private universities, and colleges in the district of Lahore, during October 2022 to January 2023. Quantitative and cross-sectional approach has been taken into consideration using Partial Least Square Structural Equation Modeling (PLS-SEM) based on a sample of 361 questionnaires. Out of which 340 answered, 10 incomplete and 11 forms returned unanswered. Regression analysis was applied for hypothesis testing. The main significance of this research is that the performance requirements and improvements in teacher quality will lead to students having the highest level of knowledge, which will help Pakistan rise to the top of the world soon. To enhance the performance of teachers and the organization, the decision taken for the improvement by the organization is to reward their teachers for motivating them to stay. Since the results relate to a particular point in time, the study has the cross-sectional research limitation. Future research can be done based upon longitudinal analysis in the current sample as part of a future line of research to address the gap. Future research can be expanded to another region of Pakistan.

Keywords: Innovative Work Behavior, Organizational Learning, Intellectual Capital, Task Performance, and Partial Least Square structural equation modeling (PLS-SEM)

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1. Introduction

Understanding the foundation of a firm's sustainable competitive advantage, this is one of the main research areas in the field of Intellectual Capital (IC). Studies have largely been organized based on a single framework since 1960s, which suggested that firms achieve sustainable competitive advantage by putting into practice strategies that make use of their own internal power (resources), by responding to opportunities outside the firm, by neutralizing external threats, and by avoiding internal weaknesses (Dahiyat, Khasawneh, Bontis, & Al-Dahiyat, 2023). It is critical to comprehend the variables that affect performance in the educational sector in Lahore, Pakistan, which has undergone significant changes in recent years. Among the most important factors influencing success in this sector are Intellectual Capital (IC), Organizational Learning (OL), and Innovative Work Behavior (IWB). This study seeks to investigate how these variables affect task performance (TP) in Lahore's educational sector.

In today's rapidly growing economy, IC is becoming an important aspect for organizations' long-term revenue. In the new strategic management era, IC evaluation is becoming one of the most significant and relevant topics (Shakina & Barajas, 2012). Many researchers studied the impact of IC like Kalkan, Bozkurt, & Arman, (2014) explored the influence of IC on the company's performance (Haider, Zubair, Tehseen, Iqbal, & Sohail, 2023). Due to the international competition, there is a general recognition that IC is an important factor for economic growth (Kalkan et al., 2014). Individual's originality in terms of their personality traits, actions, and outcomes has been studied. Additionally, it is concentrated on a personality-based component of individual creativity known as general readiness to change (Hurt, Joseph, & Cook, 1977).

IWB typically contains the study of generating unique ideas and opportunities. It also comprises behaviors which are aiming at applying change and unique knowledge or improving policies and procedures to increase the personal and business performance (Miles & Snow, 1984). The goal of OL is to improve people's behaviour and abilities so that the organization can respond to its environment more effectively. This will be focusing on improving OL potential and how to generate, direct access to IC. This study of IC, OL, and IWB on TP in Educational Sector in the region of Lahore will be riveted.

Education is a process that facilitates learning, knowledge acquisition, talents, habits values, and beliefs (Younas, Khan, Hussain, Naz, & Saleem, 2023). The education sector is an important part of an economy, so it needs to be involved in local, provincial, or domestic progress plans. Pakistan's education system has been managed by provisional government and federal Ministry. The role of federal government is to help schools in curriculum development, certification, and funding including R&D department (Iqbal, Yousaf, Shaheen, & Nisa, 2023). In Pakistan, education will improve as a result, and everyone will be accepted. The educational system is slowly improving, despite the government of Pakistan's efforts. The world of education today is one that is extremely challenging and complex. Competition from other institutions has intensified. Government money, meanwhile, has also been scarce (Yasmin, Naseem, & Masso, 2019).

The study suggests that IC is currently a crucial issue in management. In this regard, this current research significantly adds to the body of literature about IC,
specifically in Pakistan's educational sector. Pakistan is currently an emerging economy with many areas of social, political, and economic uncertainty; however, the educational sector is significantly improved in contrast to other business sectors (Jehanzeb, 2022). After evaluating these two crucial variables, the primary goal of this study is to examine how IC affects OL, IWB, and TP.

The purpose of this research is to ascertain how IC, OL, and IWB affect TP in Lahore's educational sector. We will investigate the connections between these factors and pinpoint the primary influences on TP in the educational sector by reviewing the literature. This proposed study will look more closely at the issue of how effectively the educational sector will work to raise the degree of consistency across the country. More government funding should be used, and trained and qualified staff employees should be promoted.

After reviewing literature, the gap, which has, came across is that there is lack of performance and satisfaction in educational sector related to teachers, which needs further focusing. The teaching of postgraduate has been the subject of some recent studies (Nayazi & Khalid, 2023). This made it possible to compare institutions in an organized manner, pointing out areas for potential future research and institute development. As a result, this research is likely to assess the role of IC in educational sector and address the gap noted in earlier literature. Previous research by (Khan, 2018; Yasmin et al., 2019) stated that in the context of the literature study found that there are not many notable studies on OL, TP, and IC in educational sector. This research not only fills the gap, but it also provides guidance for improving IC activities and hence, improves the overall productivity level.

1.1. Objectives

In a challenging & rapidly changing environment in which IC plays a significant role to enhance the performance of teachers in educational sector. Following are some of the objectives will the study was carried out.

- To examine the effect of Intellectual Capital on Task Performance
- To study the effect of Intellectual Capital on Organizational Learning
- To study the connection of Intellectual Capital and Task Performance if there is mediating role of Innovative Work Behavior and mediating role of Organizational Learning.

1.2. Research Questions

- What is the impact of intellectual capital on task performance?
- What is the impact of intellectual capital on organizational learning?
- What is the impact of organizational learning on task performance?
- What is the impact of intellectual capital on innovative work behavior?
- What is the impact of innovative work behavior on task performance?
2. Literature Review

2.2. Intellectual Capital

IC is the collective knowledge that an organization has ingrained in its network of relationships, organizational procedures, and employees (Sharabati, Jawad, & Bontis, 2010). John Kenneth Galbraith utilized the IC concept for the first time in 1969. Tom Stewart populated the idea of IC in "Brainpower", which was published in 1991 by Fortune Magazine. In the literature, IC is defined in a variety of ways. Researchers have found that increasing a firm's intellectual capital is crucial for increasing performance. Effective IC management will enable a company's management to boost performance (Soewarno & Tjahjadi, 2020).

The majority of businesses are unaware of the value and significance of IC, which is the basis of competitive advantage (Mehralian, Moradi, & Babapour, 2022). Moreover, IC of any organization can able to create the value because IC is the full bucket of knowledge, technology, and the system of communication, learning, customer and supplier relations (Kannan & Aulbur, 2004).

2.2.1. Human Capital

Human capital is seen as a significant and vital intangible asset in many firms. Human capital has been described as a crucial component for boosting employee productivity, enhancing an organization's resources, and providing a competitive advantage (Schultz, 1993). Measures of employee training, educational background, and other specialized advantages are considered part of human capital (Melnyk, Kubatko, Matsenko, Balatskyi, & Serdyukov, 2021). These factors improve employees' knowledge,
abilities, and standards, as well as their satisfaction with their work and performance (Kalkan et al., 2014).

2.2.2. Structural Capital

Structural capital refers to all non-human elements of fact in institutions, such as databanks, organizational charts, procedure manuals, policies, and procedures (AlQershi, Mokhtar, & Abas, 2022). It also includes anything else that adds to the value of the organization besides its tangible assets. As "what remains in the company when employees go home for the night," (Kalkan et al., 2014).

2.2.3. Relational Capital

Relational capital is another word for relational capital. Expand your network of contacts through relational capital organization to improve satisfaction and dependability (Kalkan et al., 2014). Relational capital adds value to a business's relationships with suppliers, customers, and other parties by demonstrating the commitment and consideration of those involved in the project (Walecka, 2021).

2.3. Nexus between IC and TP

It is well acknowledged that organizations can boost productivity and decrease production waste by participating in management and environmental initiatives. Additionally, it sets relatively high prices for goods, improves corporate reputations, and may therefore help a business gain a competitive edge given current environmental trends (Inkpen, 1998; Shrivastava, 1995). Chuang & Huang, (2018) contend that an organization's active involvement in acquiring knowledge and resources results in greater environmental performance. IC can save environmental expenses and increase staff professional knowledge and comprehension of concepts and energy-saving technologies when internal effects are taken into account (Suryani & Nadhiroh, 2020). The concepts of IC and task performance are defined in the remaining portion of this part, where we also present our first hypothesis.

Prior studies have demonstrated a positive connection between corporate environmental ethics, relationship learning, and performance when human capital is developed (Asiaei, Jusoh, Barani, & Asiaei, 2022). According to (Huang, Wu, Wang, & Boulanger, 2011), having human capital opens the way for an organization to adhere to international environmental standards and creates value in response to consumers' rising environmental demands.

Widener, (2006) contends that weak systems and processes prevent businesses from reaping the rewards of their human capital. In practice, structural capital creates a supportive climate that encourages and motivates the organization's members to contribute to environmental protection, thereby enhancing task performance (Ahmed, Guozhu, Mubarik, Khan, & Khan, 2020; Ali, Hussin, Haddad, Al-Araj, & Abed, 2021).

According to Wang, Shen, Chen, & Carmeli, (2021), relationships between a company's partners, such as its customers, suppliers, network members, and rivals, are now widely regarded as the primary predictors of environmental responsibility and pro-environment success in the context of organizations.

\(H_1: \text{Intellectual Capital has a positive effect on Task Performance.}\)
2.4. Nexus between IC and OL

Learning capability could be a main component of the human issue. People learn before getting into the organization (Gomes, Seman, Berndt, & Bogoni, 2022). However, the voice communication here is over the information and therefore the talents that workers learn once getting into the organization and is named as structure learning (Jamali, Khoury, & Sahyoun, 2006). It is not a stable scenario or a restricted goal. Consequently, a continuous process of adjusting to changing environmental conditions and progress in which the clusters periodically (Haider et al., 2023). The organization inspired to develop talents, information and consent on the organization’s goal (Farsani, Bidmeshgipour, Habibi, & Rashidi, 2012). Furthermore, it has been stated that IC contains all of the assets through mental activities like innovation, acquisition, and creating data (Lin, Fan, Wallace, & Zhang, 2007). Intellectual capital affects in positive manner of data management and structure learning will increase (Stevanović & Pucar, 2012).

It has been analyzed that most essential competitive approach is human resource training and holding in info of primary based economy (Pfeffer, 1994). Structure learning increase through employee’s performance because due to good performance, new data will be generated (Farsani et al., 2012). Structure learning has strong and important relationship with human capital. Structures and negative aspect determination procedure and generating values in business square measure dedicated to the structure capital. Structures embody total structure procedure, structure strategy and also the ability to use info technology (Lekić, Vapa, Rajaković, & Lekić, 2020).

Organizational culture can be helpful in increasing the structure learning. Like a company encourages the setting of informal learning. That culture develops the employee’s temperament to share data (Erickson & Rothberg, 2009). Structural capital can facilitate the thought progress across the organization and can cut back the inequity in decision (Farsani et al., 2012). Therefore, structural capital is playing an important role with structural learning. Employees with high level of skills with external atmosphere, discover additional possibilities to access totally different resources (Erickson & Rothberg, 2009). Organizational link with information and knowledgeable centers, analysis during this method, organizations received additional data from their customers to extend structure learning (Farsani et al., 2012). Therefore, the relative capital has vital relationship with organizational learning (Lashari, Nazir, & Rana, 2020). Developing employees’ abilities as well as their knowledge is also a part of organizational learning, which will ultimately accelerate an organization’s growth by fostering a flexible work environment (Malik & Mehmood, 2022). Therefore, hypothesis, which has been proposed, is as follows:

\[ H_2: \text{Intellectual Capital has a positive effect on Organizational Learning} \]

2.5. Nexus between IC and IWB

It has been tough to meet different amendments & to be able to make a path during novelty. The company’s purpose isn’t to produce for their consumers but on the other hand, extend worth & creativity (Örnek & Ayas, 2015). For having place in the market and their survival, businesses largely target their product and move towards innovation. IWB can only come out by accomplishment of new companies’ considerations. It sketched
as a remote behavior that provides staff to characterize different and valued thoughts, processes and merchandise to be procurable (de Frutos, Martín, & Sánchez, 2019).

IWB is a process, which consists of procedures of opening thoughts & their completion. New output is predicted to be accomplished because of its results (Farrukh, Meng, Raza, & Wu, 2022). Once its go through with a tough time within the business, and the output is unacceptable or innovation would like is determined, it's done that the unique actions ought to be started (Örnek & Ayas, 2015). Most of the researchers working on unique actions techniques depict stages of novelty procedure in different options. It has also been explored that IWB has multi step procedures (Scott & Bruce, 1994). In every part of this multi-step procedure, many actions, steps, and attitudes of other individual square measure accessible (Hosseini & Haghighi Shirazi, 2021). Shane processes many environmental phases and personal options as main initiator within the formation of innovative behavior. It has been described that there are four stages of IWB. These are exploration of downside, plan cohort, plan advocating and execution of innovative idea (Örnek & Ayas, 2015). The employee may have: their willingness to be innovative and the atmosphere for innovative work in order to maximize innovative work behaviour or innovation in the company (Rafique, Arshad, & SabirAsrar Ahmed, 2022). Hence, hypothesis which has been proposed is as follows:

H₃: Intellectual Capital has a positive effect on Innovative Work Behavior

2.6. Nexus between OL, IWB and TP

Task performance is one of the most obvious themes being challenged mainly by the administrations. Road map should be sketch because it is very important in the performance measures. It is impracticable for organization to achieve such matter, which will not be easily calculated. Different types of research work, which is related to task performance should also be, measured which will ultimately fulfill educational works. Task performance is a critical factor to investigate researches. It is a righteous and realistic thought. Performance activities & estimate gives a chance to relate individuals success level, their creation and collection associate with specific measures (Örnek & Ayas, 2015).

Main aim of task performance is to focus on making profits for the organization. Different divisions has been added in companies on the other hand enhance personal grounds has been met in companies (Caniëls & Veld, 2019). The reason behind this is that it is quiet tricky to achieve such kind of methods. It is also difficult to contribute to the information connecting businesses. Innovation that plays an important dynamic role mainly in customer capital, which give rise in performances of businesses by creating values to the product and services (Örnek & Ayas, 2015).

H₄: Organizational Learning has a significant and a positive association with Task Performance

H₅: Innovative Work Behavior has a significant and a positive impact with Task Performance

2.7. Intervening mechanism of OL and IWB

OL is an ongoing process that has a positive long-term impact on an organization's success (Malik & Mehmood, 2022). Since the 1990s by Bapuji & Crossan, (2004), has stated
that OL has been a topic of study, largely motivated by the desire to optimize the use of knowledge within organizations (Easterby & Lyles, 2005). You could think of OL as the process by which organizations grow. Any adjustments to organizational practices that lead to gains in a company’s success are referred to as this learning (DiBella, Nevis, & Gould, 2022). Learning capacity, which is a critical factor in determining organizational success and innovation potential, is precisely a collection of intangible assets that a company employs to create new kinds of competitive advantage (Sancho-zamora, Hernández-perlines, Peña-garcía, & Gutiérrez-broncano, 2022).

Despite being readily linked to the resource- and capability-based approach, the perspective of organizational capacities, and the OL literature, the concept was developed from it (Al-Sulami, Hashim, Ali, & Abduljabbar, 2023). Therefore, learning capability necessitates the incorporation of other particular capabilities into the business, and its gradual growth and application offers a source of competitive advantage. Recent research, like that done by Cui, Lim, & Song, (2022), demonstrates that certain organizational traits, like vertical integration, organizational size, openness to novel solutions, and/or product variety, influence the adoption of innovations.

**H6:** Intellectual Capital has a positive and a significant connection with task performance through the mediating role of Organizational Learning

**H7:** Intellectual Capital has a positive and a significant connection with task performance through the mediating role of Innovative Work Behavior

3. **Research Methodology**

With the aid of a survey questionnaire, quantitative and descriptive research was the method used in this study. Population comprised of different private and public universities, and colleges in Lahore, Pakistan. The units of analysis for this study were Lecturers, Senior Lecturers, Assistant Professors, and Associate Professors. Techniques used for this study was cross-sectional. Questionnaire has been distributed which comprised of 2 sections. In section 1, data related to demographics has been asked. On the other hand, 20 questions related to four variables have been asked in section 2. IC (5 items) (Bontis, 1998), IWB (5 items) (Clark & Henderson, 1990; Tushman & Anderson, 1986), OL (5 items) (SurveyMonkey, 2012), and TP (5 items) (Williams & Anderson, 1991).

As a general guideline, we should have 10 to 15 cases of data per predictor for the sample size of our study (Field, 2013). Our study comprised of four variables, therefore, the sample size can be calculated as follows: 15*4 = 60 people. Kline, (2015) states that a minimum sample size of 200 should be used for structural equation modeling. The number of items in the survey questionnaire * 10 respondents from the desired population can be used to calculate the sample size. Hence, there are 20 items in our study, the reasonable sample size can be 20 * 10 = 200. There is a significant chance that there will be missing data if we target only 200 people for a variety of reasons, including job rotation, hectic work schedules, medical leave, and biased responses. We therefore intended to focus on 360 responders. If the sample size is large enough, we can extrapolate the findings to include our intended audience (Field, 2013).
4. Results

4.2. Descriptive Analysis

Table 1 shows some of the respondent's characteristics such as age, qualifications, experience, and designation. Most of the respondents were from the age group of 50 or above (58.8%). Having the highest qualification of MBA (44.1%), along with 16-20 years of experience (48.2%), and securing a position of Lecturer (32.0%).

Table 1: Respondents Characteristics

<table>
<thead>
<tr>
<th>AGE</th>
<th>FREQUENCY</th>
<th>PERCENTAGE</th>
</tr>
</thead>
<tbody>
<tr>
<td>20-30</td>
<td>49</td>
<td>14.4%</td>
</tr>
<tr>
<td>31-40</td>
<td>40</td>
<td>11.7%</td>
</tr>
<tr>
<td>41-50</td>
<td>51</td>
<td>15.0%</td>
</tr>
<tr>
<td>Above 50</td>
<td>200</td>
<td>58.8%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>QUALIFICATION</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Bachelor’s degree</td>
<td>60</td>
<td>17.6%</td>
</tr>
<tr>
<td>MBA Degree</td>
<td>150</td>
<td>44.1%</td>
</tr>
<tr>
<td>M.Com</td>
<td>100</td>
<td>29.4%</td>
</tr>
<tr>
<td>MPhil Degree</td>
<td>30</td>
<td>8.80%</td>
</tr>
<tr>
<td>Doctorate Degree</td>
<td>-</td>
<td>-</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>DESIGNATION</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>Lecturer</td>
<td>109</td>
<td>32.0%</td>
</tr>
<tr>
<td>Senior Lecturer</td>
<td>102</td>
<td>30.0%</td>
</tr>
<tr>
<td>Assistant Professor</td>
<td>83</td>
<td>24.4%</td>
</tr>
<tr>
<td>Associate Professor</td>
<td>46</td>
<td>13.5%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>EXPERIENCE</th>
<th></th>
<th></th>
</tr>
</thead>
<tbody>
<tr>
<td>0-5 years</td>
<td>30</td>
<td>8.82%</td>
</tr>
<tr>
<td>6-10 years</td>
<td>71</td>
<td>20.9%</td>
</tr>
<tr>
<td>11-15 years</td>
<td>75</td>
<td>22.0%</td>
</tr>
<tr>
<td>16-20 years</td>
<td>164</td>
<td>48.2%</td>
</tr>
</tbody>
</table>

| Total Respondent    | 340   | 100%       |

4.3. Reliability and Validity

Table 2 showed that the Cronbach's Alpha is 0.72. Composite reliability should be 0.6 to 0.7, and here in this table it is more than 0.6. A value of 0.64 and above in Table 2 indicates that the AVE is over the cutoff, validating the construct's reliability. An AVE value of 0.5 and higher denotes that the data are significant.

AVE is 0.709 from table (2) therefore, the square root became 0.84. This specific digit is larger than the correlation values in the IWB column (0.52), as well as the IWB row. (0.48). The latent variables IC, OL, and TP are also the subject of similar investigation. The result indicates that discriminate validity is well-recognized shown in Table 3.
<table>
<thead>
<tr>
<th>Variables</th>
<th>Cronbach's Alpha</th>
<th># of Item</th>
<th>CR</th>
<th>AVE</th>
<th>No. of Respondent</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC</td>
<td>0.72</td>
<td>5</td>
<td>0.84</td>
<td>0.64</td>
<td>340</td>
</tr>
<tr>
<td>IWB</td>
<td>0.79</td>
<td>5</td>
<td>0.88</td>
<td>0.70</td>
<td>340</td>
</tr>
<tr>
<td>OL</td>
<td>0.82</td>
<td>5</td>
<td>0.88</td>
<td>0.65</td>
<td>340</td>
</tr>
<tr>
<td>TP</td>
<td>0.86</td>
<td>5</td>
<td>0.90</td>
<td>0.64</td>
<td>340</td>
</tr>
</tbody>
</table>

**Note:** CR; Composite Reliability, AVE; Average Variance Extracted

Table 3: Discriminate Validity Fornell-Larcker Criterion

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC</td>
<td>0.80</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>IWB</td>
<td>0.48</td>
<td>0.84</td>
<td></td>
<td></td>
</tr>
<tr>
<td>OL</td>
<td>0.58</td>
<td>0.52</td>
<td>0.81</td>
<td></td>
</tr>
<tr>
<td>TP</td>
<td>0.39</td>
<td>0.52</td>
<td>0.44</td>
<td>0.80</td>
</tr>
</tbody>
</table>

Table 4 shows the endogenous latent variable measuring TP has an R² coefficient of determination of 0.32. Thus, the three latent variables are (IC, OL and IWB) are explaining 32% variance in TP. OL explains 33% and IWB explains 23% of the variance of TP. The inner model suggests that IC has the strongest effect on TP (0.32), followed by IC effect on IWB (0.48) and IWB on TP (0.37) and IC impact on OL (0.58) and OL impact on TP (0.18). Statistically the comparison was significant between IC and TP shown in table 4.

Table 4: Structural Model

<table>
<thead>
<tr>
<th>Variables</th>
<th>R²</th>
<th>R² Adjusted</th>
</tr>
</thead>
<tbody>
<tr>
<td>IWB</td>
<td>0.23</td>
<td>0.23</td>
</tr>
<tr>
<td>OL</td>
<td>0.33</td>
<td>0.33</td>
</tr>
<tr>
<td>TP</td>
<td>0.32</td>
<td>0.31</td>
</tr>
</tbody>
</table>

The hypothesized relationship between OL and TP is statistically momentous. The hypothesized connection between IC and IWB is statistically significant. The hypothesized affiliation among IWB & TP is significant. Thus, we can conclude that IC, OL and IWB mediating strong predictor of TP because its standardized path coefficient is greater than 0.1. Figure 2 represents the output of the smart PLS algorithm and displays the values for the R² and path coefficient. On the other hand, table (6) is showing the results for hypothesis testing.

Table 5: Path Coefficient

<table>
<thead>
<tr>
<th>Variables</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC</td>
<td>0.48</td>
<td>0.58</td>
<td>0.10</td>
<td></td>
</tr>
<tr>
<td>IWB</td>
<td></td>
<td></td>
<td>0.37</td>
<td></td>
</tr>
<tr>
<td>OL</td>
<td></td>
<td></td>
<td>0.18</td>
<td></td>
</tr>
<tr>
<td>TP</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
4.4. Hypothesis Testing and Results

According to Hypothesis H1, TP would benefit from IC. T value is 1.35 and coefficient value is 0.10, according to Table 6. The fact that the path coefficient is statistically insignificant shows that IC has little direct influence over TP. H1 regarding the effect of IC on TP is thus not substantiated.

### Table 6: Direct Effect

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>( \beta )</th>
<th>Mean</th>
<th>STDEV</th>
<th>T Statistics</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC ( \rightarrow ) TP</td>
<td>0.108</td>
<td>0.113</td>
<td>0.080</td>
<td>1.356</td>
<td>0.176</td>
</tr>
<tr>
<td>IC ( \rightarrow ) OL</td>
<td>0.582</td>
<td>0.583</td>
<td>0.044</td>
<td>13.257</td>
<td>0.000</td>
</tr>
<tr>
<td>IC ( \rightarrow ) IWB</td>
<td>0.487</td>
<td>0.489</td>
<td>0.046</td>
<td>10.500</td>
<td>0.000</td>
</tr>
<tr>
<td>OL ( \rightarrow ) TP</td>
<td>0.184</td>
<td>0.179</td>
<td>0.070</td>
<td>2.640</td>
<td>0.009</td>
</tr>
<tr>
<td>IWB ( \rightarrow ) TP</td>
<td>0.374</td>
<td>0.375</td>
<td>0.054</td>
<td>6.933</td>
<td>0.000</td>
</tr>
</tbody>
</table>

**Note:** Significance at 10% (1.645), Significance at 5% (1.96) **, Significance at 1% (2.576) ***

### Table 7: Indirect Effect

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>( \beta )</th>
<th>Mean</th>
<th>STDEV</th>
<th>T Statistics</th>
<th>P Values</th>
</tr>
</thead>
<tbody>
<tr>
<td>IC ( \rightarrow ) IWB ( \rightarrow ) TP</td>
<td>0.182</td>
<td>0.183</td>
<td>0.033</td>
<td>5.578</td>
<td>0.000</td>
</tr>
<tr>
<td>IC ( \rightarrow ) OL ( \rightarrow ) TP</td>
<td>0.107</td>
<td>0.104</td>
<td>0.041</td>
<td>2.589</td>
<td>0.010</td>
</tr>
</tbody>
</table>

**Note:** A 95% confidence interval with a bootstrapping of 5,000 was used

The second hypothesis (H2) contends that IC would benefit OL. T value is 13.25, and coefficient value is 0.58, according to Table 6. Therefore, it demonstrates that IC significantly affects OL. As a result, H2 is supported, and IC significantly affects OL. According to Hypothesis H3, IC would influence TP favorably via OL. T value is 2.64 and coefficient value is 0.18, as shown in Table 6. This demonstrates that IC would affect TP through OL. H3 is therefore supported. In accordance with Hypothesis H4, IC would
benefit IWB. Table 6 demonstrates that the coefficient value is 0.48 and the T value is 10.50. In this way, it is demonstrated that IWB would affect IC. H4 is therefore supported. According to Hypothesis H5, IC would influence TP favorably via IWB. T value is 6.93 and coefficient value is 0.37, according to Table 6. Thus, it demonstrates that IC would affect TP via IWB. H5 is therefore supported. Table 7 shows an indirect path of IWB and OL. Therefore, both the hypothesis has been supported.

5. Discussion

This work empirically explores how IC and TP function between OL and IWB. The results of this analysis indicate a positive correlation between variables, except for IC and TP direct paths, which has a negative correlation. Otherwise, OL and IWB, the mediating factor on TP, are favorable. Some of the previous studies by Ibarra-Cisneros, Hernández-Perlines, & Rodríguez-García, (2020); Madyan & Fikir, (2019) have also stated the negative relationship between IC and TP. Therefore even the latest studies by Asiaei, O’Connor, Barani, & Joshi, (2023) have also stated the negative association between the two variables. The results of the regression analysis suggest that while the conclusions of this study are consistent with those of earlier studies, adopting innovative work practices by an organization would improve task performance. This suggests that people will be able to think more creatively and solve problems more effectively than they could in the past. Because knowledge can be shared readily among organizational members, organizational performance is likely to increase.

6. Contribution toward Theory

If properly applied, IC is essentially the most significant aspect in both the economic and educational worlds. The performance of faculty members in business institutes was the main subject of this study. Few studies have examined the relationship between these constructs because most of the study in the subject of IC has been focused on the commercial realm. The idea of IC is essentially a new one for Pakistan's educational sectors; hence, its implementation was urgently needed. According to the resource orchestration theory this study is in line with the recent studies conducted on IC (Nazem, 2022).

7. Practical Implications

Both the regulatory agencies and higher education institutions will benefit from this research. This study not only identifies the problems but also their underlying causes. Additionally, it emphasizes the important areas that must be prioritized for the implementation of the instructors' performance. The results showed a substantial association between IC and TP. It will make it possible for higher education institutions to put plans in place for the effective execution of performance. The findings of this study can be applied by HEIs to raise their standing.

8. Limitation and future directions

The major goal of this study was to examine how IC affected people's lives while accounting for job happiness and organizational learning as mediators. The six private universities in Lahore, Pakistan, were the sole subject of this study. This was a result of the research's scheduling constraints. The primary goal of this study was to fairly collect data, but due to a few factors, the lack of respondents may have had an impact on the
study's findings. To promote and improve primary level education in Pakistan and to eventually reach the universal enrollment rate, steps like government intervention should be taken in underdeveloped areas. This can also be done to raise the literacy rate and elevate Pakistan as a developing nation. There are several limitations on the present study. First, there are time constraints that restrict the present study's ability to have a wide-ranging impact. The educational sector is the study's main target audience, but other industries like textiles and telecommunications may prove useful to academics in the future. Future researchers may consider longitudinal research study at various time periods in contrast to the cross-sectional research study used in this study. A few educational institutions from different districts and provinces are also said to be able to offer more extensive information in the body of literature.

9. Conclusion

Education plays an enormous impact in Pakistan's economic development. The necessity for the educational sector is crucial for TP in the twenty-first century. A framework was developed for the purpose to check the association between IC and TP. The model showed the significant results between the variables. Firstly, the degree of IC and TP was calculated, and the result showed significant values between both. Secondly, the association between IC and OL was analyzed and it was stated to have significant results. Thirdly, the connection among the degree of IC & TP is mediated by OL also showed significant results. Fourthly, the bond between the degrees of IC & IWB showed significant values between the two. Lastly, the relationship between the degrees of IC & TP is mediated by the IWB showed a clear picture of a positive result. There is a need to make IC stronger so that the Task Performance, which is going through certain steps as mentioned above, should be stronger, and should have a positive impact on the overall running of educational sector.

IC, OL, IWB, and TP are the four key factors that this research focuses on. Except for the direct relationship, the study's results indicate a favorable association between these variables. Additionally, the study's findings from regression analysis demonstrate that OL and IWB practices positively mediate the path between IC and can result in exchange of knowledge activities in Pakistan's educational sector. Therefore, it is important to note that if Pakistan's educational sector adopts superior policies that leverage IC, OL, IWB, and TP, it may have a beneficial impact on educational system.

Ethical Consideration

The authors declare that this submission follows the policies of AJSS as outlined in the Guide for Authors and in the Ethical Statement. Full consent was obtained from the participants prior to the study and all procedures were carried out in accordance with approved ethical standards.

Informed Consent

Respondents were interviewed based on informed consent. A fully informed, considered, and freely given decision about whether or not to participate in the study, without the exercise of any pressure or coercion.
Declaration of Interest Statement

The authors declare that we have no known competing financial interests or personal relationships that could have appeared to influence the work reported in this paper.

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10. References


The Impact of Intellectual Capital on Task Performance in Educational Sector of Lahore


