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# Analysis of the Province-Wise Literacy Rate and its effect on the Pakistan's Economy

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#### **Abstract**

This study aims to investigate the province-wise literacy rate of Pakistan and its impact on the country's economy. Pakistan has struggled with low literacy rates, which can be attributed to a lack of investment in the education sector and a lack of technological advancements. The study reveals that literacy rates have a significant impact on a country's national income measured by Gross Domestic Product (GDP). However, cultural factors, gender inequality, low GDP per capita, political instability, and terrorism have hindered the progress of improving literacy rates. In this study, we discuss the differences, causes, and potential solutions related to province-wise literacy rates in Pakistan. The study provides insights into how increasing literacy rates can contribute to the country's economic growth and development. The research highlights the need for policymakers to invest in the education sector and address the cultural and societal issues that impede literacy rate growth. Overall, this study offers valuable information to policymakers, researchers, and other stakeholders interested in improving literacy rates and promoting economic growth in Pakistan.

Keywords: Education; national income; Province wise literacy rate; public expenditure; Pakistan.

### 1. Introduction

Education plays a vital role in the development of any nation, contributing to the growth and prosperity of society. In this modern era, education has a positive relation with the social and economic development of a country. Developed nations have bridged the gap of illiteracy and are at the forefront of progress in various fields. Each country in this global village is in competition with the rest of the world. This competition is also observed in the provinces of a country in many fields of life, but most importantly in education. Education plays crucial role to any nation's reduction in poverty level, improvement in health status, good governance and removal of inequality. Another outcome is that education gives benefits not only to an individual but also to the whole nation.

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This paper will analyze the province wise literacy rate in Pakistan and its effect on the economy. The literacy rate can be simply defined as the ability to read and write. Human capital in the form of good health and education are the most important factors of production. Indeed, many other studies including (Azam & Ahmed, 2010; Bakar *et al.*, 2014; Khan & Irshad 2018) explained the importance of education for the development of social welfare of the society.

Pakistan faces numerous constraints in providing quality education, including child malnutrition, high fertility rates, lack of opportunities and poor life skills. Furthermore, gender disparities; male is considered as dominant in the society and only he can get education. In some tribal areas, religious restrictions exist due to which females cannot attend school. In such cases there is a wide gap between the male and female literacy rates. Another hurdle people face to get quality education is the expenditure on the education sector. On the provincial side, many disparities exist between the provinces. In Pakistan, the overall literacy rate for the year 2015 was 60 percent which was greater than the preceding year which was 58. However, this rate declined in the next year; in 2016 it was 58 percent. The current literacy rate is 70 percent for males and 48 percent for females. Gender disparity can be seen from the gap that is 22 percent between the males and females getting education. However, it is different in rural and urban areas. According to the Economic Survey of 2015-16, the literacy rate in Punjab was 62 percent, while in second position Sindh was on 55 percent. In other provinces Khyber Pakhtunkhwa and Baluchistan, it was 53 percent and 41 percent. According to the Human Development Index Report of 2017, Azad Jammu and Kashmir (AJ&K) was leading with educational index of 0.64 categorized in high medium category. In Punjab educational index was 0.57, followed by KPK which scores 0.49 and for Sindh it was 0.53. FATA and Baluchistan were falling in the low education index.

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Table 1: Yearly data of all the three variables from 1993-94 to 2017-18

Year	Literacy Rate	Expenditure on	% of GDP Spent
		education	_
1995-96	39.6	42.195	2.817
1996-97	40.9	42.504	2.811
1997-98	42.2	49.084	3.022
1998-99	43.6	49.406	2.4
1999-00	45	54.002	2.611
2000-01	47.1	56.364	1.838
2001-02	49	73.745	1.9
2002-03	50.5	78.45	1.7
2003-04	51.6	97.7	1.8
2004-05	53	116.87	1.948
2005-06	54	141.7	2.254
2006-07	55	162.1	2.626
2007-08	56	187.7	2.635
2008-09	57.4	240.4	2.746
2009-10	57.7	259.5	2.591
2010-11	58	322.8	2.287
2011-12	58	393.5	2.222
2012-13	60	479.9	2.136
2013-14	58	537.6	2.493
2014-15	60	599	2.466
2015-16	58	663.3	2.65
2016-17	60	699.2	2.492
2017-18	58	902.7	2.76

Source: World Bank, Ministry of education, Pakistan economic survey (various issues)

Table 1 provides a comprehensive overview of the literacy rate and expenditure on education in Pakistan from 1995-96 to 2017-18. It is significant as it helps to analyze the trends in the literacy rate of Pakistan over the years and how much the country has spent on its education sector as a percentage of its GDP. The data indicates that although there has been an increase in the literacy rate of Pakistan, it is still relatively low, and the country has been spending less on education as a percentage of its GDP. The table can be used to analyze the impact of education expenditure on the literacy rate of Pakistan and how effective the government's policies have been in improving the country's education sector. Additionally, the table highlights the need for greater investment in education to increase the literacy rate and, in turn, have a positive effect on Pakistan's economy.

The basic objectives of the present study are to identify the literacy rate in different provinces; to know the effect of literacy rate on economy, and also to provide a clear picture of how Pakistan has evolved while allocating different proportion of budget for the education sector.

The objectives of the current study evolved based on the gaps identified in the previous research on literacy rate and its impact on the economy of Pakistan.

As the literature review was conducted, it became clear that there was limited research on the province-vise differences in literacy rates and the reasons behind these differences. Furthermore, it was observed that gender inequality and religious restrictions also played a significant role in determining the literacy rate in different provinces. These observations led to the inclusion of objectives 1 and 2.

Additionally, as the data on the public spending on education in Pakistan was collected and analyzed, it was found that there had been some increase in the expenditure over time, but not enough to achieve the desired literacy rate. Therefore, objective 3 was included to provide a clear picture of the evolution of the allocation of the budget for the education sector in Pakistan.

#### 2. Literature Review

Education is regarded as the oxygen for any country to be creative and achieve sustainable development. Whether it is countries like Asian tigers or any other developing nations like South Korea and Japan who has wiped out the problem of illiteracy. Nelson Mandela once said, "Education is the most important weapon that you can use to change the world". But the sad part is that education system is very unsatisfactory in Pakistan. Literacy is the basic factor for participating in a society. It is the most powerful vehicle to give people and help the people to obtain different life skills and entrepreneurship capacities which will help them to tackle any challenge confronting them. That is the reason that governments all over the world are trying to invest in education sector (EFA global monitoring report 2015). Historically, literacy rates all over the world have increased over time. In the year 1820, only 12 percent of the world's population in the world could read and write. In today's world, the case is opposite, because only 17 percent of the overall population of world are illiterate. In last 65 years, the literacy rate of the world is has risen by 4 percent after every 5 years that is in 1960, it was 42 percent while in 2015 it was 86 percent (EFA global monitoring report 2015).

According to the Global Education and Monitoring Report 2019, in the year 2017 there were 750 million total adults who were illiterate. Globally, the overall adult literacy rate in the year 2017 was 86 percent and it was 65 percent only in sub—Saharan Africa. In the year 2000, there were about 144 million illiterate young people which has decreased to 102 million in the year 2017. The problem that still prevails is those over the age of 65 who were estimated in the year 2016 that they were 40 percent more illiterate than the young ones. A study by Thomas, Wang and Fan (1999) measured the education inequality using Gini coefficient of education. They suggested and showed that it is the equal right of everyone to get education. But there exist a clear majority of groups between countries in which education is staggering. This study is also consistent with the Global Education Monitoring Report (2019). Such studies individually confirm that literacy rate around the world has increased and the people in this modern era are more attracted towards education. The governments around the world made different education improvements policies to give the power of education to their citizens.

While throwing some light on literacy and educational level of scheduled caste in Uttar Pradesh, Khatoon (2013) discussed that in British colonial system the policy was to give education to the elite class which resulted in negligence of mass education at that time. The doors to education were closed for the economically and socially backward sections of the society. It was the era of British colonial system that was started when British came to India as East India Company. In the British system, only those were praised and given education who were economically efficient and well settled, while the lower-class despite of the races and caste they ignored the poor backward people in the society.

In the colonial system, the British were trying to exercise everything with power. The powers regarding ruling a state, a province etc., were given to the elite class who were the full trustees of British government. Another case of literacy and education level in Nepal that was analyzed by Nowak and Dahal (2016) is the contribution of education level in Nepal. While using Johansson co-integration test, they found that there is positive link between education and economic growth. They also pointed out that primary and secondary levels of education in Nepal contribute to real GDP per capita including other Asian countries. They suggested to keep education as the top priority in all public policy matters, and to make serious efforts to increase the quality of education for socioeconomic development.

Dimitrakaki (2018) conducted a study on education in the development of entrepreneurship and investigated that the strongest element which effect the development human capital is education, which in effect increases the rate of success in entrepreneurship. With respect to that, the more education is increased the more a person is able to perceive the opportunities of business that appear in external environment. Simply it means that when the quality of education is increased for anyone in the society and the entrepreneurship requires the higher level of general knowledge, then the person is in the best position to avail the opportunities that appears in the society. John Gibson (2001) presented a new version of literacy rate in relationship with intra-household externalities. He analyzed that such externality is created when there exists a literate person in a home and he provides literacy services to other members of the family. The model he used in his paper is children height for age in the region Papua New Guinea. The study further said that the measure of this externality is large. The idea that is put forward is of the Baso and Foster (1998) which was the proximate illiterate and isolated illiterate.

Bangladesh where the literacy rate in the year 2007 was 61.87 percent, for that Islam et al. (2007) explored the relationship between education and GDP growth by multivariate causality from 1976-2003. They showed that there is a relationship between education and income which can take several forms. Sometimes income can cause education to increase while at other times education can cause the income to grow. For Bangladesh, both the variables seem to help one another to grow. Pakistan's literacy rate in the year 1951 was 17.9 percent which was very low at that time. At the time of independence and after, there was very low expenditure on education. By the year 1996, the literacy rate was 38.9 percent. In this 49-year gap, achieving this literacy rate is far low as compared to other countries like North Korea, China etc. A study by Hussain et al. (2003) showed the public expenditure on education in Pakistan. They showed that Pakistan from the time of its independence in 1947 has primarily focused on development policies and increasing economic growth. Furthermore, in terms of GDP per capita, Pakistan fares better than Bangladesh, Nepal and Bhutan but its position in the HDI, has been compromised due to low achievements in education sector. Despite allocating 20% to 30% of the total budget of education at the provincial level, a major proportion is utilized for recurring expenditures and development expenditures. No disparities have been found at allocation of budget at provincial level. However, a positive correlation between districts allocation of funds to education and district literacy rate has been found. Which means an increase in allocation of funds at district level will help in improving the district literacy rate. In other words, better opportunities provided at each district level will enhance the district literacy rate which will help in improving the overall literacy rate. Jamal and Khan (2005) investigated the education inequality in Pakistan which is today a major problem. They analyzed that greater equity in distribution of educational opportunities enables the poor ones to get larger proportion of benefits of economic growth and in return it results in a higher growth rate.

Hussain (2009) presented an appraisal of illiteracy reduction plans and designing a low-cost model to improve literacy rate in Pakistan. While giving policy recommendations and throwing some light on the previous policies regarding education and literacy, he showed that first National Educational Conference was held in 1947 at Karachi, in which it was decided that primary and religious education will be regarded compulsory to improve the literacy rate. Then in 1959, the National Educational Commission gave detailed recommendations regarding education in which adult education was regarded as top priority, but that target was not achieved. Similarly, an education policy was made in (1972-1980) which was called Awami policy to fulfill the gap of illiteracy. In this policy it was stated to provide free education up to middle class which was extended from October 1972 to October 1974. In Pakistan the literacy rate is very low and about one-half of our adult population are illiterate. But in the last two decades, a massive improvement in literacy rate has been reported especially in woman literacy rate.

Kakar et al. (2011) showed relationship between education and economic growth using time series analysis for Pakistan from 1980-2009. They explored that education has both short term and longterm effects on the economic growth. In the case of Pakistan, education has its long run relationship with economic growth. Having best level of education increase, the productive capacity of labors and efficiency also increases. This study is consistent with the previous study done by Nowak, & Dahal (2016) where in Nepal a long run relationship between education and economic growth was proved. The strange fact is that for a country like Pakistan which is better in per capita income than Nepal shows the same results. But sadly, in short run education have no significant relationship with economic growth. Malik et al. (2012) also investigated the relationship among education, poverty and economic growth in Pakistan using econometric analysis. They showed that the key to economic growth is to invest in education. Education helps to wipe out poverty and improve the socioeconomic status of individual and society. While investigating the short run and long run relationship among poverty, economic growth, education and in presence of physical capital, they said that there exists a long run relationship between these variables. The economic growth of Pakistan has not always been that bad even poverty reduction occurred in mid of first decade of 21st century. Rehman, Jindong, and Hussain (2016) explored that literacy rate is a major indicator for the economic development of countries. Many countries had already successfully managed to reach 100% literacy rate while Pakistan is far behind in achieving it. Moreover, they also said that literacy rate has positive impact on Pakistan's GDP. The national expenditure on education is 2% of GDP. The government of Pakistan had already approved a national policy in 2009 in which the public expenditure will be raised to 7% of GDP. Also, through decades, Pakistan has ignored the problem of education which is the key factor of any nation leading towards economic growth and development, by which Pakistan has been ranked 113 in 120 countries. Many other relevant studies on the education, literacy rate, and national economic development are available (see Azam & Ahmad, 2015; Karim & Khan, 2018; Rehman et al. 2018; Meena et al. 2022).

On district wise literacy rate in Pakistan, Hussain (2005) argued that those districts in Pakistan where literacy rate is high, there exist higher level of development. Moreover, he said that education for the poor people serves as an embankment or wall against volatility even the basic and necessary skills learned in primary schools can make a critical difference when government services fall short or in times of economic crisis. The major causes of low level of education in Pakistan are varied but the important factor is that in Pakistan educational system is highly fragmented and segmented. In such situation it created some serious problems in utilization of human resources in the labor market conditions.

There is a wealth of literature available on the education sector, including its improvements and policy recommendations. Additionally, numerous authors have conducted extensive research on the literacy rate of various countries, often examining its correlation with other variables. Furthermore, significant efforts have been made to analyze district-wise literacy rates, education levels at each district, and student enrollment in primary, secondary schools, colleges, and universities. Also, different surveys as in Pakistan, Alif Ailan, PSLM (2021) and Pakistan Economic Survey (2021) exist which study and find out quarterly or yearly the education level, problems regarding education and causes of low level of education in Pakistan. But on the Province wise literacy rate in Pakistan, very little work has been done or one can say that least work has been done by authors as Rehman, Jindong and Hussain (2016). This study will contribute towards the province wise literacy rate in Pakistan and how it affects the economy. The topic is interesting in a sense that new work will be accomplished, and the current research will also identify that what are the factors which retard the literacy rate in Pakistan and how it can be improved. Moreover, this research analyses the kind of relationship existing between expenditure on education. If the expenditure on education sector is increased how it will affect the literacy rate in Pakistan.

## 3. Data and Methodology

The current research study is mostly based on qualitative method, with a slight use of quantitative methods. It is important to clarify that the current research study utilizes secondary data, which means that the sampling technique and sample size are not applicable in this context. Instead, the data is collected from various sources including World Bank, Human Development Index (HDI 2017), Pakistan Social and Living Standard Measurements (PSLM), Pakistan Economic Survey, and surveys carried out each year by the EFA Global Monitoring Report. Qualitative method has several advantages as mentioned by Strauss and Corbin (1990, p.11) that qualitative research means any type of research that do not arrives at any statistical procedure but produce findings. Their study is about persons, emotions, life experiences, feelings and interactions between nations. Denzen and Lincoln (1994) also wrote that it is a multi-method approach which is involved in interpretive and naturalistic approach to its subject matter.

#### 3.1 Variables justification

The variables that are used in this research study as discussed are the literacy rate as dependent variable, the expenditure on education and % of GDP spent on education as independent variables.

#### 3.2 Literacy rate

The literacy rate is taken as dependent variable to see the variation in expenditure on education and how it results in change in literacy rate. The literacy rate is a broad topic to discuss and it not only includes the expenses on education sector but also includes the enrolment of students and teachers at each level. Also, it includes the expenditure on education sector as on primary, secondary and tertiary education. However, this study will identify and show that how each year for education sector different portion of budget is allocated and how it affects the literacy rate and indirectly how it affects the overall economy. Over the years literacy rate has been defined differently and most importantly each country has its own definition of literacy. In Bangladesh, literacy is defined as the ability of a person to can read and write in any language. In Canada, one who has passed 9<sup>th</sup> grade is considered as literate; due to this definition there exist only 1 percent illiterate people. Now in Pakistan this definition also changes yearly. According to the census in 1998, it defines literacy as one who can read a newspaper and write a letter in any language.

These are the reason due to which we cannot take literacy variable as independent in the current study because it focuses on different aspects of the prevailing and previous situation of Pakistan.

# 3.3 Expenditure on education

Access to quality education is a main problem in Pakistan. According to the State Bank of Pakistan Inflation Monitoring Report (2019) the inflation rate in March 2019 was 9.41 percent which has increased from 8.2 percent in February. Similarly, according to Pakistan Economic Survey (2017-18) the people living below poverty line are 24.3 percent. Now in such conditions where the inflation rate is on the rise and there exist a portion of people who lives below poverty line, for them getting education is a costly affair. Therefore, expenditure on education is taken as independent variable in which we will see that how expenditure on education by government can reduce the illiteracy and improve and accommodate the education sector.

# 3.4 Percentage of GDP spent on education

This variable is also independent in our model. Where percentage (%) of GDP means that how much portion of our total GDP is spent on education each year or how much budget is allocated each year for education sector. Remember that the expenditure on education is expressed in billion rupees while this represents only the overall portion of GDP on education. These both should not be mixed with each other. % of GDP spent is taken as variable in this model to show and clarify to anyone that how what portion of total GDP is going to be spend on education sector. As the government make many promises to increase the spending on education sector up to 7 percent in 2009 policies, but this is still a dream for the people of Pakistan.

#### 3.5 Data Sources

This research study utilizes statistical data from the secondary sources. The data is time series data that has been taken from the year 1990 to 2017. Secondary data is basically those data which is already existing and is collected by others not you. (Donnelian & Lucas, 2013). Primary sources are not acknowledged due to the broader scope of the topic and due to the validity situation of that data. Therefor secondary sources are used. The data is collected from various sources including World Bank, Human Development Index (HDI 2017), Pakistan Social and Living Standard Measurements (PSLM), Pakistan Economic Survey etc. Also, most importantly the surveys that have been carried out each year by the EFA Global Monitoring Report internationally. The data on literacy rate is available on internet and many other sources but due to the reliability reasons, the sources taken are the most reliable sources to be used for this research study.

#### 4. Results and Discussions

The following are the graphs showing the different allocation of budget at provincial level and also the province wise literacy rate.

## 4.1 Province wise literacy rates of Pakistan

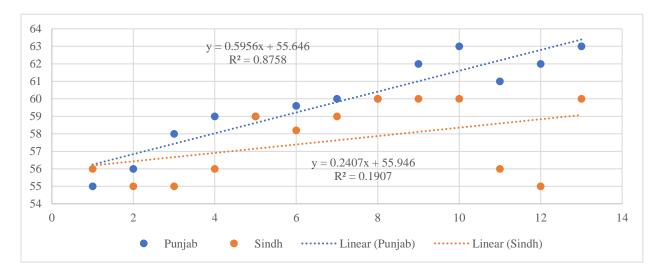
The province wise literacy rates have different trends and each province shows somehow better in literacy rate than the other. Whether it is the expenditure on education or it is the enrollment of students, both have differences. It can be seen from the Figure 1 and Figure 2 given below that shows the literacy rate of all the provinces.

### 4.2 Punjab and Sindh

Figure 1 shows the province wise literacy rate in Pakistan of two major provinces that is Punjab.

and Sindh. In this graph we can see that the Punjab province is leading from Sindh with two or three percent. Over the years we can see that in year 2016-17 the literacy rate of Punjab is 63 while that of Sindh is 60 percent. Also, if we see the past data, it shows that in year 2004-05 Punjab had 55 percent literacy rate while Sindh had 56 percent. In the preceding year we can see the increase in literacy rate of Punjab. In Figure 1, (y = 0.5956x + 55.646) in case of Punjab, and (y = 0.2407x + 55.946) in case of Sindh are estimated regression equations which show literacy rate and GDP (income) relationship in cases of Punjab and Sind. We used Ordinary Least Squares method for estimation purposes. The value of  $\mathbb{R}^2$  is the coefficient of determination which shows variation in the dependent variable (literacy rate) because of the GDP (independent variable).

Figure 1 Literacy rate of Provinces Punjab and Sindh from 2004-05 to 20



## 4.3 Khyber Pukhtoonkhwa (KP) and Baluchistan

For the province of KPK and Baluchistan the graph is provided below. Figure 2 shows that in the year 2004-05 the literacy rate of KPK was 45 percent while that of Baluchistan was 37 percent. But in the coming years KPK has literacy rate of 53 percent while Baluchistan has 44 percent in year 2016-17. While comparing all the provinces, we can say that province wise literacy rate is low due to some constraints like of culture of different provinces and the restrictions that exists in some tribal areas of Pakistan. But the good point is that over the years, this rate is growing up but at a very slow rate. In Figure 2, (y = 0.6819x + 45.527) in case of KP, and (y = 0.228x + 41.212) in case of Baluchistan are estimated regression equations which show literacy rate and GDP (income) relationship in cases of Punjab and Sind. We used Ordinary Least Squares method for estimation purposes. The value of  $\mathbb{R}^2$  is the coefficient of determination which shows variation in the dependent variable (literacy rate) because of the GDP (independent variable).

Figure 2 Literacy rates of provinces KPK and Baluchistan from 2004-05 to 2016-17.

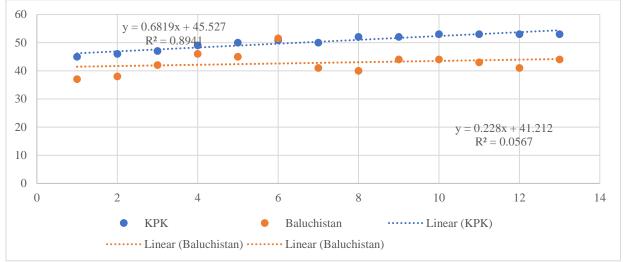


Table 2 shows the province wise literacy rate of Pakistan from 2004-05 to 2017-18. Throughout the years there is an increasing trend of literacy rate in each province. Punjab and Sindh are on the top while KPK province literacy rate has also improved in preceding years. Baluchistan however is at lower literacy rate throughout the years. Even in the year 2017-18 Baluchistan had 41 percent of the literacy rate while Punjab was on 62 percent. As PSLSM (2017) was not carried out for 2017-2018 due to such reason, Pakistan economic survey says that the figures of 2015-16 should be regarded for the current year.

Table 2
Province wise literacy rate of Pakistan from 2004-05 to 2017-18

Province wise literacy rates

Year	Punjab	Sindh	KPK	Baluchistan
2004-05	55	56	45	37
2005-06	56	55	46	38
2006-07	58	55	47	42
2007-08	59	56	49	46
2008-09	59	59	50	45
2009-10	59.6	58.2	50.9	51.5
2010-11	60	59	50	41
2011-12	60	60	52	40
2012-13	62	60	52	44
2013-14	63	60	53	44
2014-15	61	56	53	43
2015-16	62	55	53	41
2016-17	63	60	53	44
2017-18	62	55	53	41

Source: Pakistan economic survey from 2007-08 to 2016-17

# 2.4 Province wise expenditure on education

Table 3 Province wise expenditure on education from 2013-14 to 2017-18

Province wise expenditure on education (total expenditure (Rs in Billion))						
Year	Punjab	Sindh	KPK	Baluchistan		
2013-14	218038	106093	89704	36889		
2014-15	227090	117122	111711	41102		
2015-16	251471	135008	112231	45485		
2016-17	260642	146732	136121	47698		
2017-18	148043	71867	38735	21341		

Source: Pakistan economic survey 2017-18

Table 3 shows the province wise expenditure on education in Pakistan. Currently the province of Punjab has allocated 148043 billion rupees in education sector while the KPK province has allocated 38735 billion rupees. Similarly, Sindh has allocated 71867 billion rupees while Baluchistan has allocated 21341 billion rupees. Now in table 4.1, we can see the differences that how there is disparities between the provinces in literacy rate which has a direct relation with expenditure on education. Over the years, expenditure on education sector in each province has shown remarkable increase in allocation of budget or its total spending on education sector.

One problem might occur if we test an econometric model between the GDP and literacy rate. As we know that when there is an increase in literacy rate it has a direct and significant impact on GDP. Similarly, when there is an increase in GDP or more specifically GDP per capita, the total expenditure when increases or GDP per capita increases the literacy rate also moves upward. In such scenario there occurs the problem of causality. However, due to subjective and qualitative nature of this research study, here we do not include any test for causality, nor we discuss it, however this can be solved and is possible. Overall, the results of the present study are consistent with the findings of many previous studies including (Beghum et al. 2012; Rehman et al., 2016; Hussain, 2005; Azam et al., 2019; Khan et al. 2019; Faizi et al., 2020). These results are suitable and plausible for policy adoption with the prime goal to enhance literacy rate in Pakistan.

# 5. Summary and Conclusion

Literacy rate is regarded as an important indicator for any country to achieve sustainable economic growth and technological development. When a nation is educated there would be a massive increase in its productivity as well as in providing services in different sectors. For a country like Pakistan, we have seen that literacy rate is very low than the developed countries. The public spending on education with time has been increased but not to the desired level to achieve overall goals. For example, in the year 1990, total expenditure as percentage of GDP was 2.517 % which was 2.76 % in the year 2017 which means very little increase in share of GDP allocation for education sector. The data provided shows that Pakistan had three times increase in their % of GDP spent on education which was in 1995,1996,1997 and after that there can be seen sometimes increase and decrease in this value. National expenditure on education was 3.872 billion rupees in year 1993, 699.2 billion rupees in the year 2016 which is a massive increase (ignoring the current value of Rupee).

The existing literature provided also indicates that there is a significant impact of national expenditure on education on literacy rate which has a positive impact on GDP of a country. In Pakistan, wherever the district level shows a higher literacy rate, there exist higher development than other districts. Due to the subjective and qualitative nature of the current research study, no econometric model is applied but rather has used the documentative research method which includes data provided in tables and graphs to show the impact of one variable over the other.

Pakistan should focus on providing quality education that would lead to boost up its literacy rate and boost up its economy because in today's world, a nation can survive only when it has enough level of labor force, advance technological development and creative minds. That would not only contribute to a higher level in increasing the GDP of the country but will also help the living standards of the people. A resident of a country is happy when he is provided with higher income, better quality standards of life. The policy makers should not only focus to improve overall literacy rate but also, they should keenly observe the provincial literacy rate and the problems faced by each province.

Previously work has been done on overall literacy rate to show how it affects a country's economy, but this study contributes to show the province wise literacy rate, its expenditure on education sector, the enrollment of students at each level and how all these can affect a country's economy and its GDP per capita. The study is new and efficient in a sense that it will also help policy makers not to ignore the province wise literacy rates and the reasons of low level. It also provides relevant literature as much as possible specifically for Pakistan and for overall world that can help everyone to study it critically and get the idea of how these variables can affect each other. It also shows and discusses the total public spending on education as well as the province wise spending on education. Constraints that are faced by people of Pakistan like gender inequality, cultural constraints and low level of income are also mentioned in the current research thesis. This research study will contribute and show a clear image of Pakistan specifically all the provinces.

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