

Human Capital in Relation to Economic Opportunities: A Comparative Analysis of Selected States in India



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Abstract

The abstract provides an overview of a study that focuses on the relationship between Human Capital (HC) and Economic Growth (EG) in selected states in India from 2019 to 2022. The study utilized data from India economic survey and World Development Indicators (WDI) reports and employed multiple regression analysis to evaluate the outcomes. Comparative analysis was conducted between Density and Productivity Ratio (DPR), productivity and geographical area, and efficiency and population ratio. Unstandardized coefficients and standardized coefficients were utilized to assess the model, and multiple path regression and correlation analysis were used for outcome evaluation. The study found that HC has a positive and strong effect on productivity and EG, with EG being the most significant factor in competitiveness. This research study focused on the significant role played by HC in various fields, from micro scholarship in psychology to macro scholarship in economics, and its association with economic opportunities. Ten Indian states, including Mizoram, Tripura, Gujarat, Karnataka, Haryana, Telangana, Odisha, Andhra Pradesh, Sikkim, and Tamil Nadu, were selected for the analysis. The study revealed a positive and significant relationship between HC and EG. To extend the analysis of HC and EG, future studies could consider a larger population and investigate all states and union territories in India. These findings highlight the importance of HC in driving economic growth and development. The study found that by enhancing India's HC, sustained long-term EG was achieved, and Mizoram obtained the highest GDP economic growth rate when compared to other states in India.

Keywords: Human Capital, Economic Growth, Productivity, Geographical Area, Population Ratio

Introduction

In a country's EG, a significant role is performed by the HC. India is the second most populated country; moreover, it is estimated that India would become the first most populated country by 2030. Additionally, globally, India's economy is one of the rapidly expanding economies. However, in India 21.9% of the population lives under the poverty line, the CIA's world fact book said^{1, 2}. In terms of Gross Domestic Product (GDP), India is the world's 5th largest economy; similarly, concerning Purchasing Power Parity (PPP), it

is the 3rd largest one. As per the International Monetary Fund (IMF), India placed 142nd by GDP (nominal) and 128th by GDP (PPP) regarding per capita income³. A set of skills, knowledge, and capacities, which are subsumed in individuals, is termed HC; these skills are attained by the individuals via education, training, medical, work experience, along with migration. In addition, their knowledge, ideas, innovation, and decision-making abilities in work are also encompassed in HC. (i) Health, education along with experience, and training, (ii) higher health status as well as

new learning, and (iii) increase in stock with better education are the '3' major components of HC^{4, 5, and 6}.

In accordance with the definition of HC, these components are distinguished as⁷,

- The employees' growth potential; in addition, employees' potential to attain the organization's goal outside of its current role.
- Opportunities for workers in the network of contacts, education, professional skills, experience, values, together with ideas.
- A major contribution was provided by the innovation in employees' activities in producing new products, the company's loyalty to the changes, services for the company, and the desire to learn.
- Employee motivation (in this, firms value is the basis for employee motivation).

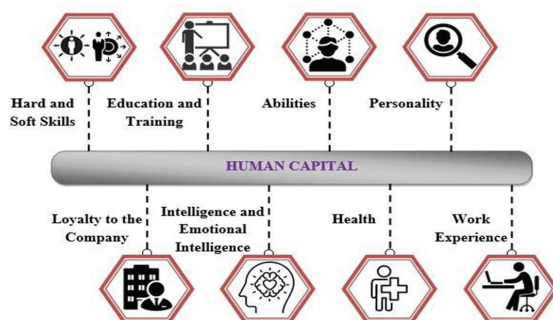


Fig. 1: Human capital development

All sorts of investments made for enhancing human skills like schooling, informal education, learning by doing, on-the-job training, et cetera are also involved in the HC.⁸ By means of specialization along with labor division, encouragement of self-employment, advancements in basic education, generation of business opportunities, and vocational training, the HC could be enhanced.⁹ With direct as well as indirect effect, the HC's role on EG is recognized. In this, the productivity of human resources is measured by the direct effect; similarly, the total productivity change, which provides an effect on EG along with competitiveness, is gauged by the indirect effect.¹⁰ The comparative analysis of HC regarding the economic opportunities of selected states

in India is examined in this research methodology. Analyzing the factors of how HC ameliorates the economic status is the major intention of this model. Figure 1 exhibits the graphical representation of EG's HC development.

The paper's remaining parts are structured as: the prevailing methodologies are investigated in section 2; the presented research methodology is explicated in section 3; the results obtained are discussed in section 4; in the end, the paper is wound up with future scope in section 5.

Related Works

Nan Jiang¹¹ investigated the intergenerational effects of HC investment on the education of adult children and later-life health of parents in China. The study utilized longitudinal data and found that college-educated children were associated with a 31% decrease in the hazard of parental death.

William E. Donald et al.¹² examined the consequences of HC on employability using self-reported questionnaires from 1355 undergraduates in UK universities. Found that HC, career ownership, and careers advice contributed to an increase in employability variance from 37.9% to 45.9% for P3 students and 49.3% for males. However, data were collected from only one university using a single model of questionnaires.

Zahoor Ahmed *et al.*¹³ evaluated the effect of NR abundance, HC, and urbanization on the EF in China using data from the World Development Bank and the Global Footprint Network catalog. Found that NR rent increased EF, while HC reduced environmental decline. The interaction between urbanization and HC was found to have a moderating effect on sustainable urbanization. However, the study was limited to a specific area and results may vary in other regions.

Shujin Zhu & Renyu Li¹⁴ measured the Economic Complexity (EC); in addition, investigated the consequences of HC on EC and HC on EG. The data being utilized were gathered as of 210 countries. For estimating the initial income, the Ordinary Least Squares (OLS) were utilized. The outcome displayed considerable mitigation in the

complexity level amongst countries. Therefore, it was evident that an optimistic effect was possessed by the EC along with varied HC levels on long-and short-term growth; in addition, it also possessed an optimistic interaction effect on EG that eventuated betwixt EC along with HC.

Michael Danquah and Joseph Amankwah-Amoah¹⁵ investigated the effect of HC on innovation and technology adoption using panel data from 45 sub-Saharan African countries between 1960 and 2010. They found that HC had a positive impact on technology adoption but had an insignificant effect on innovation. To gauge innovation along with technology espousal, the Malmquist productivity index was utilized.

Oumarou Zalle¹⁶ analyzed the conditional impacts of NRs reliant on HC together with the quality of institutions on EG. From 29 countries, data were collected from WDI as well as the International Country Risk Guide (ICRG) database. For estimating the data, an Autoregressive Distributed Lag system was utilized with an average dependency level of 19.53% as of 2000 to 2015. Furthermore, for the outcome evaluation, the econometric model's specification was employed. It was established that the investments in the humancaption along with the fight against corruption were strengthened simultaneously by the African countries.

Robert Huggins *et al.*¹⁷ investigated the HC theories, growth motivation, and also locational conditions; furthermore, examined the firm endurance across a local environment in the background of a peripheral area in the UK. The outcome displayed that the survival rate was impacted by the HC pertinent to the entrepreneurs' experience along with motivation brought about as of the strategic choices. Consequently, the likelihood of survival was contributed by the local environment.

Manuela Tvaronaviciene *et al.*¹⁸ evaluated the Quality of Life (QOL) along with analogous conceptions in HC management. The subjective contentment with the QOL was determined by taking the factors of 4 groups into consideration in the index of young people being presented. The model was developed by taking the satisfaction

level's subjective assessments into consideration with the QOL factors. It was concluded that the social environment was the crucial factor for an optimistic perception of QOL. Thus, merely the least significance was acquired by the factors for socio-political environment factors.

Zaidi *et al.* conducted a study on the impact of human capital (HC), natural resources (NRs), and globalization on economic growth in OECD countries from 1990 to 2016. They used econometric methods to address cross-sectional dependence and heterogeneity in panel data, and found a positive relationship between HC, NRs, and globalization with economic growth. However, the study had limitations in exploring the effects of only three variables on economic growth in OECD countries.

Ahmed and Wang investigated the impact of human capital (HC) on economic freedom (EF) in India from 1971 to 2014 using cointegration and causality tests. They found a negative impact of HC on EF and an inverted U-shaped relationship between economic growth (EG) and EF. However, the study only assessed the impact of the HC index on EF.

Danish *et al.* investigated the relationship between economic growth (EG) and economic freedom (EF) in relation to biocapacity and human capital (HC) using data from Pakistan's annual series from 1971 to 2014. They found that EG contributed to environmental degradation through an increase in EF, and that biocapacity also contributed to environmental degradation. However, there was no causality found in the relationship between EF and EG. They used an ARDL econometric model to reveal these findings.

Zafar *et al.*²² analyzed the impact of HC, NRs, and foreign direct investment on the EF in the US, while considering energy consumption and EG. The study found a negative relationship between EG and energy consumption with EF, and bidirectional causality between EF and energy consumption and EG. However, institutional quality was not considered in the study.

Silvia Bagdadli *et al.*²³ investigated the relationship between HC development practices and fi-

nancial performance by surveying 8800 managers and professionals from 28 countries using a multi-level approach. They found a positive association between HC development practices and financial performance, which was weaker in developed countries and not affected by income inequality. The causal direction was not established due to the cross-sectional design.

Mahesh Subramony et al.²⁴ studied the impact of two Leadership Development Practices (LDP) on organizational performance through HC and social capital as mediators. The study was conducted on 223 organizations in India using an online survey distributed to HR managers. The results showed that differentiation LDPs positively affected HC, and integration LDPs positively influenced social capital. The relationship between differentiation LDPs and sales growth was mediated by HC. However, the study had limitations, such as the exclusion of some HRM areas.

Researchers Stephen S Lim et al.²⁵ studied the measures of human capital (HC) across 195 countries from 1990 to 2016 and examined its relationship with GDP. Educational attainment was estimated using 2522 censuses and household surveys. The study found that countries with larger improvements in HC were associated with faster economic growth. The top quartile of countries in terms of absolute change in HC from 1990 to 2016 achieved a median annual GDP growth rate of 2.60% compared to 1.45% for the bottom quartile. However, the HC value of educational attainment may not be a linear function of years and education.

Research Methodology

Regarding economic opportunities, the HC is analyzed by the presented research methodology. In terms of the variations in GDP per capita, the comparative assessment of selected states in India is conducted. In this study, 10 Indian states were considered; additionally, data were collected from the period of 2019 to 2022. Karnataka, Sikkim, Mizoram, Tripura, Odisha, Gujarat, Haryana, Telangana, Andhra Pradesh, and Tamil Nadu are the states included. From India's economic survey along with WDI, the data were gathered. Then,

for estimating the collected data, the multiple regression analytical methodology was utilized. The 10 states being selected have contributed more than 5% towards India's GDP whereas the states with lesser contributions were not selected for the comparative evaluation. Table 1 elaborates on the selected states together with their EG rate.

Table 1: Analysis of the top 10 states of economic growth

Rank	State	GSDP per capita growth	
		2019-20 prices	Current prices
1	Mizoram	13.03	17.85
2	Tripura	8.70	11.26
3	Gujarat	7.61	7.99
4	Karnataka	5.13	8.44
5	Haryana	6.28	11.71
6	Telangana	7.18	11.51
7	Odisha	4.79	6.44
8	Andhra Pradesh	7.58	12.11
9	Sikkim	5.76	11.99
10	Tamil Nadu	7.55	12.80

Amongst 28 Indian states along with union territories, Mizoram obtained the highest GSDP (13.03%) per capita growth rate in the year 2019-2020. Then, the second highest rate of 8.70% was achieved by Tripura followed by Gujarat, Karnataka, Haryana, Telangana, Odisha, Andhra Pradesh, Sikkim, and Tamil Nadu with the rate of 7.61 %, 5.13 %, 6.28 %, 7.18 %, 4.79 %, 7.58 %, 5.76 %, and 7.55 %, respectively. Currently, Mizoram obtained a GSDP of 17.85%, which is the highest growth rate. Subsequently, the states Tripura, Haryana, Telangana, Andhra Pradesh, Sikkim, and Tamil Nadu attained above 10% growth rate of 11.26 %, 11.71 %, 11.51 %, 12.11 %, 11.99 %, 12.80 %, correspondingly. Similarly, the states with GSDP below 10% are

Gujarat (7.99 %), Karnataka (8.44 %), and Odisha (6.44 %). Figure 2 exhibits the graphical representation of the above tabulation.

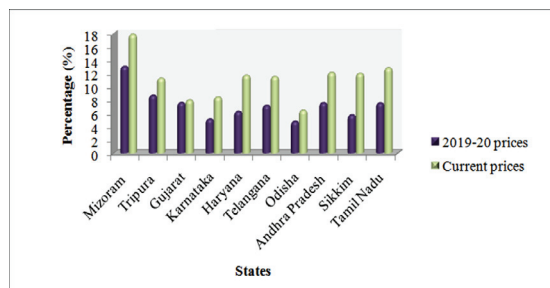


Fig. 2: Graphical representation of economic growth rate

Empirical Analysis

Table 2: Description of variables

Variables	Descriptions	Measurements
HC	Education	Percentage of gross secondary school enrolment
TPOP	Total population	Total number of residents
LFP	Labor force participation	Rate of the total labor force
GDPPC	GDP per capita	Constant LCU
FDI	Foreign direct investment	Net inflows

Source: WDI

Two systems with varied pairs were engendered to investigate the HC's impact on EG. The models are expressed as,

$$\text{LGDPPC} = \alpha_0 + \alpha_1 \text{LHC} + \alpha_2 \text{LLFP} + \alpha_3 \text{LTOP} + \beta_1 \quad (1)$$

Direct and indirect effects

$$\text{LGDPPC} = \alpha_0 + \alpha_1 \text{LHC} + \alpha_2 \text{LFDI} + \alpha_3 \text{LTOP} + \beta_2 \quad (2)$$

In these models, LGDPPC, which is utilized as the dependent variable, is the log of DP per capita. The error terms are specified as β_1 and β_2 . The dependence of HC on these factors is specified as,

$$\text{LHC} = \alpha_0 + \alpha_1 \text{LHC} + \alpha_2 \text{LFDI} + \alpha_3 \text{LTOP} + \alpha_4 \text{LLFP} + \beta_3 \quad (3)$$

Here, the log of HC is utilized as the dependent variable; also, it is normalized by the GDP. The error term is signified as β_3 .

Table 3: Analysis of dependent variables of human capital

Variables	DOLS	FMOLS
LHC	0.047**	0.096**
LLFP	-0.428**	0.339***
LTOP	-2.695***	-0.333***
LFDI	0.089***	0.165***

5% and 10% represented as *** and ** respectively.

By deploying Dynamic OLS (DOLS) along with Fully Modified OLS (FMOLS), the HC's dependent variables are analyzed in the table above. As per the evaluation, there was a significant impact on HC with 5% elevations in LLFP. A smaller but still optimistic impact was possessed by LFDI on HC. LFDI augments the HC by 0.17% and 0.16%. The DOLS outcomes of variables of LHC is 0.047**, LLFP is -0.428**, LTOP is -2.695*** and LFDI is 0.089***. The LLFP as well as LTOP has a pessimistic relation with HC whereas the other variables possess an optimistic relation with HC. Likewise, the FMOLS results of variables of LHC are 0.096**, LLFP is 0.339*** and LTOP is -0.333*** and LFDI is 0.165***; here, LTOP has negative relations with HC whereas the other variables have a positive relation with HC.

Table 4: Regression Analysis

Model	Unstandardized Coefficients		Standardized Coefficients	t.stc	Sig.
	B	Std. Error	Beta		
1 (Constant)	.039	.044		1.173	.248
Human_Capital (a1)	.581	.071	.558	8.223	.000

Model	Unstandardized Coefficients		Standardized Coefficients	t.stc	Sig.
	B	Std. Error	Beta		
Productivity (a2)	.139	.067	.158	1.974	.055
2 (Constant)	.006	.029		.144	.888
Human_Capital(a1)	.199	.073	.196	2.639	.014
Productivity (a2)	.151	.064	.174	2.476	.017
Economic_Growth (U)	.374	.081	.382	4.746	.000

Source: The processed primary data

Based on unstandardized coefficients along with standardized coefficients, the model of HC, productivity, and EG of constant variables are analyzed in the table above. Regarding the unstandardized coefficient, the highest standard error of .071 was attained by the HC than that of productivity (.067). Then, regarding standard coefficients, the Beta value attained by HC and productivity are .558 and .158, respectively. After that, HC productivity and EG were the models considered in constant 2. In unstandardized coefficients, the standard errors of HC, productivity, and EG are .073, .064, and .081, respectively. The EG attained the highest standard error amongst all the models in constant 2. Similarly, in the standard coefficient, the Beta values of HC, productivity, and EG are .196, .174, and .382, in

that order. The highest sigma value of .888 was achieved by HC in constant 2. For the outcome evaluation, multiple path regression as well as correlation analysis was utilized. The key to competitiveness is productivity, which is formed as of the HC. In this, the productivity is in line with HC as the independent variable; thus, influencing EG. After that, a positive along with strong effect was attained by EG on competitiveness. Nevertheless, EG relies on the HC factor; hence, it is not regarded as the first significant factor. Competitiveness is prompted as of EG; however, in EG, the most significant factor is the HC factor. The outcome displayed that the HC factor encourages EG together with competitiveness. Figure 3 demonstrates the diagrammatic representation of multiple path analysis.

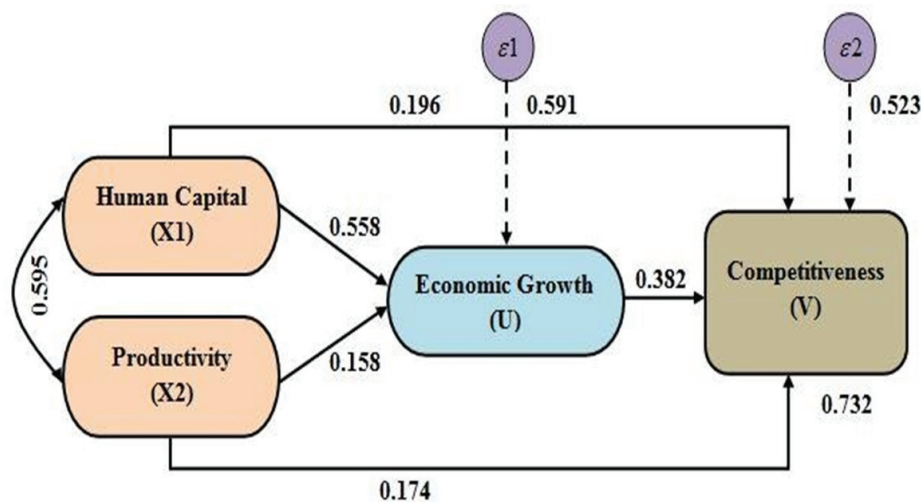


Fig. 3: Multiple path analysis

Table 5: Analysis of direct and indirect effects

Variables	Direct effects	Indirect effects		
		Human capital	Productivity	Economic growth
Human capital	0.037		0.025	0.044
Productivity	0.033	0.025		0.013
Economic growth	0.149	0.048	0.013	

The direct and indirect effects of HC, productivity, along with EG are assessed in the table above. The direct effects of HC, productivity and EG are 0.037, 0.033, and 0.149, correspondingly. The outcome displayed that the HC's direct effect had a consistent and significant effect on EG. In indirect effects, a positive impact of 0.025 was possessed by HC on productivity; similarly, the value of EG is 0.044; thus, the HC attained the highest significant value in EG. In the same manner, the productivity had a positive together with a significant effect on HC and EG in indirect effects;

also, in this, the values for HC and EG are 0.025 and 0.013. The outcome demonstrated that a more dominant effect was provided by HC on EG.

Result and Discussion

The data being collected was assessed as well as discussed here. This section evaluates the comparison between productivity and geographical area, DPR, and efficiency and population. The indices of the knowledge economy in the Indian states of Mizoram, Tripura, Gujarat, Karnataka, Haryana, Telangana, Odisha, Andhra Pradesh, Sikkim, and Tamil Nadu are analyzed in table 6.

Table 6: Indices of the knowledge economy in Indian states

States	Knowledge index (KI)	Economy incentive regime	Innovation	Education	Information and communication technology index (ICT)
Mizoram	8.02	5.21	4.19	6.11	6.13
Tripura	4.66	4.34	3.01	4.19	4.33
Gujarat	3.03	3.92	3.82	3.58	3.33
Karnataka	5.81	5.25	2.63	5.03	6.38
Haryana	6.08	3.50	3.71	4.69	4.76
Telangana	3.11	2.98	2.08	3.64	2.49
Odisha	2.95	4.02	2.89	3.03	4.09
Andhra Pradesh	4.72	5.01	4.92	4.80	5.25
Sikkim	3.97	2.76	2.98	3.84	3.27
Tamil Nadu	4.03	2.21	3.64	5.09	5.19

When compared to the other states, Mizoram achieved the highest knowledge index value of 8.02 followed by Haryana (6.08), Karnataka (5.81), Andhra Pradesh (4.72), Tripura (4.66), Tamil Nadu (4.03), Sikkim (3.97), Telangana (3.11), Gujarat (3.03), and Odisha (2.95). In an economic incentive regime, the highest value was achieved by the

states of Mizoram, Karnataka, and Andhra Pradesh whereas the least economic incentive regime value was attained in Tamil Nadu, Sikkim, and Telangana. While considering innovation value, the highest value was achieved by the state of Andhra Pradesh followed by Mizoram (4.19), Odisha (2.89), Gujarat (3.82), Haryana (3.71), Tamil Nadu (3.64), Tri-

pura (3.01), Sikkim (2.98), Karnataka (2.63) and Telangana (2.08). When analogized with all the other states, the state Mizoram achieved the highest value of 6.11 in education followed by Tamil Nadu (5.09), Karnataka (5.03), Andhra Pradesh

(4.80), Haryana (4.69), Tripura (4.19), Sikkim (3.84), Telangana (3.64), Gujarat (3.58) and Odisha (3.03). In the ICT index, Karnataka achieved the highest value of 6.38, and Telangana achieved the least value of 2.49.

Productivity and Geographical Area

Table 7: Comparison based on productivity and geographical area

State	% of Total Population	% contribution to Total GDP	The ratio of GDP Contribution & Population
Mizoram	5.62 %	4.38 %	0.7661
Tripura	2.34 %	3.09 %	1.3061
Gujarat	4.98 %	7.63 %	1.5257
Karnataka	5.09 %	5.54 %	1.0793
Haryana	3.02 %	3.80 %	1.6234
Telangana	3.42 %	2.86 %	0.7189
Odisha	3.44 %	2.51 %	0.7182
Andhra Pradesh	7.08 %	7.92 %	0.9946
Sikkim	5.11 %	8.21 %	1.4532
Tamil Nadu	5.98 %	8.24 %	1.3857

To compare productivity, the geographical region is deemed in the table above. The percentage of the total population, contribution to total GDP, and ratio of GDP contribution and population were evaluated here. The highest percentage of the population was attained by the states of Andhra Pradesh, Tamil Nadu, and Mizoram than that of the states of Tripura, Gujarat, Karnataka, Haryana, Telangana, Odisha, and Sikkim. Tamil Nadu

achieved the highest percentage of GDP of 8.24 % followed by Sikkim (8.21 %), Andhra Pradesh (7.92 %), Gujarat (7.63 %), Karnataka (5.54 %), Mizoram (4.38 %), Haryana (3.80 %), Tripura (3.09 %), Telangana (2.86 %) and Odisha (2.51 %). The highest ratio of GDP contribution and population of 1.6234 was achieved by Haryana followed by Gujarat, Sikkim, Tamil Nadu, Tripura, Karnataka, Andhra Pradesh, Mizoram, Telangana, and Odisha.

Density and productivity ratio

Table 8: Comparison based on density and productivity ratio

States	Area Sq. Km	Density (persons per sq. km)	GDP	DPR	DPR Multiplier
Mizoram	21081	365.25	52%	17.98	2.809
Tripura	10492	838.28	26%	511.21	1.929
Gujarat	196024	321.04	39%	1294.91	2.951
Karnataka	191791	318.86	28%	877.40	2.348
Haryana	44214	573.46	17%	312.76	2.488

States	Area Sq. Km	Density (persons per sq. km)	GDP	DPR	DPR Multiplier
Telangana	112077	1102.60	37%	513.11	1.931
Odisha	155707	821.14	21%	242.65	2.663
Andhra Pradesh	275045	307.95	40%	1315.91	2.519
Sikkim	7096	210.61	24%	1136.38	2.091
Tamil Nadu	130058	554.82	43%	181.36	2.689

The DPR of the states was analyzed in the above table. DPR divides a state's GDP. A state including its population along with geographical region shows better performance with higher DPR. Here, the ratio is measured based on the head GDP of a person dwelling per square kilometer area of the state. The highest density value of 1102.60 was achieved by Telangana, the second highest value of 838.28 was attained by Tripura and the third highest value of 821.14 was obtained by Odisha fol-

lowed by Haryana (573.46), Tamil Nadu (554.82), Mizoram (365.25), Gujarat (321.04), Karnataka (318.86), Andhra Pradesh (307.95), and Sikkim (210.61). While considering DPR, the top three positions were ranked by Andhra Pradesh, Gujarat, and Sikkim whereas the lowest DPR values were attained by Tamil Nadu, Odisha, and Haryana. Regarding the DPR multiplier, the top position was achieved by Gujarat with 2.951 and the lowest value of 1.929 was attained by Tripura.

Efficiency and Population

Table 9: Comparison based on efficiency and population

States	% of Total Population	% contribution in total GDP	Ratio of GDP Contribution & Population
Mizoram	5.69 %	4.38 %	0.7659
Tripura	7.58 %	6.11 %	0.8340
Gujarat	5.03 %	7.69 %	1.5259
Karnataka	5.09 %	5.55 %	1.0791
Haryana	2.12 %	3.48 %	1.6238
Telangana	3.61 %	4.01 %	1.4511
Odisha	3.53 %	2.99 %	0.7189
Andhra Pradesh	6.13 %	3.82 %	0.6409
Sikkim	4.78 %	5.25 %	0.3211
Tamil Nadu	6.02 %	8.31 %	1.3863

The efficiency and population in the states of Mizoram, Tripura, Gujarat, Karnataka, Haryana, Telangana, Odisha, Andhra Pradesh, Sikkim, and Tamil Nadu were analyzed in table 9. Here, Tripura achieved the highest percentage of the total population of 7.58 % followed by Andhra Pradesh

(6.13 %), Tamil Nadu (6.02 %), Mizoram (5.69 %), Karnataka (5.09 %), Gujarat (5.03 %), Sikkim (4.78 %), Telangana (3.61 %), Odisha (3.53 %) and Haryana (2.12 %). The highest percentage of contribution in total GDP of 8.31 % was achieved by Tamil Nadu, the second place was ranked by

Gujarat with 7.69 % and the third position was secured by Tripura with 6.11 %. Meanwhile, the states Mizoram, Karnataka, Haryana, Telangana, Odisha, Andhra Pradesh, and Sikkim acquired a GDP value of below 6%. Consequently, Haryana achieved the highest value of 1.6238 for the ratio of GDP contribution and population; moreover, Sikkim attained the lowest value of 0.3211.

Analysis of Net State Domestic Product (NSDP)

Table 10: NSDP per capita growth

State	NSDP per capita growth	
	2019-20 prices	Current prices
Mizoram	10.59	15.61
Tripura	10.13	10.98
Gujarat	8.07	8.32
Karnataka	5.21	8.62
Haryana	6.27	12.01
Himachal Pradesh	4.82	6.81
Telangana	7.36	11.65

State	NSDP per capita growth	
	2019-20 prices	Current prices
Andhra Pradesh	7.59	12.19
Odisha	4.78	6.70
Uttarakhand	5.40	9.00

The net state of the domestic product of Indian states was assessed in the table above. Compared to the prices in 2019-20 (10.59), Mizoram achieved the highest NSDP value of 15.61% at current prices; Andhra Pradesh achieved the second highest value of 12.19 followed by Haryana (12.01), Telangana (11.65), and Tripura (10.98). The states Uttarakhand, Karnataka, Himachal Pradesh, and Odisha achieved below 10% of 9.00, 8.62, 6.81, and 6.70, respectively. In comparison, the states Mizoram, Tripura, and Gujarat attained the first, second, and third positions in that order; subsequently, the last position was secured by Uttarakhand. In NSDP growth rate, the top ten positions were placed by the states of Mizoram, Tripura, Gujarat, Karnataka, Haryana, Himachal Pradesh, Telangana, Andhra Pradesh, Odisha, and Uttarakhand. Figure 4 exhibits the graphical representation of the above tabulation.

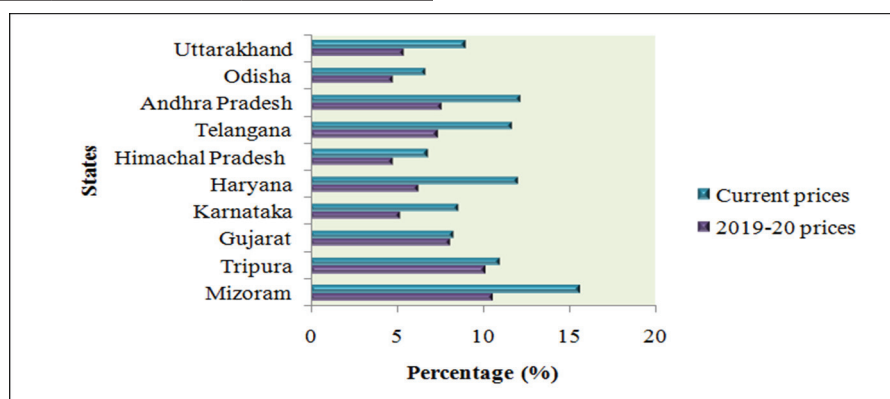


Fig. 4: Analysis of NSDP growth rate

Conclusion

In a range of fields as of micro scholarship in psychology to macro scholarship in economics, a significant role is played by the HC. Analyzing HC and its association with economic opportunities was the major intention of this research

study. Here, for the assessment, Ten Indian States have been selected; the states being selected are Mizoram, Tripura, Gujarat, Karnataka, Haryana, Telangana, Odisha, Andhra Pradesh, Sikkim, and Tamil Nadu. For analyzing the result, multiple regression analysis methodologies were utilized.

After that, a comparative analysis of the productivity ratio, population ratio, efficiency, density, and the geographical area was conducted. The outcome demonstrated that a positive along with significant relation was possessed by HC with EG. For the analysis of HC along with EG, the study can be extended in the future by considering more populations and investigating all states as well as union territories in India.

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