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Bridging the gap between Education and Employment in Modern India

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ABSTRACT

The youth population of the country occupies the bulk of its work force. India today experiences a "demographic dividend' which most developed countries can't enjoy because of their ageing population. Unfortunately, India has not been able to take the full advantage of the demographic dividend as a major part of its youth are not fit for employability. Lack of literacy, high dropout rates along with poor quality of education ensure that employment opportunities remain limited to a few. The curriculum taught in schools and colleges being too theoretical and outdated, there is a big gap between demand and supply of skilled workers. Moreover, in India, the highest enrolment takes place in the Arts stream whereas employers clearly prefer graduates with technical degrees. Most of the technical institutions which have cropped up in the recent years are managed privately and are quite expensive. These institutions thus happen to be outside the reach of the youth from low or middle-class backgrounds. These youth are therefore mostly absorbed in the informal sector with poor wages and limited social security. The net result is India is struggling today with unemployment and underemployment of its youth. The present paper takes an in-depth view of the Indian education diaspora and its connections with the job market. The paper analyses the data from various database and government reports to critically analyse the factors that are leading to the gap between education and employability. Lastly, the paper comes up with policy prescriptions such as investment in skill training and a shift from the old theoretical approach of learning to a more creative way of learning as some of the measures that can help India to bridge the gap between higher education and employability.

Keywords- Education, Skills, Job opportunities, Vocational training, employability, youth unemployment.

INTRODUCTION

Education and adequate skill formation is a prerequisite for the development of any nation. Education along with necessary skill helps to increase the quality and the productivity of the workforce. As the supply of skilled workforce increases in the economy, economic growth also increases. For developing countries like India, which suffers from huge discrepancies in the labour market, emphasis on education and skill formation helps to reduce wage inequality. Thus, education and skill formation act as an important tool for poverty reduction.

More than 50 % of India's demographic profile consists of youths below the age of 35. India thus has the advantage of enjoying a demographic dividend unprecedented by the so-called developed countries. However, to channelise this huge population as an engine of growth, it must be ensured that the youth are absorbed in high quality remunerative work. Unfortunately, the Indian labour market is characterised by the twin problems of unemployment and underemployment. On one hand, there is a huge chunk of the population who do not have adequate education and training and thus are employed in the informal sector. Again, there is a section of the Indian youth who are educated but remain unemployed or underemployed because of lack of proper job opportunities. While educational attainment has increased, there remains a significant gap between academic qualifications and market-ready skills. India's employment landscape is far from being impressive. Most of the people are employed in the informal sector. Self-employment has been increasing which points out to the lack of formal job opportunities. Moreover, there is a big gender divide with female workforce participation being one of the lowest in the world. Women in rural areas were predominantly engaged in unpaid family work of the self-employment category.

The education system in our country is such that it doesn't gear up the youth for right employment opportunities. As a result, there is a great division between the demand for skilled labour and its supply. Moreover, there is also the threat of AI taking over certain types of jobs. The digital economy has been identified as a key area for

job creation, especially for women. Technological change and digitalization have rapidly affected the demand for skills and for certain types of employment. The Indian economy has been witnessing a structural transformation since 90's with employment shifting away from agriculture to the service sector. Post pandemic, within the service sector ,a huge proportion of the youth are absorbed by the gig and the platform economy which is controlled by algorithm management. However, whether the gig economy will stand the test of time remains to be seen The government has come up with various schemes to develop skill formation. Notable among these schemes are-

Pradhan Mantri Kaushal Vikas Yojana (PMKVY) – This scheme imparts skill development training through Short-Term Training (STT) in both urban and rural areas to increase employment in the emerging sectors.

Jan Shikshan Sansthan (JSS) Scheme**:** This scheme imparts vocational skills to people with limited or no education in the age group of 15-45 years.

Craftsmen Training Scheme (CTS**):** This scheme provides long-term training through Industrial Training Institutes (ITIs) across the country.

The present paper analyses the current state of education, skill development and employability of the Indian youth .It highlights the loopholes in the education structure and recommends policy prescriptions on how to overcome these limitations. The paper has been divided into six sections. Section I comprises of the introduction. Section II sums up the existing literature. Section III and IV deal with the objective and the research methodology respectively. Section V consists of the empirical findings while the last section concludes with some policy recommendations.

LITERATURE REVIEW

In recent times, lot of emphasis is being given on the linkage between education and employability Several researchers have tried to analyse these two dimensions in the context of the Indian economy. Some of these have been discussed here.

Verick (2013) points out that since the youth can't afford to remain unemployed for long, hence they pick up activities characterised by low labour productivity. Among the early labour market entrants, males are usually in casual wage employment, while their female counterparts tend to be self-employed. The results tend to indicate that, except those with primary level of education, youth with higher levels of education have a lower participation rate compared to the illiterates. In terms of the latter, youth with at least a secondary education have around a 20 per cent lower probability of participation. Females show a lower participation rate compared to males with the lowest participation probability for urban females.

Chadhuri.S (2014) contest the hypothesis that greater public assistance for skill acquirement helps to improve the relative wage inequality in future. The author took the help of dataset of 13 OECD countries from 2000-2011. Factors such as terms of trade, population growth and degree of openness etc were taken as control variables and the direct consequence of public expenditure on wage inequality was measured. The finding was that a statistically significant relation was found for all those 13 countries although for specific countries, the relation was sometimes found to be positive, negative or even zero.

Khare.M (2014) in his study focuses on analysing the growth and changing structure of the Indian higher education system in the light of the education profile of the Indian jobseekers. Khare points out that the discipline of one's study becomes very important in case of specialized/technical jobs. The study further revealed that Electronics and IT hardware has the highest employability index followed by Health care services, IT/ITES, and Pharmaceuticals and Chemicals in decreasing order. Indian youth are more lacking in personal skills as compared to functional skills. Functional skills are relatively more industry specific and are generally taken care of by industries during their probationary trainings. The expectation from the higher education sector is thus to focus on imparting personal skills which are more of general nature, fitting into the requirements of a broad cross section of industries

Gautam, M (2016) analyses the education structure of the country using the "Capability Approach" as a holistic mechanism of evaluation and ways in utilizing the demographic dividend of the country. He states that out of the four types of learning- Divergent, Convergent, Assimilating and Accommodating, The Indian education system is basically assimilative in nature. There is more focus on theoretical knowledge than practical. Gautam

M. draws attention that little more than 60% of the employers are somewhat satisfied with the new graduates passing out of Indian engineering colleges.

Rastogi.H (2018) claim that only 10% of the Indian workforce has formal skill training whereas for developed countries like the US, Germany it is more than 50% of the workforce. 16% of Indian companies provides in-firm training on recruitment, in contrast to 85% of firms in China. 75% or more of the graduates on an average are not considered employable. Rastogi blames the poor quality of the higher education for the lack of employability of the Indian youth. He also identifies the factors such as an ineffective quality assurance system ,inappropriate methodology of teaching and assessment, to be responsible for the poor quality of higher education

Singh. D & Shastri. (2020) examine the nexus among public expenditure allocated to education, educational attainment at secondary level and unemployment rate in India for the period 1987–2017. The study employs autoregressive distributed lags (ARDL) bound testing approach to find the long-run relationship among the variables. The causal linkages are investigated through block exogeneity test based on vector error correction model. The empirical results indicate that educational attainment proxied by gross enrolment ratio at secondary level of education negatively affects unemployment rate in long run as well as in short run. However, public expenditure on education is ineffective in influencing both educational attainment and unemployment rate.

Motkuri.V & Revathi E (2021) examine the framework of vocational training in India. The authors point out to distinct skill shortages in some sectors. They further classify skills as Generic and Specific in nature. Generic skills consist of critical thinking, creativity etc. They are transferable. Specific skills on the other hand are technical in nature. These skills are limited within the domain of the occupation. Generic skills therefore obtain a higher place in the hierarchy of skills.

Kumar.R (2024) aims to examine the dynamics of structural changes in the employment pattern of the country. The study employs a non-linear autoregressive model (NARDL) to examine the effect of the growth rates in three broad economic sectors namely agriculture and allied, services and industry on work force participation .Kumar points out that the growth in the industrial sector significantly creates employment opportunities in the short and long run. The manufacturing sector can absorb workers with limited skills whereas high skills are now a prerequisite for any modern service sector. Kumar therefore roots for the development of the manufacturing sector for the sake of sustainable and inclusive growth of the country.

OBJECTIVES

The education system of a country has close linkages with the job market. A sound education along with proper skills ensures a smooth transition from college level to the workplace. However, for India, this transition is not always a continuous one with high levels of unemployment and underemployment. The present paper tries to seek the root cause behind such phenomenon. It tries to develop a conceptual framework in linking skill development and the educational learning outcome of the youth with that of employability in the labour market. Thus, the basic objectives of the paper can be summed up as

I. To analyse the overall employment situation of the country.
ii. To discuss the educational attainment of the youth of the country.
iii. To analyse the role of skill development for accessing decent employment opportunities.

METHODOLOGY

The paper relies on secondary data collected from various official databases and reports. The data on higher education has been taken from the All-India Higher Education Reports. Parameters such as the enrolment ratio in various government and private colleges, the discipline wise turn-out at the undergraduate and the post graduate level etc have been used to understand the employment situation in the country. Statistical tools like bar diagram, pie charts etc have been used to portray these data. The data for employment were taken from the surveys of the National Sample Survey Organisation while the data regarding skill formation were taken from the India Skill Development Report. The period chosen for the analysis
is from 2000- 2022.

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FINDINGS

Education in India falls under the control of both the Union Government and the states. It is run by both public and private institutions The last few decades have seen a marked improvement in the literacy rates and gross enrolment ratio at the school level. For colleges and universities, privatisation has been relatively slow. The Indian system of higher education is the third largest in the world. The percentage enrolment in government colleges falls far short of private colleges. (Table 1)

Table1:Percentage Enrolment in Private and Government Colleges

Government Colleges	34.5
Private aided Colleges	21.1
Private non-aided Colleges	44.4

Source-AISHE 2021- 2022

However, it is mainly the youth from the urban areas coming from higher socio-economic backgrounds who have access to these institutions. Despite several initiatives by the government like reservations , students from marginalised societies or those coming from poor families including those from rural areas, hardly get the chance to attend colleges or any private university. This dichotomy puts a large portion of India's youth outside the access of decent formal jobs.

Again, while there has been a rise in the quantity of private institutions, their quality is questionable. It is understood that most of these institutions prioritize profit over the needs of students. The government-based institutions on the other hand stick to the age-old syllabus and teaching process which are outdated in today's world. Added to these, are the problems of lack of requisite faculty, proper infrastructure etc. The net result is that Indian students are far from prepared to meet the requirements of modern industry. A glance into the profile of graduates and post graduate students will bring into light the gap between the demands of the employment industry and what it is supplied with. The total number of pass-outs during 2020-21 at the undergraduate level shows that the highest number of students graduated in the Arts stream followed by Science and then Commerce. Engineering and Medical students came much later.(Table 2)

Table 2:Discipline-wise turnout at Undergraduate Level for the year 2020-21(%)

Arts/Humanities/Social Science	29.58
Science	16.05
Commerce	14.77
Engineering and Technology	11.98
IT and Computer	3.05
Medical	3.63
Management	2.61
Others	18.33

Source-AISHE2020-21

This pattern of learning comes from the fact that getting a degree in the Arts stream is cheaper. Most colleges in rural areas do not have the Science division as they don't have any laboratory facilities. Moreover, enrolment in any technical degree or diploma means migrating out of the homes which are often not approved by their parents. Thus, a huge percentage of girl students choose the Arts stream over others. Similarly, for Postgraduate (PG) level programs, Master of Arts (M.A.) programme has the highest enrolment followed by Master of Science (M.Sc.) Master of Business Administration (M.B.A.) and Master of Commerce (M.Com.) together account for around 22.7% of the total PG enrolment in PG level.(Table 3)

Table 3:Discipline-wise turnout at postgraduate Level for the year 2021- 2022(%)

Arts/Humanities/Social Science	40.7
Science	18.6
Commerce	10.1

Engineering and Technology	2.6
IT and Computer	3.2
Management	12.6
Others	12.2

Source-AISHE2021-22

The above analysis sums up the situation from the supply side of the economy. The unemployment market provides the clue to the demand for workers. Table 4 shows that there is clearly no link between the employability of students with their discipline wise turnout at the undergraduate level. It is seen that B.E/B. Tech students have the highest employability followed by MBA students while the next three positions are taken by BA, B. Com, and B.Sc. students respectively.

Table4:Sectors and their employability talent (%)

BE/ B. Tech	55.15
MBA	55.09
BA	44.2
B. Com.	42.62
B. Sc.	38.06
MCA	29.3
ITI	31.3
Polytechnique	21.42
B. Pharma.	44.63

Source- India Skills Report 2022

It is the manufacturing sector which absorbs most of the unskilled and the low skilled labour as compared to the service sector. Many manufacturing operations are dependent on manual labour for tasks such as packaging, assembly etc which do not require any formal training. Moreover, many manufacturing companies provide basic, on-the-job training for unskilled workers to help them learn specific tasks. This helps the unskilled workers to become more productive . Big firms often subcontract their work to smaller firms who hire unskilled workers with lower wages. This is a very important indicator of the manufacturing sector's potential to absorb India's huge pool of unskilled labour.

Table 5: Skill level in manufacturing sector employment (UPSS, aged 15+), 2000, 2012, 2019 and 2022 (%)

	2000	**2012**	**2019**	**2022**
Unskilled	9.7	13.6	18.7	20.4
Low	87.4	81.4	75.5	72.8
High/Medium	2.9	5.0	5.9	6.7

Source- Various rounds of the Employment and Unemployment Survey data and the Periodic Labour Force Survey (NSSO)

Within the service sector, it is the subsectors Trade and Transport which engages workers with no skill while sectors such as Finance, Public Administration require medium to high level of skills.(Table 6). Many services—such as finance, healthcare, education, IT, and professional services—rely heavily on expert knowledge and decision-making, which typically requires higher education and training. : As services become more digital, driven by AI, they need workers with advanced technical skills such as data analysis, software development, etc.

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Table6:-Skill level in services sector employment (UPSS, aged 15+), 2000–22 (%)

	Trade, hotels and restaurants				Transport, storage & communications				Finance, business and real estate				Public administration, health & education			
Skill level	**2000**	**2012**	**2019**	**2022**	**2000**	**2012**	**2019**	**2022**	**2000**	**2012**	**2019**	**2022**	**2000**	**2012**	**2019**	**2022**
No skill	11.0	13.8	10.3	9.5	41.3	21.2	12.6	9.3	8.0	12.2	10.5	9.7	24.9	17.6	14.0	14.2
Low skill	86.7	79.3	82.3	87.5	56.1	66.6	72.6	71.0	52.6	38.9	45.4	47.9	31.7	35.4	36.7	40.7
High/Medium	2.2	6.9	7.4	3.0	2.7	12.2	14.8	19.7	39.4	48.9	44.0	42.3	43.5	47.0	49.3	45.1

Source-Computed from various years of the Employment and Unemployment Survey data and the Periodic Labour Force Survey

In India, the unemployment figure for the youth exceeds that of the adults. However, there has been a reduction in youth unemployment from 17.5% in 2019 to 12.4% in 2022. The drop in youth unemployment has primarily taken place because of an increase in female employment during the pandemic years.(Table 7).

Table7:Unemployment rate (UPSS) among youths and adults, 2000, 2012, 2019 and 2022 (%)

Youth	**2000**	**2012**	**2019**	**2022**	**Adult**	**2000**	**2012**	**2019**	**2022**
Male	6.2	6	17.3	12.6	Male	0.5	0.3	1.4	1
Female	4.4	6.8	17.9	11.8	Female	0.3	0.6	1.3	0.8
Total	5.7	6.2	17.5	12.4	Total	0.4	0.4	1.4	0.9

Source- Computed from Employment and Unemployment Survey data, and Periodic Labour Force Survey data.

There has been a substantial increase in the self-employed category. However, this type of increase in employment is mainly distress driven and its sustainability remains to be seen in the future.(Table8). The rise in self-employment has mainly taken place in the rural areas. Women with low academic qualifications , those who are mainly involved in farm work comprise the bulk of self-employment .

Table8:Distribution of employment structure, 2000, 2012, 2019 and 2022

Employment status	**2000**	**2012**	**2019**	**2022**
Regular formal (6)	7.6	7.5	10.2	9.5
Regular–informal employment in the organized sector (5)	2.3	5.6	6.5	5.0
Regular–informal employment in the unorganized sector(4)	5.0	5.4	8.1	7.2
Self-employed (3)	52.3	52.2	51.7	55.9
Casual wage employment in organized sector (2)	1.9	4.1	2.8	3.9
Casual wage employment in unorganized sector (1)	31.0	25.1	20.7	18.6

Source: Employment and Unemployment Survey data and Periodic Labour Force Survey data

It is observed that unemployment in urban areas is greater than that in rural areas. The result is often attributed to the tendency of urban youth to pursue their education. Education and employment engage the bulk of the youth population However, recent evidence shows that there is a growing share of the youth who are neither in education nor in employment ,which is a matter of concern for the policy makers. This may reflect the unwillingness of the educated youth to take up low paying jobs. Thus, it can be seen again that while the quality of education needs an upgradation, it is also necessary that the economy generates suitable employment opportunities.

CONCLUSION

The paper clearly points out the various loopholes in the education of the country resulting in low employment opportunities. . Post independence, India has seen a rise in the number of educational institutions manifested in the increase in the literacy rate and gross enrolment rate The Indian higher education system is the third largest in the world, but the educational infrastructure of the country is clearly insufficient to meet the growing requirements of the country in terms of both quantity and quality. Firstly, there are not enough colleges and universities in the rural areas. The private colleges and universities that have sprung up in the last few decades are mostly located in the urban areas and outside the reach of many because of their exorbitant costs. The government schools and colleges are challenged with the problem of high dropouts despite an increase in the enrolment rates in recent years. Moreover, they struggle with poor infrastructure, empty position etc. Given the fact that the percentage of GDP spent on the education sector is abysmally low, it is not surprising that the government institutions cannot invest in quality lab, high speed internet and the other requirements of modern education across the world. Thus, the transition from higher education to employment is not a smooth and effortless one for most of the country's

youth. India has a high rate of both unemployment and underemployment particularly with regards to its youth and female population. More than 80% of the employment is in the informal sector which is characterised by the absence of social security, proper payment and decent working conditions.
The sectors which have been the main drivers of growth for India post liberalisation such as Information Technology, Telecommunication, Banking and Financial services can only absorb youths who are at least graduates with high levels of skills. The rapid pace of technological change has created a widening gap between the skills the workforce possesses and those that are in demand. Post pandemic, India has seen a boom in jobs from the gig economy which lacks long-term stability. An exploration of the employment scenario reveals that the youths are increasingly taken into self-employment given the paucity of jobs in the formal sector. India has surpassed China in population in recent years and our working population is going to increase in the coming decades. Given the bulk size of the youth population, it is imperative that we invest in proper education and skill formation if the country wants to enjoy the benefits of the demographic dividend. Post independence, there is evidence that this percentage is going to swell up further. If the country fails to provide employment to the youth who are joining the labour force, it might not only fail to utilize the golden opportunity that its demographic dividend presents but also lead to social unrest that will ultimately disturb the stability of the economy.

Recommendations
The following recommendations can be made to improve the transition of students to future productive workers .
Firstly, the curriculum of the colleges must be made more flexible, relevant and competitive. Priority should be given to critical thinking and practical applications.

Secondly, adequate emphasis must be given to faculty retention and their training.
Faculties should be encouraged to take part in Faculty Development Programmes and engage in meaningful research in their own streams .

Thirdly , the government must try to improve the infrastructure of the educational institutions. Classrooms, laboratories, libraries should be upgraded to meet the global standards.

Next, the government must also ensure higher education becomes more inclusive and affordable. Branches of colleges and universities need to be established in the rural areas. More scholarships and aids can be given so that students from marginalised communities can also receive the benefits of higher education.

Lastly, the colleges and the universities should focus on industrial networking. Every college/ university department must have an active placement cell which should always be in very close touch with the industry. Colleges in rural or semi urban areas can collaborate with the local SMEs .New courses can also be introduced keeping in mind the needs of the local entrepreneurs. This way the youths from the rural and the urban areas

will not have to migrate to the urban areas for jobs, and this will lessen the load from the overcrowded urban job market .

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