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Employer perception on graduate employability: evidence from Uttar Pradesh

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Abstract: The current paper is an attempt to understand the skill gap and predicted job market skills needed. Thus, following the set of objectives and review of the literature, 13 types of skills relevant to employment were identified and classified into three categories: technical skills, non-technical skills, and behavioural skills. Out of the 13 talents chosen by businesses, technical skills in graduates were deemed the most significant, followed by skill flexibility. Students and HR executives were asked to rate all talents on a Likert scale of 1 (least essential) to 5 (most important) using structured questionnaires (most important). There is a gap between the required and apparent abilities of graduates, resulting in poor performance of employees in new workplaces. Graduate foreign language skills have a 0.45 gap, while conceptualising skills have a 0.44 difference. Academic excellence and numeric skills have the smallest difference, with a 0.11 index value. This highlights the importance of identifying the most crucial talents for employers.

Keywords: behavioural skills education; employability; non-technical skills; skills gap; technical skills graduate employability.

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Biographical notes: M. Yousuf Malik is a seasoned economist with expertise in revenue mobilisation, economic growth, and public finance. Holding a PhD from the University of Lucknow, his research on the mobilisation of revenue receipts in major northern states of India has earned him accolades, including the prestigious Doctoral Fellowship Award from the Indian Council for Social Science Research (ICSSR). Driven by a passion for academia, he has served as an Assistant Professor at institutions like Woxsen University and National P.G. College Lucknow. A prolific author, his publications in esteemed journals reflect his dedication to exploring economic dynamics and policy implications.

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1 Introduction

Graduate employability is an important issue as the global economic recession has led to a significant decline in the employment prospects of recent college graduates over the past few years. To boost their chances of getting hired, graduates must demonstrate relevant skills and attributes that are highly desired by the employers. Employers have long questioned graduates' capacity to contribute fully to the position on which they have been appointed (Andrews and Higson, 2008). Many students pursue higher education to enhance their chances of getting a profession; nevertheless, it no longer guarantees them a job without appropriate job skills (Arum and Roksa, 2010; Betcherman et al., 2004), Barber and Mourshed (2007), and Gergen et al. (2014). Graduate employability is also used as a crucial indicator to assess educational quality in general and higher education in particular. Graduates have begun to adapt more effectively to the demands of the work market and learning activities. Employers expect graduates to have the necessary technical skills for their specific jobs. However, over the period growing importance of soft skills have been proved by many researchers (Stewart et al., 2016). Unemployment among college graduates is prevalent in both rich and developing nations according to a

growing body of studies (Zoghbi-Manrique-de-Lara et al., 2017; Nghia et al., 2019). China, for example, generates around 7 million university graduates annually (Zoghbi-Manrique-de-Lara
et al., 2017), yet the number of jobless graduates in 2013 was over 2 million (Lee et al., 2015). Only 25% to 30% of graduates in India, one of the world's largest higher education systems (second only to China), are employed [Singh and Tilak, (2020), p.57]. In Taiwan, data has been gathered that graduate unemployment outnumbers all other educational levels in terms of employment rates [Wu, (2011), p.303].

The Indian labour market is characterised by a significant share of informal employment, particularly in the agricultural and unorganised sectors. Informal workers lack job security, social protection, and access to benefits such as healthcare and pensions. The informal sector accounts for a substantial portion of employment in India, with estimates varying from 70% to 90%. Uttar Pradesh has a diverse labour market with a significant portion of the workforce engaged in the agricultural sector. According to the Periodic Labour Force Survey (PLFS) 2018–2019, agriculture accounts for a substantial proportion of employment in the state. However, there has been a shift towards non-agricultural sectors in recent years due to urbanisation and industrial growth.

The state also has a significant informal sector, particularly in small-scale manufacturing, construction, and trade. Informal workers face challenges such as low wages, lack of social security, and limited access to benefits. Strategies to formalise the informal sector and provide better working conditions are crucial for inclusive growth (Agarwal et al., 2019).

With over 6 lakh students registered in ITIs and ITCs in 2020, the state's existing skill development infrastructure is also underused. According to the Uttar Pradesh-Skill Development Policy document, approximately 60% of the intake capacity in private sector ITCs, polytechnic, engineering, and professional institutions went unutilised. The main causes for such underutilisation include poor quality education, outmoded trades, outdated syllabi, skill mismatches, a high rate of young unemployment, and a slow rise in work prospects in the state in recent years. According to one estimate, less than 30% of ITI and polytechnic graduates were able to find meaningful work after completing their courses (Government of Uttar Pradesh, 2013). Uttar Pradesh Skill Development Mission (UPSDM) actively enhances youth employability in Uttar Pradesh through various programs, including PMKVY for short-term skill training, Kaushal Satrang for broad district coverage, Rozgar Melas for job opportunities, employability enhancement for holistic skills, RPL for skill recognition, women empowerment for gender inclusion, and apprenticeship training for practical experience.

The paper has been divided into eight sections which starts from introduction followed by research methodology and objectives. In the next section we have explained the social economic and professional background of the employers which is followed by the ranking of educational fields by these employers. In the next section we explored the demand for education degrees by the employers wherein we have included the evident 13 skills present in the graduates. In the next section we have analysed the evident skills in graduates and skills needed by the graduates. The data for both the presence and absence of skills in graduates has been collected by asking questions to employers, thus resulting in a skills Gap index. In the next section we have provided the future vision of job market by employers and policy suggestion to improve skills and reduce the skill gap.

2 Review of literature

Globally, there is a robust increase in the growth rate of research focusing on enhancing the capability of graduates to meet the demand of the new workplace environment. The approach adopted is to assess the desirability of skills deemed necessary by employers. Academic institutions are developing and reviewing lists of competencies or graduate qualities that learners are expected to gain in order to be employable after graduation. Graduates play a crucial role in the economy, and there are many different perspectives on how graduates do perform when they enter the labour market (Rainsbury et al., 2002). The debate around graduate employability has consistently ignored subjective components of employability, such as how fresh graduates interpret the labour market they desire to enter and the attitude they acquire towards their future employment and employability.

Uttar Pradesh being the most populous state of India needs to amplify efforts to provide better skills to its workforce. This can be made possible if various schemes like, the Prime Minister's Council for Skill Development has set up a manpower target of 500 million skilled workers by 2022 is implemented in the manner prescribed. This target has been divided among 20 odd ministries/departments including the National Skill Development Corporation (NSDC) (Sanghi et al., 2012).

It is clear from the international debates that graduate employability is more than a list of skills and is culturally and contextually dependent because individual knowledge is both implicit and explicit (Lerman et al., 2017). Students and graduates suggest several reasons for the poor employment skills of the majority students some of which include traditional teaching methods, low-quality literature, overcrowded classrooms, and inadequate university infrastructure (Han and Altman, 2010; Picot et al., 1998; Matthews, 2000; Williams and Sandler, 1995). They complained about the teaching style at university which was still dominated by the transmission of knowledge from teachers to students. Much knowledge provided in class was outdated and irrelevant, and was therefore of not much use for their future occupations (Delebarre, 2016). Student participants unanimously reported that most exams in their universities were still designed to recheck the knowledge provided in class. Participants' assertions in this study are congruent with those reported in the literature. The paper aims to improve the prospects of a match between labour market demand (employers looking for workers) and labour market supply (graduates looking for employment).

However, the classification of skills that have been derived by various academicians looked upon, the skills are divided into two major types, hard skills and soft skills (Deaconu et al., 2014; Dunbar et al., 2016; Orr and Simmons, 2011; Fung et al., 2014; Stewart et al., 2016). Hard skills are associated with the technical parts of learning how to do a job. (Matsouka and Mihail, 2016), and soft skills, in particular, refer to the qualities necessary for managing interpersonal relationships (Andrews and Higson, 2008). The chronology of India is a populous country with a diverse labour market. The labour force participation rate (LFPR) in India stood at 51.4% in 2019, indicating the proportion of the working-age population actively engaged in either paid work or seeking employment. However, gender disparities persist, with female LFPR considerably lower than male LFPR.

Unskilled employees play a vital role in employment generation, particularly in labour-intensive sectors such as agriculture, construction, and manufacturing. Their participation in these sectors contributes to overall job creation and economic growth,

poverty alleviation, improve living standards and enhance inclusive growth (Basu, 1999; Fields, 2004; Kanbur and Venables, 2005; Mehta and Vyasulu, 2015). Studies have shown that the availability of unskilled labour is crucial for sustaining economic activities and meeting the demand for goods and services (Ghani and O'Connell, 2014). This sectoral employment helps absorb surplus labour, reducing unemployment rates and supporting poverty reduction efforts (Mitra, 2003).

3 Research methodology and data collection

The present study is purely based on primary data. The data for the employer's section has been taken from the two companies in Uttar Pradesh, which are Oriental Insurance and Hindustan Computers Limited (HCL). Both companies are service sector companies. The total number of samples taken of the employer's section are 37. The consent from the respondents was taken in written form with their sign on questionnaire. Although our research was conducted among companies located in Lucknow exclusively, but it is believed that the findings related to the role of employers and field of specialisation may generate conclusions of interest for research carried out in other parts of India as well. However, the total sample of 97 graduate employees was collected from many company offices like HCL, Oriental Insurance and Sahara Business House in Lucknow city. The presence of these 13 skills in the graduates is verified by the employers who are working under them. To derive the skill gap index, the questionnaire carries two questions, one for Employers and one for Workers, where they were asked to rank all skills on a Likert scale of 1 (least important) to 5 (most essential) using structured questionnaires (most important), thus a ranking order was developed based on the mean scores of the evaluations. T test has been applied to test the difference between the means of skills of employees given by employer (IMP) and how many skills are evident in the employees (EVD).

4 Objectives

1 estimating the perception of employers on graduate employability

2 estimating the skill gap index of graduates in Uttar Pradesh

3 understand foreseen job market demands and preparedness

4 Suggest policy recommendation for improving employability among graduates.

5 Background of the employers

According to a survey published by the Centre for Monitoring Indian Economy, unemployment rate in Uttar Pradesh jumped from 11.4% points to 21.5% in April 2020 (CMIE). Unemployment has risen to 2.1% in July 2017 to its present level over a lengthier period. This indicates the crisis in the largest labour force state of India is itching towards unbearable level, if timely policies were not implied to mitigate the

crises. The current paper is in this direction to understand the causes of unemployment and the skills to mitigate this problem.

The empirical analysis of the designated objectives starts with understanding of the sample population that has been derived, as it gives a clear picture of employers and their education level and their position. Table 1 shows the institution type that employer has last attended and the position of the employers in a company structure. It has been tried to find the answers to the questions, that how employers sustain their carrier and what is the commonality between the senior employers. Table 1 is considered, the columns represent the position of the employers, and the rows show us the institution type attended. Out of the total employer's 56.8% have attended public institutions out of which majority of them (29.7%) were posted at zonal head office, 13.5% were posted at branch offices and 10.8% at other places.

Table 1 Designation and the institution type attended by the employers

	Background of employers						*Total*
	National head office	*Zonal head office*	*Branch office*	*Divisional office*	*Do not know*	*Others*	
Public	0.0%	29.7%	13.5%	2.7%	0.0%	10.8%	56.8%
Aided	0.0%	0.0%	0.0%	0.0%	2.7%	2.7%	5.4%
Private	2.7%	13.5%	16.2%	0.0%	0.0%	5.4%	37.8%
Total	2.7%	43.2%	29.7%	2.7%	2.7%	18.9%	100.0%

Source: Primary survey of author

The lowest category of employers, i.e., 2.7%, who had attended public institutes are posted at divisional offices. In the institutional category 37.8% have attended private institutions. Out of 37.8%, 16.2% of employers were posted at the branch offices and 13.5% were posted at zonal offices. The lowest category of employers, i.e., 5.4%, has attended institutes aided by the government and other organisations. If column wise column classification is considered only 2.7% of employers who have attended the private institute are posted as national head. Looking at the posting place, 43.2% were posted at zonal head office which was followed by 29.7% in branch offices.

6 Ranking of educational fields by employers

Ranking educational fields is necessary to understand the importance of various branches of education or understand the probability of employability in various fields. Table 2 in this regard shows the five layers of preferences given by employers to various academic subjects, within which they will like to hire the graduates. The greater the score given to a subject by the employer, the more are chances of the graduates of that subject being hired by the employers in Table 1 there are seven subjects with five layers of preferences. The total of each layer is equal to 100. In the below analysis the subjects have been ranked according to the score they were given by the employers.

In Table 2 in first layer's 78.4% of the employers have given preference to candidates having engineering degree, while the second preference is given to candidates having medical degree with 8.1% preference. The third preference is given to management, economics and commerce, both having 5.4% preference score.

Table 2 Rank of the educational fields by the employers layer wise

Educational fields	*Engineering*	*Management*	*Economics and commerce*	*Law*	*Medical*	*Art and design*	*TT education*	*Mean*
Layer 1	78.4	5.4	5.4	2.7	8.1	0	0	1.64
Layer 2	0	86.5	5.4	0	5.4	2.7	0	2.43
Layer 3	10.8	0	75.7	2.7	0	0	10.8	3.02
Layer 4	0	8.1	16.2	27	10.8	0	37.8	4.27
Layer 5	10.8	13.5	10.8	0	0	54.1	10.8	5.56

Source: Primary survey of author

In the second layer of preferences, management was given the highest preference with a score of 86.5%; economics and commerce and medical both having a score of 5.4%. In the third layer of preference, the field of economics and commerce was given a score of 75.5% which is the highest in layer third while engineering and TT Education both received a score of 10.8%. In the fourth layer, TT Education has been given 37.8% score, which is the highest in this layer while law and economics and commerce stood at second and third position respectively with a score of 27.0 and 10.8%. In the last layer, art and design were the most preferred with a score of 54.1% while the management was at the second spot with a preference score of 13.5%.

When all the layers of preferences given by employers to various subjects from which they would like to hire graduates are added together, graduates with a degree in management receive the highest score of 86.5%, while graduates with a degree in engineering receive a score of 78.4%. Following this, the graduates with economics and commerce as subject were found likely to be hired, with a score of 75.7%. At fourth position in the overall ranking by combing all layers of preferences is art and design with 54.1% score, which is followed by TT education with 37.8% score.

There are various skills that are important from an employer's point of view. In the Table 3 shown, 13 types of skills which respondents rated from extremely important to not important have been given.

The most important skill according to the respondents is the technical skill which has been rated the most important by 54.1% of the employers. Technical skill refers to how well an individual is technically competent while executing his task. Technical ability encompasses both understanding of technology and the method of performing a task in a well-defined and logical manner. The second most important skill according to the employers is skill importance adaptability, which has been rated the most important by 45.9% of employers. This skill shows the power of a graduate to adopt new skills. As the time goes on there is a need to upgrade the old skills to match the needs of present situation. The third most important skill as clear from the table is computer skill with an extremely important score of 43.2%. At the fourth position is conceptualising skills which was given the most important rank by 37.8% of the employers. The least important skill according to the employers is citizenship skills.

Table 3 Employers perception on importance of skills

Perception on skills	*Extremely important*	*Important*	*Neutral*	*Less important*	*Not important*	*Mean*
Technical skills	54.1	29.7	13.5	0	2.7	1.7
Academic skills	32.4	62.2	5.4	0	0	1.7
Managerial skills	21.6	56.8	16.2	2.7	2.7	2.1
Citizenship skills	8.1	70.3	13.5	5.4	2.7	2.2
Skill importance adaptability	45.9	40.5	5.4	2.7	5.4	1.8
Sector specific skills	8.1	59.5	18.9	2.7	10.8	2.5
Foreign language skills	13.5	32.4	24.3	27	2.7	3.8
Conceptualising skills	37.8	51.4	5.4	0	5.4	1.8
Leadership skills	16.2	62.2	18.9	2.7	0	2.1
Computer skills	43.2	56.8	0	0	0	1.6
Communication skills	29.7	67.6	2.7	0	0	1.7
Personal Skills	29.7	67.6	2.7	0	0	1.9
Numeric skills	13.5	62.2	10.8	8.1	5.4	2.3

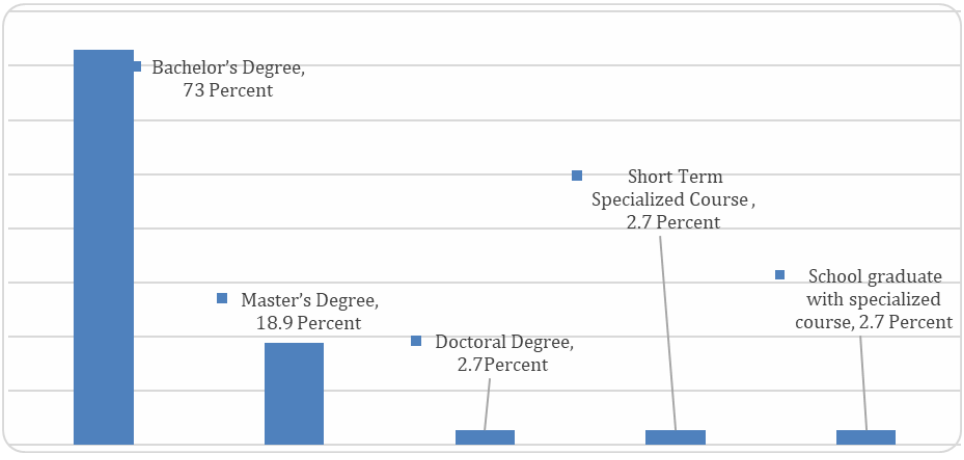
Source: Primary survey of author

7 Demand for an academic degree

Academic degrees are the steppingstones that most people use to secure a career. There are two kinds of degrees: academic and professional. The former is more research-oriented and prepares a student for a certain field, while the latter focuses on problem solving and real-world application. Most graduates believe that their college degree is connected to their employment and that the quality of their job performance is related to their college training, induction, or on-the-job training (Riley, 1982). An academic degree done not only increase the likelihood of acquiring a job, but it also secures greater income in the labour market than those who do not have an academic degree. The goal here is to determine what sort of degree businesses want from graduates.

The view of employers on the requisite degrees and abilities is crucial for both students and colleges. Graduates will always be in high demand to meet the needs of businesses, ensuring that all graduate pass outs are readily employed as they possess the necessary abilities. This approach creates new challenges for educational institutions that prepare graduates. In this regard, Figure 1 depicts employers' preferences for various courses from which they want to recruit graduates. There were five-degree categories from which employers were required to choose. It has been discovered that 73.0% of the employers preferred graduates with a bachelor's degree, whereas 18.9% preferred graduates with a master's degree. The other three types of degrees have the same 2.7% score: graduate with doctoral degree, short term specialised course with UG/ PG, and students with short term specialised courses. That indicates that just 2.7% of businesses prefer to hire PhD candidates, and another 2.7% prefer to hire applicants with specialised courses.

Figure 1 Employers perception on required academic degrees (see online version for colours)



Source: Primary survey of author

8 Evident skills in graduates

To further understand the existing abilities of graduate employees, it is asked employers to score the evident skills, which offer a clear image of skills without bias. Table 3 represents the satisfaction of the employers about the evident skills in the graduates. The same 13 skills were used in this table also which have been used earlier. The response of the employers was categorised as highly satisfied, satisfied, neutral, and less satisfied.

Table 4 Evident skills in graduates

Skills evident in graduates					
Graduate skills evident	*Highly satisfied*	*Satisfied*	*Neutral*	*Less satisfied*	*Mean*
Graduate academic excellence	27.0	64.9	8.1	0	1.811
Graduate technical skills	32.4	54.1	2.7	8.1	2.054
Graduate communication skills	10.8	78.4	8.1	2.7	2.027
Graduate computer skills	32.4	56.8	8.1	2.7	1.811
Graduate leadership skills	10.8	56.8	24.3	8.1	2.297
Graduate managerial skills	13.5	51.4	32.4	2.7	2.243
Graduate conceptualisation skills	10.8	62.2	18.9	8.1	2.243
Graduate personal skills	16.2	62.2	10.8	10.8	2.162
Graduate citizenship skills	5.4	48.6	37.8	5.4	2.514
Graduate numeric skills	8.1	67.6	21.6	2.7	2.189
Graduate foreign language skills	18.9	45.9	16.2	18.9	3.351
Graduate sector specific skills	5.4	35.1	43.2	13.5	2.730
Graduate skill adaptability skills	16.2	37.8	37.8	2.7	2.432

Source: Primary survey of author

It was discovered that 32.4% of employers were highly satisfied with the technical abilities of graduates hired. The same number of employers (32.4%) was likewise highly satisfied with the graduate computer abilities. Academic excellence is the third talent with which employers are highly satisfied. Graduate foreign language competence is the least pleasing talent, as 18.9% of employers were dissatisfied with the employees' skills.

Table 5 Skill gap index among graduates

Skill type	*Mean of employers perception (IMP)*	*Mean evident of graduate employees (EVD)*	*Skill gap (IMP-EVD)*
Graduate academic excellence	1.70	1.81	0.11
Graduate technical skills	1.70	2.05	0.35
Graduate communication skills	1.70	2.03	0.33
Graduate computer skills	1.60	1.81	0.21
Graduate leadership skills	2.10	2.30	0.20
Graduate managerial skills	2.10	2.24	0.14
Graduate conceptualisation skills	1.80	2.24	0.44
Graduate personal skills	1.90	2.16	0.26
Graduate citizenship skills	2.20	2.51	0.31
Graduate numeric skills	2.30	2.19	0.11
Graduate foreign language skills	3.80	3.35	0.45
Graduate sector specific skills	2.50	2.73	0.23
Graduate skill adaptability skills	1.80	2.43	0.63

Source: Primary survey of author

The skill gap index analyses the disparity between graduates' apparent skills and employers' perceptions of graduates' talents. As a result, this index shows the gap between the abilities required of graduates and the skills that are obvious. The highest discrepancy in the measure is 0.63 in graduate skill adaptability. As a result, there is a gap between the required and apparent abilities of graduates, resulting in poor performance of employees in new workplaces. Graduate foreign language skills have a 0.45 gap, whereas graduate conceptualising skills have a 0.44 difference and are ranked third. Graduate academic excellence and graduate numeric skills, on the other hand, have the smallest difference with an index value of 0.11. Graduate citizenship, communication skills, and technical skills all had index values of 0.31, 0.33, and 0.35 respectively.

Table 6 t test on mean of IMP and EVD

	t	*DF*	*Sig. (two-tailed)*	*Mean*	*Mean difference*	*0.5% confidence interval of the difference*	
						Lower	*Upper*
Mean IMP	30.718	36	0.000	2.0894	2.08941	2.0890	2.0898
Mean EVD	28.541	36	0.000	2.2974	2.29738	2.2969	2.2979

Source: Authors own calculations

t statistics has been used to find the difference between the means of skills of employees given by employer (IMP) and how much skills are evident in the employees (EVD). The test was done at 5% level of significance, where in the null hypothesis there is no difference between the means of IMP and EVD. The test results were significant which makes us reject the null hypothesis and there is a difference between the mean of the employee's skills (IMP) given by employers and the skills evident in employees (EVD) given by employers. This output shows that the mean for IMP is 2.0894 versus 2.2974 for EVD. Thus, it can be concluded that the evident skills in graduates are low as compared to expected skills that employers want graduates to possess.

Future vision of the job market part contains the current information needed to direct labour markets and people toward opportunities in the present and future of employment. This portion of the article charts the future jobs and skills, as well as the rate and direction of change possibilities for employment.

Table 7 Future vision of the job market

Future preference	College degree	Technological knowledge	General knowledge	Personality trait	Tech-savvy	*Urban* *Upbringing*	Multi-tasking	Multi-lingual
Increase	56.8	97.3	78.4	91.9	83.8	51.4	94.6	73
Decrease	10.8	2.7	5.4	2.7	13.5	27	5.4	16.2
No change	32.4	0	16.2	5.4	2.7	18.9	0	10.8
Total	100	100	100	100	100	100	100	100

Source: Primary survey of author

Table 6 depicts the future significance of seven key factors ranging from academic degrees to multi-tasking, which incorporates both characteristics of a well-educated graduate. The respondents were asked to indicate whether the future relevance of these criteria in the future employment market will rise, decrease, or remain same. On top of the list was technological expertise, which 97.3% of employers said will be more important in the future, while only 2.7% said it would be less important in the future. On the second spot is multitasking, which 94.6% of employers said will increase in importance in the future and 5.4% of employers said will decrease in the future, followed by personality trait, which 91.9% of employers said will increase in importance in the future and 5.4% said will not change in the future.

The highest difference in the skill gap index is seen in skill adaptability, which has a difference of 0.63. As a result, there is a gap between the required and apparent abilities of graduates, resulting in poor performance of employees in new workplaces. Graduate foreign language skills have a 0.45 difference, whereas graduate conceptualising skills have a 0.44 difference and are ranked third. Graduate academic excellence and graduate numeric skills, on the other hand, have the smallest difference with an index value of 0.11. Graduate citizenship, communication, and technical skills have index values of 0.31, 0.33, and 0.35, respectively, and are in the middle of the index value range. It is implicit that graduates' prospects of finding work will improve as their foreign language abilities and flexibility improves.

However, technology, climate change, globalisation, and demographics are viewed as significant aspects that will play a defining role in the development of the work force in the coming years. Understanding how these elements may impact labour and society, as noted in the International Labour Office (2017), is critical for preparing for future prospects.

9 Conclusions and policy suggestions

Employers' perceptions of graduate employability are based or assessed on a set of 13 selected abilities that have been employed in this study. Majority of the employers have a postgraduate degree and have attended public funded colleges. Engineering is the most coveted educational sector in which businesses want to hire graduates, followed by management, economics, commerce, and medical. Employers consider TT education and art and design to be the least desirable educational professions. Out of the 13 talents chosen by businesses, technical skills in graduates were deemed the most significant, followed by skill flexibility. According to employers' perceptions, sector-specific skills are the least important. When it comes to degree preferences, 73% of companies prefer to recruit graduates with a bachelor's degree, while 18.9% prefer graduates with a master degree. Graduates with specialised courses were the least valued, with only 2.7% of companies preferring this degree. According to the report, greater qualifications are appreciated, with 59.5% of employers agreeing that higher qualifications are valued, and only 2.7% disagreed. Employers share the same view about the future relevance of higher education. According to the report, finding jobs would be difficult in the future, and skill-based courses will be appreciated more than a UG degree.

As a result, there is a need to promote skill-based courses and offer graduates, with skill-based courses, as regular graduates would struggle to find work. The employers were least satisfied with the graduate numeric skills, graduate computer skills and graduate communication skills. Thus, there is a need to improve the graduate conceptualisation skills, graduate skill adaptability and foreign language skills to improve the efficiency of new graduates and make them realise their potential in the production process. However, the most efficient skills according to the skill gap index, found in the graduates of Lucknow are academic numeric and managerial skills.

Declarations

Consent of respondents

The consent from the respondents was taken in written sign on questionnaire. We have recorded email address of respondents for transparency and got permission from them for using their name and contact information with publishing authorities.

Author's contribution

There are currently three authors listed in the paper, the first author is the principal author who has given the original idea to work on this problem and prepared manuscript. The second author is my co-worker who has helped in data collection and writing the third author has contributed in revision and proof reading.

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