

**AN EMPIRICAL STUDY ON GAP ANALYSIS  
AMONGST STUDENTS' SKILL SET AND INDUSTRY  
EXPECTATIONS: WITH SPECIAL REFERENCE TO  
POST-GRADUATE MANAGEMENT INSTITUTES IN  
PUNJAB**

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**DOCTOR OF PHILOSOPHY**

in

**Management**

By

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2024**

## DECLARATION

I, hereby declare that the presented work in the thesis entitled “**An Empirical Study on Gap Analysis amongst Students’ Skill Set and Industry Expectations: With special reference to Post Graduate Management Institutes in Punjab**” in fulfillment of degree of **Doctor of Philosophy (Ph.D.)** is outcome of research work carried out by me under the supervision of Dr. Pooja Sharma working as Associate professor, in the Mittal School of Business of Lovely Professional University, Punjab, India. In keeping with the general practice of reporting scientific observations, due acknowledgments have been made whenever the work described here has been based on the findings of another investigator. This work has not been submitted in part or full to any other University or Institute for the award of any degree.



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## CERTIFICATE

This is to certify that the work reported in the Ph. D. thesis entitled “**An Empirical Study on Gap Analysis amongst Students’ Skill Set and Industry Expectations: With special reference to Post Graduate Management Institutes in Punjab**” submitted in fulfillment of the requirement for the reward of the degree of Doctor of Philosophy (Ph.D.) in the Mittal School of Business is a research work carried out by Megha Mohan, 41900041, is a bonafide record of his/her original work carried out under my supervision and that no part of the thesis has been submitted for any other degree, diploma or equivalent course.



**(Signature of Supervisor)**

Name of supervisor: Dr. Pooja Sharma

Designation: Associate Professor

Department/school: Mittal School of Business

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## **Abstract**

Not having the appropriate employability skills at an adequate level can hurt one's chances and prospects during the interview stage and one's ability to get a job. However, it appears that our system is in the process of ignoring the fact that these recent engineering and management graduates lack the desired skill sets they require as soon as they step into the real world of tough jobs and competition. Employable skills are a relatively new and frequently used concept talked about term, these days. The study was carried out to find the gap between the industry expectations and the delivery of those skills to the students. As the unemployment rate is increasing in the state of Punjab, the issue of skill development is being addressed at all levels from the higher education institutes to the state and central government using developing policies at all these levels with the primary focus of the study was the management students, faculty members, and the industry personnel or recruiters. The study's main goal is to identify the gap between the skills expected/required by the industry in management and engineering graduates and the skills available to the candidates. The study also investigates the potential causes and makes a few recommendations. The majority of employers complain that graduates lack the necessary skills and abilities for their industries. Employers frequently claim that graduates are unprepared for the workforce because they lack employability skills. This research purposes to find out the skills necessary among the fresh graduates to make them employable as per the recruiters. Punjab has been considered as one of the prosperous states in India until recently where it has been observed dealing with numerous economic problems. Over the last few decades, several industrial entities here have either shut their doors or relocated their operations to more cost-effective locations. Similarly, the employment prospects in Punjab's industrial sector have decreased in absolute terms, particularly after 2005. The industrial segment that is acknowledged as a locomotive of economic development has continued to remain unfledged in Punjab. The solution to this problem of unemployment necessitates tremendously watchful planning of the fundamental development process. This necessitates a distinct balance of both market and non-market strategies that contribute to the development of an institutional structure that is responsive as it will play an important role to attain the goals of job creation, social harmony and growth in the economy. To fulfil this purpose Punjab Skill Development

Mission (PSDM) is constituted in line with the National bodies discussed above. The prime objective of this PSDM is to enable the youth to take up training that is relevant to the industry so that they become skillful and can secure a job for themselves easily. It aims to conduit the increasing gap between the demand for skilled personnel in the industry and the unemployed youths by making sure that the candidate with the right Qualifications gets the desired job. The skill mismatch between academic education and employment has widened to the point where on one hand, the youth is unable to look for the jobs they desire for and on the other hand, the employees are not capable of finding the rightly trained personnel. According to the *India Skill Report (2019)*, less than 50% of the graduating youth are employable. This has led to broadening the gap between the skills possessed by the student's graduation and employability.

Higher education needs to lift up to discourse these issues present in the corporate and are becoming hindrances in making their graduates employable. There are very few studies that have identified the skill gaps related to employability in the context of Indian Industry. Although there are a few studies have identified some of the important skills required but again the suggestions as to the methods or procedures to develop those skills are still not appropriate. There still exists a space between the skills that are available and the skills that are work-ready and that make a student employable. No framework for employability has been proposed in the context of Indian Management graduates at the doctoral level. To maintain quality and fulfil the growing demand for education and learning, policymakers must develop funding strategies for education that place more of an emphasis on interactive learning options, which also need resources. While the suggested learning strategies are put into practice in higher education institutions, the nation's ongoing problem of unemployed young should be addressed through fostering entrepreneurship and lifelong learning. Despite the abundance of employment options in the globalized world, there are not enough employable graduates. There is no difference between the students' acquired skills and what the industry expects in terms of communication skills, career adaptability skills, work ethics, self-efficacy, and information technology among the seven skills taken into account for the gap analysis between the students and the industry. After testing the major gap analysis, a conclusion has been reached. On the other side, there is a

disconnect between emotional intelligence and teamwork skills, which are required by the market and seen as vital for students, yet there is a gap because of the contrast in their ranks or priorities. Through this study, it can be seen that the majority of respondents agree that there is a significant disconnect between faculty members' perspectives and students' real talents. In addition, there is a significant gap between the perspectives of faculty and industry, and the institution's faculty members believe they have imparted all the required knowledge to students, even though this is not the case in the student's view. Except for communication abilities, there is little difference between what the industry requires and what the faculty is teaching. This suggests that educators need to put more effort into helping students develop their oral and writing communication abilities. One soft ability that is particularly valued during interviews is communication. It may not be necessary later in a career. The findings showed a difference between the professors and the students in terms of communication skills, teamwork abilities, and emotional intelligence.

## **Acknowledgment**

With heartfelt gratitude and under the divine blessings of Almighty God, I extend my profound appreciation to all who have been instrumental in shaping this thesis. The journey toward the completion of my Ph.D. program at Lovely Professional University has been nothing short of transformative, and it is through the unwavering guidance, support, and collaboration of numerous individuals that this milestone has been achieved.

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# **CHAPTER-1**

# **INTRODUCTION**



# **CHAPTER-1**

## **INTRODUCTION**

India is popularly known for cherishing its demographic bonus, with the majority of the population under the age of 30 (*India Skill Report, 2020*). The country continuously needs to find ways to keep the manpower skilled to meet the mandate from the industry while grabbing worldwide opportunities by supplying talent to the job markets. Most employers assess the graduates based on their hard and soft business-related knowledge and skills, and their job experience. Employability is a term that has several different meanings and understandings among its stakeholders. The majority of employers complain that graduates lack the necessary skills and abilities for their industries. Employers frequently claim that graduates are unprepared for the workforce because they lack employability skills. This research purposes to find out the skills necessary among the fresh graduates to make them employable as per the recruiters.

With the growth in the higher education sector, the concern about the quality of education, and accreditations is increasing. However, the comparisons emphasized research, using the performance and employability of the students as the yardstick to measure the institute's value, the quality of teaching as well as the teachers. There has been noticeable progress as far as the higher education statistics are concerned in terms of the number of colleges and universities and the students. The government and private bodies are making collective efforts to nurture talent by focusing on the expansion in the HE sectors.

### **1.1 UNEMPLOYABILITY STATUS IN INDIA**

The unemployment rate (UER) is an important economic pointer as it reflects the inability of workers to find employment that contributes to the economy of the Nation (*Reserve Bank of India, 2023*). It is one of the chief problems

that constrain the economic growth in India. As India strives to become a knowledge-based economy, we face a conundrum of increasing skill shortages and unemployment or underemployment among highly educated individuals (Tiari et al., 2024). While a skills shortage is a serious concern, excess education can result in underutilization of skills and lower demand for workers with low skills (Kayode, 2023). Over the next two decades, more than 12 million young people aged 15 to 29 are predicted to enter the workforce annually (World Bank, 2022). The key to reaping this demographic dividend is to fully utilize the working-age population, thereby increasing output to the greatest extent possible. However, due to insufficient education, training, and marketable skills, there are serious concerns that arise about their employability.

In the labor market, there are two sorts of skill mismatches: (i) Qualification incongruity that happens when the level of qualification of a worker varies from what is required to perform the job; and (ii) When the individual's area of education is different from the sector in which he/she has taken up the job (OECD, 2014). The unemployment Rate of India for the year 2021 was 5.98%, with a decline of 2.02% from 8.00%, in the year 2020. There was an increase of 2.73% from 5.27% in 2019 after a decline of 0.06% from 2018 when the rate was 5.33% after a decline of 0.03% in 2017 (CMIE, 2021).

Several other Indian states had high unemployment rates. Rajasthan with an unemployment rate of approximately 11.4%, owing to seasonal employment and a lack of economic diversification. Bihar's unemployment rate was around 11.7%, owing to limited industrial growth and a high migration of young people seeking work elsewhere. Punjab reported an unemployment rate of 8% to 10%, with challenges stemming from its agricultural base and insufficient industrial expansion. Despite its high literacy rate, Kerala experienced an unemployment rate of approximately 12.5% due to a mismatch between job market demands and educational outputs (CMIE, 2023). Since, Similar studies were conducted in these states (Mishra et al., 2018; Rani, 2021), the state of Punjab has been selected for conducting this

research.

The government's priority is to create jobs while also improving employability. As a result, the GOI has engaged several steps to create employment in the country (*Ministry of Labour and Employment, 2022*). Many Initiatives have been taken by the government

such as the National Rural Employment Programme (NREP) on cost cost-sharing basis in the ratio of 80:20 between the state and the central government. They have also launched schemes such as MGNREGA, PMKVY, Aatmanirbhar Bharat Rojgar Yojana (ABRY), and many more focusing on one or the other aspect of unemployment. Apart from the above-mentioned initiatives, the government's leading programs like “Atal Mission”, “Digital India”, “Make in India”, “Start-up India”, “Smart City Mission”, for gradations and “Urban Renovations”, “Housing for All”, “Infrastructure Development”, and “Industrial Corridors” are all intended to create job opportunities.

By offering opportunities for skill development, job creation, and support for self-employment, government programs like the National Rural Employment Programme (NREP), MGNREGA, PMKVY, and Aatmanirbhar Bharat Rojgar Yojana (ABRY) are directly related to addressing India's unemployability status (*DGE, Ministry of Labour and Employment, 2024*). The goal of these programs is to close the skills gap between what employers need and what workers already possess. The Pradhan Mantri Kaushal Vikas Yojana (PMKVY), for example, aims to upskill young people to improve their employability and match their skill set with industry demands (*Ministry of Skill Development and Entrepreneurship, 2023*). Similar to this, more general programs like "Make in India," "Digital India," and "Startup India" seek to stimulate entrepreneurship, innovation, and investments in important industries to establish an atmosphere that is favorable for the creation of jobs (*Digital Leadership for Viksit Bharat, India Foundation, 2024*). These initiatives seek to ensure that workers have the skills needed to meet the

demands of a fast-changing labor market in addition to creating jobs. By encouraging production across multiple industries, the Production Linked Incentive (PLI) programs guarantee that the labour force is sufficiently trained to manage new technologies and procedures, while also helping to create jobs. The government hopes to improve the nation's overall employability status by concentrating on these programs to address the two main issues of skill mismatches and unemployment. A National Skill Development (NSD) Mission within the scope of the Ministry of Skill Development is to create individuals who are ready to perform the job with the required skill sets. The Emphasis has been laid on the major employment generation sectors such as roads and Highways, railways, transport, Textiles, power, telecom, etc. Production Linked Incentive (PLI) schemes were launched in the Budget of the year 2021-22 with spending of around Rs. 1.97 lakh crore which is beginning from 2021-22 for 5 years. All of these initiatives are likely to create employment and enhance productivity in the short and long term.

In fiscal year 2023-24, the PLI schemes continued to drive significant economic growth. By mid-2023, the scheme had attracted investments totalling more than Rs. 2.5 lakh crore across multiple sectors. Notably, electronics manufacturers committed to significant production expansions, resulting in a 20-25% increase in output in this sector alone. The textile and apparel sectors also benefited, with several new projects launched to increase production capacity and create approximately 7.5 lakh new jobs. The automotive sector saw investments of Rs. 74,850 crores, with a focus on electric vehicles and advanced technology components. This widespread participation demonstrates the PLI schemes' potential to boost productivity while also encouraging innovation, self-reliance, and long-term economic stability, which aligns with India's strategic goal of becoming a global manufacturing leader.

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## 1.2 UNEMPLOYABILITY STATUS IN PUNJAB

Punjab has been considered one of the prosperous states in India until recently when it has been observed dealing with numerous economic problems. Over the last few decades, several industrial entities here have either shut their doors or relocated their operations to more cost-effective locations. Similarly, the employment prospects in Punjab's industrial sector have decreased in absolute terms, particularly after 2005 (Singh and Ghuman,2018). This decline has reduced the employment opportunities for the graduates in the state and also harmed the economic health of this state in the 2018- 19 fiscal year, Punjab has a higher unemployment rate for people aged 15 and up, which is higher than the national average (*Economic Survey, 2021*).

Out of the total Population of Punjab 2.43 crore, 66% belongs to the rural areas and the remaining 34% is in Urban areas (*Census, 2001*). The Labour participation rate in Punjab is 41.76 percent as against 27.75% in India (*NSSO, 2020*). For 2023-24, Punjab's population stands at approximately 2.77 crore. Of this population, around 62% reside in rural areas, while the remaining 38% live in urban regions, reflecting a gradual urbanization trend in the state. The Labour Participation Rate (LPR) in Punjab is around 46%, which is higher than the national average of approximately 40%. This indicates a significant proportion of Punjab's population is either employed or actively seeking employment compared to the national figures (*Census, 2011*). These changes underscore the evolving economic landscape of Punjab, with increasing urbanization and a more engaged workforce compared to earlier decades. This disturbing state in Punjab has been estimated and known at both the national and state levels by the Planning Commission of India and the Punjab government (Singh, Singh, and Brar,2003). The Labor Force Participation Rate (LFPR) in Punjab has grown

2.75 % since 2023-24 against the LFPR of 1.03 percentage at the national level (*Punjab Economic Survey, Government of Punjab, 2024*). Industry and services are estimated to grow by 7.2 percent and 8.5 percent during the year 2023- 24 (*Department of Planning, Government of Punjab, 2024*) thereby, there is a huge requirement for skilled laborers to avoid the increasing gap. It is observed that several MBA graduates are dissatisfied due to a lack of job opportunities in Punjab. Their abilities do not meet the needs of the corporate world. As a result, rather than simply increasing the number of students, there is a want to progress the eminence of education (Gakhar and Kour,2012).

The industrial segment that is acknowledged as a locomotive of economic development has continued to remain unfledged in Punjab. The solution to this problem of unemployment necessitates tremendously watchful planning of the fundamental development process. This necessitates a distinct balance of both market and non-market strategies that contribute to the development of an institutional structure that is responsive as it will play an important role in attaining the goals of job creation, social harmony, and growth in the economy. The focus of HEIs in Punjab should be on improving the quality of teaching and education that can inculcate the required skills in the labor force. The quality of education is deteriorating over time and the skills delivered by these institutes are neither good in quality nor they are according to the demand of the industry (Singh, Parida, and Pattayat, 2020).

### **1.3 SKILL SET REQUIRED FOR EMPLOYABILITY**

Skills are described as the ability and one's capability to carry out complex tasks, a job, or a work concerning ideas, objects, and people, acquired through systematic, deliberate, and continuous effort. These abilities and attitudes are important for enhancing the employability of the graduates as well as their academic success. Responsiveness, aptitude, and practice contribute to their ability. It can also be concluded that expertise is acquired, while ability is demonstrated. For the study, the Skills are broadly categorized into soft

skills and technical. Soft skills are difficult to teach, despite their importance in the workplace., however, inculcating soft skills among undergraduates remains a tough task because it requires fewer observable elements and fluctuates significantly depending on the character and context of each person. It includes various non-academic competencies such as decision-making teamwork, communication, leadership, and lifelong learning. These Graduates have no option but to supplement their hard skills with soft skills to demonstrate their accurate potential and gain an advantage over their peers. Talent, experience, or professional knowledge that is relevant to the worker's profession is often known as technical skills. These abilities include a combination of theoretical knowledge and practical skills applied to tasks that require physical effort to achieve goals. Employers are fascinated by the technical knowledge of the business graduates as compared to general business skills, Employability skills are valued at all levels of an increasingly complex labor market, which emphasizes the versatility of employees and the application of learning in new environments, as well as a more dominant service sector. The significance of these skills can be associated with the working styles of organizations in the modern age. How jobs are intended at the workplace nowadays necessitates people interacting with one another and working in groups to achieve organizational goals. People are moving more within the organization to perform in diverse Zones across the globe, but they are further looking for new and inspiring roles looking for better career opportunities.

Keeping in mind the career goals and ambitions of an individual; it opens the gate to skills in the relevant areas, the degree programs are expected to engage their students in intellectual development in novel and more compound ways of thinking and processing knowledge so obtained in a degree so that it is not just the knowledge that is acquired but also the intellect to spread over the knowledge so gained in the multiple contexts. Prime objective of these programs is to make their graduates work-ready with employability skills. Skill development in the students is essential for

augmenting the preparedness of the students for the industry and guiding them towards inclusive growth. In India, there is a cut-off between what is being imparted to the students during the degree programs and the expertise that employers are looking for. However, these skills are not met effectively.

ago when registering in nearly any degree program guaranteed a choice of job opportunities in the graduation year. Because of the volatility in job markets caused by globalization, traditional methods of accessing and sustaining highly competitive job markets have faded away also the changes in the ways vacancies are filled have changed. Employers nowadays contemplate employees to have pertinent personality qualities, characteristics, and employability skills to meet the rapidly fluctuating demand at work (Messum, Wilkes, and Jackson, 2015). They believe that knowledge and skills in a worker can be instilled and enhanced, but it is not easy to grow and impart soft skills. As a result, A diverse set of employability skills are preferred when hiring graduates instead of technical skills (Fowler et al., 2013). It has become more important to meet workforce demands that are more imperative than job security. Special attention is given to employability skills which are explicitly the occupational skills by the Employers. Employability abilities range from a general assumption that they have something to do with training at the early position, to very detailed lists of definite skills, to employability being seen as a method of learning.

There is a lack of autochthonous developed curriculum and learning matter that can cater to the progressing needs of the industry. Opening up of foreign trade of goods and services has not only led to the increase in the inflow of FDI but has also raised a Question of worry for the Business institutes as there is a paradigm shift in the education and training required by the students in different areas of management (Khan, 2023). There is a lack of full self-sufficiency in management education as there are many engineering colleges where management courses are run just as a part. Several concerns relate to evolution, advancement, growth, assessment by the various bodies providing accreditations, etc. (Reddy, Sharma and Gupta, 2024). Environmental factors



have an important part to play in perceiving employability (Petruzzello et al., 2023). Therefore, a polished idea is required to capture the effect of external influences like dynamic environment in understanding its role in employability. Thus, being able to be employable is a way for a student to prepare himself to deal with an unsettling and dynamic environment.

In today's environment that is highly competitive, a degree is not sufficient for securing good jobs, as it no longer guarantees employability, as it did decades ago. According to *India Skill Report, 2020*, to grasp the growing opportunities with the rise of digital, industries are finding people with new skill sets and professional approaches that they time and again find are not accessible in the present talent market. Thus, bridging this gap becomes important. Around 12 million Indians graduate every year after that only 5 million job opportunities are created. More than half of the population is unable to find a suitable job. The unemployment gap is widening. It is a big question of concern. The answer lies in the fact that what is taught nowadays is rote learning. It has become a question of survival on the part of management Institutes. There is a dire need to make the required changes in the curriculum that is employer-friendly and to go beyond classroom teaching and give the students the practical exposure that can serve as the aid to make the students employable. Management institutes nowadays are adopting outcome-based learning where the emphasis is on experiential learning, activities designed to equip the students with the required skill sets.

Employability is related to the education and acquisition of skills as the important basics of the industry's needs. The employability gap is substantial in the context of the workforce supply and demand (Yong and Ling, 2023). There exists a mismatch between the skills attained by the students and the skills essential for the employers or Industry. Based on these needs the faculty has to design the participatory learning process, learning that is activity-based, and other integrated learning methodologies in the Management Institutes (Caleb, 2024). There are many challenges that India is facing in this concern. Even though the graduates that India produces in Management are

more than that of the USA, there is no considerable argument to amend the syllabus and introduce any innovation in the pedagogy. Today's Education not only aims at making graduates skilled in becoming responsible and proactive employees in the industry but also beneficial members of society (Martín Gómez et al., 2024). This purpose of the education system should be simultaneously reflected in the current needs and aspirations of graduates' values and ideals. The progress in the field of Technology has made the entire world a global village and to become a capable part of this village, the graduates must have the skills required to survive worldwide. Thus, this globalization wave creates new demands for education (Jato and Iordye, 2023). Because we have one of the world's largest youth populations, we must invest satisfactorily in their education and employability to develop the world's largest puddle of technically trained workforce. It is extensively thought that people's knowledge, skills, and imagination are important in sustaining the development may it be economic, and social activity in a knowledgeable society (Bamidele, 2024). India's existing growth at a fastpace and dynamic climate for investment, the demand for skilled workers having progressive skills will only grow.

#### **1.4 SKILL SET DEVELOPMENT SYSTEM IN INDIA**

India incidents a great benefit by possessing the youth as the resource for employment, which means there exists an extraordinary opportunity to provide such manpower to the industry that will in turn add to the Nation's Growth. The Ministry of Skill Development and Entrepreneurship (MSDE) was founded in the month of that June 2014 after summing the high requirement for the skilled labor force in the country. Shri Narendra Modi, The Prime Minister of India, sensed the necessity to pay attention to the skill development of the Graduates and post-graduates, keeping in consideration the changes that are taking place in the labor market, and thereafter the ministry was recognized that works in the association with the other government departments to cope up the increasing demand of the skilled workforce. It intends to institute common standards and techniques of

educating and teaming up the hard work of the institutions that is aimed at the development of the skills.

This Ministry also pinpoints getting all the other ministries together to perform in a unified way in the path of skills development. It makes clear, the aims and the conclusions ascertaining the organizations that will guarantee that the projected outcomes are achieved. The Ministry also works in very close alliance with the National Skill Development Corporation (NSDC) which helps in providing relevant training to the institutes that helps to harmonize the skill sets and design the relevant curriculum with the help of the market research. They aim to bridge the gap between the skills demanded by the industry and supply of the skilled graduates by enhancing the initiatives related to skill development.

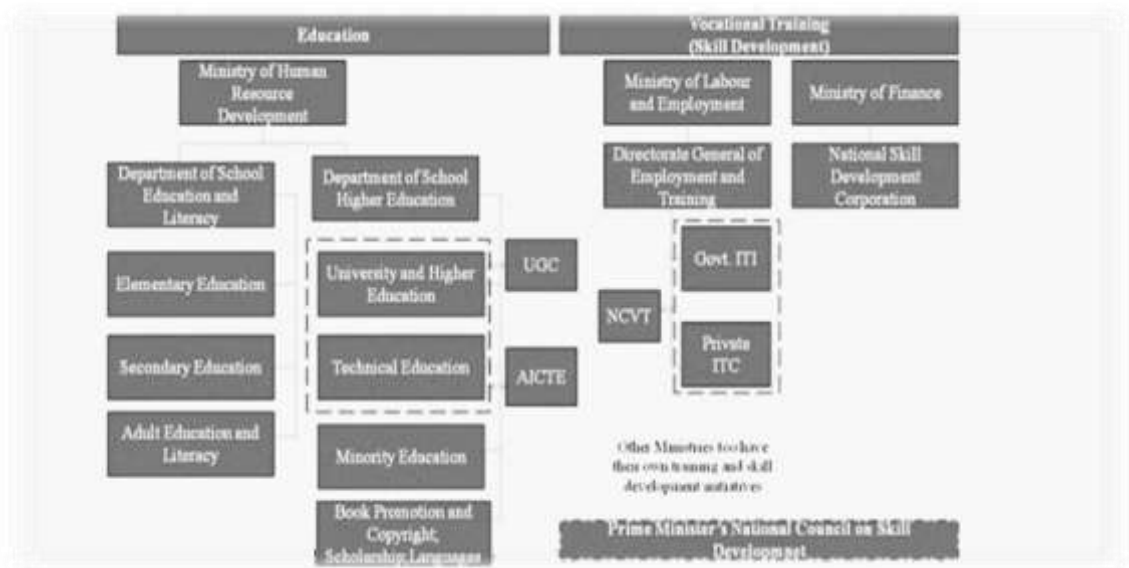
The skill acquisition process in India passes through double channels including the formal as well as informal. The Purpose of both the sectors, may it be Public and Private is to impart official training to the graduates. The government of India is running Training Institutes such as ITIs impart the training required to process the Skill Development to the graduates which is a key channel to gain Professional or Vocational training. Apart from this, the Labor Laws in India also confirm that the graduates who are opting for Management education are provided training through adding Traineeship programs provided by different industries. Although there is a substantial contribution of the private sector in skill development but still the public sector still rules these development programs in the nation (Blaskovics et al., 2023). There is also an informal channel that is not in the structured form but assists the formal sectors to work for imparting the skills through working on the job or through experiential learning. The government has identified 20 high-development areas and services that can provide additional work in the coming years, with 10 in manufacturing and an equal number in services. The National Skill Development Policy, of 2009 was outlined to strengthen the initiatives taken in the direction of skill development. This Public-Private Partnership (PPP) model, overseen by the Ministry of Skill Development

(MSD) and Entrepreneurship, seeks to promote skill development through the establishment of high-quality institutions equipped with the necessary training and infrastructure.

The Government of India has set up the Ministry of Skill Development, which is responsible for coordinating all the activities and developments related to skill development. The focus of this body is on removing the disconnect between the supply and demand of skilled labor, including vocational, technical, and soft skills (India Skill Report, 2022). They are focusing on boosting entrepreneurship in India so that in the coming years India becomes the biggest supplier of the Labor force in the World. The National Skills Qualifications Framework (NSQF) started its operation on 27th December 2013. Its framework was based on the modern idea of abilities that analyses the aptitude, knowledge, and skills that are needed after attaining each qualification. This Public-Private Partnership (PPP) model, overseen by the Ministry of Skill Development (MSD) and Entrepreneurship, seeks to promote skill development through the establishment of high-quality institutions equipped with the necessary training and infrastructure.

**Figure.1.1.1: Current Structural Framework of the Education and Skill Development Sector in India**

Source: NSSO, Economic Survey, 2019



## **1.5 SKILL DEVELOPMENT SYSTEM IN PUNJAB**

The government of India introduced the Nation Skill policy to provide skill education to about 500 million youth by the year 2022. Under this plan, the state of Punjab aims to provide the required skills to about 2 Lakh youths. To fulfill this purpose Punjab Skill Development Mission (PSDM) is constituted in line with the National bodies discussed above. It was notified by the Governor of Punjab through the Announcement dated 2<sup>nd</sup> September 2014. The Mission is one such point within the government to articulate and navigate skill development schemes across the departments. It acts as an integral mission that combines the various efforts by different departments of the state to achieve the laid objective and target of Punjab.

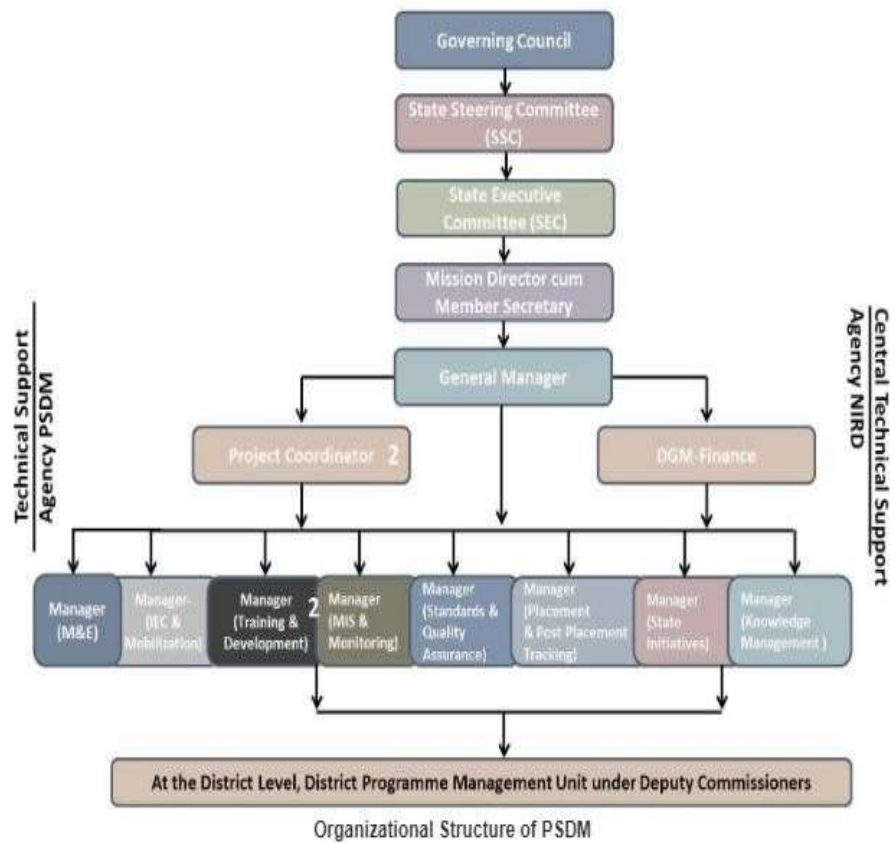
The prime objective of this PSDM is to enable the youth to take up training that is relevant to the industry so that they become skillful and can secure a job for themselves

easily. It aims to conduit the increasing gap between the demand for skilled personnel in the industry and the unemployed youths by making sure that the candidate with the right Qualifications gets the desired job. They have been providing free skill development training across all the districts of Punjab both in the rural and urban areas. The council is commanded by the Chief Minister and constitutes other Ministers and administrative secretaries of various departments.

The most powerful asset of the nation is its youth. They create the opportunities for its growth and development. However, the issue of the gap between the skill set and industry expectations is making these opportunities less attractive to the youth. 8.1% of India's population has failed to find a suitable job for them. The number is Almost 10% in the case of the Punjab State (*CMIE (2020)*). There is a huge gap between the present status and the desired goals. Only 10.87% of the Indian workforce has undergone skill training, 4.5 million of the youth enter the labor markets and out of that, only 2% is found to have formal skilled training (*PWC, 2019*). The skill mismatch

between academic education and achieving employment has widened to the at a stage where, on the one hand, the youth is unable to look for the jobs they desire, and on the other hand, the employees are not capable of finding the rightly trained personnel. According to the *India Skill Report (2019)*, less than 50% of the graduating youth are employable. This has led to broadening the gap between the skills possessed by the student's graduation and employability.

**Figure. 1.1.2 Skill Development eco-system in Punjab**



*Image Source: Punjab Skill Development Mission*

PSDM offers free skilled development training that are linked with the employment to the prospective workforce between the age group of 18-35 years throughout different districts. These training programs are nationally certified and are provided through listed training partners at rural and urban locations covering 20 different industries such as Healthcare, Food processing, green jobs, Constructions, Media and Entertainment, electronics etc. This

Mission is found to bridge the gap constantly between the requirement of the skilled labor force by the industry and the youth that is unemployed due to the lack of the skills by ensuring that the candidates choose the apt course as per his academic background, skill set and aptitude. To make sure that there is convergence and harmonization of these efforts, many departments participate with various other sectors, to provide strategic sustenance thereby growing outreach and providing training to meet local needs.

### **1.6 ROLE OF CURRICULUM IN SKILL SET DEVELOPMENT**

Curriculum development is an area that should be of utmost importance for the HEIs, it has not got as much attention as it requires. To succeed in the long run, they have to focus on producing graduates who are competent in giving their contribution to rebuild the economy and its inclusive growth. The Human Capital Theory has been given importance by nations across the globe (Becker, 1975) while drafting the policies

related to Higher Education. This theory acts as the link between economic success and the education of the labor. Thereby, the government holds great expectations from Higher education for the development of employability in the graduates. As per some researchers, the Human capital theory is connected to employability (Morley, 2001) and for some, it is still an empty concept. HEIs do not always succeed in preparing the graduates for the complex role that is expected at the workplace, they are also expected to perform the work designated to them, to work individually in a competitive manner. However, there are other ways through which these Institutes can contribute towards the economic development of the nation, preparation of graduates for employment through curriculum being one of them which will help them in attaining life-long learning (Knight and Yorke, 2002). The Quality of education also has an impact on learning which can be assessed by the quality of different subjects in the curriculum. The skills required to make a student employable are seen in the various modules of various textbooks

(Atkins, 1999). This condition has become challenging as today's stakeholder creates pressure on the institutes and Universities. It also becomes their prime duty to guarantee that their students are fully prepared with not just academic skills but much more than that (Misni, Mahmood, and Jamil, 2020). Some of the most common objections of employers are that the graduates lack the skills like decision- making, teamwork, problem-solving, and self-Learning even after completion of degrees they lack the knowledge of how to apply whatever they have learned (Griffin and Annulis, 2013). The relevant curriculum is that is designed to inculcate in the learners' competencies that are the requirements of the Labour market.

Employability traces back to education, where the focus is on the achievement and the ability of the student to perform well on the job dissimilar to the belief of just securing a job. Therefore, as per the HEIs, graduates' employability depends upon the competencies and abilities that ensure their employment in the long run also (Yorke, 2006). Employment can be categorized in two ways roadly- being able to secure a job after the completion of a degree and empowering students to be sustained learners throughout his/her lives by training them with the required knowledge, right attitude, and necessary skills (Harvey, 2001).

Gaining employment at the entry level is the most challenging for the fresh graduates. According to employers, employability skills will add to the chances of being successful in their careers. It is the responsibility of the HEIs to inculcate not only technical but also the employability skills in their graduates (Rasul, 2013). A large number of workforce plans and become the target of the policies of the labor market as all the countries are focusing on employability enhancement (Yusof and Jamaluddin, 2015). It has become the prime concern for the policymakers of the HEIs, industry, and graduates themselves as the percentage of the skilled workforce is very low thereby it becomes essential to upskill the graduates which also is a challenge for the government. These employability-related issues have been in the eyes of the universities and policies by the ministries. Skill development has been an



issue of debate for a very long now, and even after this unemployment is still prevailing in the nation, the reason being the incompatibility that exists between the competency of the graduates and the expectations of the industry (Singh, 2014). This is not only the problem of India but other nations also, all are trying to find out how global skills can be developed through education and curriculum that can be transferred from one country to another. Graduates must try to have the academics and skills required to perform practically.

The education institutes must develop tactics that will ensure the preparation of students in such a way that they are successful in taking up diverse jobs. They must understand that the skills for employability must not only focus on securing employment but they should also possess the skill sets, techniques, and attributes in their students to ensure their success after securing that employment (Mansour and Dean, 2016). HEIs must produce graduates with the skill set that is demanded by employers that are updated frequently. This will certainly narrow the mismatch between the skills supplied and demanded.

With investments or financial contributions, the standard of education and its amenities could be greatly improved. Education, on the other hand, aids in the development of potential and skills. In short, education can discipline, train, and reveal one's ability. As a result, students can be nurtured into productive employees by advancing curriculum, which can be viewed as a kind of investment in human capital. Investing in education, according to this school of thought, is not a waste of money. Without a doubt, increased worker productivity boosts the economy of India; education creates an eminent workforce, thus increasing the country's productivity, especially influencing its economic gains.

By better understanding the skills of its graduates, the education sector must emphasize employability as a critical education aim of the university degree. Universities must incorporate a rather more practical learning approach,

initiate insightful engagement in discussions, and employ interactive learning strategies as part of the curriculum to guarantee that students have the skills that employers demand. Graduate employability, particularly in developing countries, is highly dependent on student-related actions and the quality of the institute or university (Misni, Mahmood, and Jamil, 2020). A critical solution to current employability challenges is to ensure a curriculum and educational approach that is demand-driven and responsive to the needs of employers in the real world.

The curriculum should help students develop not only a theoretical understanding of subjects and various skills, but also personal aspects of growth like self-efficacy and metacognition. Strategies for developing these metacognitive abilities and guiding students in "learning how to learn" are especially important in increasing graduates' employability (Knight and Yorke, 2003). However, simply developing these employability skills is not sufficient. Students should also be able to articulate to potential employers the skills they have acquired through both the curriculum and extracurricular activities.

### **1.7 ROLE OF NEP IN SKILL SET DEVELOPMENT**

The National Education Policy (*NEP 2020*) was framed to refurbish the education system and formulate a road map for India. It is expected that with the introduction of this policy, the government will be able to bridge the gap in the standard of Education, internationalization of education, and instill innovativeness in the nation. NEP has given the agenda to the HEIs to thrive with the main focus areas being human resource development, entrepreneurship, and job creation. It is established on the principles of equality, autonomy, and empowerment of the weaker segments of society to provide skill-based education that is multi-disciplinary to breed employment by making the students employable.

NEP 2020 will play a significant role in widely improving the preceding education system (Bari, 2024). It is founded on the concepts of quality and fairness. As a result, it will root for noteworthy changes in the educational landscape and generate employment opportunities all over the country (Ghosh, 2024). This policy will give a big drive-in to skill the youth in India (Jain, 2024). It makes it mandatory for the HEIs to Update their curriculum regularly with current and future requirements of the industry by including the most recent changes and developments in the subject is critical to generating student interest and improving their innovativeness (Bora and Mathew, 2024). It is also necessary to develop a pedagogy that is new and effective to have a teaching-learning process that is effective and efficient (Radovan and Radovan, 2024). The curriculum followed by The Institutes and universities must be competitive to disseminate knowledge and skills, classroom skills and experience to raise the ability and fellowship of individuals (Aithal et al., 2024). Periodic improvements in the education system are required for human growth and long-term social progress. Modifications in the education system that take into account several achievement models in developed countries and tailor them to local needs are currently required for a nation to prosper. The emphasis of this policy on skill development has made the higher education institutes enter into a transition phase with vast changes in the policies (Fia, Ghasemzadeh and Paletta, 2023). The higher education of the 21st century in the world as well as in India is very complex, affected by several challenges as well as opportunities such as insufficient infrastructure, resource mobilization, scalability, mismatch in the delivery of the skills, and many more (Mishra and Aithal, 2023).

Skill development has become one of the most significant aspects of the progress and economic growth of the nation (Kuzkin, Cherkashyna and Kuchmacz, 2023). The level of preparedness by the students and the higher education institutes defines the kind of educational encounters they will have and how these events will shape their journeys with these institutes (Adewolu,

2024). It plays a crucial role in the economic development of a nation as the supply of skilled manpower to the various sectors starts from here. Not only for these institutes but the government also should take the initiative to invest in education and skill development. Master of Business Administration is a globally recognized degree that provides a wide study of all the facets of management and business.

### **1.8 ROLE OF HIGHER EDUCATION INSTITUTES IN CURRICULUM AND SKILL SET DEVELOPMENT**

The perception of employability has grown into the keystone and has become a fundamental element of the market and policies related to employment in several countries including India (Chandra, 2024). There has been considerable debate about the performance of higher education institutions in many countries, predominantly in the European and Asian continents, especially in terms of satisfaction of the students, quality of education service, and Supply of labor to the industry (Taderera, F. (2024). These Institutions are responsible for preparing their students and getting them ready as per the industry requirements as soon as they have completed their degrees. Requirements (Abdelwahab, Rauf and Chen, 2023). The current era's highly competitive environment has changed the operative situations of organizations, and as a result, employers' skill desires have also changed (Baughman, 2018). Several employers across the world prefer to hire individuals who are dynamic and possess well-diversified skills along with the relevant qualifications (Kamarudin et al., 2023). Being suppliers of the workforce to the employers in the industry and government the HEIs are assigned significant responsibility (Ahsan, 2020). To fulfill the changing needs of the HEIs, the students must be trained efficiently, to comply with this these institutes are advised to set up Quality Management Systems.

It usually takes more than three years to attain the attributes that are needed to discharge their skills in the industry efficiently and also ensure sustainability

while performing during employment (Emeh, 2024). The transition of the graduates from HEIs to the organizations in the industry where they will achieve employment has been a key issue (Abbas and Sağsan, 2019) but many of them have failed to train the students and convey the necessary skills to the students believe to add the value reason being, majority of the HEIs lacks significantly behind in meeting the expectations of the industry (Jacob and Gokbel, 2018). Moreover, there is a need to make substantial efforts to link the experience or knowledge gained at their HEIs with the labor market. Rapid changes faced by the business environment can be one of the reasons for such in capabilities of HEIs. Furthermore, an absence of effective management, a stable reduction in the state grants for R&D activities, and an absence of direction between industry and skills have resulted in a shift in the attention of HEIs (Abbas, 2014). Industry-academia

collaboration has frequently resulted in new research topics that benefit industry, society, academia, and government. Collaboration between industry and academia provides numerous benefits. It improves students' career prospects, raises awareness of industry trends, and makes it easier to obtain research grants. Furthermore, it helps businesses develop innovative products and services, promote employee training and development, and attract new talent with creative thinking skills (Lutchen, 2018). Furthermore, collaboration with industry allows HEIs to share technical expertise, which is critical for advancing research, skill development, innovation, and knowledge dissemination (Makkonen, 2017).

The mechanisms to monitor the learning outcomes should be clearly defined by the Higher Education Institutes. Management Education should focus on framing the student's attitude in such a way that it is adaptable and challenge-driven (Sung, Thomas and Rikakis, 2024). The authors defined competency as the combination of knowledge, skills, and attitude. Educational Institutes should inculcate professionalism, responsibility, ethics, creativity, and adaptability into the students so that they can become competitive in the market (Kishore, and Mousumi, 2012). Creativity, which was once eluded by

employers is now considered a valuable trait by them, who are attempting to generate the empowered, well-performing personnel required for competitiveness in the current marketplace (Robinson, 2000). Although some entry-level jobs require a low level of academic skill still basics of these are still required for good job performance.

The curriculum is a vital document that supports educational goals. It aids in the selection of suitable teachers, makes available appropriate teaching techniques, and replicates the acquaintance, experiences, and abilities students will achieve and how it will be measured (Calinao, 2023). If the curriculum comprises all of the required components, teachers and students will know what they will study, how, and in what ways they will be judged. Both the teacher and the student will benefit from increased transparency and liability (Zhou et al., 2024). The need to benchmark and internationalize curricula has arisen as a result of globalization. A multidimensional need assessment should be used in the curriculum development process to forecast needs (Birt et al., 2023). The expertise to be imparted must be identified based on the type of students, trying to balance local and global requirements, blending theory and application, delivery and achievement feasibility, and so on. New technologies in teaching, such as information and communication technology (ICT) tools, have a strong effect on teaching and learning methodologies. These are included in the curriculum and also contribute to the effectiveness of its delivery and assessment (Rofi'I et al., 2024). If all of these factors are considered during the curriculum development process, the curriculum will meet the anticipated standards. This approach can assist in implementing the curriculum development process systematically by trying to capture and retain the necessary knowledge for curriculum development (Ke et al., 2023).

There is significant disappointment with the value of business graduates in the practicality of the corporates. They mentioned that the need for skill sets varies from job to job and from time to time according to the situation (Yen, Thuy and Thuy, 2023). It was found that the existing skill set was inadequate

for the industry requirement. Researchers mentioned that there is a skill gap between the actual skill set and expected skill set which is not able to create any value for the company in the initial years (Bukartaite and Hooper, 2023). The Universities and Institutes have also realized their role as the developers of values, beliefs, and ideas that promote the advancement and humanity in society (Zhanbayev et al., 2023). The imminent skills gap of the workforce crisis of the year 2025 poses a significant problem for higher education institutions, as regional agencies, employers from the industry, and policymakers throughout the nation look up to higher education for pioneering solutions (Riga, 2024).

### **1.9 IMPORTANCE OF PRACTICAL EXPERIENCE IN SKILLSET DEVELOPMENT**

One of the primary goals of HEIs is to confirm that their graduates can find employment in their chosen field (Santiago, 2009). Theoretical knowledge obtained in college does not make one an engineer; therefore, internships always augment and support their domain knowledge while also exposing students to practical solutions to real-world problems taking them a step nearer to employability (Jakopec et al., 2024). The internships are training programs that are meant to impart hands-on practical training to students in general and particularly to those programs where the application skills of the knowledge gained in the curriculum but there remains a lack of practical exposure (Bernido et al., 2024). It makes the students learn about the desired skills, working actually in the industry as an intern. Students who participated in internship programs scored highly on all aspects of work preparedness. They were aware of what employers expected of them at work. They were able to successfully apply basic skills, higher-order skills, and job-specific skills needed by employers at the job and valued intrinsic rewards over extrinsic ones (Kapareliotis, Voutsina, and Patsiotis, 2019). At the education level, students learn versatile skills, they learn them in isolation

but they are to be performed in the group or co-existence with others. This indicates that the conversion of a student from learning in the classroom to working as an adult must be facilitated by the Education institutes (Hamamra and Qabaha, 2023). The students are now realizing the significance of practical knowledge. Thereby, practical exposure through internship plays a vibrant role in achieving employability. The total strength of the internship is that it is the preparatory phase for the students taking it up (Sobri et al., 2024). It is to make them ready for entering into the labor market by developing their learning as well as building self-confidence. Through internships, students can hone their general and specialised skills while gaining invaluable work experience. Engaging in an internship program facilitates students' understanding of their compatibility within a specific industry or job profile. As a result, their resolve to work for a particular business or sector might be reinforced. Clarifying expectations for interns' duties, responsibilities, and results is probably going to improve the internship experience as a whole. These programs must have two goals- to train the intern students to perform in a way that they can acquire numerous skills, and secondly, to make them familiar with the actual; work environment and gain actual work experience (Popov, 2024). Even though the experiences one has at work might vary, they are all centred around and supportive of learning. It needs to function as an educational tool (Khasawneh, 2024). They must aim at making a student job proficient, and also help them to understand how these aspects will benefit him/her to achieve his/her goals in the long run. The prime aim these programs must be to make their intern job ready to market-ready (August et al., 2013). Education and Human advancement are believed to go hand in hand. Both of them are essential for achieving the goals of life (Chickering and Braskamp, 2009). Higher education institutes and educational services that provide opportunities for students to obtain practical experience go by various names. They may be performed by various departments within such institutions (Tight, 2023). Thus, this type of practical training is commonly provided to students under the banners of Experiential Learning internships, etc. These terminologies vary from time to time. However, these kinds of



programs that are conducted under different titles signify one common aspect and that is practical learning. The vital intention is to prepare the graduates with certain kinds of hands-on training in association with the industry to take up the real business world. Current businesses are concerned about the extent to which potential applicants have the hands-on practical knowledge and skills to face the difficulties of a constantly changing workplace (Chen and Chen, 2011). It is prevalent for recent graduates to find it difficult with the pressures of work-related struggles. Recent graduates who have completed internships before the interview appear to be more enticing job candidates than those who have not yet done internships (Divine et al., 2007).

The decision of universities to include internships as a credit-based course in their curricula is based on the premise that learning must not only stick to the pedagogies that are classroom-based but also in real-life experience gained in an actual-world work setting (Al-Maatoq et al., 2023). According to experiential learning theory, learning is conceived of as a procedure in which knowledge is generated and acquired through experience. Internship programs allow students to put their skills, beliefs, and attitudes toward specific tasks or career paths. They enable students to bridge the gap between esoteric educational theory and practical workplace reality (Zopiatis, 2007). Students will have the chance to use the knowledge and skills they have acquired in a traditional classroom in the world of work and gain a pragmatic perspective on workplace challenges (Chen et al. 2011). The influence internship programs may have on new graduates' career predictions and employability selections has only recently become the focus of scientific investigation.

### **1.10 ISSUES AND CHALLENGES IN SKILL SET DEVELOPMENT**

A collection of competencies makes a person employable. It is crucial to identify the specific competencies required for employability and recognize the distinct skill sets involved. Another important question is how personal

development has evolved into a process that requires deliberate planning and documentation. A key challenge is whether employable skills are taught within a fixed timeframe or whether individuals develop these skills through self-directed efforts.

Universities play a vital role in identifying and teaching the necessary knowledge sets to meet the demands of industries. Employability is defined as the ability to secure and maintain employment. It encompasses a combination of accomplishments, skills, and personal characteristics that not only make a candidate employable but also successful in their chosen careers, benefiting both themselves and their employers (Yorke, 2004). Skills and knowledge, essential assets for employability, are primarily developed through education. Additionally, self-employability is important for skill formation and is relevant both internally and externally to an organization (Rothwell and Arnold, 2007). Employability is considered a complex concept (Forrier and Sels, 2003), influenced by internal factors such as job-related knowledge and skills, as well as the ability to find a job that aligns with one's vocational training (Hillage and Pollard, 1998).

The concept of employability also includes personal and professional development, which involves reflecting on oneself and the organization, embracing lifelong learning and flexibility, building social capital, and achieving work-life balance (Römgens, Scoupe, and Beausaert, 2020). Human value, in this context, refers to the skills, knowledge, and attitude required to meet expectations, along with career competencies, work exploration, and career control. Recent changes in the job market and higher education have underscored the importance of graduate employability for researchers, policymakers, and employers. There are significant gaps between what higher education institutions offer and what industries expect from entry-level graduates (Damoah et al., 2021). Self-perceived employability can be seen as comprising both internal and external components, effectively distinguishing employability from professional

confidence and, to some extent, from career success (Rothwell and Arnold, 2007). Factors influencing employability include both external and internal elements, with a positive correlation between these factors and the employability of students. Enhancing employability involves identifying and aligning curriculum factors with industry expectations. Exposure to work during a degree program is essential for developing communication skills, work-related attitudes, and other competencies needed for post-graduation employment (Dong et al., 2019). Self-efficacy plays a significant role in career choices that foster personal development, with personal qualities and subject understanding being crucial for skill development. Employability challenges traditional notions in higher education, prompting a re-evaluation of whether the focus should be on subject knowledge or on developing the ability to learn. Some scholars argue that this shift is driven more by government policies and managerial influences than by academic perspectives, which could lead to dissatisfaction among educators tasked with teaching employability skills (Hillage and Pollard, 1998).

Globally, there is concern that the current education system is not producing graduates with the lifelong learning and professional skills needed for career success. Academics serve as the bridge between higher education institutions and government policy, navigating the balance between these two realms. This raises the fundamental question of whether the primary purpose of education is to prepare individuals for the workforce, to provide intellectual stimulation, or to achieve both goals simultaneously (Morley, 2001). Employability is about the ability to secure, sustain, and, if necessary, acquire new employment. It depends on an individual's level of knowledge, skills, attitudes, and how they apply these in their work. Therefore, employability is a combination of personal attributes, skills, and subject understanding, making it a complex concept. The emphasis on personal attributes has grown, as they are now recognized as having a significant impact on career success. Additionally, factors such as self-directed learning, curriculum design, teaching methods, and assessment types play important roles in shaping education for employability. Educational institutions are focusing on

developing basic generic skills and graduate attributes, leading to a reconsideration of whether education's primary purpose is to prepare individuals for the workforce, provide intellectual stimulation, or both (Atkins, 1999). There is a slight interaction between HEIs, alumni, and industry to improve graduate employability (Belwal, Priyadarshi, and Al Fazari, 2017). Employers expect graduates with a wide range of skills who can help their companies compete successfully in the marketplace. Graduates should prepare themselves not only with technical skills but also with soft skills. Communication skills, again particularly the ability to use the English language, showed the greatest disparity. It can be seen as the susceptibility of a graduate to portray the characteristics that the employers need. This must be considered necessary for the effective performance of the organization in the future. The need for flexibility to respond to growth in their careers has given rise to short-term contracts, working part-time, working from home, and outsourcing. During internships, students often exhibited deficiencies in analytical skills, communication abilities, problem-solving aptitude, and business acumen. However, they demonstrated strengths in various other areas, including self-management, effective utilization of information and communication technology (ICT), interpersonal relationships, teamwork, innovative thinking, critical analysis, self-assurance, assertiveness, and a strong motivation for learning. Management institutes could offer a specialized program focusing on all the skills mentioned above. It is also imaginable that such a program will be implemented continuously throughout the course to ensure consistent training (Bist et al., 2020). Also, there is a positive impact of industrial training on the non-technical skills of the graduates. The longer the duration of training the more extensive the exposure and the better the performance of a graduate. Communication in the English language is also found to be an important factor as per the employers. Non-technical skills though were found more important for finding a job. The curriculum should be a framework to shape the student in terms of knowledge, and abilities required by the employer. Students in vocational secondary schools have relatively high employability skills. The development

of employability skills in students is critical for the country's future success. As a result of new developments in the workplace, it is no longer possible to remain static in one organization. Students' employability skills were significantly predicted by participation in career development activities and a positive self-concept. For the effective enhancement of employability, it is not only the responsibility of organizations for what they need from graduates but also the responsibility of candidates for what they are learning and what they will put into practice in the workplace. Both employers and candidates need to work collectively towards bridging the gap between skills expected and possessed (Pham and Jackson, 2020).

When these candidates enter the workforce, unemployed management graduates must overcome several formidable obstacles. The mismatch between the skills they learned in school and the particular skills that employers require is one of the main problems (Pelser, 2024). The trouble exists with finding employment that fits their qualifications because of this gap. Furthermore, a common obstacle is a lack of work experience, as employers frequently favor candidates with real-world experience, making it difficult for recent graduates to demonstrate their abilities (Matos et al., 2024). This problem is made worse by the intense competition in the job market, where many recent graduates are fighting for a small number of spots, making it difficult for oneself to stand out. Economic factors are also important because recessions and slowdowns can affect the number of jobs available, especially in management positions, which can make the hiring process take longer (Subburayan, 2023). A lot of recent graduates suffer from a lack of professional connections, which makes it difficult for them to find employment in the management sector (Yadav et al., 2023). This may make it more difficult to find out about job opportunities and set up interviews. The gap that exists between entry-level positions and graduates' expectations is another issue that can cause dissatisfaction and protracted unemployment (Tomlinson and Tholen, 2023). For people who are unwilling or unable to relocate, geographic restrictions may also limit their options for employment.

Additionally, because industry demands are changing so quickly, it's important to continuously learn and adapt, which can be challenging if you don't have access to the right tools or advice. Extended joblessness can also result in psychological and emotional strain, lowering self-esteem and impeding job search efforts even more (Van Hooft and Van Hoyer, 2023). A problem that some management graduates may encounter is being viewed as overqualified for specific jobs. This can result in rejections or make it difficult for them to land jobs outside of their area of expertise which still offer valuable experience (Turin, et al., 2023).

### **1.11 RESEARCH QUESTIONS**

A skill gap in the labor market causes massive unemployment while also making it difficult for employers to find workers with the necessary skills. These Challenges are majorly associated with entry into the labor market where fresh graduates face difficulties in finding and sustaining a job that is as per their qualifications. Therefore, this is becoming one of the most formidable problems that are faced by developing nations where the number of unemployed youths is growing in number (International Labor Organization, 2019). Around 84% of the world's youth population lives in developing countries (UN, 2007). In the year 2016, the percentage of jobs that are threatened by computerization in India was 69% yearly (World Bank, 2016).

1. What is the skill set that makes a graduate employable? It is important to identify what are those competencies that are required to be employable and how you recognize the distinct skill sets.
2. What are the employability skills that employers consider to be important for a candidate to perform and flourish in the industry?
3. What is the role of Higher Education Institutes in imparting the expected skills to the students and how are these skills going to be imparted to the students? An institution has the biggest role to play in inculcating the skill

set in the students, to make them achieve employment.

4. What is the level of preparedness of the students as per the industry expected by the industry? Despite the efforts made by the faculty and the students, the student himself/herself is also responsible for attaining the skills.
5. How to identify the skill gap between the industry expectations, Faculty, and the student

**CHAPTER-2**  
**REVIEW OF**  
**LITERATURE**



## **CHAPTER-2**

### **REVIEW OF LITERATURE**

This chapter summarizes the existing literature on a specific topic, citing works by reputable authors and scholars. It is typically included in a thesis, research report, or thesis introduction, to give the reader an understanding of the field's established knowledge and ideas. The literature review is guided by a conceptual framework that defines it as more than just a list of available literature; rather, it consists of summaries and analyses of existing research and scholarly works.

In recent years, there has been a notable surge in the establishment of higher educational institutions, encompassing both public and private sectors. This expansion has corresponded with a significant rise in the number of graduates completing their studies annually in India. Moreover, accessibility to higher education has become more attainable for the average individual, owing to the proliferation of educational schemes, scholarships, and the simplified process of obtaining educational loans.

These reviews have been classified into sections given below:

2.1 Skill Set as per the industry

2.2 Student Preparedness

2.3 Role of Institution and Faculty in Skill Set Development

2.4 Student Preparedness, Skillset Imparted by the Faculty, and Industry Expectations

2.5 Overall Graduate Employability

2.6 Complexities and Rapid Technological Advancements

2.7 Critical Review of Most Relevant Studies

2.8 Research Gap

Over the last few years there has been an increase in the number of higher educational institutions, both public and private; with an increasing number of graduates graduating each year has also increased dramatically. As a result, India has seen a substantial growth in the number of Graduates and Undergraduates graduating from these institutes. Furthermore, higher education is now within the reach of the average person due to the availability of various educational schemes and scholarships, as well as the ease of obtaining educational loans.

## **2.1 SKILLSET AS PER THE INDUSTRY**

The first phase to achieve success and sustainability is to find out the skills that are required and the learning system with apt content and its delivery (Nigam, 2010). The impact of soft skills on creativity is found better than hard skills. (Ibrahim, Boerhannoeddin and Bakare, 2017). Employee creativity potential was positively influenced by organizational learning. Past interactions should be managed and blended along with workers' existing hard and soft skills (Naqshbandi, et al., 2023). Candidates are not considered equipped for work if they do not possess an adequate level of skills (Mastura et al., 2013). The Indian government has created a model curriculum for evolving employability skills. The course includes both technical and non-technical skills for expertise. The primary goal of the authorities is to teach technique abilities to university students (Singh, 2011). The globally expected skills for employment in different sectors and found out that some of the skills are highly in demand and some are not at all in demand. Teamwork is found to be the most demanding skill across the globe (Asefer and Abidin, 2021). Interpersonal and collaborative skills, problem-solving and productive self-management, skills relationship, and management skills are the most important skills that are highly in demand all over the world in various sectors (Modric, Samardzija and Vejzagic, 2024). It is the combined responsibility of educators and employers, to aid in equipping these graduates with the skills in demand and make them good leaders for the future (Sarfraz, et al., 2018). Twelve skills are considered extremely important with discipline topping the list. Organizational, problem-solving skills, teamwork skills, and good time management skills have a strong correlation with gender. There is also a link between respondents' abilities and

organizations, such as problem-solving abilities (Azmi, et al., 2018). These skills along with the communication skills are found to be important soft skills that are possessed by the graduates as per the respondents' perception (Patacs and Tablatin, 2017). Soft skills are said to have a greater impact on creativity than hard skills. Employee creativity potential was positively influenced by organizational learning. The impact of hard and soft skills on employee creativity capacity was moderated by organizational learning (Purwanto, 2020). An organization should manage past interactions and blend them with workers' current hard and soft skills. In essence, in the 4.0 period, organizational learning could provide favorable conditions for knowledge development (Sopa, et al., 2020). Many Employability skills are beginning to emerge in Greek society and higher education institutions (Alpaydın and Kültür, 2022). Teachers and policymakers agree on the importance of instilling skills and competencies in students, but this has yet to become a priority in educational practice, and the reasons for this should be investigated further (Machmud and Fakhri, 2021). The importance of self-theories for students' learning should be appreciated. Governments' roles should also be examined. Organizations and governments must consider how they can interact with the public in various sectors (Arnesen, Arnesen and Elstad, 2021). The government could help graduates improve their work preparedness and employability by establishing job centers in all the cities, instituting mandatory internship and work placement programs, and delivering quality scholarship programs. The focus should be on the creation of a technologically based competitive advantage (Asonitou, 2015). It is believed that a student having self-efficacy skills will have sub-goals that can serve as milestones of success (Mehta, 2001). Higher education can make a change in personal beliefs and approaches in shaping one's primary goal of education (Bharwdwaj, 2001). It is the practice of skill formation that should be treated similarly to capital formation. Many economists say there will be an increase in the demand for educational training the Higher educational systems must understand the country's need for workers possessing high skill levels and knowledge and make efforts to meet that. There is a need for an integrated model of skill formation (Hussain, 2005). This gap proves to be disadvantageous for developing nations like India, where they have to bear the heavy cost of importing talent from outside due to the lack of required skills in their own country. Due to this unemployment of the youth is increasing due to the

common reasons related to labor market. The soft skills are as much as important for candidates in order to be competent. These both skills go hand in hand as the market is aggressive and fluctuating. Universities focused on enhancing the soft skills like interpersonal skills, decision making, organizational skills, problem solving skills, self-management, teamwork, etc. Still, Employers didn't find them suitable for their organization. The authors mentioned that graduate engineers are only partially competent in soft skills and do not match the requirements of the industry (Wilson and Marnewick,2018). The primary focus of the employers is on the continuing investment in the form of human capital through either formal or informal education focusing on reinforcement of the links between the skills taught and expected that would also help the economy in the long run. There exists a gap between the B-schools and industry related to the knowledge, skills, and attitudes of graduates. Curriculum review and appropriate pedagogy are needed to bridge the gap between the management graduates and the corporation's expectations (David, David and David, 2021). HEIs seek to progress all boulevards for fresh graduates to gain those skills that are anticipated in the labor marketplace. Moreover, regardless of the vast expansion of the supply of labor in the past couple of decades, companies continue to discuss the battle for talent and the dearth of actual graduate traits (Brown, Sadik and Xu, 2021). In this regard, confirming a correct understanding of the link between experience, proficiency development and requirements of the labor market would appear more acute than ever.

Employability includes individual elements, personal circumstances, and also external factors, such as factors of the labor market, and characteristics of job vacancy. This is an acute consideration in assessing graduates' entry to jobs as it has been identified as one of the important aspects of their employability (Wilton, 2011). Despite the increasing labor market demands for skilled graduates; HRs seem to be having trouble filling their positions due to claims that these graduates in the rising economies are not employed and are frequently seen to be lacking in key skills that are vital for the employers (Jackson, 2021). Besides, many of them have amenably criticized that the majority of these graduates are unemployed due to a lack of these skills. This bothersome condition has posed numerous queries about the significance of the degrees run by the HEIs, their productivity, and the employability of their graduates, this may

be due to the increasing disparity between the skills set developed by these institutions into the students and the skills required by the Labour market (Bandeled and Faremi, 2012.) as it is said that Employability does not only concerns getting a job but developing the skills and expertise that will enable the students to secure a job and sustain in the career (Quinlan and Renninger, 2022). Therefore, the emphasis should be on creating ability rather than employability.

Interdisciplinary Integration of functional Knowledge is needed to develop the right kind of attitude and skills. Analytical Skills make Management Graduates competent and suitable for the industry. Critical and creative thinking, proper delegation of responsibilities, and people management skills are the most demanding skills in the industry (Arya, Saxena, and Kumar,2014). Candidates must develop skills that are important from the Employer's Point of view to meet the expectations of the industry (Lisá, Hannelová and Newman,2019). Employers deliberate that graduates having management degrees need to possess high levels of skills in almost all areas of the workplace (Fettes, Evans and Kashefpakdel, 2020). The ability and willingness of fresh graduates to perform well to learn in business roles was regarded as a vital competency at the workplace by the employers, they also believe that staying capable in a changing world necessitates trust in the ability to manage one's learning (Muzam, 2023). To remain worthwhile, one must be eager to learn new skills to be in the race during a rapidly changing workplace. They consider the knowledge potential as much as the knowledge currency (Hodges and Burchell, 2003). Employability skills are defined as "skills needed not only to obtain jobs but also to progress within an organization to achieve one's potential and contribute effectively to enterprise strategic directions" from the perspective of an employer (Asefer and Abidin, 2021). Recruiters' demands and aspirations for graduates from various countries were strikingly similar. Employability is determined not only by the graduates' characteristics, but also by the faculty, curriculum, university's teaching and learning system, employers' expectations, and many other factors (Cheng et al., 2022). There is also a challenge faced by the administration of the colleges regarding the same. Developing a curriculum that lives up to the expectations of the industry is a rigorous task (Carnevale and Smith, 2013). To overcome this problem, there must be an alignment between the syllabus and

the market, workforce, economy, and the needs of the industry. The focus needs to be shifted to the creation of balancing the skill gap associated with 21st-century frugality and labor market mandate (McLester and McIntire, 2006). Graduates all over the world are concerned about their employability. The employment-focused curriculum provides the opportunity for higher education Institutes to develop an edge over other colleges and Universities to shorten the gap between the skills and the needs of the market (Mourshed, et al, 2012). 15 The skills gap in the workforce was a major result of the change in the skills required by them to realize low, medium, and high-skill jobs, that require different levels of competence and knowledge after high school. The graduates proclaimed that the beginning of the skills gap was a by-product of the Change of technological pace, globalization, and intrinsic burdens of the knowledge economy (Cappelli, 2015). There is a decline in the learning of employees through the learning and development programs carried out by employers that have contributed to the broadening of the skill gaps (Laurison and Friedman, 2016). To overcome this gap, academia, and industry need to ally, wherein they can take the initiative to provide hands-on practical exposure regarding the skills required to perform the job (Bardhan and Gower, 2020). For this, it is very important to realize that there exists a difference between the desires of employers and the aspirations of the employees (Marescaux et al., 2020). Apart from the Technical Skills employers also expect them to be open-minded, reliable, punctual, honest, professional, dependable, disciplined, responsible, motivated, creative, team players, confident, having good communication skills (Malhotra, 2012) as they are considered as a fundamental requirement of the workplace in the form of effective verbal communication, though writing skills are as important as (Wrahatnolo, 2018). Some employers do not give importance to the degree and Subject knowledge but to the ability of a graduate to handle multifarious information and transfer it successfully (Tomlinson, 2021). Terms like "industry readiness" and "job fitment" cannot be taken literally. It can only be solved if these gaps are well-identified and analyzed. As a result, there is an intact market for realistic training. Along with this Employers value work ethics, teamwork, and time management, while students value perceived honesty, continuous learning, and work ethics. When starting a job, knowledge is an important asset, but what is desired is teamwork. This skill can be inculcated from primary age by assisting students with how

to work in a group (Wrahatnolo, 2018). Financial accounting, financial reporting, and financial statement analysis are among the skills required by accounting graduates, according to students, whereas employers place a premium on financial statement analysis, computer software knowledge, and financial accounting (Carnes, Christensen and Madsen, 2023). There is a mismatch between student perceptions and employer expectations of the skills – not knowledge – required of accounting graduates. Although previous studies investigated students' perceptions and employers' expectations, the information should be updated regularly to reflect current conditions (Aryanti, and Adhariani, 2020). It was also exhibited that persons practicing accounting are facing job dismissals due to an increase in the usage of software for performing accounting functions. There is found to be a skill gap on the part of the graduates as far as the knowledge of software is concerned.

The employers of such graduates expect them to know how to run these functions on the machine (Ghani and Muhammad, 2019). The industry in the present world only looks for trained manpower with specialization. Management Graduates require skills such as competency, cognitive skills, and functional and people skills to get employment and put their knowledge into practice (Abang, 2020). India has students with a shortage of skills. The shortage can be reduced by essentially gearing up the education system through innovative initiatives (Nawaz and Reddy,2013).

The importance of **skills** and personal attributes is higher as compared to the subjects in their degree and its results. Following are the skills considered important as expected by the industry.

**2.1.1 Time Management Skills** are considered an essential soft skill as managing time at the workplace is a very important expectation of employers that will include not only the completion of a given task in time but also setting priorities, goal setting, planning, etc. (Ismail and Khalid,2020). Time Taken to cultivate each of these skills in the graduates will not only help them to organize their daily Schedule and also build a new competency but also bring the references to develop the skills required to manage life (Erde, 2013). In this speedily fluctuating environment and escalating

global competition there is a persistent and growing need for time management and creativity (Zampetaks, Bouranta, and Moustakis, 2010). Effective time management Skill is an important factor in gaining a competitive edge by the organization (Claessens, et al., 2007). It includes principles and systems that help the graduate to use his/her time to achieve what they want. It also comprises planning and managing the minutes and the hours of a day most operatively and efficiently with the motive to complete all assigned tasks in time.

**2.1.2 Communication Skills** including oral and written communication skills are most required by the industry (*Corporate Recruiters Survey, 2014*) and are Scrutinized as most essential for the professional as well as growth (Srivastava, 2018). These abilities are essential for the progression and Success in the career (Coliver, et al., 1999). There exists a strong relationship between proficiency in communication skills and managerial effectiveness (Bass, 1990). Today's generation lives in a global community where communication is of significant importance to negotiation, and attaining targets and goals, Management Students need to improve their present skills to carve a position for themselves in their current as well as future organizations. They also need to attain proficiency in these skills with detailed reference to a background of cultures that exist in the recent workplace set-up.

**2.1.3 Leadership Skills-** Budding demands from industry creates challenges for faculty and students to develop an environment in which they can thrive. Therefore, to be a good leader requires the ability to apply leadership skills in any situation. Leadership skills can be developed by formal training that should be in place before delegating administrative duties. These skills are needed to be an effective leader that can be inculcated through higher education. It is an important element advancing for any profession to be significant and connected in a phase of sensitive global competition (Farr and Brazil, 2012). It is also believed to create the desired beliefs and ethics of an individual (Haq, 2011). Thereby, the HEIs must focus on the choice of co-curricular activities as they will instill, cultivate, and improve not only leadership qualities but also cohesion amongst the students. However, even after conducting all these co-curricular activities and programs that are a mandatory part of college and universities,



these skills remain matters of concern amongst fresh graduates (Ghani, Away, and Rani, 2020). One of the main contributing factors to unemployment is the nonexistence of soft skills including leadership skills (Jobstreet, 2013).

**2.1.4 Team Work Skills-** Team learning must be applied within a unit of study to augment students' teamwork skills. The concept of teams is as important in management education and career readiness as it is in the real world. A team is defined as a group of people who make different decisions but share a common reward as a result of all those decisions. However, to reach to these common goals is not an easy task (Forbes, 2013). Teamwork ability refers to the aptitude to mound and collaborate with colleagues and peers from diverse social and cultural experiences in order to attain a common goal. It subsidizes assistance for others and oneself in adjusting to changes and developing lecturers' tasks by the faculty of HEIs.

**2.1.5 Work Ethical Skills-** are considered one of the utmost important skills, as they play a noteworthy role in the life of human beings. Irrespective of whether being rewarded or not (Bulut, and Ouedraogo, 2021). They are needed to identify what is appropriate, accurate, and moral for humans, an application of values and conduct to the most complex problems adopting a rational approach (Abiogu et al., 2021). The industry expects the candidates to be ethically fit in the diverse culture of their organization (Hunkenschroer and Luetge, 2022.); they demand work ethics skills that they make them ready for the workplace. Thereby, ethics are concerned with the manner individuals apply this while in an ethical dilemma (Klopotan, Aleksić and Vinković, 2020).

**2.1.6 Creative Thinking and Analytical Skills-** One of the expectations of the industry is that graduates should solve day-to-day problems by using creative and Analytical skills (Beke et al., 2020). Creative thinking Skills are the set of intellectual activities possessed and adopted by individuals that may vary according to a specific task and Situation or the kind of effort one puts into a certain event that defines the capacity of the individual to solve various problems (Kadir and Satriawati, 2017). Individuals with these skills try to advise a reliable and novel design to resolve the problem by taking the help of new applications (Young and Bali, 2014). This is a type of skill to look at

problems or thoughts carefully by reviewing the reliability of the knowledge as per the criteria of their judgment (Seferoglu and Akbıyık, 2006).

**2.1.7 Networking Skills** are an important skill in professional careers, assisting individuals in their growth and learning. Professional networking has a variety of advantages. Individually, it promotes the development and advancement of professionals' careers (Dulworth, 2006). Your networks also enable you to find appropriate, consistent assistance when it is required (Ru and Ortolano, 2009). Networking facilitates the formation of groups to raise awareness and/or advance socioeconomic progress (Compton, 2009). To receive the support of the networks created in the career is very important for one's success.

**2.1.8 IT Skill** is a valuable skill for helping to codify information, solve problems, and find significance in words or data. It is an important and budding need of the industry as it is believed to influence the existing and future employees as the industry is now being spread globally through the application of digital technology (Cascio and Montealegre, 2016). Existing jobs are being transformed, and upcoming vacancies are being shaped, generating the demand for modernized ICT-related skills commonly known as IT skills (Vrana, 2016). These are also an imperative element in the socio-economic development and employability of the work force. Without having enough of this skill, it is difficult to contribute to the growth of the economy and society (Bejaković and Mrnjavac, 2020). The process of preparing students for marketability in higher education is extremely important. Students today are heavily exposed to technology and use it in the majority of their daily activities (Yong and Gates, 2014). To achieve these goals, HEIs must be fully embraced with IT, digital and technology, and innovation infrastructures.

**2.1.9 Self- Efficacy Skills** play a crucial part in the career development of an individual (Baker, 2019) by believing in one's competence to complete a given task proficiently (Bandura, 1999). Performance in the classroom is also believed to be affected by graduates' belief in themselves regarding his/her ability and expectations of outcomes (Otmame, Mohammed and Driss, 2020). Inculcating self-efficacy skills is believed to increase and withstand an individual's efforts. Efforts are also required on the part of

the colleges and universities to arrange counseling sessions to make these skills stronger in their Graduates as well as for the faculty members (Laydes et al., 2024).

**2.1.10 Problem Solving-**The advantages of these abilities cannot be overstated. From freshers to industry veterans, this skill is very essential for realizing one's goals and working efficiently. Employers in the industry value graduates who have these practical skills and can provide timely and attainable solutions to emerging problems in the industry (Aliu and Aigbavboa, 2021). The ability to extend solutions to rising problems has been recognized as a desired trait of graduates. Problem-solving has been identified as the capability to be imaginative and concrete in handling the problems of the industry (Kilgour and Koslow, 2009). It is defined as the capacity to aspire for positive outcomes despite a difficult path in analyzing problems (Wickramasinghe and Perera, 2010). Problem-solving is also defined as thinking out of the box, improving an individual's intellectual abilities, and providing alternate solutions to evolving problems in the industry (Conrad and Newberry, 2012).

**2.1.11 Decision Making-** The first step that an employee will take for problems that arise is to make a decision and generate various alternatives for problem resolution (Sari, 2022). People make decisions daily from a very young age. Trade-offs are an important part of decision-making. Rarely do we have a perfect option, one that perfectly meets all of the relevant criteria (Boshuijzen-van et al., 2024). Managerial decision-making is associated with a significant level of physical and mental pressure and is frequently stressful (Timmer et al., 2024). As adolescents navigate new environments such as college and the workplace while remaining independent of their parents, decision-making skills become increasingly important (Dymnicki, Sambolt, and Kidron, 2013). Providing students with decision-making skills can improve their career adaptability (Coetzee and Stoltz, 2015).

**2.1.12 Conceptual Knowledge-**There is growing concern that, while graduates leave universities and colleges with significant subject knowledge, a noteworthy proportion may lack basic skills (Song and Xu, 2024). As per the industry expectations, the students must perform well in academics, therefore, it is very important to ensure that the curriculum that is designed for delivering the courses is supreme in reaching

excellence in academics, competencies and that should be of the same importance to the faculty as well (Yara and Oteno, 2010). Therefore, it remains a major task for them to make a curriculum that will offer the opportunity to the students to learn the skills that are relevant in all and the specific careers they wish to qualify for (Billett, 2006).

**2.1.13 Emotional Intelligence-** Job experiences and emotional attachments to the job have a positive significant relation with emotional intelligence. Employers prefer candidates for employability who possess a high level of emotional intelligence. Individuals having high emotional intelligence are found to be more successful in their careers than those with low emotional intelligence as they have good self-responsiveness and are responsive to others as well, they are believed to perform better in pressure situations and acclimate to organizational change (Tan and French-Arnold, 2012). It is considered a yardstick in managing the human resource practices that are followed for the recruitment and selection of candidates. EI has appeared as a key predictor of an individual's personal and professional achievement (Weinzimmer, et al., 2017). People with high EI not only comprehend and manage their own emotions better, but they also have strong compassion and social consciousness for others.

**2.1.14 Career Adaptability** is the ability to change one's emotions, thoughts, and behavior in response to uncertainty in a swiftly moving work environment (Savickas, 2005). It can also be seen as the level of willingness to respond actively in the expectancy of situations in which it is tough to foretell the future, as opposed to maintaining a crumbling capacity that is limited to the present stage of development of one's career (Delle and Searle, 2022). It is significant for career hunt, satisfaction, and outcomes of performance as it inspires individuals to adjust to the demands of the environment, which are not easy to predict (Bocciardi, et al., 2017). This is also a skill concerning the adaptation of oneself smoothly in an environment at the workplace that is very uncertain.

## **2.2 STUDENT PREPAREDNESS**

Higher education in India is developing to be more responsible focusing beyond traditional educational instructions and the processes of acquiring knowledge (Aithal

and Aithal, 2020). It is evolving to be the reflector of the needs of the Labor Market, expectations of the firms within different industries, charge to augment the talent, and to narrow down the skills gap to make the students for various employment opportunities throughout their studies and even after that (Alharahsheh and Pius, 2021). Employability skills also referred to as job-ready skills, are required by students to prepare themselves to become competent and efficient workers once their studies are completed (Mainga, Daniel and Alamil, 2022). The observation of student learning experiences plays a role in influencing their employability and competency, serving as one of the contributing factors in this regard. They are an individual's ability to exercise and determine employability skills to sustain and adapt in a job environment (Sattar and John, 2014). It is critical to invest in education because education allows people to grow and improve their well-being (Misnia, Mahmooda, and Jamilb, 2020).

The industry is constantly emphasizing the importance of business graduates who are ready for the work having a strong generic skill that will help them to develop competitiveness that will lead to the growth of the talent pool and also the personal growth of these graduates (Moreno, Friesen and Bialystok, 2011). The progress of improvement in employability skill development programs depends upon evaluating training needs by using assessment tools, framing training content, defining the attribute to be developed, and providing post-training feedback (Hassan, Elsaed and Zohry, 2023). Researchers have found that employees having a degree in Masters of Business Administration validated high self-confidence, self-efficacy, workplace skills, negotiation and huge industry knowledge, analytical and organizational skills, ability to work in a team effectively, and also can apprise to the cross-cultural environment (Hwang and Chang, 2011).

Employability abilities are necessary not only to gain employment but also to improve themselves as employees in performing their role to the highest possible level to achieve significant strategic institution or business goals (Cheng et al., 2022). Gaining employment is regarded as an important factor in determining the success of an educational institution, particularly for those graduates with a degree educational level. Many first-year students at the Higher Education Level are still unemployed due to an absence of experience, inadequate communication skills, and studies that are irrelevant

to the job market (Nooriah and Zakiah, 2017). The learning of higher institutions wishes to inculcate the job skills that will ultimately produce graduates with apt knowledge and skills (Björck, 2021). The importance of employability skills cannot be overstated in today's job market and career landscape, as they are a critical determinant of success. Consequently, it has been high on education stakeholders' agendas (O'Leary, 2017). By incorporating generic skills as per the national and international framework of qualification that intends to improve students' knowledge and skill set (European Qualifications Framework, 2018).

To recover the quality of teaching and the outcomes of graduates, these skills must be unified into assessments and comparisons of educational schemes. Acquiring a variety of skills boosts the chances of graduates finding work and gives students confidence in their abilities so that they can overcome any situation in their lives. (Christie, 2016). Many developing nations have improper and unproductive policies that aim at point changes required in the acquaintance, skills, or behavior of an individual (Okolie, et al., 2019). Sometimes, due to a lack of adequate infrastructure, it becomes difficult for institutions and universities to provide good quality education while developing students' skills and capacity to respond to 21st-century industry demand (Khahro and Javed, 2022). Students must first be clear about their choice and the outcomes of the choice of career and career paths they will opt. Aside from certifying that the syllabus and the learning experiences are appropriate, and involving students in the industry is also the most appropriate action (Bruni-Bossio and Delbaere, 2021). The Employability of students has been in question for the past few years, due to the unwelcoming economic conditions, there arises a need for students' obligation to sustain themselves in the very competitive global market (Fakunle, 2021). Considering the investment made in higher education by the individual and government, it becomes important that these graduates are employable as they graduate (Qenani, MacDougall, and Sexton, 2014). Self-perceptions influence what people succeed in the current job market and the career landscape hinges on what individuals can accomplish with the knowledge and skills they acquire., but they are certainly not a replacement for desirable skills and knowledge (Pajares, 2002). Self-perception is an extremely valuable attribute that provides the individual with consumption, signaling, and

motivational value across the whole of their life experiences (Javornik et al., 2021). The consumption benefit is determined. Considering that maintaining a positive self-perception contributes to personal happiness, self-image has emerged as a variable within this utility function (Sahin and Nasir, 2022). By continuing to believe in one's ability, one makes it easier to persuade others that one possesses such qualities (Luttrell and Sawicki, 2020). Most prominently, one of the abilities that are believed to improve the motivation to take up tasks in the long run is self-confidence which allows a student to continue to perform and achieve the goals despite of various failures (Moneva and Tribunalo, 2020). On the other hand, self-perceptions, not only impact the behavior of the graduates but also their state of mind, fitness, well-being happiness, and other emotions all through their life (Palenzuela-Luis et al., 2022). However, they need to fetch employment for themselves. This trait of self-perception has become essentially important for the final year graduates who will be a part of the fast challenging labor market soon (Berntson, 2006). The feeling of being employable provides the feeling of being secure and independent, it creates a sense of motivation and behavior that may lead to better performance at the workplace, pliability to adversity, success in the career, and better health and satisfaction in life (Pool and Qualter, 2013). Therefore, to improve the idea of employability from the student's perspective, it is required to understand the determinants of employability. Along with this, there are external factors that also become part of these determinants of employability (Pham and Jackson, 2020). These external factors play a vital role in influencing the perception of graduates in various circumstances. Their motivation for selecting universities and academically gifted students consider the prestige of the institution when selecting an institution for higher studies, as well as the influences that are allied with them during the process of making this decision till, they finally select the institute (Wilson and Adelson, 2012). There are many ways to improve the management skills of the graduates as mentioned by employers in one way or the other because by improvement in the essential skills in the students, they can get the graduates of management degrees to a level where they can meet the demands of the employers for employability after the successful completion of their degrees (Morgan and O'Gorman, 2011).

Individual factors influencing the employability of an individual's knowledge and skills

acquired through formal education or work experience are included in self-perceptions (Rothwell, 2008). Furthermore, social capital has been identified as a contributor by increasing job market knowledge and awareness (Fugate, Kinicki, and Ashforth, 2004). Individual attitudes, temperaments, and personality traits are also important as that the integration of personal qualities is very important given, they have a significant impact on an individual's success (Lees, 2002). Non-cognitive skills, or personality traits, are widely accredited Individual development, employment opportunities, future earnings, and labor market success all depend on cognitive skills (Palczyńska, 2021).

### **2.3 ROLE OF INSTITUTION AND FACULTY IN SKILL SET DEVELOPMENT**

The perception of employability has grown into the keystone and has become a fundamental section of the workforce for many nations, including India, and may be integral to job-related affairs (Dudu, 2022). Notwithstanding extensive discussions about the contribution of universities to countries' economies, quite a few countries are yet to achieve satisfactory higher education performance, predominantly in the European and Asian continents, in terms of the satisfaction of the students, quality of education service, and Supply of labor to the industry (Salmi and D'Addio, 2021). These Institutions are responsible for preparing their students and getting them ready as per the industry requirements as soon as they have completed their degrees (Herbert, et al., 2020). The current era's highly competitive environment has changed the operational situations of organizations, and as a result, employers' skill desires have also changed (Baughman and Baumgartner, 2018). There are a majority of employers across the world who prefer to hire individuals who are dynamic and possess diversified skills along with the relevant qualifications (Pinto, and He, 2018). Acting as suppliers of the workforce to employers in the industry and government the HEIs are assigned significant responsibility (Ahsan, 2020). To fulfill the changing needs of the HEIs, the students must be trained efficiently, to comply with this these institutes are advised to set up Quality Management Systems (Abbas, Kumari and Al-Rahmi, 2024). It usually takes around 3-4 years to attain the qualities that are needed to discharge their skills in the industry efficiently and also ensure sustainability during their employment and performance (Balzquez, Domenech, 2018). The transition of the graduates from HEIs to the organizations in the industry where they will achieve employment has been



a key issue (Abbas and Sagsan, 2019) but many of them have failed to train the students educational institutions strive to impart necessary skills to students in the belief that this adds value (Aboobaker, 2020). This is because the vast majority of Higher Education Institutions (HEIs) fall short of meeting industry expectations (Jacob and Gokbel, 2018). Moreover, there is a need to make considerable efforts to link the experience or knowledge gained at their HEIs with the labor market. Rapid changes faced by the nosiness environment can be one of the reasons for such in capabilities of HEIs (Menon and Suresh, 2021). Additionally, an absence of effective management, a stable reduction in the state grants for R&D activities, and a lack of direction between industry and skills have resulted in a shift in the attention of HEIs (Abbas, 2014). Industry-academia collaboration has frequently resulted in new research topics that benefit industry, society, academia, and government. Smart classrooms, video production facilities, exclusive multimedia labs, and training kits are examples of institutional factors that influence academic outlooks and assist trainers in comprehending and engrossing new technical and instructive information (Akenbor and Al Ibanichuka, 2014).

Collaboration between academia and industry is mutually beneficial. For Higher Education Institutions (HEIs), it enhances students' career opportunities, fosters industry awareness, and secures research funding (Otache, 2022). Additionally, it aids businesses in innovating new products and services, training employees, and recruiting innovative talent (Lutchen,2018). Collaboration with industry also allows HEIs to share technical expertise, which is critical for research, skill development, innovation, and knowledge (Makkonen,2017). The labor market and its relationship to educational and training sectors support the goal of increasing the number of young people who have qualifications and are equipped with knowledge and skills (Lauder and Mayhew, 2020). The traditional method of teaching that is followed predominantly in the education system has made the faculty only knowledge disseminators, following the extensive processes of just informing the learners and missing the inculcation of the necessary skills (Fouche and Andrews, 2022). The students attempt to learn what the professor told through the examples provided to demonstrate the use of the information in the form of a case study. Therefore, the role of faculty's role in boosting

educational progress and performance is critical. Management professors with academic and industry experience will be able to provide students with practical knowledge (Engin-Demir, 2009).

The faculty participation in the internship program should be considered a decision, and faculty should be aware of the labor market because this program exists due to the industry (Johnson, 2022). Current students' lives are very different from the patterns of life developed in the educational system. It displays a dearth of concerns towards skills that are required to comprehend the existing viewpoint (Cruz et al., 2021). The teacher can use technology in novel ways. Teachers acknowledge that there is still a regional divide in digital literacy. Faculty must develop these skills themselves and for the same there should be a change reflected in their pedagogical aspects as many graduates have blamed deprived employability skills on teaching pedagogy that is not up to the mark (Yara and Otieno, 2010). The mechanisms to monitor the learning outcomes should be clearly defined by the Higher Education Institutes. Management Education should focus on framing the student's attitude in such a way that it is adaptable and challenge-driven (McCrorry et al., 2021). The authors defined competency as the combination of knowledge, skills, and attitude. Educational Institutes should inculcate professionalism, responsibility, ethics, creativity, and adaptability into the students so that they can become competitive in the market (Kishore and Mousumi, 2012).

There is significant discontent with the quality of management graduates in the practicality of the corporates. They mentioned that the need for skill sets varies from job to job and from time to time according to the situation. They found the existing skill set inadequate for the industry requirement (Li, 2022). There are many reasons behind the unemployability or under-employability of MBAs in India, one may be the proliferation

and quality of B Schools are not up to the mark. They binge in the quantitative growth sacrificing the quality (Leu et al., 2024). Researchers mentioned that there is a skill gap between the actual skill set and expected skill set which is not able to create any value for the company in the initial years (Agrawal et al., 2020). The Universities and Institutes have also realized their role as the developers of morals, beliefs, and ideas

that promote the advancement and humanity in society. The imminent skills gap of the workforce crisis of the year 2025 poses a significant problem for higher education institutions, as regional agencies, employers from the industry, and policymakers throughout the nation look up to higher education for pioneering solutions (Pedró, 2024). It must be understood that the need to advance these skills to permit them to effectually impart the contents of the curriculum and skills. By aptly designing their curriculum, these institutes can contribute to national development and address graduate challenges such as unemployment, underemployment, and unemployability (Chauke, 2023).

The primary goal of higher education (HE) should be to increase students' knowledge of theories, research, and skills. A major challenge in the employability of graduates is not associated with the non-availability of jobs but an absence of employability skills (Okunuga and Ajeyalemi, 2018). The system of higher education must respond to providing knowledge and skills as per industry also required by the economy and society. Although many developed countries consider this a priority, these institutions in developing countries continue to struggle to develop innovations to meet today's labor demands (Okolie, Nwosu, and Mlanga, 2019). Generic skills are meaningfully used in conversations in society, the workplace, and also at education (Okolie, Nwosu, and Mlanga, 2019). Even in thriving labor markets with low unemployment rates, pockets of long-term unemployment persist. This has been explained in urban areas that are relatively depressed as a feature of either localized demand deficiencies or observed skills discrepancy and supply-side problems.

HEIs have been classified in various ways increasing the burden to contribute to graduate labor supply employability. The insertion of explicit employability skills 'training' on management degrees continues to spread, owing in part to policy rules for greater involvement of employers in the development of curriculum (Adewolu Ogwo, 2024). Despite disagreements about where employability skills are most useful, and be developed, and whether universities' role is to make the employers request undergraduates for the workplace (Cranmer, 2006). Employers have long lamented graduate labor's lack of "work-readiness." Supply and confirmation continue to point to dissatisfaction with, for example, correct understanding of the workplace

environment, aptitude for problem-solving, teamwork, analytical thinking, and interpersonal skills (Husain et al., 2020). This is despite intensive efforts, particularly among newer HEIs, to involve employers and address labor-market skill requirements. There is little agreement among managers about the level of readiness for work they expect from new hires and how rapidly they should be able to work without detailed supervision after hiring. Subsequently, the degree to which an employer's discontent signifies a 'real' skills gap is challenged (Hesketh, 2000). Despite this, significant resources have been engaged in making efforts to improve the employability skills of graduates while they are in the university, either by implanting skills from the courses in the degree or by offering them add-on or value-added courses (Nkomo, 2023). There is a long debate that goes on the extent of the skills that are in shortage and who all are responsible for it, the overbearing for institutes to prepare students in a better way for getting entry into the workforce will continue to strengthen as a result of the augmented personal contribution of HE and current patterns such (Oztel, 2020). Accepting the dynamics of the labor market and the needs of employers looking to offer these graduates a wide choice of attributes to allow them to attain employment is paramount for both the students and the HEIs (Monteiro, Almeida and Garcia-Aracil, 2021).

#### **2.4 STUDENT PREPAREDNESS, SKILL SET IMPARTED BY THE FACULTY AND INDUSTRY EXPECTATIONS**

The Management degree aims to help the student to develop various skills such as analytical and personal, problem-solving skills that have great importance in the industry and modern economy (Ghafar, 2020). This research also attempts to provide an in-depth analysis of this situation. A lack of required skills serves as the greatest barrier to the employability of graduates. Only three skills are considered important for employment that are- field experience, skills related to leadership and authority, the practical knowledge. Willingness to perform work apart from their routine work and their engagement in their job are considered important. Higher education Institutions are to play an important role in promoting self-awareness among their students taking the help of various career counseling centers (Lisá, et al., 2019). Therefore, to bridge the skills gap between candidates and employers, the strategic

management instructive model designed is to endorse student learning and the development of hard and soft skills related to strategic planning. The four-stage strategy process model consists of the following stages: (1) circumstances assessment and diagnosis, (2) strategic choice generation, (3) strategic choice, and (4) strategy execution. It provides a full opportunity for the professors to integrate theory and practice in teaching, thereby bridging the skills gap between graduates and employer requirements (David, 2021). External factors such as rigorous change in technology, the Political environment, and the regulatory forces make it necessary for the leaders of the companies they adapt to these radical changes (Greenwood and Hinings, 1996). There is frequently a disparity between what is taught through the curriculum and what is appreciated in the workplace. Student's gratification is a major gauge of their success and by examining their satisfaction level with their education and job, programmers frequently identify areas that need improvement to provide the best possible learning environment for the students (Waller, Foust, and Panthi, 2021). The change in curriculum is possible with a change in the attitude, behavior, and belief of the teacher (Thomas, 2022). There should be cooperation between the universities and the environment that they are going to work in so that there is an alignment between how they are being taught and the needs of the employer (Germain-Alamartine, and Moghadam-Saman, 2020). The employers should also be given the chance to stay closer to the academics and they will be involved in the business and have to spend less time on the research. They might provide the inputs and give their inputs regarding the knowledge and the results that might help the firm to achieve the targets by using the new technology and resources (Anastasiu, et al., 2017). Significant gaps are found in the perceived value of competence and academic ability, as well as computer literacy was discovered in the assortment processes in the government sector and the financial industry (Gunarathne, Senaratne and Herath, 2021). The financial sector is increasingly becoming dependent on IT, and there is a growing demand for workers with IT skills. These organizations tend to screen very carefully while recruiting, and most have promotion systems that correspond well to the probation story, with at least in the first few years on the job (Velasco, 2012). There are many such factors contributing to a gap between the management students at university and their employability.

The competencies gap between the expectations of the corporates and the candidates is wider on the part of Corporates as well as Candidates. The Employers demand and expect innovation, creativity, aptitude and reasoning, and verbal exchange abilities from the Graduates (Briones et al., 2021). It is the responsibility of the educational bodies to do certain modifications and prepare the students for a dynamic environment and organization. Lack of experience and problem-solving abilities are the two most important factors that prevent students from getting employment (Ng et al., 2021). The gap between the employer and candidates is sometimes large enough that candidates are not capable of fulfilling it (Karam et al., 2020). It has been stated that educators should provide real-world projects to the students, expose them to the software tools that are used in the industry, and make them effective in solving problems to lower the gap between employers and them (Radermacher, Walia and Knudson,2014).

By implementing various ways for refining the vital soft skills in students, HEIs could get students from different streams such as management degrees to a satisfactory level regarding the employer's requirement for employability after they complete their degree (Durazzi, 2021). The caliber of the faculty and the level of skill they possess prove a positive relationship in enhancing the performance of students as well as their teaching style which improves the understanding of the subjects they teach (Heinesen, 2010).

## **2.5 OVERALL GRADUATE EMPLOYABILITY (OGE)**

The prime objective of Higher Education Institutes is to turn their students into either entrepreneurs or employable graduates who can not only their respective employer organization but also the society and Nation as a whole (Eesley and Lee, 2021). Therefore, it becomes very important for the HEIs to focus on the Overall employability of a Graduate by ingraining the required skills (Hosain, Mustafi, and Parvin, 2021). It is not only right for the graduates but it also adds to the value of the respective Institute. The Pandemic has hit the world economy substantially which has resulted in the shrinking of the Purchasing power of the people and has led to a decrease in production and thereby drop in employment opportunities, giving rise to

increasing talk about employability (Hossain, 2021).. This gives rise to changing situations where almost all the countries will spot the huge difference between the jobs created and the fresh graduates entering the labor market until the economies gain back their normal pace (Wachter, 2020). To ensure the pace in the lagging economy these institutions are expected to acquire the skill set that will help their graduates to live up to the expectations of their employers (Goulart et al., 2022). The Overall Graduate Employability can be defined as compiling a succession of skill sets that, if a graduate obtains helps him to succeed in his career (Tomlinson, 2012). Those are the skills and capabilities that enable the students to encounter the requirements of the industry and easily change themselves with the change in the market conditions.

## **2.6 COMPLEXITIES AND RAPID TECHNOLOGICAL ADVANCEMENTS**

As industries change at a never-before-seen rate due to quickening technological advancements and growing operational complexity in businesses, unemployed management graduates are facing more and more difficulties (Özelli, 2021). Employees with advanced, specialized skills who can keep up with new technologies, data analytics, digital transformation, and other emerging trends are now in high demand across modern industries (Albukhitan, 2020). These employees also need to have a solid foundation in management. There is a big disparity between the skills graduates possess and the skills employers require, though, because many Higher Education Institutions (HEIs) are finding it difficult to modify their curricula fast enough to keep up with these changes (Ahmad, 2020). One of the primary problems is that students are not adequately prepared with the high-tech, practical skills that are now essential in the job market by the traditional management education model, which frequently concentrates on general principles and broad theories (Sánchez, 2021). For example, industries are calling for more and more knowledge in fields like digital marketing, blockchain, artificial intelligence, and data-driven decision-making. These fields require not only technical proficiency and the ability to incorporate new tools and technologies into business strategies but also a strong understanding of management practices. Graduates who haven't had any experience in these fields might not be ready to meet employer expectations.

The difficulty facing HEIs is that developing and updating curricula is frequently a slow process. The time, money, and experience that updating course materials to reflect the most recent technology developments demands may be lacking in many institutions (Cocaj, 2023). It's also a difficult task to incorporate these changes into current programs while maintaining their coherence and comprehensiveness. Due to this delay in updating educational curricula, students may find that their acquired skills are no longer relevant by the time they graduate, which will place them at a disadvantage in the competitive job market (Indrawati, and Kuncoro, 2021).

A lot of management graduates discover that to close the skills gap between what employers require and what they currently possess, they must seek further training, certifications, or even higher education (Goulart, Liboni and Cezarino, 2022). This leads to a vicious cycle of underemployment or prolonged unemployment since graduates have to spend more money and time learning the skills they need to get the jobs they want (Abomaye-Nimenibo and Samuel, 2021). Additionally, it adds to the stress that graduates feel, as they might feel unprepared and uncertain about their future in a job market that is becoming more and more complex and demanding (Benati and Fischer, 2020). Also, there may be wider economic ramifications if HEIs fail to meet industry demands. If graduates lack the abilities required to contribute to the workforce in an effective manner, businesses may experience a lack of talent in critical areas, which would impede innovation and growth (Dwipayana, Darmayanti and Wijonarko, 2023.). This situation highlights how crucial it is for academic institutions and business executives to work together more closely to make sure that curricula meet the needs of the real world.

The growing specialisation within industries is one of the main problems. Employers who use increasingly advanced technologies need staff members with in-depth knowledge of specialised fields like data science, cybersecurity, and digital innovation (Paško et al., 2022). These positions require a combination of technical expertise and management acumen, which is something that traditional management programs frequently fall short of offering (Karanja and Malone, 2022). Graduates who have only concentrated on general management skills might find it difficult to compete for these specialised positions, which could cause them to become frustrated and extend their



job search (Loft and Jensen, 2020). Besides, because of the speed at which technology is developing, the skills that employers require of candidates are always changing. Graduates must participate in lifelong learning and ongoing professional development since what was innovative only a few years ago can easily become dated (Morley and Jamil, 2021). But this expectation of continuous upskilling puts graduates under more strain, on top of the time and money they may already be bearing from the initial costs of their education. For individuals who are already having difficulty finding work, the requirement for continuous training can be especially daunting. This creates a catch-22 situation where learning the necessary skills becomes more challenging in the absence of a steady income or job security (Bethell, 2022). The job market has become more complex due to the rise of digital platforms and remote work. These changes bring flexibility and global employment opportunities, but they also make graduates proficient in online project management tools, virtual collaboration, and digital communication (Uduafemhe, Ewim and Karfe, 2023.). Graduates' employment prospects may be further limited if they are unfamiliar with these tools, as they may find it difficult to thrive in remote work environments (Bowen, 2020). For those who do find work, the pressure to innovate and keep up with technology trends can also result in burnout and unhappiness at work. The constant need to adapt and pick up new skills can be overwhelming for recent graduates, particularly in fields with steep learning curves and fast-paced work environments (Colwell, 2024). The career paths of management graduates may become even more complicated as a result of this atmosphere, which can result in high turnover rates and a feeling of instability.

## 2.7 CRITICAL REVIEW OF MOST RELEVANT STUDIES

**Table: 2.7.1: Critical Review of Most Relevant Studies**

<b>Author and Year</b>	<b>Indexing of journal</b>	<b>Methodology</b>	<b>Main findings relevant to research work</b>
David, M.E., David, F.R. and David, F.R.,2021	Scopus	Systematic Literature Review	To help bridge the skills gap between graduates and employers, the strategic management pedagogical model designed is to promote student learning and the development of hard and soft skills related to strategic planning. The four-stage strategy process model consists of the following stages: (1) situation assessment and diagnosis, (2) strategic option generation, (3) strategic choice, and (4) strategy implementation. It provides ample opportunity for professors to integrate theory and practice in

			teaching, thereby bridging the skills gap between graduates and employer requirements.
Damoah, O.B.O., Peprah, A.A. and Brefo, K.O., 2021	Thomson Reuters	One way ANOVA	Employers, policymakers, and researchers in developed and developing economies all now place a significant emphasis on graduates' employability due to recent shifts in the labor market and higher education. There are still gaps between what higher education offers its students and what the industry expects from entry-level graduates, as evidenced by the statistically significant differences.
Das, M., 2021, 2021	Scopus	Literature review	The reviews reported employability skills can be taken into account to improve understanding of how employability skills

			<p>can be embedded into the curriculum within B- -schools. Enhancing employability skills should be a collaborative effort involving universities, employers, policymakers, and students to ensure that educational outcomes meet market demands. Higher education providers should strive to close the employability gap by the time students graduate and are ready to compete in an overcrowded labor market.</p>
Elsayegh, A. and El-adaway, I.H.,2021	Springer	Review Analysis	<p>There is frequently a mismatch between what is taught in the curriculum and what is valued in the workplace. Students' satisfaction is a major indicator of their success and by surveying their satisfaction level about their education and job, programs frequently identify areas that need improvement to provide</p>

			the best possible learning environment for the students.
2020	Scopus	Mean Score comparisons	Employers value work ethics, teamwork, and time management, while students value perceived honesty, continuous learning, and work ethics. Financial accounting, financial reporting, and financial statement analysis are among the skills required by accounting graduates, according to students, whereas employers place a premium on financial statement analysis, computer software knowledge, and financial accounting. There is a mismatch between student perceptions and employer expectations of the skills – not knowledge – required of accounting graduates. Although previous studies investigated students' perceptions and employers' expectations, the information

			should be updated regularly to reflect current conditions.
Bilsland, C., Nagy, H. and Smith, P., 2020, 2020	Scopus		<p>Intern students lacked communication skills, problem-solving ability, analytical skills, and business understanding but performed well in other areas such as self-management, efficient use of ICT, interpersonal skills and teamwork, creativity and critical thinking, self-assurance and assertiveness, and a desire to learn new things. Management schools may provide a specific curriculum emphasising all of the previously listed competencies.</p> <p>It is also possible that such a program will be implemented continuously throughout the course to ensure consistent training.</p>

<p>Al-Mutawah, M.A., Thomas, R., Eid, A., Mahmoud, E.Y. and Fateel, M.J., 20192019</p>	<p>Scopus</p>	<p>Tests and Qualitative Interviews, ANCOVA</p>	<p>It was exhibited that persons practicing accounting are facing job dismissals due to an increase in the usage of software for performing accounting functions. There is found to be a skill gap on the part of the graduates as far as the knowledge of software is concerned. The employers of such graduates expect them to know how to run these functions on the machine.</p>
<p>Deshpande, S. and Munshi, M.M., 20202019</p>	<p>Cabell's Directory</p>	<p>Descriptive statistics</p>	<p>The Soft skills of the fresh graduates are found significant and creative to gain a successful career ahead. The pupils were conscious of how important role these skills can play in their employability and in determining their career. The skills that are considered to be important are positive attitude, problem-solving, self-direction, communication, and self-motivation. However, employers expected that they</p>

			possess skills such as problem-solving, good ethics, positive attitude, and teamwork, and they also realized that the level of these skills possessed by the graduates is not up to the mark.
Kay, et al., 2019	SJR	Thematic Analysis	There was a lack of required skills that served as the greatest barrier to the employability of the graduates. Only three skills are considered important for employment that are- field experience, skills related to leadership and authority, the practical knowledge. The importance was given to willingness to perform work apart from their routine work and their engagement in their job. The higher education Institutions are to play an important role in promoting self-awareness amongst their students taking



			the help of various career counseling centers.
Bayanova, et al., .2019	Scopus	Review	The factors that impacted the performance were identified as both external and internal. It was found that there exists a positive correlation between the factors that affect the employability and employability of the students. It was recommended that one of the ways that may lead to enhancing employability is to find out the factors within the curriculum that affect employability and frame those factors according to the expectations of the industry. The students must be exposed to the work during their degree to develop communication skills, work-related attitudes, and the other skills required to perform the job after graduation.

Junaidi, J., et al., 2018	Scopus	Factor Analysis	The employers believed that there is a positive impact of industrial training on the non-technical skills of the graduates. The emphasis was on the duration of the training and related it the longer the exposure better the performance of a graduate. Communication in English is also believed to be an important aspect as per the employers. Curriculum should be a framework to shape the student in terms of knowledge, and abilities required by the employer.
Azmi, I.A.G., Hashim, R.C. and Yusoff, Y.M., 2018	J-Gate	Factor Analysis	There were 12 skills that university students consider to be extremely important, with discipline topping the list. Organizational skills, problem-solving skills, teamwork skills, and good time management skills have a strong correlation with gender. There is also a

			link between respondents' abilities and organizations, such as problem-solving abilities.
Patacsil, F.F. and Tablatin, C.L.S 2017	Springer	Descriptive statistics	Teamwork and communication skills are found to be important soft skills that are possessed by the graduates as per the respondents' perception. Respondents' views on the importance of various soft skills were identical. The opinion differed in the case of hard skills, where there was widespread disagreement about the significance of various hard skills. Soft skills are shown to be more important than hard skills.
Wolff, L.A., Sjöblom, P., Hofman-Bergholm, M. and Palmberg, I., 2017	Scopus	Review	There should be cooperation between the universities and the environment that they are going to work in so that there is an

			<p>alignment between how they are being taught and the needs of the employer.</p> <p>The employers should also be given the chance to stay closer to the academics and they will be involved in the business and have to spend less time on the research. They might provide the inputs and give their inputs regarding the knowledge and the results that might help the firm to achieve the targets by using the new technology and resources.</p>
Singh, et al., 2017	SJI	Independent t-test	<p>It was analyzed that the necessity of these skills that the industry expects them to possess while they are on their job also looked for the requirement of training in inculcating these employees and also suggested the ways to shorten the gap that exists between these skills and the</p>

			industry expectations. It was found that active listening, writing ability, effective verbal communication, comprehensive reading, problem-solving, decision-making, loyalty towards the organization, ethics, teamwork, how do they manage conflicts, how do they negotiate, building relationships, etc. out these identified skills the top 5 skills that were in demand are problem-solving skills, active listening, presentation skills, decision making, stress management.
Sehgal, P., Nambudiri, R. and Mishra, S.K., 2017	Emerald	SEM-PLS	Educational institutions are primarily focused on developing basic generic skills and graduate characteristics. According to students' perspectives on employers' selection criteria, the top five critical employability skills are computer proficiency, teamwork abilities, English

			<p>language fluency, prior training, and the individual's personality characteristics.</p> <p>There is little interaction between higher educational institutions, alumni, and industry to improve graduate employability.</p>
2015	Elsevier	Review	<p>Employability skills are beginning to emerge in Greek society and higher education institutions. Teachers and policymakers agree on the importance of instilling skills and competencies in students, but this has yet to become a priority in educational practice, and the reasons for this should be investigated further. Governments' roles should also be examined. Organizations and governments must consider how they can interact with the public in various sectors.</p>

			The focus should be on the creation of a technologically based competitive advantage
Hamid, et al., 2014	Scopus	Factor Analysis	Employers expect graduates with a wide range of skills who can help their companies compete successfully in the marketplace. Employers emphasize the importance of graduates equipping themselves not just with technical skills but also with soft skills. They perceive that graduates often lag behind in demonstrating the level of proficiency required in these essential employability skills. Communication, predominantly the ability to use the language, exhibited the utmost disparity.
Evans, D.K. and Yuan, F., 2014	J-Gate	Descriptive Statistics	Students in vocational secondary schools have relatively high employability skills.

			<p>The development of employability skills in students is critical for the country's future success. As a result of new developments in the workplace, it is no longer possible to remain static in one organization. Industrial training experience in the area of employability skills acquisition. Students' employability skills were significantly predicted by participation in career development activities and a positive self-concept.</p>
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## 2.6 RESEARCH GAP

The most powerful asset of the nation is its youth. They create the opportunities for its growth and development. However, the issue of India's population has failed to find a suitable job for them. The number is Almost 10% in the case of the Punjab State (*CMIE (2020)*). There is a huge gap between the present status and the desired goals. Only 10.87% of the Indian workforce has undergone skill training, 4.5 million of the youth enter the labor markets and out of that, only 2% is found to have formal skilled training (*PWC, 2019*). The skill mismatch between academic education and employment has widened to the point where on one hand, the youth is unable to look for the jobs they desire, and on the other hand, the employees are not capable of finding the rightly trained personnel. According to the *India Skill Report (2019)*, less than 50% of the graduating youth are employable. This has led to broadening the gap between the skills possessed by the student's graduation and employability.

Higher education needs to lift to discourse these issues present in the corporate and are becoming hindrances in making their graduates employable. There are very few studies that have identified the skill gaps related to employability in the context of Indian Industry. Although there are a few studies that have identified some of the important skills required again the suggestions as to the methods or procedures to develop those skills are still not appropriate. There still exists a space between the skills that are available and the skills that are work-ready and that make a student employable. No framework for employability has been proposed in the context of Indian Management graduates at the doctoral level. There is a requirement for better investigation and delivery procedures to make the students work-ready. The steps taken in this regard will have impacts in the long run for all the stakeholders. The following are the research questions, the present study will attempt to answer this.

1. What is the skill set that makes a graduate employable? It is important to identify what are those competencies that are required to be employable and how do you recognize the distinct skill sets?

2. What are the employability skills that employers consider to be important for a candidate to perform and flourish in the industry?
3. How do the expected skills by the industry impact the Overall Graduate Employability (OGE) of the students?
4. What is the role of Higher Education Institutes in imparting the expected skills to the students and how are these skills going to be imparted in the students? An institution has the biggest role to play in inculcating the skill set in the students, to make them achieve employment.
5. What is the level of preparedness of the students as per the industry expected by the industry? Despite the efforts made by the faculty and the students, the student himself/herself is also responsible for attaining the skills.
6. How to identify the skill gap between the industry expectations, faculty or the students. The gap between the skill set and industry expectations is making these opportunities less attractive to the youth.

**CHAPTER-3**  
**RESEARCH**  
**METHODOLOGY**

## **CHAPTER-3**

### **RESEARCH METHODOLOGY**

This chapter focuses on the methodology of research. In both scientific and exploratory or descriptive research, the methodology is critical to carrying out investigations systematically and objectively.

This study examined the role of higher education in trying to bridge the skill gap that will help in bridging the 2025 skill gap crisis. Higher education institutions are expected to advance innovative approaches to bridge the skills gap while addressing critical issues. The goal of this study was to bridge the gap between academic curriculum, industry expectations, and student's perceptions about what the industry expects for improving social attitudes and cultural experiences in public and private universities. According to the research literature on the subject, a skill gap exists between new interns and those entering the workforce and the qualifications (Skills) required of those already in the position.

The objectivity of any scientific investigation is dependent on the accuracy of the research design chosen by the researcher. The nature of the problem dictates the research methodology, as each program necessitates a unique process and operation. It establishes the dependability and generalizability of findings. Each page of the research work in question should follow the format described.

As a result, care must be taken in selecting standardized tools, selecting appropriate sampling techniques, and implementing sound procedures for collecting, tabulating, and analyzing data using appropriate statistical measures. The purpose of this section is to reveal the methodology used to attain objectives of the current study, and it covers a variety of topics such as problem statement, objectives, hypothesis, sampling, data collection tools, and analysis tools. The research methodology is designed with extreme caution and care, as any flaw in it may jeopardize the reliability and validity of the

study. As a result, each research problem is distinct from the others, necessitating a distinct methodology and approach. It is necessary to tailor the selection of logical and scientific methods to the context of the research problem.

Research methodology provides a foundation and sound framework for applying logic to a research problem. Research studies that outline a proper research plan are carried out in a series of predefined steps. The research plan is consistent with the objectives of the study. Following the determination of research objectives, the type of data required, data collection methods, and sample size, the researcher selects appropriate tools and methods.

### **3.1 STATEMENT OF THE RESEARCH PROBLEM AND NEED OF THE STUDY**

At the moment, employability is a major issue all over the world. If we get to the bottom of the problem, we can easily see that after every student graduates from college, his academic knowledge and competencies are fine-tuned. It's a different story when it comes to getting and keeping a job in the corporate world. They must then maintain and compete in the practical professional world. Over and above academic skills, many other skills are behavioral in nature or softer skills, such as English communication – both spoken and written interpersonal skills, the part of communication, situational behavior, and so on, they play the most important role in helping the candidate fit into the workplace.

Not having these skills at an adequate level hurt, one's chances and prospects during the interview stage, as well as one's ability to get a job at all. However, it appears that our system is in the process of ignoring the fact that these recent engineering and management graduates lack the desired skill sets that are required of them as soon as they step into the real world of tough jobs and tough competition. Employable skills are a relatively new and frequently used concept talked about term, these days.

Everyone – academics, industry, and even the government – is emphasizing the need for employable skills in recent graduates. A NASSCOM-McKinsey report that is frequently cited states that 75 percent of engineering graduates in India are unemployed,

and this report sheds light on a completely different face of employability skills. Another survey conducted by FICCI and the World Bank revealed that 64% of employers were dissatisfied with the quality of engineering graduates. As a result, the importance of employability skills becomes clear. Our study attempts to observe/scrutinize the set of communication and behavioral skills that are given critical importance by industry (employers) and then to observe the degree of availability of those same identified skills in management and engineering students when they are so-called 'job-ready.' Finally, the current study attempts to suggest a few ideas for bridging the identified gap to address the 'lack of employability skills'.

A skills gap is the difference between the abilities that workers possess and the skills that employers need or want. To determine the skills, you need to achieve the organizational and self-goals there arises a need to do a skills gap analysis. The identification of skill gaps aids in defining the competencies that organizations will require now and, in the future, and it informs management faculty and students of the crucial competencies they will need to advance. Young employees need to be prepared for the labor market with the help of HEIs and faculty members, who can teach them morals and ethics, and a variety of general or non-specific skills, and finally, from employers, who can teach them occupational skills. The current study has made an effort to determine the nature and causes of any skill gaps as well as provide suggestions for improving management education's relevance to the market.

### **3.2 RESEARCH DESIGN**

This execution of research design is heavily reliant on the quality of research planning used to carry out the study. Planning is a proactive decision-making process that aids in dealing with complexities. It is a method that entails making and evaluating each set of interconnected decisions. Planning is essential for the success of any task. A research plan entails a predetermined course of action that is supposed to be necessary to achieve specific goals. Planning in research guides the researcher toward organizing ideas, which aids in reaching a set of appropriate conclusions.

Employability is a broad topic that includes various factors which affect the employment of the student. This study proposes to comprehend the gaps that exist in management education concerning employability is a multifaceted state that needs sudden attention and analysis from the point of view of the stakeholders such as the management students, faculty, placement team, and recruiters.

The present study considers the qualitative approach to get basic insights into the subject matter, as well as the quantitative approach, was used to evaluate and analyze the concept. The study was exploratory providing insights into the research problem. After being exploratory, it has been decided to go for Descriptive research for this study. The primary focus of the study is the management students, faculty members, and industry personnel or recruiters.

This research concentrates on attaining insights into the basis that there exists an employability gap among management students at the post-graduation level. A proper understanding of these issues will help to bridge employability gaps in the management Institutes and colleges so that substantial strategies can be developed and steps can be taken to overcome this situation.

### **3.3 OBJECTIVES OF THE STUDY**

The study's main goal is to identify the gap between the skills expected/required by the industry in management and engineering graduates and the skills available to the candidates. The study also investigates the potential causes and makes a few recommendations. The study establishes the following research objectives:

1. To validate the skill set required in postgraduate management students to meet industry expectations.
2. To find the impact of Skills expected by the industry on the Overall Graduate Employability (OGE) of the Post Graduate Management Students in Punjab.
3. To study the level of skill set imparted by the faculty to the students of Post Graduate Management Institutions in Punjab.
4. To examine the level of skill set acquired by the student of the Post Graduate Management Institute in Punjab.

5. To analyze the gap between the skill set imparted by the faculty, the skill set acquired by the students, and industry expectations.

### **3.4 HYPOTHESES OF THE STUDY**

The hypotheses concerning the objectives of the study are established as follows:

**Ho 1: There is no effect of the Skills Expected by the Industry on the Overall Graduate Employability (OGE) of the Post Graduate Management Students in Punjab.**

Ho1.1: There is no effect of Communication Skills on the Overall Graduate Employability (OGE) of the Post Graduate Management Students in Punjab.

Ho1.2: There is no effect of Career Adaptability Skills on the Overall Graduate Employability (OGE) of the Post Graduate Management Students in Punjab

Ho1.3: There is no effect of Work Ethics Skills on the Overall Graduate Employability (OGE) of the Post Graduate Management Students in Punjab

Ho1.4: There is no effect of Emotional Intelligence Skills on the Overall Graduate Employability (OGE) of the Post Graduate Management Students in Punjab

Ho1.5: There is no effect of Self-Efficacy Skills on the Overall Graduate Employability (OGE) of the Post Graduate Management Students in Punjab

Ho1.6: There is no effect of Team Work Skills on the Overall Graduate Employability (OGE) of the Post Graduate Management Students in Punjab

Ho1.7: There is no effect of Information Technology Skills on the Overall Graduate Employability (OGE) of the Post Graduate Management Students in Punjab

**Ho 2: There is no significant gap between the level of skill set imparted by Faculty members and the level of skill set acquired by the students**

Ho2.1: There is no significant gap between the level of Communication skills imparted by Faculty members and the industry expectations.

Ho2.2: There is no significant gap between the level of Career Adaptability skills imparted by Faculty members and the industry expectations.



H0<sub>2.3</sub>: There is no significant gap between the level of teamwork skills imparted by Faculty members and the industry expectations.

H0<sub>2.4</sub>: There is no significant gap between the level of Emotional Intelligence skills imparted by Faculty members and the industry expectations.

H0<sub>2.5</sub>: There is no significant gap between the level of Work Ethics skills imparted by Faculty members and the industry expectations.

H0<sub>2.6</sub>: There is no significant gap between the level of Self-Efficacy skills imparted by Faculty members and the industry expectations.

H0<sub>2.7</sub>: There is no significant gap between the level of Information technology skills imparted by Faculty members and the industry expectations.

**H0 3: There is no significant gap between the level of skill set acquired by the students and industry expectations.**

H0<sub>3.1</sub>: There is no significant gap between the level of Communication skills imparted by Faculty members and the level of skill set acquired by the students

H0<sub>3.2</sub>: There is no significant gap between the level of Career Adaptability skills imparted by Faculty members and the level of skill set acquired by the students

H0<sub>3.3</sub>: There is no significant gap between the level of teamwork skills imparted by Faculty members and the level of skill set acquired by the students

H0<sub>3.4</sub>: There is no significant gap between the level of Emotional Intelligence skills imparted by Faculty members and the level of skill set acquired by the students.

H0<sub>3.5</sub>: There is no significant gap between the level of Work Ethics skills imparted by Faculty members and the level of skill set acquired by the students.

H0<sub>3.6</sub>: There is no significant gap between the level of Self-Efficacy skills imparted by Faculty members and the level of skill set acquired by the students.

H0<sub>3.7</sub>: There is no significant gap between the level of Information Technology skills imparted by Faculty members and the level of skill set acquired by the students.

**H0 4: There is no significant gap between the level of skill set imparted by the faculty members and the industry expectations.**

H0<sub>4.1</sub>: There is no significant gap between the level of Communication skills acquired by the students and industry expectations.

H0<sub>4.2</sub>: There is no significant gap between the level of Career Adaptability skills acquired by the students and industry expectations.

H0<sub>4.3</sub>: There is no significant gap between the level of teamwork skills acquired by the students and industry expectations.

H0<sub>4.4</sub>: There is no significant gap between the level of Emotional Intelligence skills acquired by the students and industry expectations.

H0<sub>4.5</sub>: There is no significant gap between the level of Work Ethics skills acquired by the students and industry expectations.

H0<sub>4.6</sub>: There is no significant gap between the level of Self-Efficacy skills acquired by the students and industry expectations.

H0<sub>4.7</sub>: There is no significant gap between the level of Information Technology skills acquired by the students and industry expectations.

### **3.5 SAMPLE DESIGN / SAMPLING PLAN**

#### **3.5.1 Sample Area**

The study considered Punjab state to conduct this research with the unemployment rate i.e., 9.6% (CMIE, 2020). Further, the study considers three categories of respondents.

- 1) Recruiters from the industry who conduct placement drives in management campuses
- 2) Faculty members who are teaching MBA/PGDM students

3) Final year MBA/PGDM students

### 3.5.2 Sample Size

**Table 3.5.1 Sample Size of the Respondents**

<b>Respondents</b>	<b>Sample Size</b>
Recruiters from the industry who conduct placement drives in management campuses	<b>250</b>
Faculty members who are teaching MBA/PGDM students	<b>120</b>
Final year MBA/PGDM students	<b>664</b>

*Source: Sample Size calculator (Cochran's Sample size formula)*

### 3.5.3 Sampling technique

- The study collected data regarding the number of Universities and Institutions in Punjab from the official websites of AICTE and UGC. There is a total of 20 Universities and 89 Management Institutes in Punjab (Refer to Annexure-4). Further, the study selected 50% of universities and management for data collection using the Lottery Method of Random Sampling technique (*Refer to Table 3.6.1*).
- Further, the recruiters' list is extracted from the official website of these Universities/Institutes institutes There are around 668 recruiters (Eliminated duplicate entries) from 32 different industries (Refer to Annexure-5) who have visited these campuses to conduct placement drives. The sample size of the study consists of 250 respondents, hence, the quota for each industry is fixed (Refer to Table 3.5.3). Quota sampling was used in this study to ensure that the sample accurately represented the diverse range of industries from which the recruiters came. Given that there are 668 recruiters in 32 different industries, the goal was to collect a balanced view from each sector rather than allowing the sample to be skewed by over-representation from specific industries.

- The sample size of the study consists of **250 respondents, hence, the quota for each industry is fixed using Cochran's formula for a smaller population** (Refer to table 3.5.2).

$$n = \frac{n_0}{1 + \frac{(n_0-1)}{N}}$$

- For selecting the industry in the samples, the Quota is determined based on the following criteria-

$$\text{Quota} = (\text{Total number of recruiters in one industry} / \text{Total number of recruiters of all industries}) * 250$$

- 275 Questionnaires were distributed amongst the recruiters of the Post Graduate Management Students in the Punjab region, 255 questionnaires were received with full responses afterwards 171 responses were considered in the study after excluding some of the reactions because of straight lining as they could mislead the results.
- Further, the Purposive Sampling Method was used to select the respondents from each industry. They were approached through emails or social media platforms like Facebook, Instagram, and LinkedIn. Purposive sampling was used in this study to ensure that the respondents were highly relevant to the research objectives. This method enables researchers to approach recruiters who are directly involved in the placement of Post Graduate Management Students, ensuring that the data collected comes from individuals with the most relevant expertise. The study focusses on collecting directly applicable data by targeting these key respondents via emails and social media platforms such as Facebook, Instagram, and LinkedIn, avoiding irrelevant or less informed responses. This approach improves the quality and relevance of the findings by ensuring that the insights gathered are tailored to the needs of the research.

**Table 3.5.2: Industry-wise List of Recruiters**

<b>Industry</b>	<b>No. of companies</b>	<b>Sampling Technique</b>
Agriculture	18	Quota Sampling
Airline	15	Quota Sampling
Automobile/Automotive	37	Quota Sampling
Banking/Financial Services	56	Quota Sampling
Beauty Products	3	Quota Sampling
BPO	13	Quota Sampling
Cement	12	Quota Sampling
Chemical	18	Quota Sampling
IT-Services	65	Quota Sampling
Conglomerate	20	Quota Sampling
Construction	6	Quota Sampling
Consultancy	12	Quota Sampling
Apparel	4	Quota Sampling
Consumer Goods	6	Quota Sampling
Education	22	Quota Sampling
Electronics	25	Quota Sampling
Engineering	20	Quota Sampling
Entertainment	19	Quota Sampling
Food Processing/Beverage	26	Quota Sampling
IT/Hardware	10	Quota Sampling
Healthcare/ pharmaceutical	43	Quota Sampling
Hospitality/Hotel	31	Quota Sampling
Service	19	Quota Sampling
Logistic	11	Quota Sampling
Manufacturing	21	Quota Sampling
Media	15	Quota Sampling
HR	15	Quota Sampling
Retail	14	Quota Sampling
Steel	17	Quota Sampling

Tyres	15	Quota Sampling
Telecom	20	Quota Sampling
Textile	16	Quota Sampling

Source: Websites of colleges and universities

**Table 3.5.3: Industry-wise Sample Size (Recruiters)**

<b>Industry</b>	<b>Number of recruiters in Punjab</b>	<b>Quota</b>	<b>Sampling Method</b>
Agriculture	18	7	Purposive
Airline	15	6	Purposive
Automobile/Automotive	37	14	Purposive
Banking/Financial Services	56	22	Purposive
Beauty Products	3	1	Purposive
BPO	13	5	Purposive
Cement	12	5	Purposive
Chemical	18	7	Purposive
IT Services	65	25	Purposive
Conglomerate	20	8	Purposive
Construction	6	2	Purposive
Consultancy	12	5	Purposive
Apparel	4	2	Purposive
Consumer Goods	6	2	Purposive
Education	22	9	Purposive
Electronics	25	10	Purposive
Engineering	20	8	Purposive
Entertainment	19	7	Purposive
Food Processing/Beverage	26	10	Purposive
IT/Hardware	10	4	Purposive
Healthcare/ pharmaceutical	43	17	Purposive
Hospitality/Hotel	31	12	Purposive

Service	19	7	Purposive
Logistic	11	4	Purposive
Manufacturing	21	8	Purposive
Media	15	6	Purposive
HR	15	6	Purposive
Retail	14	5	Purposive
Steel	17	7	Purposive
Tyres	15	6	Purposive
Telecom	20	8	Purposive
Textile	16	6	Purposive

Source: Author's creation

### **Postgraduate Management Students and Faculty Sample Selection Process**

The study collected data regarding the number of Universities and Institutions in Punjab from the official websites of AICTE and UGC. There is a total of 20 Universities and 89 Management Institutes in Punjab. Further, the recruiters list is extracted from the official website of these Universities/Institutes. Further, the study selected 50% of universities and management institutes (Refer to Annexure-5) for data collection using the Lottery Method of Random Sampling technique. Further, 12 student respondents and 6 faculty respondents from each selected university and Institute used the Purposive Sampling method. The sample size of the study for the faculty members consists of 120 respondents and those of the students are 664 respondents which is calculated with the help of the following sample size formula by Cochran.

$$S = Z^2 \times P \times \frac{(1 - P)}{M^2}$$

Out of 146 Questionnaires distributed to the faculty members, 121 were received back and 109 responses were considered as part of the study after removing the incomplete responses. Out of the Questionnaires distributed to the students, 543 responses were received and 512 responses were selected in the study after removing all the incomplete responses.

### **3.6 PROCESS OF DATA COLLECTION**

Thereby following steps were followed for Sampling and Data collection-

Stage 1: Selection of State

Stage 2: Selection of Colleges and Universities

Stage 3: Selection of Recruiters who have visited these campuses to conduct placement drives

Stage 4: Selection of Students

Stage 5: Selection of Faculty Members

#### **Stage 1: Selection of State**

The state of Punjab was considered for the research as the unemployment rate i.e., 9.6% (CMIE, 2020) which is on the higher side. The various initiatives taken by the Punjab skill development mission were also popular and are also included in the study.

#### **Stage 2: Selection of Colleges and Universities**

The data of universities and colleges was collected from the websites of AICTE and UGC. There is a total of 20 Universities and 89 Management Institutes in Punjab. The study selected 50% of universities and management for data collection using the Random Sampling technique (*Refer Table 3.6.1*).

#### **Stage 3: Selection of Recruiters who have visited these campuses to conduct placement drives**

The data of the recruiters of MBA/PGDM placements were collected from the Placement section of the websites of all the selected Institutes and Universities. There were approximately 668 Recruiters after eliminating duplicates. The selected were categorized as per Industry. Further, 250 recruiters were selected out of 668 Recruiters based on Industry categorization using Quota Sampling. (*Refer Table 3.5.1*)

#### **Stage 4: Selection of Students**

664 students were from the chosen universities/Institutes. The study determined the sample size with the help of the following sample size formula. Further, 12 student respondents from each selected university and Institute were chosen using the Purposive Sampling method.



$$S = Z^2 \times P \times \frac{(1 - P)}{M^2}$$

### Stage 5: Selection of Faculty Members

120 faculty members were chosen from selected universities/Institutes. The study determined the sample size with the help of the following sample size formula. Further, 6 faculty respondents from each selected university and Institute using the Purposive Sampling method.

**Table 3.6.1 Sample Selection of Institutes**

S.No.	Universities/Institutes included in the Study
1	Swami Satyanand College of Management and Technology
2	Guru Nanak Dev Engineering College
3	Punjab Institute of Management & Technology
4	St. Soldier Group of Institutions
5	Ckd Institute of Management and Technology
6	Swami Sarvanand Institute of Management & Technology
7	Baba Farid College of Management & Technology
8	Guru Nanak Dev University
9	Kalia Educational and Research Society Group of Institutions
10	A & M Institute of Management and Technology
11	Punjabi University
12	Chandigarh Business School of Administration
13	Apeejay Institute of Management and Engineering Technical Campus
14	Aryabhata Group Of Institutes, Barnala
15	Sant Baba Bhag Singh University
16	Patel Institute of Management & Technology
17	Amritsar College of Engineering & Technology, Amritsar
18	Chandigarh University

19	Ct Institute of Management & It
20	Indo Global College of Engineering
21	Cgc Technical Campus - Faculty of Management
22	Quest Infosys Foundation Group of Institutions
23	Punjab College of Technical Education
24	Gulzar Group of Institutions
25	Dr I T School of Business
26	Vms Institute of Management Batala
27	S.Sukhjinder Singh Engineering & Technology College
28	Maharaja Ranjit Singh Punjab Technical University
29	Aman Bhalla institute of Management and Technology
30	Baba Banda Singh Bahadur Engineering College
31	Lala Lajpat Rai Institute of Engineering & Technology
32	Doaba Institute of Engg. & Tech.
33	Cordia Institute Of Business Management
34	Lovely Professional University
35	Sri Sukhmani Institute of Engineering & Technology
36	Pyramid College of Business and Technology
37	Innocent Hearts Group of Institutions
38	Khalsa Institute of Management & Technology for Women
39	Swami Vivekanand Institute of Engg. & Tech.
39	Dav Institute of Engineering & Technology
40	Rayat Bahra University
41	University Institute of Emerging Technologies (Uiet), Gharuan
42	Malwa College
43	Guru Nanak Institute of Management & Technology
44	Guru Kashi University
45	D.A.V University
46	Chitkara University
47	Sri Sai College Of Engg. & Tech
48	Swift Technical Campus

49	Shaheed Udham Singh College of Engineering & Technology
50	Lyallpur Khalsa College Technical Campus
51	Ram Devi Jindal Educational Charitable Society Group of Institutions
52	Adesh University
53	Dips Institute of Management & Technology

### 3.6.1 Data Collection Methods

Primary Data was collected in the following ways-

- a) A survey using a structured Questionnaire to the recruiters or the employers was conducted to collect data related to the skill set expected by industry from the management students.
- b) Data regarding the skill set imparted by faculty was collected through questionnaires from the faculty members who are teaching or are involved in preparing students for placements. The level of skill set in terms of various skills was understood based on their responses.
- c) Data regarding the skill set acquired by students was collected through a questionnaire from the students concerning the skills that are expected by the industry. The level of skill set in terms of various skills was examined based on their responses.

This research also used secondary data sources, such as reports from various business associations/chambers/education boards, such as AICTE, UGC, CII, ASSOCHAM, FICCI, and others (Refer Table-3.6.2), to supplement or co-relate the findings obtained from primary sources of data. The study used appropriate statistical tools and software to analyze the collected data.

**Table 3.6.2: Reports on Skill Development**

S.	Report	URL
1	PMKY Dashboard	<a href="http://pmkvyofficial.org/Dashboard.aspx">http://pmkvyofficial.org/Dashboard.aspx</a>
2	Ministry of Skill	<a href="https://www.msde.gov.in/">https://www.msde.gov.in/</a>
3	Indian states by	<a href="http://statisticstimes.com/economy/gdp-of-indian-">http://statisticstimes.com/economy/gdp-of-indian-</a>
4	Pradhan Mantri	<a href="http://pmkvyofficial.org/placement.aspx">http://pmkvyofficial.org/placement.aspx</a>
5	Rajasthan ILD	<a href="http://rajskills.edu.in/">http://rajskills.edu.in/</a>

6	Tamil Nadu   Skill	<a href="https://tngim.com/">https://tngim.com/</a>
7	Indian Brand	<a href="https://www.ibef.org/">https://www.ibef.org/</a>
8	COE, uttar Pradesh	<a href="https://pib.gov.in/">https://pib.gov.in/</a>
9	Utkarsh Bangla	<a href="http://aitcofficial.org/">http://aitcofficial.org/</a>
10	Maharashtra   Skill	<a href="https://sahabhag.maharashtra.gov.in/">https://sahabhag.maharashtra.gov.in/</a>
11	Telangana   Skill	<a href="http://telanganajagruthi.org/">http://telanganajagruthi.org/</a>
12	India Skills Report	<a href="https://wheebox.com/india-skills-report.htm">https://wheebox.com/india-skills-report.htm</a>
13	India Skills Report	<a href="https://wheebox.com/assets/pdf/ISR_Report_2020">https://wheebox.com/assets/pdf/ISR_Report_2020</a>
14	India Skills Report	<a href="https://wheebox.com/assets/pdf/ISR_Report_2018.pdf">https://wheebox.com/assets/pdf/ISR_Report_2018.pdf</a>
15	India Skills Report	<a href="https://wheebox.com/assets/pdf/ISR_Report_2017.pdf">https://wheebox.com/assets/pdf/ISR_Report_2017.pdf</a>
16	India Skills Report	<a href="https://wheebox.com/assets/pdf/ISR_Report_2016.pdf">https://wheebox.com/assets/pdf/ISR_Report_2016.pdf</a>
17	India Skills Report	<a href="https://wheebox.com/assets/pdf/ISR_Report_2015.pdf">https://wheebox.com/assets/pdf/ISR_Report_2015.pdf</a>
18	India Skills Report	<a href="https://wheebox.com/assets/pdf/ISR_Report_2014.pdf">https://wheebox.com/assets/pdf/ISR_Report_2014.pdf</a>
19	Punjab Skill	<a href="http://psdm.gov.in/index.php">http://psdm.gov.in/index.php</a>
20	National Skill	<a href="https://nsdcindia.org/sites/default/files/files/Worksho">https://nsdcindia.org/sites/default/files/files/Worksho</a>
21	National Skill	<a href="https://services.india.gov.in/service/ministry_services">https://services.india.gov.in/service/ministry_services</a>
22	Guidelines for	<a href="https://www.ugc.ac.in/pdfnews/6556003_Guidelines-">https://www.ugc.ac.in/pdfnews/6556003_Guidelines-</a>
23	Skill Gap report,	<a href="https://www.ugc.ac.in/skill/SectorReport/Telecommu">https://www.ugc.ac.in/skill/SectorReport/Telecommu</a>
24	Skill Gap report,	<a href="https://www.ugc.ac.in/skill/SectorReport/Travel%20Tour">https://www.ugc.ac.in/skill/SectorReport/Travel%20Tour</a>
25	Curriculum for	<a href="https://www.ugc.ac.in/e-book/SKILL%20ENG.pdf">https://www.ugc.ac.in/e-book/SKILL%20ENG.pdf</a>
26	Report of the sub-	<a href="https://www.niti.gov.in/writereaddata/files/Final%20r">https://www.niti.gov.in/writereaddata/files/Final%20r</a>
27	Skill Development	<a href="https://www.aicte-india.org/bureaus/skill-">https://www.aicte-india.org/bureaus/skill-</a>
28	Skill Development	<a href="https://www.startupindia.gov.in/content/sih/en/govern">https://www.startupindia.gov.in/content/sih/en/govern</a>
29	Skills	<a href="http://ficci.in/sector/74/project_docs/sectorprofile.pdf">http://ficci.in/sector/74/project_docs/sectorprofile.pdf</a>
30	Skill India plan	<a href="https://mpmsme.gov.in/mpmsmecms/Uploaded%20Doc">https://mpmsme.gov.in/mpmsmecms/Uploaded%20Doc</a>
31	Green Skill	<a href="http://gsdp-envis.gov.in/">http://gsdp-envis.gov.in/</a>
32	FICCI-KPMG	<a href="http://ficci.in/spdocument/20405/ficci-kpmg-global-">http://ficci.in/spdocument/20405/ficci-kpmg-global-</a>
33	The skill	<a href="http://ficci.in/SPdocument/20073/skill-aug16.pdf">http://ficci.in/SPdocument/20073/skill-aug16.pdf</a>
34	The Skill	<a href="http://ficci.in/spdocument/20073/imacs.pdf">http://ficci.in/spdocument/20073/imacs.pdf</a>
35	Revised scheme	<a href="https://www.aicte-india.org/sites/default/files/PMKVY-">https://www.aicte-india.org/sites/default/files/PMKVY-</a>
36	Gap	<a href="https://www.ugc.ac.in/pdfnews/6556003_Guidelines-">https://www.ugc.ac.in/pdfnews/6556003_Guidelines-</a>
37	Introduction S	<a href="https://www.niti.gov.in/sites/default/files/2019-">https://www.niti.gov.in/sites/default/files/2019-</a>
38	Policy report - on skill	<a href="https://assets.ey.com/content/dam/ey-sites/ey-">https://assets.ey.com/content/dam/ey-sites/ey-</a>
39	India International S	<a href="https://nsdcindia.org/iisc-network">https://nsdcindia.org/iisc-network</a>

Source: Website of various bodies publishing the Skill reports

### 3.7 SAMPLING INSTRUMENT

- 1) A set of common statements of 15 Dimensions were prepared for industry experts/recruiters, students, and faculty for identifying the skills expected by the industry, imparted by the faculty, and acquired by the students of Post Graduate Management degree.
- 2) Structured Questionnaire was prepared after checking the validity and reliability of the scales of the dimensions.

### 3.7.1 Instrument Development

The survey has been conducted for the recruiters from the industry, faculty members and students from the post graduate management degrees to study the expectations of the industry and gap that exists between these expectations and skill set of the students and faculty. For the same, a set of statements were made and was distributed to Experts from the academics and industry.

### 3.7.2 Preparation of the Preliminary Draft of the Questionnaire for the Industry

After going through a lot of literature and research a list of 15 Skill Set (*Table 3.7.1*) and Over Graduate Employability were enumerated and the meanings of those skills were also explained in detail for correct understanding.

**Table 3.7.1 Skill Set Explored through Literature**

S.No.	Determinants	Explored by
1	Time Management	A Häfner, A Stock ,2015
2	Career Adaptability	ML Savickas · 2012
3	Team Work	LM Lower, TJ Newman,2017
4	Self-Efficacy	G Chen, SM Gully, D Eden,2001
5	Problem Solving	M Coetzee,2012
6	Communication	M Coetzee,2012
7	Decision Making	M Coetzee,2012

8	Networking	De Klerk, S. (2010)
9	Work Ethics	M Coetzee,2012
10	Leadership	Singh, G. K. G., & Singh, S. K. G. 2008
11	IT Skills	Van Deursen, A. J., Helsper, E. J., & Eynon, R. (2016).
12	Overall Graduate Employability (OGE)	Hosain, M. S., Mustafi, M. A. A., & Parvin, T. (2021)
13	Emotional Intelligence	Palmer, B. R., Stough, C., Harmer, R., & Gignac, G. (2009).
14	Creative and Analytical	M Coetzee,2012
15	Conceptual Knowledge	Pefanis Schlee, R., & Harich, K. R. (2010), (2017).,Cory, S. N., & Pruske, K. A. (2012)

### 3.7.3 Validation through expert opinion

The experts were asked to respond upon the relevance and clarity, also the suggestion for the improvement was asked. Content Validity index was used to check the content validity through Relevance and Clarity (*Refer Table3.7.2*) through the responses of the experts from Academics and Industry who validated the statements of all the 15 Dimensions.

**TABLE 3.7.2: CONTENT VALIDITY INDEX (CVI)**

<b>Dimension</b>	<b>CVI (relevance)</b>	<b>CVI(Clarify)</b>
<b>Time Management</b>	<b>.957</b>	<b>.926</b>
<b>Career Adaptability</b>	<b>.915</b>	<b>.915</b>
<b>Communication</b>	<b>.928</b>	<b>.962</b>
<b>Team Work</b>	<b>.944</b>	<b>.930</b>
<b>Self-Efficacy</b>	<b>.950</b>	<b>.900</b>
<b>Problem Solving</b>	<b>.916</b>	<b>.916</b>
<b>Work Ethics</b>	<b>.958</b>	<b>.927</b>
<b>Leadership</b>	<b>.958</b>	<b>.950</b>

<b>Creative and Analytical</b>	<b>1.00</b>	<b>1.00</b>
<b>Decision Making</b>	<b>.916</b>	<b>.948</b>
<b>Emotional Intelligence</b>	<b>.916</b>	<b>.979</b>
<b>Conceptual Knowledge</b>	<b>.916</b>	<b>.916</b>
<b>Networking</b>	<b>.916</b>	<b>.916</b>
<b>Information technology</b>	<b>.933</b>	<b>.916</b>
<b>OGE</b>	<b>.916</b>	<b>.948</b>

Values range from 0 to 1 where I-CVI > 0.79, the item is relevant,

*Source: Author's Computation through Experts Opinion*

### 3.7.4 Modification of the Questionnaire

All the statements were found Relevant and were clear in the meaning, few statements were modified after the suggestions given by the Experts from the Industry and Academics.

### 3.7.5 Pilot testing – Reliability test

After the content Validity, Cronbach's Alpha was used to check the reliability (*Refer Table 3.7.3*) of the Dimensions.

**Table 3.7.3: Reliability Analysis**

<b>Dimension</b>	<b>Cronbach's Alpha</b>
<b>Time Management</b>	<b>.726</b>
<b>Career Adaptability</b>	<b>.750</b>
<b>Communication</b>	<b>.718</b>
<b>Team Work</b>	<b>.729</b>
<b>Self-Efficacy</b>	<b>.756</b>
<b>Problem Solving</b>	<b>.709</b>
<b>Work Ethics</b>	<b>.701</b>
<b>Leadership</b>	<b>.713</b>
<b>Creative and Analytical</b>	<b>.757</b>

<b>Decision Making</b>	<b>.728</b>
<b>Emotional Intelligence</b>	<b>.760</b>
<b>Conceptual Knowledge</b>	<b>.720</b>
<b>Networking</b>	<b>.733</b>
<b>Information technology</b>	<b>.756</b>
<b>Overall Graduate Employability</b>	<b>.801</b>

### 3.7.6 Development of the Questionnaire for Faculty and the Students

On the basis of the skill set extracted from the data collected from the industry recruiters, the questionnaire was drafted for the faculty members as well as the students. The Questionnaire for the faculty and the students was developed on the basis of skills set expected by the industry, which is confirmed after Confirmatory Factor Analysis (CFA). The content validity of the experts was checked by the experts from the academicians and the industry Table 3.7.4 Shows the content validity of the faculty, Table 3.7.5 shows the Reliability analysis for the faculty and the students.

**TABLE 3.7.4: CONTENT VALIDITY INDEX (CVI)**

<b>Dimension</b>	<b>CVI (relevance)</b>	<b>CVI(Clarify)</b>
<b>Career Adaptability</b>	<b>.916</b>	<b>.916</b>
<b>Communication</b>	<b>.957</b>	<b>.926</b>
<b>Team Work</b>	<b>.916</b>	<b>.916</b>
<b>Self-Efficacy</b>	<b>.916</b>	<b>.916</b>
<b>Work Ethics</b>	<b>.958</b>	<b>.927</b>
<b>Emotional Intelligence</b>	<b>.911</b>	<b>.979</b>
<b>Information technology</b>	<b>1.00</b>	<b>1.00</b>

Values range from 0 to 1 where I-CVI > 0.79, the item is relevant,

*Source: Author's Computation through Experts Opinion*

**Table 3.7.5: Reliability Analysis (Cronbach's Alpha)**

<b>Dimension</b>	<b>Faculty</b>	<b>Students</b>
<b>Career Adaptability</b>	<b>.702</b>	<b>.702</b>

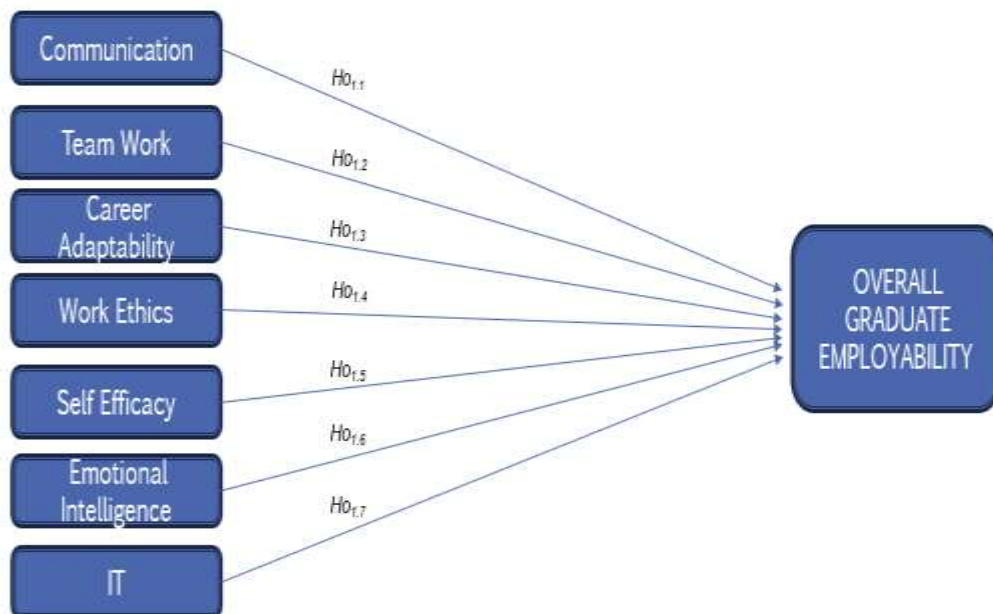


<b>Communication</b>	<b>.711</b>	<b>.752</b>
<b>Team Work</b>	<b>.701</b>	<b>.701</b>
<b>Self-Efficacy</b>	<b>.733</b>	<b>.732</b>
<b>Work Ethics</b>	<b>.712</b>	<b>.704</b>
<b>Emotional Intelligence</b>	<b>.714</b>	<b>.735</b>
<b>Information technology</b>	<b>.701</b>	<b>.713</b>

Source: Author's Computation

### 3.8 CONCEPTUAL FRAMEWORK- SKILLS IMPACTING OVERALL GRADUATE EMPLOYABILITY (OGE)

The framework shown in Fig. 3.8.1 emphasizes the crucial role of diverse talents, notably teamwork skills, in determining Overall Graduate Employability (OGE) in the context of Industry.



*Fig.3.8.1 Conceptual Framework*

To be employable in the industry, it is assumed and hypothesized that graduates need a

well-rounded skill set that includes communication, teamwork, career adaptability, work ethics, emotional intelligence, self-efficacy, and information technology. These skills equip individuals to handle complex challenges, contribute effectively to strategic initiatives, and adapt to a dynamic, technology-driven landscape, thereby enhancing their employability and long-term career prospects (Mohan et al., 2024). The conceptual model seeks to evaluate the impact of these skills on the overall employability of management postgraduates.

### **3.9 DATA ANALYSIS TECHNIQUES**

This research is exploratory relying on the primary source of data to achieve the defined objectives. A questionnaire with the Likert scale was developed to get the required data from the industry, Faculty, and Students. The study selected a sample size of 250 industry employers, data was received in full from 171 Employers. The sample size for the faculty was 120, the data was received from 109 faculty members, The sample size for the students was 664 and the data was received from 512 Students. The study also used the reports such as India Skill Reports, CMIE reports, FICCI reports on Skill development, CII reports, ASSOCHAM, etc. to find the research gap. The Questionnaire was finalized after Validating the Content from the expert using CVI (Content Validity Index) and Pilot testing where the reliability is checked using Cronbach Alpha. The data was collected and these factors are then reduced and established using Principal Component Analysis (PCA), the final data was collected and the scale is validated using CFA for the final selection of the variables and factors. Secondly, the model was measured by using Structural Equation Modelling (SEM) to check the impact of skills validated by CFA on the Overall Graduate Employability. Afterwards, the level of skill set of the faculty and Students was found in comparison to the skills validated again by using a structured Questionnaire. Finally, the gap was found between the industry and the faculty, faculty and students and Industry and faculty concerning the skills validated. Further independent sample t-test was used to find the gap between industry, faculty, and students with respect to the dimensions validated using CFA.

**Table: 3.9.1 Objective-wise Data Analysis Techniques**

OBJECTIVE	DATA ANALYSIS TECHNIQUE
<u>OBJECTIVE-1:</u> To validate the skill set required in post-graduate management students to meet industry expectations.	Principal Component Analysis (PCA) And CONFIRMATORY FACTOR ANALYSIS (CFA)
<u>OBJECTIVE-2:</u> To find the impact of Skills expected by the industry on the Overall Graduate Employability (OGE) of the Post Graduate Management Students in Punjab	Structural Equation Modelling (Sem)
<u>OBJECTIVE-3:</u> To study the level of skill set imparted by the faculty to the students of Post Graduate Management Institutions in Punjab.	Descriptive Statistics
<u>OBJECTIVE-4:</u> To examine the level of skill set acquired by the student of the Post Graduate Management Institute in Punjab.	Descriptive Statistics
<u>OBJECTIVE-5:</u> To analyze the gap between the skill set imparted by the faculty, the skill set acquired by the students, and industry expectations	Independent T-Test

**CHAPTER-4**  
**VALIDATION OF**  
**POSTGRADUATE**  
**MANAGEMENT STUDENTS'**  
**SKILL SETS TO MEET**  
**INDUSTRY EXPECTATIONS**

## **CHAPTER 4**

### **VALIDATION OF POSTGRADUATE MANAGEMENT STUDENTS' SKILL SETS TO MEET INDUSTRY EXPECTATIONS**

This chapter analyses the factors that affect the employability of MBA and PGDM. The projected value of the model relating to soft skills and technical skills that affect the employability of the graduates is explored through the Literature review. The objectives as stated are to validate the skill set as industry Expectations, with the main objective to estimate the employability gap. It can be stated these students must have the skills that can provide an advantage to them in the future while securing employability. The main skills that are explored from the literature are Communication, Time Management, Career Adaptability, teamwork, Self-Efficacy, problem-solving, Work ethics, Leadership, Creative and Analytical, Conceptual Knowledge, Decision Making, Networking and Information Technology. The capability of students and their skill sets can be easily decided by the faculty members as they are providing proper training to these students in terms of improving their skills. The data analysis and interpretation of the information gathered from primary sources were the topics of this chapter. In this chapter, the quantitative components of the information gathered through a structured questionnaire are analyzed. The study's hypotheses are tested using inferential statistics after an analysis of the descriptive statistics. The findings of the Employability Skills, Importance of Management Degree test are presented with an independent sample t-test.

#### **4.1 RESEARCH PLAN**

This research is exploratory relying on the primary source of data to achieve the defined objectives. Questionnaires with the Likert scale were developed to get the required data from the industry, Faculty, and Students. The study selected a sample size of 250 industry employers. The sample size for the faculty was 120 and sample size for the students was 664. The study also used reports such as India Skill Reports, CMIE reports, FICCI reports on Skill development, CII reports, ASSOCHAM, etc. to find the research gap. The Questionnaire was finalized after Validating the Content from the

expert using CVI (Content Validity Index) and Pilot testing where the reliability is checked using Cronbach Alpha. The data was collected and these factors were then reduced and established using Principal Component Analysis (PCA), the final data was collected and the scale was validated using CFA for the final selection of the variables and factors. Secondly, the level of skill set of the faculty and Students was found in comparison to the skills validated again by using a structured Questionnaire. Finally, the gap was found between the industry and the faculty, faculty, and students, and Industry and faculty concerning the skills validated.

#### **4.2 SKILLS EXPLORED FROM THE LITERATURE REVIEW**

15 Skills, mentioned in Table 4.2.1 were found and Explored through the Literature Review. The experts suggested a few modifications and changes. After incorporating the same the questionnaire was finalized after testing Reliability and validity.

<b>Table 4.2.1 Skill Dimensions Explored from the Literature</b>	
Skill 1	Time Management
Skill 2	Career Adaptability
Skill 3	Team Work
Skill 4	Self-Efficacy
Skill 5	Emotional Intelligence
Skill 6	Networking
Skill 7	Decision Making
Skill 8	Problem-Solving
Skill 9	Information technology
Skill 10	Creativity and Analytical

Skill 11	Leadership
Skill 12	Work Ethics
Skill13	Communication
Skill14	Conceptual Knowledge
Skill 15	Overall Graduate Employability

### 4.3 DETERMINATION OF SKILL SET AS PER INDUSTRY EXPECTATIONS

We explicitly asked the group of industry chiefs, HRs, and those who are conducting the interviews of the candidates from the Post Graduate management Institutions in Punjab to rate the significance of each ability as expected or desired of management graduates in these surveys. The data's validity and reliability were examined, and the mean and relevance of these abilities were ranked. Next, institutions were contacted to learn more about the present skill levels of their graduates. We calculated each skill's mean value, average skill level, and deviation from industry standards for those skills.

#### 4.3.1 Dimension reduction using Principal Component Analysis (PCA)

Since the study is concerned with scale development the first step is to run the PCA or factor analysis to check the covariation amongst measured variables and to find the common factors that elucidate the sequence and structure of the measured variables. After this, the adequacy of the data was checked using KMO and Barlett's test which is a measure to check the adequacy of the sample through the data and to assess the suitability of applying factor analysis on the existing data set. Bartlett's test of sphericity is performed to test that the items in the correlation matrix are uncorrelated to each other (Granić and Marangunić, 2019).

<b>Table 4.3.1: KMO and Bartlett's Test</b>		
Kaiser-Meyer-Olkin Measure of Sampling Adequacy.		.708
Bartlett's Test of Sphericity	Approx. Chi-Square	2138.099

	Df	435
	Sig.	.000

*Source: Author's Computation*

As per the KMO and Barlett's Test, the Kaiser-Meyer Olin Measure of Sampling Adequacy value is .708 shown in Table 4.3.1 which is above the acceptable level of .50 (Chan and Idris, 2017). This certainly signifies that the sum of partial correlations is not more than acceptable in comparison to the sum of correlations. The sum of the analysis of this variable is 70.8%. This demonstrates that the correlation pattern does not exhibit diffusion. Therefore, in this situation, factor analysis is applicable. Bartlett's test of Sphericity is used to examine the hypothesis that there is no significant difference in the correlation matrix and identity matrix. An identity correlation matrix signifies that variables are not related and are not ideal for factor analysis.

It contrasts the identity matrix with an observed correlation matrix. In essence, it determines whether there is some duplication among the variables that we can sum up with a limited number of elements. It is performed before using PCA or factor analysis to confirm that PCA compresses data in a meaningful way so that it is ensured that the data reduction technique is appropriate to use. As a result, the factor analysis of these data would yield trustworthy and unique factors. Table 4.3.1, also contains Bartlett's Test of Sphericity, where the Approx. value of the Chi-Square value obtained is 2138.009 and the significant value 'p' is 0.000 which is less than 0.001. Thus, we can say, that this correlation matrix is not found to be an identity matrix, as the p-value calculated in Bartlett's Test of Sphericity in Table 4.3.1 is not more than the significance level of .05. therefore, it can be concluded that the dataset is suitable for applying the data reduction technique. Therefore, this specifies a strong relationship among the variables in the study. Thus, factor analysis is appropriate for this set of data. The present skill set of postgraduate management students of Punjab that are expected by the industry has been confirmed and validated by using PCA in SPSS and CFA using AMOS. They are recognized as the effective statistical technique utilized in terms of verifying the factor structure of the set of observed variables. In addition, CFA provides a better allowance to establish better bonding among observed variables including that their underlying latent constructs exist A linear transformation technique called PCA is



frequently utilized in a variety of domains, most notably for feature extraction and dimension reduction. Based on the connection between features, PCA aids in the discovery of patterns in data, it seeks to map the directions of the largest variance in high-dimensional data upon a new substructure with the same or fewer number of dimensions.

The primary principal component will exhibit the maximum possible variance when the original multidimensional data is projected onto this new subspace of dimensionality (usually denoted as  $k$ , where  $k \leq d$ ). Subsequent principal components will possess the greatest variance possible within this constraint. Notably, despite potential correlations among the inputs, the resulting principal components will be orthogonal to one another, signifying their lack of correlation. This lack of correlation implies that each principal component is independent of the others. The portion of variance a variable shares with all other variables analyzed is termed as commonality.

<b>Table 4.3.2 Communalities</b>		
	Initial	Extraction
CA1	1.000	.672
CA2	1.000	.773
CA4	1.000	.824
CO1	1.000	.729
CO2	1.000	.811
CO4	1.000	.792
CO5	1.000	.799
TW1	1.000	.792
TW2	1.000	.722
TW3	1.000	.827
SE2	1.000	.760
SE3	1.000	.628
SE4	1.000	.579
SE5	1.000	.721
WE2	1.000	.666
WE3	1.000	.658
WE4	1.000	.661
WE5	1.000	.691

EI1	1.000	.639
EI2	1.000	.485
EI3	1.000	.527
EI4	1.000	.542
EI5	1.000	.695
IT2	1.000	.745
IT3	1.000	.452
IT4	1.000	.869
OGE1	1.000	.684
OGE2	1.000	.773
OGE3	1.000	.631
OGE4	1.000	.731
Extraction Method: Principal Component		

The co-variation amongst the items is described in terms of a small number of common factors plus a unique factor for each variable. Communalities explain the percentage of variance of each variable that can be explained through the principal components. It is the squared multiple correlation of the variable using the factors as predictors. The commonality calculates the percent of change in each variable that is explained by all the factors jointly and may be interpreted as the reliability of the indicator. When an indicator variable has a low communality, the factor model is not working well for that indicator and possibly it should be removed from the model (Hagedoorn and Cloodt, 2003). However, communalities must be interpreted to the interpretability of the factors. Table 4.3.2, shows the obtained values of the communalities using the extraction method in PCA. Communality of almost all the factors is above 0.40 therefore, there is no need to delete any item as corresponding communalities for all the items are above 0.4 which lies above the acceptable range (Gaskin, Richard, 2012). For full orthogonal PCA, the communality will be 1.0 for all the variables and all the variance in the variables will be explained by all the factors, which will be as many as are variables. In the communalities chart, SPSS labels this column the "initial" communalities. The "extracted" communality is the percent of the variance in each variable explained by the factors which are extracted, which will usually be a smaller amount than all the possible factors, resulting in coefficients less than 1.0. For PFA, however, the communalities for the various factors will be less than 1 even initially.

PCA was chosen with the Promax rotation that was chosen to display the pattern Matrix, as it recovered the structure better than the Varimax (Finch, 2006). Promax Rotation is an oblique rotation, that allows the factors to be correlated to each other. This can be calculated faster than other rotation methods, so it is useful for datasets of more than 150. It enables to identification of the existence of a simple structure in a better way and is suggested when the purpose is to identify which items are related to which factors, this method is preferable (Graham, et al., 2020). Suppression of absolute values less than 0.50 in the options menu was selected. A value of 0.50 has been chosen because the sample is not very big (Hair, et al., 2006) therefore, the factors with a loading of less than 0.50 are not displayed in the matrix.

	Component							
	1	2	3	4	5	6	7	8
CA1				.790				
CA2				.800				
CA4				.869				
CO1	.845							
CO2	.867							
CO4	.867							
CO5	.870							
TW1							.827	
TW2							.826	
TW3							.871	
SE2						.896		
SE3						.566		
SE4						.535		
SE5						.826		
WE2			.795					
WE3			.788					
WE4			.809					

WE5			.824					
EI1					.756			
EI2					.673			
EI3					.658			
EI4					.723			
EI5					.806			
IT2								.860
IT3								.610
IT4								.933
OGE1		.793						
OGE2		.864						
OGE3		.799						
OGE4		.858						
Extraction Method: Principal Component Analysis.								
Rotation Method: Promax with Kaiser Normalization.								
a. Rotation converged in 6 iterations.								

At the beginning of this research study, 15 factors (skills) were identified from the Literature namely, Time Management, Career Adaptability, Communication, Team Work, Emotional Intelligence, Self-Efficacy, Leadership, Decision Making, Problem Solving, Critical and Analytical Thinking, Work ethics, Networking, Information Technology, Conceptual Knowledge, and Overall Graduate Employability. After Performing PCA after multiple times, 8 factors remained, as the factors and variables were deleted with the reason that alpha value of less than 0.50 or the item was loaded in more than one factor. After Running the analysis, for many times, Table 4.3.3: Pattern matrix was generated as an output which displays the factor loadings. Each row in the pattern matrix is basically a regression equation, standardized observed variable is specified as a loading of the factors. These loadings are regression coefficients. This matrix holds the existing correlations between variables and factors The Pattern Matrix with Kaiser Normalization, displaying the final items or variables with 8 factors. The final Factors (skills) that are formed are Communication Skills, Overall Graduate

Employability, Team Work, Self-Efficacy, Work Ethics, Emotional intelligence, Career Adaptability, and Information technology.

Component	1	2	3	4	5	6	7	8
1	1.000	-.216	.089	.004	.065	.001	.024	-.072
2	-.216	1.000	-.033	-.107	.013	-.085	.002	-.043
3	.089	-.033	1.000	.022	.026	-.034	.004	-.019
4	.004	-.107	.022	1.000	.025	.358	.405	-.106
5	.065	.013	.026	.025	1.000	.027	.071	.079
6	.001	-.085	-.034	.358	.027	1.000	.244	-.047
7	.024	.002	.004	.405	.071	.244	1.000	.023
8	-.072	-.043	-.019	-.106	.079	-.047	.023	1.000

Extraction Method: Principal Component Analysis.  
 Rotation Method: Promax with Kaiser Normalization.

The correlation matrix displays correlation coefficients for different items in the scale by depicting the correlation between possibly all the pairs of values in a table. It is assumed to be an influential tool for summarizing a dataset to identify and visualize the patterns in the given data. It can be referred from Table 4.3.3, that the factors are distinct and not correlated to each other. The rule of discriminant validity is that variables should be related more strongly within the factors than between the factors. Firstly, it has been tested through the pattern matrix, where no item is there with the cross-loadings, and the correlation between all the factors does not exceed more than 0.70. thereby, indicating that there are no factors with high correlation with each other.

#### **4.3.2 Validation of the Skillset Expected from the Students of Postgraduate Management Programs in Punjab through Confirmatory Factor Analysis (CFA)**

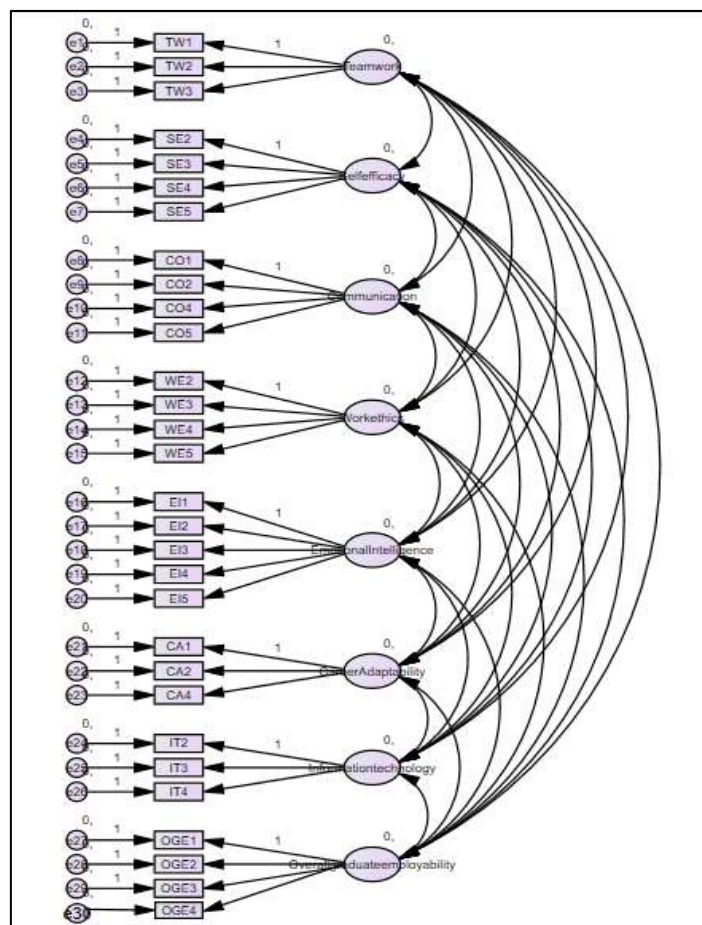
Confirmatory Factor Analysis (CFA) seeks to determine whether the number of factors/constructs and standardized loadings of measured (indicator) variables correspond to what is expected based on pre-established theory. Indicator variables are carefully chosen based on prior theory, and factor analysis techniques are used to see if

they load as expected onto the predetermined number of factors. The underlying hypothesis is that each factor is associated with a particular set of indicator variables. A fundamental requirement for conducting confirmatory factor analysis is to hypothesize in advance about the number of factors in the model and the expected relationships between variables and factors.

(Kim and Mueller, 1978).

The seven-factor model of Employability along with the Overall Graduate Employability (OGE) was formulated using Pattern matrix Model Builder in AMOS, as shown in Figure 4.3.1, This diagram denotes the specification of input that is required for analyses using the AMOS graphics. In this schematic exhibition measured/observed variables are shown in the rectangles and unobserved variables are in the circles.

**Figure 4.3.1: Pattern Matrix Model generated using AMOS**



Thus, in rereading the model depicted in Figure 4.1, it is seen that there are seven factors namely Team Work (TW), Communication (CO), Self-Efficacy (SE), Work Ethics

(WE), Emotional Intelligence (EI), Career Adaptability (CA), Information Technology (IT), Overall Graduate Employability (OGE). The 30 observed variables from Item 1 through Item 30. They serve as pointers of the respective basic latent factors. The structural regression coefficients are represented by the one-way arrows in the model, which show how one item in a scale affects another. The one-way arrows connecting each Employability component to its congeneric set of Employability questions therefore imply that the scores on the latter are "caused" by each of the linked factors; these regression coefficients indicate the factor loadings. The one-way arrows connecting each Employability component to its congeneric set of Employability items consequently imply that the scores for the latter are "influenced" by each of the linked factors; the regression coefficients indicate the factor loadings. Finally, the curved two-way arrows joining each of the Employability factors specify their intercorrelation. The "1"s assigned to the first of each set of factor loading coefficients, as well as the regression coefficients linked to each error term, are automatically imposed by the computer; as such, they reflect a fixed value of 1.00 and should not be approximated. The "1"s connected to the factor loadings address the problems of model identification and scaling of the unseen components, whereas those connected to the error terms indicate values that are thought to be known; only the error variances are of importance. For many years, academics have been very interested in the evaluation of model fit in the literature on structural equation modeling. Several model fit test statistics have been recommended for carrying out this evaluation. However, choosing the right test statistic to assess model fit can be challenging since it depends on the distributional properties of the chosen data, the size of the sample, and/or the features of the suggested models (Marcoulides, Foldnes and Grønneberg, 2020). The selection of the test statistic is dependent on the numerous distributional properties of the sampled data, sample size, and the proposed model attributes, which makes evaluating model fit in SEM which is certainly rather difficult.

**Table 4.3.5: Model fit Indices**

<b>Model</b>	<b>CFI</b>	<b>IFI</b>	<b>TLI</b>	<b>RMSEA</b>
<b>Values</b>	.900	.901	.873	0.63

Confirmatory Factor Analysis was used to validate the factor structure obtained from Principal Component Analysis (PCA). Various fit indices were used to evaluate the model's adequacy. The indices are the Comparative Fit Index (CFI), Relative Fit Index (RFI), Incremental Fit Index (IFI), Tucker Lewis Index (TLI), and Root Mean Square of Error Approximation (RMSEA). Table 4.3.5 displays the values for these indices. The CFI index, which is superior to the Non-Normed Fit Index (NFI) because it is insensitive to sample size (Fan, Thompson, and Wang, 1999), compares the fit of the proposed model to an independent (null) model. A CFI value of more than .900 indicates a good fit. CFI at 0.900, which is above the accepted range of .900 which shows the model fit is good and acceptable. IFI is also above the considerable limit of 0.9. This application of model fit indices such as RMSEA, CFI, and TLI is heavily depending on a set of cut-off values. The value of RMSEA is 0.63, values ranging from 0.05 and 0.08 are considered acceptable (Kim, et al., 2016). Value of TLI is 0.873, which means that model is a moderate fit, as the value lies between 0.8 to 0.9 (Anggriani, Anggrawan, and Cahyadi, 2020).

**Table:4.3.6 Model Validity and Reliability Measures**

	<b>CR</b>	<b>AVE</b>	<b>MSV</b>	<b>MaxR(H)</b>
<b>Communication</b>	0.887	0.664	0.015	0.903
<b>Career Adaptability</b>	0.861	0.676	0.402	0.879
<b>Work Ethics</b>	0.822	0.536	0.014	0.824
<b>Emotional Intelligence</b>	0.778	0.418	0.015	0.802
<b>Self-Efficacy</b>	0.794	0.493	0.402	0.805
<b>Team Work</b>	0.860	0.672	0.345	0.875
<b>Information Technology</b>	0.818	0.645	0.007	1.597



<b>Overall Graduate Employability</b>	0.912	0.544	0.009	0.990
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For the final model, Table 4.3.6 Further, it is very important to check the reliability and validity to validate this set of factors. CR, AVE and MSV are the measures to check the reliability and validity. Here, CR stands for Composite Reliability. It is sometimes referred to as construct reliability which is an index to measure the internal consistency in the item of the scale (Brunner M. and Süß H.M., 2005. CR values of all the factors are above 0.6 and are considered as a good fit in the scale as CR must have values greater than 0.60 (Nizar, et al., 2019) AVE stands for Average Variance Extracted, which signifies the average variance that a construct describes in its variables that are relative to the overall variance of its indicators This validity check includes testing the convergent and discriminant validity. Convergent validity can be seen with the help of factor loadings for all the scale items along with Average Variance Extracted (AVE). AVE of all the factors is above .50 except for Self-Efficacy= 0.492, Emotional Intelligence=0.418, information technology=.401, Which is also considered acceptable as the value of corresponding CR is more than 0.60 (Hair, et al., 2009). For the discriminant validity the Values of Maximum Shared Variance (MSV) should be < AVE (Gaskin, 2021). in table 4.3.6, all the factors have the value of MSV < AVE, that means all the constructs meet the discriminant Validity. MaxR(H) shows the maximum Reliability, the corresponding values is more than 0.7 and is within the satisfactory limits. Convergent validity with the help of Average Variance Extract (AVE) was used to appraise the validity of each crucial element (AVE). Maximal reliability and Composite reliability were used to test for reliability. The values of CR, AVE and MaxR(H) in Table 4.3.6 demonstrates that this skill set is reliable and valid.

**Table 4.3.7: Standardized factor Loadings**

<b>Item</b>	<b>Factor item</b>	<b>Std. loading</b>
<b>COMMUNICATION</b>		

CO1	Candidate always uses appropriate vocabulary and grammar while communicating with others.	.72
CO2	Candidate can easily persuade, convince, or influence others through my communication skills.	.88
CO4	Candidate always checks spellings and grammar at the time of written communication.	.78
CO5	Candidate can easily build wide and effective networks or contacts to achieve goals.	.87
<b>TEAM WORK</b>		
TW1	Candidate always believes that team work is important.	.84
TW2	Candidate encourage others to adapt to the change.	.73
TW3	Candidate always try to include all the members of the group while performing any tasks or making any decision.	.88
<b>SELF-EFFICACY</b>		
SE2	Candidate is certain about overcoming all the challenges while performing the tasks.	.63
SE3	Candidate is certain about the accomplishment of difficult tasks.	.78
SE4	Candidate is always confident of dealing efficiently with unexpected events	.74
SE5	Candidate can handle unforeseen situations well.	.64
<b>WORK ETHICS</b>		
WE2	Candidate always accepts the responsibility for the results of decisions or actions taken.	.74

WE3	Candidate upholds the ethics and values of the profession, community, or workplace.	.69
WE4	Candidate always encourages responsible behavior towards the community and the environment.	.73
WE5	Candidate finds it easy to provide direction to others, and to motivate and empower them.	.76
<b>EMOTIONAL INTELLIGENCE</b>		
EI1	Candidate can understand why other people feel in one way or the other.	.73
EI2	Candidate can control the emotions and show them only when it is appropriate.	.55
EI3	Candidate can understand why he/she feels in one way or the other.	.50
EI4	Candidate do not let the emotions take over his/her responsibilities.	.65
EI5	Candidate adjusts his/her emotions as per the situation.	.76
<b>CAREER ADAPTABILITY</b>		
CA1	Candidate always adjusts him/herself according to the situation.	.73
CA2	Candidate is always ready to perform new tasks with the group members.	.89
CA4	Candidate can adjust or reset goals given to him/her.	.84
<b>INFORMATION TECHNOLOGY</b>		
IT2	Candidate can understand the procedure of using any software required to perform a task.	.60

IT3	Candidate knows how to fix the problems with the software	.70
IT4	Candidate can organize the data or records in the software	.86
<b>OVERALL GRADUATE EMPLOYABILITY</b>		
OGE1	Only the Best candidates are employed in my organization	0.77
OGE2	My organization provides a better chance to fresh graduates	0.82
OGE3	Before hiring all selected candidates go through strict and detailed selection tests.	0.91
OGE4	The HRM professionals at my organization are experts to use the best candidates	0.66

Table 4.3.7, shows the standardized factor loadings for item in the scale as standardized factors are the estimates of parameters that is built on the analysis of the data that is standardized, meaning all variables are assumed to have a unit variance. This data is less affected by the scale of measurement and it can be used to draw comparisons of the relative effect of those variables that are contrasting (Fox, 1997). It is anticipated that estimations of alpha will strongly positively correlate with the size of factor loadings. Estimates of factor loading reflect the degree to which the factor and the item are related and are determined using sample correlations. The predicted value of alpha increases with the factor loadings for the items in a scale (Shevlin, et al., 2000). A confirmatory Factor analysis (CFA) using Minimum Likelihood was conducted to obtain the standardized factor loading of every item in the scale. All the items had a factor loading of .50 and above. therefore, all the items in the scale remained as the acceptable value of factor loadings (.30) has been sustained (Amoako, 2018). After this Analysis, 30 items were retained. No item was rejected. Based on the results of the analysis, there are 8 variables labeled as: Communication Skills, Team Work Skills, Work Ethical Skills, Information technology Skills, Emotional Intelligence, Career Adaptability, Self-Efficacy and Overall graduate Employability. This the skill set that is expected by the industry from the post Graduate Management Students in Punjab.

### 4.3.3 Reliability Statistics of the Scale

Scale reliability analysis is a method for determining the characteristics of measurement scales or scale items. This analysis consists of determining the correlations between the fundamental items of a scale and calculating various reliability measures commonly used in research. In addition to looking at inter-item correlations, reliability analysis produces several commonly used reliability measures. These measures provide information about the consistency and stability of the scale or its items, allowing researchers to assess the reliability of their measurements.

Cronbach's Alpha	N of Items
.768	30

Again, after the final development of the scale reliability was checked for the second time to ensure the reliability of the scale. It is not unknown that Cronbach Alpha helps in showing the reliability of the entire test and in this section, through reliability statistics, the viewpoints of Industry expectations on the skill sets of the students have been shown. Cronbach's alpha can be known as the most effective measure of internal consistency that shows how closely some sets of items are associated with each other as a group. In addition, it is also recognized to be an effective measure of "scale reliability". In case the value of Cronbach Alpha is higher than .70 then that value is good and from the study, it can be stated that the Cronbach Alpha value is .768 shown in Table 4.3.8 which is considered reliable.

## 4.4 RESULTS AND DISCUSSION

The study determined that students need to improve these skills for better career prospects by using CFA analysis to finalize an employability scale based on industry expectations. According to industry feedback, work ethics, teamwork, and IT skills should be the top priorities for postgraduate management students in Punjab, as these 105 areas had the highest mean scores (Deepa & Seth, 2013). However, faculty members ranked communication skills higher than work ethics and self-efficacy, indicating a discrepancy in the priorities that industry and faculty view as important.

An employability scale was developed as a result of the statistical analysis that validated seven skill dimensions and overall graduate employability. Communication skills, career adaptability, emotional intelligence, self-efficacy, work ethics, teamwork skills, information technology, and overall graduate employability are all measured on the eight-dimensional scale. Work ethics were ranked highest in the industry, followed by IT and teamwork abilities. Graduates should have a basic understanding of IT, act morally, collaborate well in groups, adjust to change, and involve colleagues in decision-making. Industry recruiters prioritized self-efficacy, career adaptability, and communication skills, with emotional intelligence coming in last. While industry and faculty rankings were comparable, student perceptions showed notable variations. Therefore, practical insights suggest that students should prioritize developing work ethics, IT proficiency, and teamwork skills to align with industry expectations. Graduates should also enhance their communication skills and adaptability to meet evolving career demands. Despite some alignment between industry and faculty rankings, students should be aware of these differences and work on bridging any gaps to improve their employability.

#### **4.5 CONCLUSION OF THE CHAPTER**

Employability of postgraduate management students in Punjab depends on having a diverse skill set that satisfies industry standards. Work ethics, teamwork, IT competence, communication, career flexibility, self-efficacy, and emotional intelligence are among the critical competencies that have been validated. Work ethics and teamwork are highly valued by both industry and academia, however faculty members place greater value on communication abilities. The agreement and minor differences between the viewpoints of industry and academia emphasise how important it is for students to build a broad skill set in order to improve their employability. By filling in these skill gaps, we can ensure that students are more prepared for the workforce and can satisfy the wide range of demands from employers. This all-encompassing method of skill development will greatly enhance the student's career success and flexibility in a tight labor market. The study determined that students need to improve specific skills to improve their career prospects, as revealed by the CFA analysis, which resulted in an employability scale based on industry standards.

According to industry feedback, the most important skills for postgraduate management students in Punjab were work ethics, teamwork, and IT skills, which had the highest mean scores. Interestingly, faculty members rated communication skills higher than work ethics and self-efficacy, indicating a misalignment between industry and academic goals.

Employability of postgraduate management students in Punjab depends on having a diverse skill set that satisfies industry standards. Work ethics, teamwork, IT competence, communication, career flexibility, self-efficacy, and emotional intelligence are among the critical competencies that have been validated. Work ethics and teamwork are highly valued by both industry and academia; however, faculty members place greater value on communication abilities. The agreement and minor differences between the viewpoints of industry and academia emphasize how important it is for students to build a broad skill set to improve their employability. By filling in these skill gaps, we can ensure that students are more prepared for the workforce and can satisfy the wide range of demands from employers. This all-encompassing method of skill development will greatly enhance the student's career success and flexibility in a tight labour market. The statistical analysis yielded an employability scale that validated seven key skill dimensions as well as overall graduate employability. These dimensions include communication skills, career adaptability, emotional intelligence, self-efficacy, work ethics, teamwork abilities, and information technology. Each of these skills is critical in determining overall graduate employability. According to industry recruiters, work ethics are the most important skill, followed by IT skills and teamwork abilities. They emphasized that graduates should have a basic understanding of information technology, exhibit strong ethical behaviour, work effectively in teams, adapt to changes, and involve colleagues in decision-making processes. Industry professionals prioritized self-efficacy, career adaptability, and communication skills, but emotional intelligence was ranked lower. Notably, while industry and faculty rankings were somewhat similar, students' perceptions of these priorities differed significantly, indicating potential gaps in understanding or emphasis between students and their future employers.

# **Chapter-5**

## **IMPACT OF INDUSTRY- EXPECTED SKILLS ON THE OVERALL GRADUATE EMPLOYABILITY OF POSTGRADUATE MANAGEMENT STUDENTS**



## **CHAPTER 5**

### **IMPACT OF INDUSTRY-EXPECTED SKILLS ON THE OVERALL GRADUATE EMPLOYABILITY OF POSTGRADUATE MANAGEMENT STUDENTS**

In this chapter, an attempt is made to identify the impact of skill sets validated by industry recruiters and the impact of seven specific skills on the employability of graduates from postgraduate management institutes in Punjab. This involves a thorough examination of each of these abilities to determine how each one affects a student's capacity to find work, both individually and collectively.

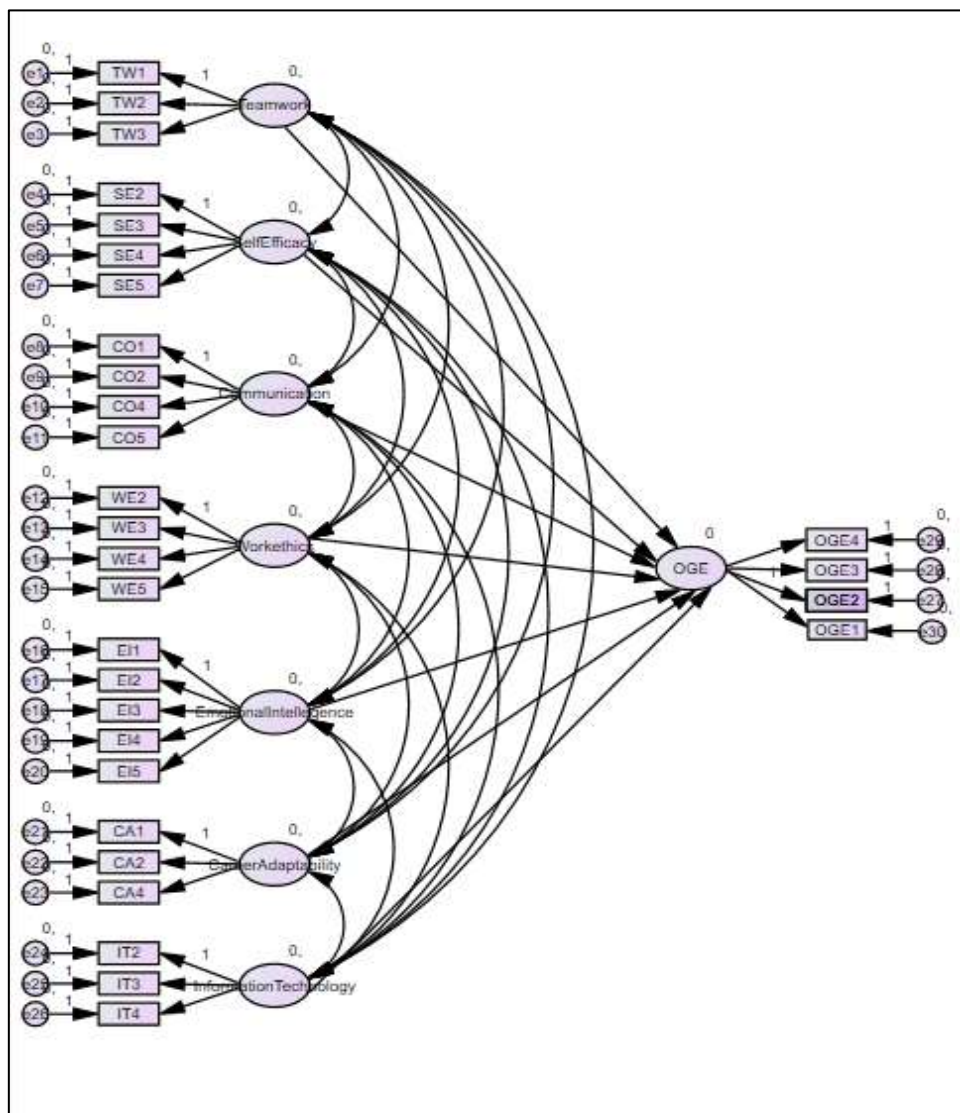
#### **5.1 THE IMPACT OF SKILLS EXPECTED BY THE INDUSTRY ON OVERALL GRADUATE EMPLOYABILITY (OGE) OF THE POST GRADUATE MANAGEMENT STUDENTS IN PUNJAB.**

After Confirming all the Factors (Skills) are Communication skills, Teamwork Skills, Work ethics, Emotional Intelligence, Self-Efficacy, Overall Graduate Employability, Career Adaptability skills, and Information Technology Skills using Confirmatory factor Analysis (CFA), the Structural Equation model (SEM) has been used to study the impact of the validated skills as per the industry expectations on the Overall Graduate Employability of postgraduate management Students in Punjab. All the model fit indices have been found within the acceptance level as shown in Table 5.1.1. SEM is a multivariate technique of analysis that is used to identify the relationship between the seven factors of Employability as expected by the industry and the overall graduate Employability.

The Path diagram in Fig. 5.1.1 revealed that all seven skill dimensions show an impact on the Overall graduate employability supporting the hypothesis- Ho<sub>1.1</sub>, Ho<sub>1.2</sub>, Ho<sub>1.3</sub>, Ho<sub>1.4</sub>, Ho<sub>1.5</sub>, Ho<sub>1.6</sub>, Ho<sub>1.7</sub>. According to the path diagram in Fig. 5.1.1, all seven skill dimensions affect the employability of graduates overall, which supports the following hypotheses: Ho<sub>1.1</sub>, Ho<sub>1.2</sub>, Ho<sub>1.3</sub>, Ho<sub>1.4</sub>, Ho<sub>1.5</sub>, Ho<sub>1.6</sub>, and Ho<sub>1.7</sub>. Each skill dimension—information technology skills, self-efficacy, communication skills, teamwork skills, work ethics, career adaptability skills, and emotional intelligence

skills—was examined, and the diagram verified the effects of each. The overall employability of postgraduate management students in Punjab is increased by each of these skills, as suggested by this visualization. The results show that improving these skills can increase graduates' employability prospects and are consistent with the predicted findings.

**Fig. 5.1.1: Path Model Estimation**



Therefore, indicating that Team Work, Career Adaptability, Self-Efficacy, Communication, Work Ethics, Information Technology, Emotional Intelligence all have the impact on Over All graduate Employability of a Post graduate management

Student in Punjab as the ‘p’ value of all the relationship is found to be less than 0.05 (Table 5.1.1).

**Table: 5.1.1 Regression Weights**

Relationship			Hypothesis	Estimate	S.E.	C.R.	P	Decision
OGE	<---	Teamwork	Ho <sub>1.1</sub>	.045	.046	1.967	0.033	Rejected
OGE	<---	Self-Efficacy	Ho <sub>1.2</sub>	.033	.048	2.684	0.049	Rejected
OGE	<---	Communication	Ho <sub>1.3</sub>	-.099	.090	-1.093	0.027	Rejected
OGE	<---	Work ethics	Ho <sub>1.4</sub>	.042	.047	1.894	0.031	Rejected
OGE	<---	Emotional	Ho <sub>1.5</sub>	-.018	.029	1.623	0.040	Rejected
OGE	<---	Career Adaptability	Ho <sub>1.6</sub>	-.060	.065	0.924	0.035	Rejected
OGE	<---	Information	Ho <sub>1.7</sub>	.241	.239	1.010	0.351	Accepted

There were seven independent variables viz. Team Work, Self-Efficacy, Communication, Work-Ethics, Emotional Intelligence, Career Adaptability, Information technology that were confirmed using CFA. This Objective has attempted to check the impact of all these 7 skills as per the industry expectations on the Overall Graduate Employability. As a result six skills that are Teamwork, Communication, Self-Efficacy, Emotional Intelligence, Career Adaptability, and Work Ethics were found to have an impact on the OGE of a graduate, thereby accepting the Alternate Hypothesis. There is only one skill which is Information Technology which does not impact the OGE of the graduates as per the industry, thereby rejecting the hypothesis.

The outcomes reveal that Six factors have positive effects on the OGE of postgraduate management Students in Punjab except the Information technology Skills. Employability of the students has been a focus of desirability, to not only the HEIs but also the researchers, faculty members, and the graduates also. This research has contributed to the thoughtful concept of all the employability skills expected by employers that can impact the OGE in Punjab. Through this, the hypothesized relation between all the 7 expected findings was studied and it was found that communication skills (Kanagavalli and Gayathri, 2022), Team teamwork skills ((Kanagavalli and Gayathri, 2022), Work ethics Skills, Emotional intelligence Skills, career Adaptability

skills, all are impacting the Overall Graduate Employability except the Information technology Skills. Although IT skills are considered essential, industry personnel have noted that different sectors prioritize different competencies. Soft skills such as leadership, strategic thinking, and communication are valued more than advanced IT skills in industries such as finance and consulting. These industries frequently require management graduates to excel in areas beyond their technical expertise. All graduates are expected to have at least a basic level of IT proficiency. Most candidates have basic IT skills, so these are not a distinguishing factor in the hiring process. It was noted that soft skills such as team management, problem-solving, and interpersonal abilities are more highly valued in management positions. These skills are essential for effective leadership and decision-making, and they are frequently prioritized over specific technical IT skills. Furthermore, IT skills are common among management graduates, making it difficult to distinguish candidates solely based on these competencies. When IT skills become commonplace, they go from being a distinguishing feature to a mandatory requirement. If specific IT skills are required, management graduates are trained to use the appropriate software.

Even though there is an increase in the number of projects and industrialization in the economy. Employers are expected to create employment for fresh graduates. But there will be a gap. If there is a mismatch between the Qualities of the graduates and the demands of the employers. Though the industry expects the graduates to have a basic knowledge of IT skills these skills are not considered to have an impact on the Overall Graduate employability, when discussed it was responded that since the recruiters provide the training after the selection of these graduates are required to learn and practice on software tools needed to perform the job.

## **5.2 RESULTS AND DISCUSSION**

The results of this exploratory study show that, with the exception of information technology (IT) skills, six factors positively affect postgraduate management students in Punjab's overall graduate employability (OGE). Higher education institutions (HEIs), researchers, faculty members, and graduates themselves have all placed a great deal of emphasis on employability. Understanding the various employability skills that

employers demand and how they affect OGE in Punjab has been made easier thanks to this research. The study investigated the proposed connections among the seven anticipated employability skills. With the exception of IT skills, it was discovered that emotional intelligence, work ethics, communication, teamwork, and career adaptability all have a positive impact on OGE.

There is still a gap if there is a mismatch between the demands of the employers and the qualities of the graduates, even with an increase in projects and an industrialised economy that raises expectations for employers to create jobs for recent graduates. Basic IT knowledge is expected of graduates by the industry, but it has little bearing on the employability of graduates as a whole. Conversations with employers revealed that graduates must study and practise the software tools necessary to do their jobs well since recruiters provide the required training after hiring. Consequently, even though basic IT skills are expected, they are not thought to be essential for initial employability because employers provide the necessary training.

### **5.3 CONCLUSION OF THE CHAPTER**

The mismatch between graduate qualities and employer demands means that even though the research affirms that 6 critical skill dimensions positively impact overall graduate employability, a gap still exists. This disparity persists despite an industrialized economy and growing projects. Employers anticipate graduates to have a basic understanding of IT, but since required training is given after hire, this expectation has little bearing on an individual's employability overall. Thus, while rudimentary IT skills are expected, they are not considered essential for initial employability because employers are willing to train new employees in the particular software tools needed for their positions. This emphasizes how graduates must concentrate on acquiring a wider range of employability skills to successfully meet industry expectations. Moreover, offering robust career counselling and skill assessment services can help students identify and develop the skills that are most valued by employers. By taking these steps, educational institutions can better equip graduates to meet industry expectations and improve their overall employability.

**Chapter-6**  
**ASSESSMENT OF THE**  
**FACULTY-IMPARTED**  
**AND STUDENT-**  
**ACQUIRED SKILL SET**

**CHAPTER 6**  
**ASSESSMENT OF THE FACULTY-IMPARTED AND STUDENT-  
ACQUIRED SKILL SET**

The third and fourth Objectives are to assess the quality of skills taught by postgraduate institutes' faculty members and Acquired by the students by contrasting their abilities with industry standards. Descriptive statistics are used in this assessment, and mean scores are used to determine ranking.

**6.1 DETERMINATION OF THE LEVEL OF SKILLSET IMPARTED BY THE FACULTY**

Here, the descriptive statistics (Average Mean Scores) have tended to summarize different characteristics within a dataset. Descriptive statistics assists in visualizing the given data for presenting the data in a meaningful way. Additionally, the study has aimed to evaluate and compare the level of skills of faculty and its differences with the responses of industry. Furthermore, multiple questions have been asked from both sides of respondents that are categorized into 7 different segments. Questions for the students that have tended to measure the level of skills imparted by the faculty members to the students. In this case, the total number of respondents in both sections is 109 and each of the responses has been collected individually.

**Table 6.1.1: Mean Score Comparisons of the Scale Items (Skills) by Faculty**

<b>Item</b>	<b>Statements</b>	<b>Mean Scores</b>
<b>COMMUNICATION</b>		
CO1	I instill in students the ability to consistently use appropriate vocabulary and grammar when communicating with others.	3.66
CO2	I foster the ability of students to easily persuade, convince, or influence others through communication skills.	3.64
CO4	I ensure that students consistently check spelling and grammar during written communication.	3.10
CO5	I ensure that students can effortlessly establish wide and effective networks or contacts to achieve goals.	3.14
<b>TEAM WORK</b>		

TW1	I ensure that students consistently acknowledge the importance of teamwork.	3.05
TW2	I ensure that students are capable of encouraging others to adapt to change.	3.49
TW3	I ensure that students consistently make an effort to include all group members while performing tasks or making	3.25
	<b>Average Mean Score of team Work</b>	<b>3.26</b>
<b>SELF-EFFICACY</b>		
SE2	I ensure that students are certain about overcoming all challenges while performing tasks.	3.22
SE3	I ensure that students are certain about accomplishing difficult tasks.	3.32
SE4	I ensure that students are always confident of dealing efficiently with unexpected events.	3.34
SE5	I ensure that students are able to handle unforeseen situations well.	3.31
	<b>Average Mean Score of Self-Efficacy</b>	<b>3.29</b>
<b>WORK ETHICS</b>		
WE2	I ensure that students always take accountability for the consequences of decisions they make.	3.38
WE3	I ensure that students uphold the ethics and values of the profession, community, or workplace.	3.04
WE4	I ensure that students always encourage responsible behavior towards the community and the environment.	3.46
WE5	I ensure that students find it easy to provide direction to others, as well as to motivate and empower them.	3.35
	<b>Average Mean Score of Work Ethics</b>	<b>3.30</b>
<b>EMOTIONAL INTELLIGENCE</b>		
EI1	I ensure that students can understand why other people feel in one way or another.	3.24
EI2	I ensure that students can control their emotions and show them only when it is appropriate.	2.91
EI3	I ensure that students can understand why they feel in one way or another.	2.80
EI4	I ensure that students do not let emotions take over their responsibilities.	3.56
EI5	I ensure that students adjust their emotions as per the situation.	3.61
	<b>Average Mean Score of Emotional Intelligence</b>	<b>3.22</b>

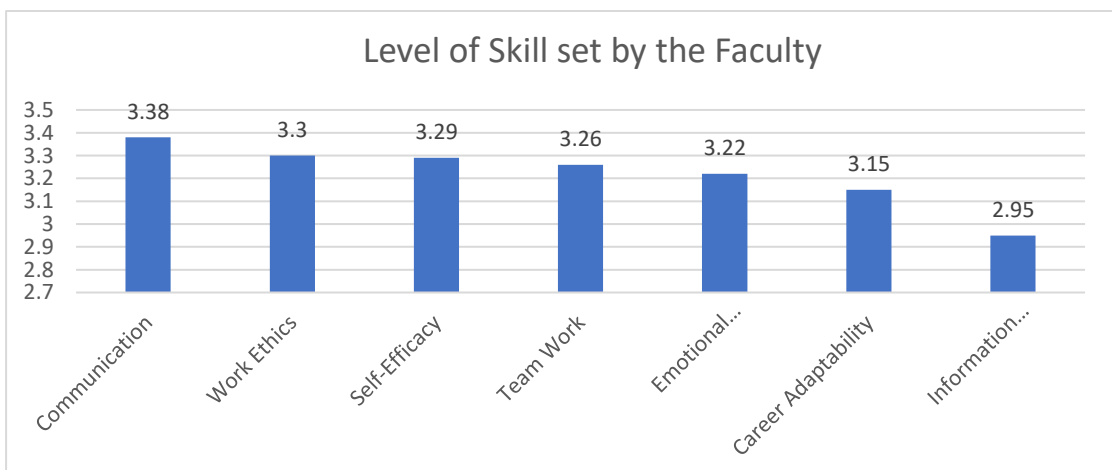


<b>CAREER ADAPTABILITY</b>		
CA1	I ensure that students always adjust themselves according to the situation.	2.94
CA2	I ensure that students are always ready to perform new tasks with group members.	3.45
CA4	I ensure that students can adjust or reset the goals given to them.	3.06
	<b>Average Mean Score of Career Adaptability</b>	<b>3.15</b>
<b>INFORMATION TECHNOLOGY</b>		
IT2	I ensure that students can understand the procedure of using any software required to perform a task.	3.26
IT3	I ensure that students know how to fix problems with the software.	2.78
IT4	I ensure that students can organize data or records in the software.	2.81
	<b>Average Mean Score of Information Technology</b>	<b>2.95</b>

**Table 6.1.2: Ranking of factors based on Average Mean Scores (Faculty)**

<b>Factor</b>	<b>Average Mean Scores</b>	<b>Rank</b>
Communication	3.38	1 <sup>st</sup>
Work Ethics	3.30	2 <sup>nd</sup>
Self-Efficacy	3.29	3 <sup>rd</sup>
Team Work	3.26	4 <sup>th</sup>
Emotional Intelligence	3.22	5 <sup>th</sup>
Career Adaptability	3.15	6 <sup>th</sup>
Information	2.95	7 <sup>th</sup>

**Fig. 6.1.1: Level of Skill set by the faculty**



As Shown in Table 6.1.1, when level of skills imparted by the faculty to the students is examined, communication skills with the Average mean score of 3.38 is considered the most important against the Work ethics skill with the Average mean score of 3.7 as expected by the industry as the first rank from the management graduates, being ranked as the second preference of the faculty with the mean score of 3.3. While self-efficacy is third in the rank followed by team Work, Emotional Intelligence and Career Adaptability. Least Importance being given to Information technology with the Average mean Score of 2.95 as shown in Table 6.1.2. There can be found a disparity between the skill ranking by the industry and the faculty members teaching post graduate management Students of Punjab. Communication is ranked sixth by the industry and first by the faculty, which clearly shows that there is the gap in the level, but gain to test this statistically independent t-test would be used to test the null hypothesis for the various skills.

## **6.2 PEDAGOGIES USED BY THE INSTITUTIONS IN DEVELOPING THE SKILL SET EXPECTED BY THE INDUSTRY**

As per the Subjective data collected from the faculty members regarding the Pedagogies and Innovative methodologies, they adopt to ensure the students is prepared for the skill set that the employer expects for their students. Table 6.2.1 shows various techniques adopted by the HEIs.

**Table 6.2.1 Pedagogy which is used to develop the following skill set as expected by the industry in the student**

<b>Skill Expected by the Industry</b>	<b>Remarks</b>
Communication Skills	Language Lab, Role Plays, Game of verbal expressions, Active listening, Turn talking, mock Interviews, Positive feedback, Demonstration Games, Group tasks, Case Studies, Podcasting, Storytelling, Blog writings, Communication through Theater Techniques, Phonetics, Verbal Persuasions,

Career Adaptability Skills	Simulation games, Situation analysis, case studies, management games- Board Room battles, sales guerilla, work-shops, Live projects, field studies, Guest lectures, situation analysis, adapting change activities, storytelling.
Team Work Skills	Group Projects, Case based learnings, Live Projects, Team Work Building, Global virtual Team Projects, Idea building blocks, Think-pair-repair activity, Snowball discussions, Human knot game, Storytelling, team pursuit
Work Ethics Skills	Apperception, Universal human values, Workshops, seminars, Industry lectures on the importance of ethics, situation analysis, case studies, CSR initiatives, role plays, Group discussions, Case lets, workshops, community development Projects, Rural Innovative Projects
Self-Efficacy Skills	Mastery Experience, Effective Communication, Peer Modelling Activity, psychological arousals activities, Goals and feedback activity, Self-assessment activities, Problem-solving opportunities, Workshops, Students affirmation activities, Vicarious experiences
Emotional Intelligence Skills	Good things activity, Roleplay, Story Telling, Wonder of Words, Puppets and feelings activity, feeling your feet, reflect

	your own emotions, Observant activities, Practicing the emotions.
Information technology Skills	Use of ICT tools, Mini projects, Analysis using software,

As per the Responses collected from the faculty members regarding the pedagogies adopted for disseminating different skills, there was a vast difference found between the ways these skills are being taught to them or inculcated in them. Also there are a number of Pedagogies using which more than one skill can be obtained by the students. For Instance, Role play can be conducted to build communication skills along with Emotional Intelligence Skills.

### **6.3 ASCERTAINMENT OF LEVEL OF SKILL SET ACQUIRED BY THE STUDENTS**

To assess the skills and knowledge acquired by the students of postgraduate management institutions of Punjab, the survey has received 512 responses from students. Here, the students have been asked several questions related to different types of skills that are usually acquired during graduation preparation such as Communication, teamwork, Self-efficiency, Emotional Intelligence, career Adaptability, Information technology, and Work Ethics Skills The students have asked several questions related to their skills or professionals that have been acquired during the preparation. According to the report of Evans (2019), the mean value in statistical interpretation does not allow a person to only acknowledge the average value of overall numbers. Here, the mean value has been determined based of the student’s responses and has been provided toward an answer either positively or negatively. The positive and negative answer of students assists in evaluating the quality of the responses to observe students’ thinking process about the skill set expected by the industry from them. This observation of the student responses assists in understanding the importance of learning new skills that helps to fulfill the industrial requirements of skills.

Henceforth, for the first factor as per the ranking by the student, the most important skill is identified as Self-Efficacy with an Average mean value of 3.54.

Higher Education Institutions (HEIs) should consider implementing a variety of strategies to address the communication and IT skills gaps identified among postgraduate management students in Punjab (Hinduja et al., 2023). Incorporating communication workshops into the curriculum can help students improve their verbal and written communication skills. These workshops should include hands-on activities such as presentations and group discussions (Bowen and Shume, 2020). Organizing guest lectures and seminars by industry professionals, as well as establishing mentorship programs, can help students gain valuable insights and feedback on their communication skills (Okolie et al., 2020). HEIs should update their IT curricula to reflect the most recent technological advancements and provide hands-on training with industry-standard software. Partnerships with technology firms can provide students with cutting-edge tools and certifications that validate their abilities (Aithal and Maiya, 2023). Investing in well-equipped IT labs and providing access to online learning platforms will also help with practical IT training. Implementing a feedback mechanism and performance metrics to track progress and effectiveness will allow HEIs to make necessary program changes and better prepare students for industry demands (Fernandes and Singh, 2022).

**Table 6.3.1: Mean Score Comparisons of the Scale Items (Skills) by Student**

<b>Item</b>	<b>Statements</b>	<b>Mean Scores</b>
<b>COMMUNICATION</b>		
CO1	I always use appropriate vocabulary and grammar while communicating with others.	3.40
CO2	I can easily persuade, convince, or influence others through my communication skills.	3.44

CO4	I always check spellings and grammar at the time of written communication.	3.39
CO4	I can easily build wide and effective networks or contacts to achieve goals.	3.42
	<b>Average Mean Score of Communication</b>	<b>3.46</b>
<b>TEAM WORK</b>		
TW1	I always believe that team work is important.	3.46
TW2	I t encourage others to adapt to the change.	3.47
TW3	I always try to include all the members of the group while performing any tasks or making any decision.	3.44
	<b>Average Mean Score of team Work</b>	<b>3.44</b>
<b>SELF-EFFICACY</b>		
SE2	I am certain about overcoming all the challenges while performing the tasks.	3.43
SE3	I am certain about the accomplishment of difficult tasks.	3.44
SE4	I am always confident of dealing efficiently with unexpected events	3.44
SE4	I can handle unforeseen situations well.	3.66
	<b>Average Mean Score of Self-Efficacy</b>	<b>3.44</b>
<b>WORK ETHICS</b>		
WE2	I never take the accountability for the consequence of decisions taken by him/her.	3.44

WE3	I uphold the ethics and values of the profession, community, or workplace.	3.43
WE4	I always encourage responsible behavior towards the community and the environment.	3.47
WE4	I find it easy to provide direction to others, and to motivate and empower them.	3.31
	<b>Average Mean Score of Work Ethics</b>	<b>3.43</b>
<b>EMOTIONAL INTELLIGENCE</b>		
EI1	I can understand why other people feel in one way or the other.	3.63
EI2	I can control the emotions and show them only when it is appropriate.	3.37
EI3	I can understand why he/she feels in one way or the other.	3.44
EI4	I I do not let the emotions take over his/her responsibilities.	3.63
EI4	I adjust his/her emotions as per the situation.	3.41
	<b>Average Mean Score of Emotional Intelligence</b>	<b>3.43</b>
<b>CAREER ADAPTABILITY</b>		
CA1	I always adjust him/herself according to the situation.	3.46
CA2	I am always ready to perform new tasks with the group members.	3.37
CA4	I can adjust or reset goals given to him/her.	3.48
	<b>Average Mean Score of Career Adaptability</b>	<b>3.47</b>
<b>INFORMATION TECHNOLOGY</b>		

IT2	I can understand the procedure of using any software required to perform a task.	3.24
IT3	I know how to fix the problems with the software	3.44
IT4	I can organize the data or records in the software	3.8
	<b>Average Mean Score of Information Technology</b>	<b>3.42</b>

*Source: Author's Computation*

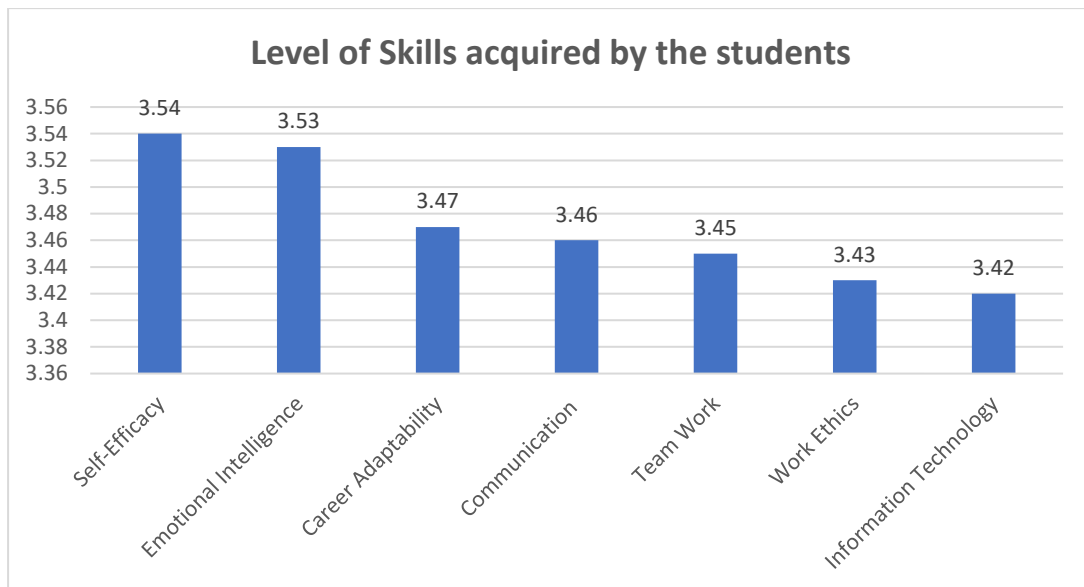
**Table 6.3.2: Ranking of Skills based on Average Mean Scores (Student)**

<b>Factor</b>	<b>Average Mean Scores</b>	<b>Ranking</b>
Self-Efficacy	3.54	1 <sup>st</sup>
Emotional Intelligence	3.53	2 <sup>nd</sup>
Career Adaptability	3.47	3 <sup>rd</sup>
Communication	3.46	4 <sup>th</sup>
Team Work	3.45	5 <sup>th</sup>
Work Ethics	3.43	6 <sup>th</sup>
Information Technology	3.42	7 <sup>th</sup>

*Source: Author's Computation*

**Figure 6.3.1: Level of Skills acquired by the students**





Source: Author's Creation

As per the responses of 512 Students, Self-efficacy with an Average mean score of 3.54 has been ranked first, followed by Emotional intelligence with a score of 3.53. Information technology being the last with the Average score of 3.42. The analysis of the level of skills assists the post graduate students to understand the requirement managerial skills in the industry that helps to develop the quality of the skills of management students. On the other hand, in terms of analysing the gap between the industry's expectations and skills set of students, a survey has been conducted with the support of 109 faculty members. It has been also portrayed that the main skill sets of students are those that are student driven such as self-efficacy and Emotional Intelligence which cannot be developed beyond a point but is there in the nature and personality of the student and can be enhanced by themselves with the help of HIEs and faculty members. From the aforementioned descriptive statistics, it can be stated that there has some difference in the skill levels of the students. It has been shown in the descriptive statistics that candidates are having software and technology related skills though they are not able to make better communication. Therefore, it can be highlighted that there has some difference in between their communication skills and technology related skills. On the other hand, it can also be highlighted that these candidates are setting priorities with a proper sense of importance and urgency. On the other hand, they are hesitating to provide new ideas while solving any issues therefore, this can be recognized as the major gap in their skill sets.

## **6.4 RESULTS AND DISCUSSION**

Students are affected academically, socially, professionally, morally, and culturally by higher education institutions (HEIs). A set of seven industry-expected skills, validated through statistical techniques, served as the basis for a questionnaire used to assess the effectiveness of the faculty in imparting skills. After the faculty responses were analysed and ranked, work ethics, self-efficacy, teamwork, emotional intelligence, career adaptability, and IT skills were found to be more important than communication skills. To develop these skills, a range of cutting-edge pedagogies and activities are used, including language labs, role plays, and management games. The faculty and industry rankings did not differ much, indicating that skill expectations were in line. Students frequently lack the knowledge and skills necessary for the industry, despite their best efforts. According to a survey, students place the highest value on emotional intelligence and self-efficacy, while IT skills are ranked lowest. This suggests a disconnect between students' abilities and industry expectations. Students' answers revealed disparities in their priorities and capacities for acquiring skills, which caused them to be out of step with what the industry requires. It was also mentioned that while HEIs can help, they cannot fully develop some innate abilities like emotional intelligence and self-efficacy. Candidates with strong communication, career flexibility, self-efficacy, emotional intelligence, work ethics, and IT skills are preferred by the industry. Certain students expressed challenges in gaining these fundamental abilities, pointing out areas where HEIs' instructional strategies need to be improved.

## **6.5 CONCLUSION OF THE CHAPTER**

It emphasizes how important it is for professors and higher education institutions (HEIs) to provide postgraduate management students in Punjab with the skills they need to meet industry expectations. There are still differences between what employers require of their employees and what students possess, even though educators and business agree on the value of self-efficacy, communication, and work ethics. The study

demonstrates that even though the industry values fundamental IT skills, post-hire employer-provided training means that these skills are not essential for initial employability. Rather, self-efficacy, teamwork, and communication are more important.

Though student responses show varying levels of preparedness and a strong preference for self-efficacy and emotional intelligence, faculty efforts employing innovative pedagogies have shown promise in skill development. The gaps that have been found highlight the necessity for HEIs to continuously modify their curricula and instructional strategies to close these gaps. Improving employability for graduates as a whole requires enhancing skill sets like communication, teamwork, and adaptability, as well as matching student priorities with industry demands. By taking a comprehensive approach, graduates will be better equipped to meet the varied and changing demands of employers in the competitive job market.

# **Chapter-7**

## **GAP ANALYSIS BETWEEN FACULTY, STUDENT AND INDUSTRY-EXPECTED SKILLS**

**CHAPTER 7**

**GAP ANALYSIS BETWEEN FACULTY-IMPARTED, STUDENT-ACQUIRED, AND INDUSTRY-EXPECTED SKILLS**

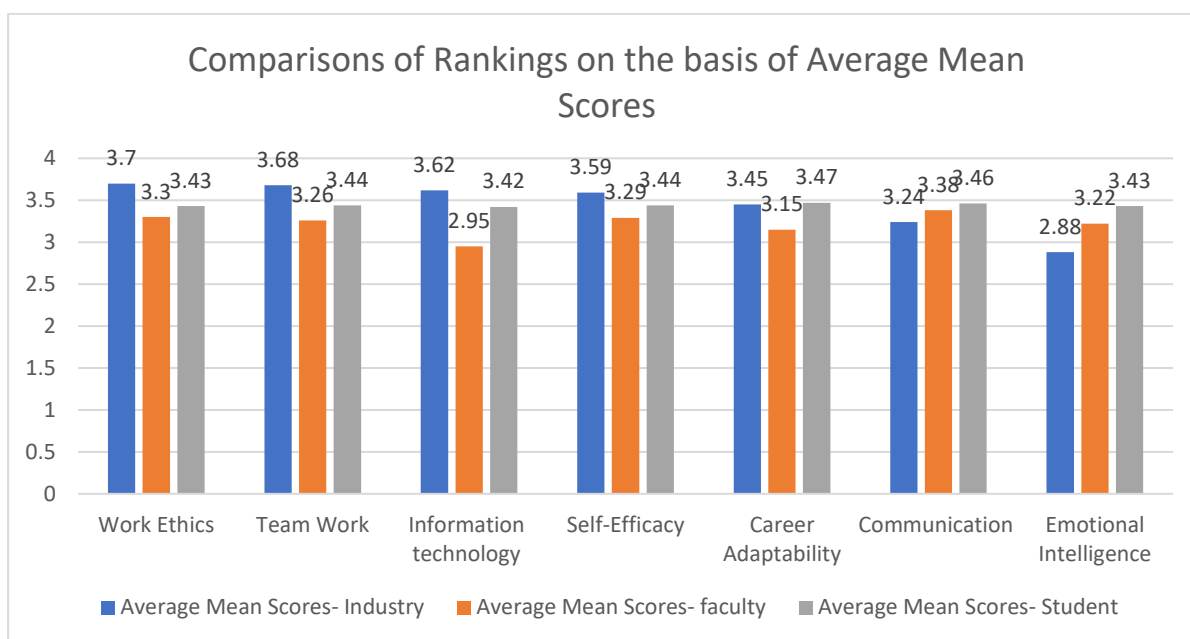
Understanding the complex relationship between industry-expected proficiencies, student-acquired competencies, and faculty-imparted skills is crucial to comprehending Punjab's postgraduate management students' employability landscape. To identify the differences and opportunities for collaboration among these important stakeholders, this chapter conducts a thorough gap analysis. Through an examination of the degree of alignment—or lack thereof—between the curriculum, industry demands, and faculty instruction, we hope to shed light on ways to improve graduate preparedness and close skill gaps in the dynamic labour market.

**7.1 ANALYSIS OF THE GAP BETWEEN THE INDUSTRY, FACULTY, AND STUDENTS**

**Table: 7.1.1 Comparisons of Rankings on the Basis of Average Mean Scores**

<b>Factor</b>	<b>Average Mean Scores- Industry</b>	<b>Average Mean Scores- faculty</b>	<b>Average Mean Scores- Student</b>
Work Ethics	3.7	3.3	3.43
Team Work	3.68	3.26	3.44
Information technology	3.62	2.95	3.42
Self-Efficacy	3.59	3.29	3.44
Career Adaptability	3.45	3.15	3.47
Communication	3.24	3.38	3.46
Emotional Intelligence	2.88	3.22	3.43

**Fig. 7.1.1 Comparisons of Rankings based on Average Mean Scores**



As per the rankings given by the industry, faculty and students to the various skills, there is a vast difference between the priorities that are set by these three. It can be observed from Fig. 7.1.1 there is a big gap for the Information technology skill which is considered important by the faculty and the industry but not by the student. Even the Emotional Intelligence skills is also not much expected by the industry but is ranked high by the students. The least is the gap for the communication skills as per the rankings given by them on the basis of Average mean scores. To better understand this gap, t test is performed and the results are analyzed below using SPSS.

In terms of knowing the gap between the skills set that have been imparted through the faculty and the skills set that have been acquired through the students, a survey has been conducted by taking 512 students and 109 faculty members. It is not unknown that there has some major gap between the skills imparted by the faculty and the skills that have been effectively acquired through students and Industry expectations. On the other hand, it can be highlighted that this gap analysis has been carried out using SPSS software and, in this software, and T-test have been conducted. It is not unknown that

T-test support in analyzing the gaps more between two independent samples. The ranks have been compared using the mean scores but more reliable test to check if there is a significant gap is t- test which has also been used to test the gap. The T-test can be recognized as the statistical test that has been utilized in terms of comparing the means of mainly two groups.

## 7.2 GAP ANALYSIS AMONGST INDUSTRY AND FACULTY USING INDEPENDENT T-TEST

It is more often utilized in testing hypothesis to control whether a procedure or effective treatment actually having an impact on the interest population or in case these two groups are not similar from each other. In addition, with the help of this T-test is has become easier to make a comparison between two samples (Gerald, 2018). Following are the Hypothesis used to test the Gap between various skills as per the industry, faculty and the students.

**H01.1: There is no significant gap between the level of Communication skills imparted by Faculty members and the industry expectations.**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
CO	Equal variances assumed	59.073	.000	-1.362	278	.174	-.565	.415	-1.383	.252
	Equal variances not assumed			-1.591	249.072	.113	-.565	.356	-1.266	.135

The p-value from Levene's test is less than the significance level of 0.05, it can be stated the differences that are obtained in sample variances are not likely to occur based on

random sampling as of a population with alike variances. The Independent sample test of gap analysis regarding Communication Skills expected by the industry and imparted by the faculty shows that there is a significant gap between the industry and Faculty as the P value is 0.174 which is more than 0.05, when not assuming equal variances in the p-value is 0.113 which is still not significant, thereby null Hypothesis will be accepted and we can conclude that there is no significant gap between the Communication Skills that are imparted by the faculty and Expected by the Industry.

**H0<sub>1.2</sub>: There is no significant gap between the level of Career Adaptability skills imparted by Faculty members and the industry expectations.**

Table 7.2.2 Independent Sample T-test between Industry and Faculty- Career Adaptability Skills										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
CA	Equal variances assumed	51.782	.000	2.593	279	.010	.944	.364	.227	1.661
	Equal variances not assumed			2.904	274.777	.004	.944	.325	.304	1.585

The Independent sample test of gap analysis regarding Career Adaptability Skills expected by the industry and imparted by the faculty shows that there is no gap between the industry and Faculty as the P value is .010 which is less than 0.05, thereby null Hypothesis will be rejected and we can conclude that there is a significant gap between the Career Adaptability Skills that are imparted by the faculty and Expected by the Industry.



**H0<sub>1.3</sub>: There is no significant gap between the level of teamwork skills imparted by Faculty members and the industry expectations.**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
T W	Equal variances assumed	51.784	.000	2.523	278	.012	.922	.366	.203	1.642
	Equal variances not assumed			2.834	274.201	.005	.922	.325	.282	1.563

The Independent sample test of gap analysis regarding Team Work Skills expected by the industry and imparted by the faculty shows that there is no gap between the industry and Faculty as the P value is .012 which is less than 0.05, thereby null Hypothesis will be rejected and we can conclude that there is a significant gap between the Team Work Skills that are imparted by the faculty and Expected by the Industry.

**H0<sub>1.4</sub>: There is no significant gap between the level of Emotional Intelligence skills imparted by Faculty members and the industry expectations.**

		Levene's Test for Equality of Variances		t-test for Equality of Means							
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
										Lower	Upper
E I	Equal variances assumed	89.486	.000	2.989	278	.003	1.275	.427	.435	2.115	
	Equal variances not assumed			3.446	259.590	.001	1.275	.370	.547	2.004	

The Independent sample test of gap analysis regarding Emotional Intelligence Skills expected by the industry and imparted by the faculty shows that there is no gap between the industry and Faculty as the P value is .003 which is less than 0.05, thereby null Hypothesis will be rejected and we can conclude that there is a significant gap between the Emotional Intelligence Skills that are imparted by the faculty and Expected by the Industry.

**H0<sub>1.5</sub>: There is no significant gap between the level of Work Ethics skills imparted by Faculty members and the industry expectations.**

		Levene's Test for		t-test for Equality of Means						
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		Equality of Variances								
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	94% Confidence Interval of the Difference	
									Lower	Upper
WE	Equal variances assumed	22.251	.000	-3.518	278	.001	-1.671	.475	-2.607	-.736
	Equal variances not assumed			-3.920	276.499	.000	-1.671	.426	-2.511	-.832

The Independent sample test of gap analysis regarding Work Ethical Skills expected by the industry and imparted by the faculty shows that there is no gap between the industry and Faculty as the P value is .001 which is less than 0.05, thereby null Hypothesis will be rejected and we can conclude that there is a significant gap between the Work Ethical Skills that are imparted by the faculty and Expected by the Industry.

**H0<sub>1.6</sub>: There is no significant gap between the level of Self-Efficacy skills imparted by Faculty members and the industry expectations.**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-		Std. Error	95% Confidence	

						tailed)	Mean Difference	Difference	Interval of the Difference	
									Lower	Upper
S E	Equal variances assumed	51.741	.000	3.433	278	.001	1.267	.369	.540	1.993
	Equal variances not assumed			3.852	274.511	.000	1.267	.329	.620	1.914

The Independent sample test of gap analysis regarding Self-Efficacy Skills expected by the industry and imparted by the faculty shows that there is no gap between the industry and Faculty as the P value is .001 which is less than 0.05, thereby null Hypothesis will be rejected and we can conclude that there is a significant gap between the Self-Efficacy Skills that are imparted by the faculty and Expected by the Industry.

**H0<sub>1.7</sub>: There is no significant gap between the level of Information technology skills imparted by Faculty members and the industry expectations.**

Table 7.2.7 Independent Sample T-test between Industry and Faculty- Information Technology Skills										
Levene's Test for Equality of Variances			t-test for Equality of Means							
F	Sig.	T	Df	Sig. (2-	Mean Difference	Std. Error	95% Confidence Interval of			

						tailed)		Difference	the Difference	
									Lower	Upper
I T	Equal variances assumed	60.4 26	.00 0	4.0 03	278	.000	1.581	.395	.804	2.35 8
	Equal variances not assumed			4.5 86	264.0 51	.000	1.581	.345	.902	2.26 0

The Independent sample test of gap analysis regarding Emotional Intelligence Skills expected by the industry and imparted by the faculty shows that there is no gap between the industry and Faculty as the P value is .000 which is less than 0.05, thereby null Hypothesis will be rejected and we can conclude that there is a significant gap between the Emotional Intelligence Skills that are imparted by the faculty and Expected by the Industry.

**Table 7.2.8: Gap Between Industry Expectations and Skill imparted by the Faculty to the Post Graduate Management Students in Punjab**

Hypothesis	Accepted/Rejected
H0 <sub>1.1</sub> : There is no significant gap between the level of Communication skills imparted by Faculty members and the industry expectations.	Accepted
H0 <sub>1.2</sub> : There is no significant gap between the level of Career Adaptability skills imparted by Faculty members and the industry expectations.	Rejected

H0 <sub>1.3</sub> : There is no significant gap between the level of Team Work skills imparted by Faculty members and the industry expectations.	Rejected
H0 <sub>1.4</sub> : There is no significant gap between the level of Emotional Intelligence skills imparted by Faculty members and the industry expectations.	Rejected
H0 <sub>1.5</sub> : There is no significant gap between the level of Work Ethics skills imparted by Faculty members and the industry expectations.	Rejected
H0 <sub>1.6</sub> : There is no significant gap between the level of Self-Efficacy skills imparted by Faculty members and the industry expectations.	Rejected
H0 <sub>1.7</sub> : There is no significant gap between the level of Information technology skills imparted by Faculty members and the industry expectations.	Rejected

After the gap analysis it has been found that there except a gap between the level of skills imparted by the faculty and expected by the industry. Except for the Communication skills, the results of t test for all the other skills have shown that there is a significant gap between the skills that a faculty imparts to these students and what an industry expects. As, we have discussed earlier during the start of the research the gap that exists may be between the Industry and Faculty, as in faculty fails to deliver what the industry expects from their students or there could be a gap between the skills that are imparted by the faculty and the skills that are acquired by the students, may be the student is unable to understand or grasp what the faculty is teaching or making him/her learn or the gap may be due to skills that are acquired by the students is different from what is expected by the industry. So, proceeding with the analysis for testing the gap between the students and the industry.

### 7.3 GAP ANALYSIS AMONGST FACULTY AND STUDENTS USING INDEPENDENT T-TEST

The faculty must play a very important role in the process of skill enhancement and the process of achieving employability of students. The present study attempts to find the gap, if exists any between the skills imparted by the faculty and acquired by the students. Sometimes, it is the student preparedness that affects the employability being no gap between the faculty skill levels and the industry expectations. Therefore, using independent t test the gap would be analyzed between the responses of these two samples with respect to different skills validated by the industry.

**H0 2.1: There is no significant gap between the level of Communication skills imparted by Faculty members and the level of skill set acquired by the students.**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
C O	Equal variances assumed	34.006	.000	-.708	619	.479	-.232	.328	-.877	.412
	Equal variances not assumed			-1.003	273.649	.317	-.232	.232	-.689	.224

The Independent sample test of gap analysis regarding Communication Skills imparted by the faculty and acquired by the students shows that there is a gap between Students and Faculty as the P value is .479 which is more than 0.05, thereby null Hypothesis will be accepted and we can conclude that there is no significant gap between the Communication Skills that are skills imparted by the faculty and acquired by the students

**H0 2.2: There is no significant gap between the level of Career Adaptability skills imparted by Faculty members and the level of skill set acquired by the students**

Table 7.3.2 Independent Sample T-test between Faculty and Students- Career Adaptability Skills										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
C A	Equal variances assumed	12.627	.000	-2.709	681	.007	-.844	.311	-1.455	-.232
	Equal variances not assumed			-2.438	247.362	.015	-.844	.346	-1.525	-.162



The Independent sample test of gap analysis regarding Career Adaptability Skills imparted by the faculty and acquired by the students shows that there is no gap between Students and Faculty as the P value is .007 which is less than 0.05, thereby null Hypothesis will be rejected and we can conclude that there is a significant gap between the Career Adaptability Skills that are skills imparted by the faculty and acquired by the students

**H0 2.3: There is no significant gap between the level of Team Work skills imparted by Faculty members and the level of skill set acquired by the students**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
T W	Equal variances assumed	96.079	.000	-.194	681	.846	-.044	.225	-.486	.399
	Equal variances not assumed			-.154	215.190	.877	-.044	.283	-.601	.514

The Independent sample test of gap analysis regarding Team Work Skills imparted by the faculty and acquired by the students shows that there is a significant gap between Students and Faculty as the P value is .846 which is more than 0.05, thereby null Hypothesis will be accepted and we can conclude that there is no significant gap between the Team Work Skills that are skills imparted by the faculty and acquired by the students

**H0 2.4: There is no significant gap between the level of Emotional Intelligence skills imparted by Faculty members and the level of skill set acquired by the students**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
E I	Equal variances assumed	34.162	.000	.993	681	.321	.304	.306	-.297	.905
	Equal variances not assumed			.872	240.400	.384	.304	.349	-.383	.990

The Independent sample test of gap analysis regarding Emotional Intelligence Skills imparted by the faculty and acquired by the students shows that there is a significant

gap between Students and Faculty as the P value is .321 which is more than 0.05, thereby null Hypothesis will be accepted and we can conclude that there is no significant gap between the Emotional Intelligence Skills that are skills imparted by the faculty and acquired by the students

**H0 2.5: There is no significant gap between the level of Work Ethics skills imparted by Faculty members and the level of skill set acquired by the students**

Table 7.3.5 Independent Sample T-test between Industry and Faculty- Work Ethics										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
W E	Equal variances assumed	7.17	.005	-9.485	681	.000	-3.257	.343	-3.931	-2.583
	Equal variances not assumed			-7.583	250.139	.000	-3.257	.379	-4.004	-2.509

The Independent sample test of gap analysis regarding Work Ethics Skills imparted by the faculty and acquired by the students shows that there is no gap between Students and Faculty as the P value is .000 which is less than 0.05, thereby null Hypothesis will be rejected and we can conclude that there is a significant gap between the Work Ethics Skills that are skills imparted by the faculty and acquired by the students.

**H0 2.6: There is no significant gap between the level of Self-Efficacy skills imparted by Faculty members and the level of skill set acquired by the students**

Table 7.3.6 Independent Sample T-test between Faculty and Students- Self-Efficacy Skills										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
S E	Equal variances assumed	7.130	.004	-2.306	619	.021	-.589	.256	-1.091	-.087
	Equal variances not assumed			-2.680	189.296	.008	-.589	.220	-1.023	-.156

Source: Author's Computation

The Independent sample test of gap analysis regarding Self-Efficacy Skills imparted by the faculty and acquired by the students shows that there is no gap between Student and Faculty as the P value is .021 which is less than 0.05, thereby null Hypothesis will be rejected and we can conclude that there is a significant gap between the Self-Efficacy Skills that are skills imparted by the faculty and acquired by the students

**H0 2.7: There is no significant gap between the level of Information Technology skills imparted by Faculty members and the level of skill set acquired by the students**

**Table 7.3.7: Independent Sample T-test between Faculty and Students- Information Technology Skills**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
I T	Equal variances assumed	19.335	.000	3.615	681	.000	1.049	.290	.479	1.619
	Equal variances not assumed			3.245	247.479	.001	1.049	.323	.412	1.686

Source: Author's Computation

The Independent sample test of gap analysis regarding Information Technology Skills imparted by the faculty and acquired by the students shows that there is no gap between the Student and Faculty as the P value is .000 which is less than 0.05, thereby null Hypothesis will be rejected and we can conclude that there is a significant gap between the Information Technology Skills that are skills imparted by the faculty and acquired by the students

**Table 7.3.8: Gap between Skill imparted by the faculty and acquired by the students to the Post Graduate Management Students in Punjab**

Hypothesis	Accepted/rejected
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H0 2.1: There is no significant gap between the level of Communication skills imparted by Faculty members and the level of skill set acquired by the students	Accepted
H0 2.2: There is no significant gap between the level of Career Adaptability skills imparted by Faculty members and the level of skill set acquired by the students	Rejected
H0 2.3: There is no significant gap between the level of Team Work skills imparted by Faculty members and the level of skill set acquired by the students	Accepted
H0 2.4: There is no significant gap between the level of Emotional Intelligence skills imparted by Faculty members and the level of skill set acquired by the students.	Accepted
H0 2.5: There is no significant gap between the level of Work Ethics skills imparted by Faculty members and the level of skill set acquired by the students.	Rejected
H0 2.6: There is no significant gap between the level of Self-Efficacy skills imparted by Faculty members and the level of skill set acquired by the students.	Rejected
H0 2.7: There is no significant gap between the level of Information Technology skills imparted by Faculty members and the level of skill set acquired by the students.	Rejected

*Source: Author's Computation*

The analysis of Table 7.3.8 reveals significant gaps between faculty members' skills and those acquired by postgraduate management students in Punjab, as evidenced by the rejection of hypotheses H0 2.2, H0 2.5, H0 2.6, and H0 2.7. Gaps were identified in Career Adaptability, Work Ethics, Self-Efficacy, and Information Technology skills. The disparity in Career Adaptability skills may be due to a lack of real-world applications in the curriculum, indicating the need for more experiential learning

opportunities to improve students' flexibility in dynamic work environments (Grantham and Iachizzi, 2024). The gap in Work Ethics could be attributed to a lack of emphasis on professional conduct, implying that faculty should incorporate ethics workshops and role-playing exercises into the curriculum (Shneiderman, 2020). For Self-Efficacy, the mismatch between theoretical instruction and practical application suggests that more leadership and decision-making opportunities could help students gain confidence (Liu et al., 2020). Finally, a lack of information technology skills could be caused by outdated technology or insufficient practical training, emphasizing the importance of updating the IT curriculum and providing access to current tools and software. Addressing these gaps through targeted strategies, such as curriculum reviews and improved teaching methods, can help better align faculty skills with those acquired by students, resulting in better employability outcomes.

It is very important for the higher education institutes to ensure the quality of teaching by faculty to make sure that the skills or attributes that make a student employable or competent is being transferred to them with the help of curriculum, classroom teaching or extra curricula activities. After conducting independent t test on the responses from the sample of faculty and the students, it has been observed that there exists a gap between certain skills such as work ethics skills, Self-efficacy skills and Information technology skills. There is no significant gap found between communication, team Work and Emotional Intelligence. The level of these skills acquired by the student is same as it is imparted by the faculty. The next subsections compile the results in order to explore the potential sources of these perceptual discrepancies that contribute to the employability gap. A synthesis of this kind has been performed at the level of macro and micro variables to look at the perceptions of the stakeholder groups.

#### **7.4 Gap Analysis amongst Industry and Students using Independent T-test**

It has been shown that there is a huge disparity with the interpretation of skills and this disparity is made by faculty and students. In addition, through the support of this analysis several gaps have been shown that are within the industry expectations and skill sets of students. In terms of critically highlighting gap analysis within industry expectations and student's skill sets, mean square and descriptive statistics have been

portrayed in an effective manner. In addition, this objective has been portrayed to analyze the level of skill sets that have been obtained through the students of this Post Graduate management Institute specifically in Punjab. The analysis of the level of skills assists the post graduate students to understand the requirement managerial skills in the industry that helps to develop the quality of the skills of management students. Independent t test has been used to identify the skills where the gap exists irrespective of different rankings by the respondents.

**H0<sub>3.1</sub>: There is no significant gap between the level of Communication skills acquired by the students and industry expectations.**

<b>Table 7.4.1: Independent Sample T-test between Industry and Students-Communication Skills</b>										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
C	Equal variances assumed	4.240	.040	-6.129	619	.000	-1.427	.233	-1.885	-.970



Equal variance s not assumed			- 6.84 2	177.93 8	.000	-1.427	.209	- 1.839	- 1.016
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Source: Author's Computation

The Independent sample test of gap analysis regarding Communication Skills expected by the industry and acquired by the students shows that there is no gap between the Industry and Students as the P value is .000 which is less than 0.05, thereby null Hypothesis will be rejected and we can conclude that there is a significant gap between the Communication Skills expected by the industry and acquired by the students.

**H0<sub>3.2</sub>: There is no significant gap between the level of Career Adaptability skills acquired by the students and industry expectations.**

Table 7.4.2: Independent Sample T-test between Industry and Students- Career Adaptability Skills									
Levene's Test for Equality of Variances		t-test for Equality of Means							
F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference		
							Lower	Upper	

C A	Equal variance s assumed	12.62 7	.00 0	- 2.70 9	681	.007	-.844	.311	- 1.455	-.232
	Equal variance s not assumed			- 2.43 8	247.36 2	.015	-.844	.346	- 1.525	-.162

Source: Author's Computation

The Independent sample test of gap analysis regarding Career Adaptability Skills expected by the industry and acquired by the students shows that there is no gap between the Industry and Students as the P value is .007 which is less than 0.05, thereby null Hypothesis will be rejected and we can conclude that there is a significant gap between the Career Adaptability Skills expected by the industry and acquired by the students.

**H0<sub>3.3</sub>: There is no significant gap between the level of Team Work skills acquired by the students and industry expectations.**

Table 7.4.3: Independent Sample T-test between Industry and Students- Team Work Skills								
Levene's Test for Equality of Variances		t-test for Equality of Means						
F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	

									Lower	Upper
T W	Equal variance s assumed	96.07 9	.00 0	- .19 4	681	.846	-.044	.225	-.486	.399
	Equal variance s not assumed			- .15 4	215.19 0	.877	-.044	.283	-.601	.514

Source: Author's Computation

The Independent sample test of gap analysis regarding Team Work Skills expected by the industry and acquired by the students shows that there is a gap between the Industry and Students as the P value is .846 which is more than 0.05, thereby null Hypothesis will be accepted and we can conclude that there is no significant gap between the Team Work Skills expected by the industry and acquired by the students.

**H0<sub>3.4</sub>: There is no significant gap between the level of Emotional Intelligence skills acquired by the students and industry expectations.**

<b>Table 7.4.4: Independent Sample t-test between Industry and Students- Emotional Intelligence</b>		
	Levene's Test for Equality of Variances	t-test for Equality of Means

		F	Sig.	T	Df	Sig. (2- tailed )	Mean Differenc e	Std. Error Differenc e	95% Confidence Interval of the Difference	
									Lower	Upper
E I	Equal variance s assumed	34.16 2	.00 0	.99 3	681	.321	.304	.306	-.297	.905
	Equal variance s not assumed			.87 2	240.40 0	.384	.304	.349	-.383	.990

The Independent sample test of gap analysis regarding Emotional Intelligence Skills expected by the industry and acquired by the students shows that there is a gap between the Industry and Students as the P value is .321 which is more than 0.05, thereby null Hypothesis will be accepted and we can conclude that there is no significant gap between the Emotional Intelligence Skills expected by the industry and acquired by the students.

**H0<sub>3.5</sub>: There is no significant gap between the level of Work Ethics skills acquired by the students and industry expectations.**

**Table 7.4.5 Independent Sample t-test between Industry and Students- Work Ethics**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
W E	Equal variances assumed	7.117	.005	-9.485	681	.000	-3.257	.343	-3.931	-2.583
	Equal variances not assumed			-7.583	250.139	.000	-3.257	.379	-4.004	-2.509

*Source: Author's Computation*

The Independent sample test of gap analysis regarding Work Ethics Skills expected by the industry and acquired by the students shows that there is no gap between the Industry and Students as the P value is .000 which is less than 0.05, thereby null Hypothesis will be rejected and we can conclude that there is a significant gap between the Work Ethics Skills expected by the industry and acquired by the students.

**H0<sub>3.6</sub>: There is no significant gap between the level of Self-Efficacy skills acquired by the students and industry expectations.**

Table 7.4.6: Independent Samples Test- Self-Efficacy										
		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
S E	Equal variances assumed	50.395	.000	2.749	681	.006	.678	.247	.194	1.162
	Equal variances not assumed			2.333	230.554	.021	.678	.290	.105	1.250

Source: Author's Computation

The Independent sample test of gap analysis regarding Self-Efficacy Skills expected by the industry and acquired by the students shows that there is no gap between the Industry and Students as the P value is .006 which is less than 0.05, thereby null Hypothesis will be rejected and we can conclude that there is a significant gap between the Self-Efficacy Skills expected by the industry and acquired by the students.

**H0<sub>3.7</sub>: There is no significant gap between the level of Information Technology skills acquired by the students and industry expectations.**

**Table 7.4.7: Independent Sample T-test between Industry and Students-Information Technology Skills**

		Levene's Test for Equality of Variances		t-test for Equality of Means						
		F	Sig.	T	Df	Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
									Lower	Upper
I T	Equal variances assumed	19.335	.000	3.615	681	.000	1.049	.290	.479	1.619
	Equal variances not assumed			3.245	247.479	.001	1.049	.323	.412	1.686

*Source: Author's Computation*

The Independent sample test of gap analysis regarding Information Technology Skills expected by the industry and acquired by the students shows that there is no gap between the Industry and Students as the P value is .000 which is less than 0.05, thereby null Hypothesis will be rejected and we can conclude that there is a significant gap between the Information Technology Skills expected by the industry and acquired by the students.

<b>Table 7.4.8: Gap Between Skill Expected by the Industry and acquired by the Post Graduate Management Students in Punjab</b>	
<b>Hypothesis</b>	<b>Gap (Yes/No)</b>
H0 <sub>3.1</sub> : There is no significant gap between the level of Communication skills acquired by the students and Industry expectations	Rejected
H0 <sub>3.2</sub> : There is no significant gap between the level of Career Adaptability skills acquired by the students and industry expectations	Rejected
H0 <sub>3.3</sub> : There is no significant gap between the level of Team Work skills acquired by the students and industry expectations.	Accepted
H0 <sub>3.4</sub> : There is no significant gap between the level of Emotional Intelligence skills acquired by the students and industry expectations.	Accepted
H0 <sub>3.5</sub> : There is no significant gap between the level of Work Ethics skills acquired by the students and industry expectations.	Rejected
H0 <sub>3.6</sub> : There is no significant gap between the level of Self-Efficacy skills acquired by the students and industry expectations.	Rejected
H0 <sub>3.7</sub> : There is no significant gap between the level of Information Technology skills acquired by the students and industry expectations.	Rejected

Amongst the seven skills that are considered for the gap analysis between the students and the industry there exists no gap between the skills acquired by them and expected



by the industry as far as Communication skills, career Adaptability skills, Work ethics, self-efficacy and Information Technology is concerned. It has been concluded after testing the significant gap analysis and accepting the Null hypothesis. On the other hand, there exists a gap between the Team Work skills and Emotional Intelligence. Which are expected by the industry and also considered important for the students, but due to the difference in the rankings or priorities of both, there exists a gap as the Null hypothesis is rejected.

<b>Table 7.4.9 Gap between Industry Expectations, Skill imparted by the faculty and acquired by the Post Graduate Management Students in Punjab</b>			
<b>Skill</b>	<b>Gap between Industry and faculty</b>	<b>Gap between Students and faculty</b>	<b>Gap between Industry and Students</b>
<b>Communication</b>	NO	NO	YES
<b>Career Adaptability</b>	YES	YES	YES
<b>Team Work</b>	YES	NO	NO
<b>Emotional Intelligence</b>	YES	YES	NO
<b>Work Ethics</b>	YES	YES	YES
<b>Self-Efficacy</b>	YES	YES	YES
<b>Information Technology</b>	YES	YES	YES

Through this analysis it can be highlighted that, most of the respondents have accepted that there has some massive gap between the viewpoint of faculty members and the skills that actually students have actually got. Apart from that, within the viewpoints of faculty and Industry there has some huge disparity and the Institution's faculty

members are thinking that they have given all the necessary learning to students though as per the students that is different.

## **7.5 Results and Discussion**

Form the above gap analysis in Table 4.9.9 it can be seen that in all the skills, except for the communication skills there exists gap between the industry expectations and skills that are imparted by the faculty. It can be inferred from this that the faculty have to invest more in incorporating the team building, career adaptability, emotional intelligence skills. Communication is one such soft skill that is considered very important may be not ahead in the career but at the time of interview specially. The results revealed that there exists a gap in skills, between the faculty and the students. There is a gap between the Career Adaptability skills in relation to Industry Expectation, career adaptability skills imparted by the faculty and the same skills acquired by the students, same is the case with work ethics, self-efficacy and Information Technology, meaning the p value of the independent t-test is less than 0.05. thereby it is concluded that there is a gap between these skills as per the three respondents. Industry and faculty both consider Emotional Intelligence as an important skill and is also ranked at the first place by the students but there still exists a gap between these skills during imparting these skills to the students by the faculty and also there is no gap between industry and students regarding the skill related to Emotional Intelligence. Same is the case with Team Work skills, there is a gap between the faculty and industry but there is a significant gap that is found in relation to the team work skill in the expectations of the industry and student and faculty and the student as well. The Higher Education Institutes of Punjab must make the efforts towards all the skills that are considered important for the employers visiting the Institutes and University campuses for the recruitment drives.

The gap identified could be a guiding force for the industry, faculty, students, and also the Higher Education institutes. All must make the combined efforts towards the skill development. The gaps are well identified between the industry expectations, faculty, and students. There are more efforts required towards Emotional Intelligence, Self-

efficacy, communication, and Teamwork skills where the major gap is identified as there was a considerable difference in the significant values of their results.

## **7.6 Conclusion of the Chapter**

Except communication skills, the gap analysis shown in Table 4.9.9 reveals discrepancies between industry expectations and the skills taught by faculty across a variety of competencies. For students to succeed in interviews and throughout their careers, soft skills like teamwork and emotional intelligence are just as important as communication.

Additionally, the analysis shows a discrepancy between the skills students learn and the skills taught by faculty, pointing out areas where schools can improve their teaching strategies to better meet the needs of the workforce. Notably, substantial deficiencies in information technology skills, work ethics, self-efficacy, and career adaptability were found, requiring faculty and educational institutions to pay close attention. The degree to which industry and student perspectives on the value of emotional intelligence and teamwork coincide highlights these skills' importance in the workplace. But closing the knowledge gap between student- and faculty-acquired skills is still necessary to guarantee graduates' marketability.

Higher education institutions in Punjab are urged by the gaps in knowledge to give priority to skill development programs that meet industry standards. Closing these gaps and developing a workforce with the necessary skills for success in the contemporary professional landscape require cooperative efforts from industry stakeholders, faculty, students, and educational institutions.

# **Chapter-8**

## **Findings, Implications, Recommendations and Contribution of Study**

## **CHAPTER 8**

### **FINDINGS, IMPLICATIONS, RECOMMENDATIONS, AND CONTRIBUTION OF STUDY**

This chapter summarises the main conclusions of our investigation, along with any ramifications and suggestions that can be drawn from the data. In this chapter, we analyze the patterns and insights that have been found, determining their wider significance and providing stakeholders with practical recommendations based on the study's contributions.

#### **8.1 FINDINGS OF STUDY**

The study has attempted to draw attention to the lack of employability among management students at Postgraduate management institutes in Punjab. The goal of this study is to determine the most crucial skill set for tackling organizational difficulties, the efficiency of MBA programs (Muthukamatchi and Veerachamy, 2021) in developing those skills, potential gaps in the MBA curriculum, and viable solutions to fill those gaps (Kumar and Shivashankar, 2021). Three different sets of questionnaires have been developed to attain the necessary objectives. These questionnaires capture the opinions of employers, faculty and management graduates regarding the same set of variables that affect management graduates' employability. Employers' top priority today is finding management graduates who possess all necessary employability skills (Damoah, Peprah, and Brefo, 2021). The skills gap, often known as the discrepancy between applicants' talents and those required for the job, is a serious worry for recruiters seeking to find skilled workers (Singh, Paul, and Tewari, 2022). Employers prefer to hire management graduates who have the necessary skills and are prepared to begin working right away after completing their MBA degree, without the need for further, job-specific training (Ashraf, 2022). Three parts, one for each of the three categories of respondents, provide the results of the current study.

It has also been found that these questions have been asked to the students mainly to analyze the skill levels of these students through the faculty members and industry. According to the whole survey, it can be concluded that these questions are related to whether students can execute the tasks within the ethical boundaries, and whether students are performing all their duties ethically or not. It can be stated from the above analysis that, this CFA analysis has been utilized to validate the skill sets of the students as per the industry's expectations (Houkes, et al., 2020). The study found a significant skill gap, the level of priority placed on employability abilities, and a perceptual discrepancy between the skills required by businesses and those taught to students by management colleges. Low interactions between academia and industry were the main cause of this. The study also found that faculty members' severe workloads prevent them from finding time to participate in academia-industry interaction.

#### **8.1.1 Identification of the skills expected by the Recruiters from the Post Graduate Management Students in Punjab**

The skills that have been validated are career adaptability, Communication, self-efficacy, Work Ethics, emotional intelligence, Team Work and information technology (Wilson and Marnewick, 2018). It can also be highlighted that CFA analysis has been done to finalize the scale for Employability by way of industry Expectations. It has been found in this analysis that these students need to improve their skill dimensions in terms of getting a better future. This section has explained the industry's requirements appropriately and also discussed the necessary skills of a student. The rankings calculated based on average means cores were given by the industry about the skills they expect from the postgraduate management students in Punjab. It has been found from the analysis that, the recruiters want three major things such as work ethics, Teamwork, and IT skills as they have achieved the highest mean scores (Deepa, S., & Seth, M. (2013). It can also be stated that there is a difference in the priority of the skills as per the faculty, i.e, according to them the priority is given to communication skills followed by work ethics and Self-efficacy. On the other hand, the entire analysis is also more concerned about numerous other dimensions such as career adaptability, teamwork, communication, self-efficiency, and some others (Khorrami, Farhadian, and

Abbasi, 2018). 15 skills were explored from the various literature and the research reports by AICTE, FICCI, UGC, etc. related to skill development, the questionnaire is made and the responses were analyzed to validate the skill set that is expected by the employers of the postgraduate management degree in Punjab. After the various statistical tools, 7 skill dimensions and Overall Graduate Employability have been validated and an employability scale was developed. It is believed that those are the skills that are expected by the industry recruiters by the students. The 8-dimensional scale that was framed was- Communication skills, career adaptability skills, teamwork skills, Emotional Intelligence, Self-efficacy, work ethics, Information technology, and Overall Graduate Employability. Rankings of these skills were also found based on the responses from the industry. Work ethics was ranked first with the highest mean score meaning that the industry gives the highest importance to ethics and expects a graduate must also behave ethically and uphold the ethics and values of the workplace as well as the community and also encourage others to behave responsibly towards the community and society, it is also expected that he/ she must take the responsibility of his/her actions at the workplace. The second-ranking is given to Team Work skills, where they are expected the graduates to perform well in a group of members, adapt to the change as well as encourage others to adapt to the change and they are expected to make efforts towards involving all the teammates in a decision-making process (Wakelin-Theron, Ukpere, and Spowart, 2018). They are also expected to have Information technology skills, and basic knowledge of handling the software, followed by self-efficacy, career Adaptability, and communication skills. Emotional Intelligence is being ranked last by industry recruiters. Though there was not much difference found in the rankings of industry and faculty there was a vast difference that was found on the part of the student. To align identified skills with industry requirements and integrate them into the educational curriculum, institutions should develop industry-relevant modules and courses focused on essential skills such as work ethics, IT proficiency, teamwork, and communication. Practical learning can be enhanced through workshops, seminars, and internships, offering hands-on experience and direct industry feedback. Establishing advisory boards with industry professionals can ensure curriculum relevance, while regular assessments and continuous feedback mechanisms help refine

students' abilities. Periodic curriculum reviews based on industry trends will keep the program up-to-date and effectively prepare students for their careers.

### **8.1.2 Impact of Overall Graduate Employability on the Skill Set Expected by the Industry from the Post Graduate Management Students in Punjab.**

The outcomes of this exploratory study reveal that Six factors have positive effects on the OGE of postgraduate management Students in Punjab except the Information technology Skills. Employability of the students has been a focus of desirability, to not only the HEIs but also the researchers, faculty members, and the graduates also. This research has contributed to the thoughtful concept of all the employability skills expected by employers that can impact the OGE in Punjab. Through this, the hypothesized relation between all the 7 expected findings was studied and it was found that communication skills (Kanagavalli and Gayathri, 2022), Team teamwork skills ((Kanagavalli and Gayathri, 2022), Work ethics Skills, Emotional intelligence Skills, career Adaptability skills, all are impacting the Overall Graduate Employability except the Information technology Skills.

Even though there is an increase in the number of projects and industrialization in the economy. Employers are expected to create employment for fresh graduates. But there will be a gap. If there is a mismatch between the Qualities of the graduates and the demands of the employers. Though the industry expects the graduates to have a basic knowledge of IT skills these skills are not considered to have an impact on the Overall Graduate employability, when discussed it was responded that since the recruiters provide the training after the selection of these graduates are required to learn and practice on software tools needed to perform the job.

### **8.1.3 Level of skill set imparted by the Faculty amongst Post Graduate Management Students in Punjab**

In the meantime, higher education institutions have a great responsibility to look out for every student they enroll. Academically, socially, professionally, morally, and culturally, a student's complete personality must be shaped by mentors to be accepted by all. The level of skills examined by the faculty was measured by the questionnaire. The questionnaire was framed using the 7 skills and OGE that were found to be



expected by the industry and is validated using various statistical techniques. As, the importance of faculty and higher education institutes cannot be ignored in shaping a graduate and inculcating the attributes and outcomes that were defined by them and were expected for a graduate to possess after the completion of a degree (Tejedor, et al., 2021). The pedagogies that are adopted by them, the practices that are followed to pursue classroom teaching, additional assignments, and tasks given to the students all help them to achieve and move a step forward towards Employment. As, the government has introduced new educational reforms (Peters, 2021), has made it mandatory for the HIEs to take steps and efforts towards the skill development of the students. Keeping in view the same, the faculty responses have been analyzed and rankings have been obtained by the faculty for the skills expected by the industry using Average mean scores. It is also Studied how to include employable skills into business curricula through various pedagogies and teaching methodologies that tend to focus on fewer skills, smaller groups, or a single institution (Mahfoodh and Hashim, 2021). Amongst the 7 skills ranked as per the skills imparted by the faculty, communication skill was considered the most important, also various innovative pedagogies have been used by various faculty members, such as language lab, Turn talking, record and reflect, Role plays, communication games, Mock Interviews etc. The second rank was given by the faculty to the work ethic skills, the industry also considered it of the same importance. Ethics are considered a very important aspect at all the phases of life and similarly also considered important by the faculty, also various efforts are being made by them along with their HEI in developing these skills (Brambilla, et al., 2021). The faculties have mentioned the 'Apperception' game that helps to build work ethics skills in the students, through teaching personal and Universal Human Values and also attempting to make a student understand the importance of ethics in the workplace (Miller, et al., 2022). The third rank is given to self-efficacy skills, which concerns the belief of an individual in him/herself, various techniques and pedagogies have already been adopted by various faculty members and HEIs to develop self-efficacy skills (Alosaimi, 2021), and a few of them are mastery Experience, Situation Analysis, etc. in all these techniques students will be given situation to either analyze his/her experience, situation analysis where they will be given a situation in which they have to put them self and make the decision for them. Teamwork is though considered most important

by many faculty members but as per the cumulative scores, it has been ranked fourth (Robinson, 2021). Again, as per the subjective data asked for the faculty, they mentioned various pedagogies that are adopted to progress the same in their graduates. Management games such as ‘If you build it’, ‘Save the Eggs’, ‘Go for Gold’, ‘Talking in Circles’, ‘Board room battle’ etc. are used in the classroom to develop team-building skills amongst the graduates. This skill can be developed in the classroom by giving group assignments or group tasks. The fifth rank is given to Emotional Intelligence Skills (Papoutsi, Drigas and Skianis, 2021). For this, it is very important to identify good and bad emotions. There are certain teaching techniques adopted by the faculty to ensure the emotional intelligence skills in the students such as ‘Good things’ activity, ‘Role Play’, ‘Stories’, ‘Wonder of words’, etc. Now, a day’s Emotional intelligence is considered as a crucial skill as it enables the students to understand and use their emotions judiciously. Career adaptability and Information technology have been ranked last. Though career Adaptability is important as it talks about how flexible an employee is at the workplace in adapting to changes or new circumstances (Delle and Searle, 2022). Information technology skills have been imparted using various practical subjects throughout the MBA/PGDM degree. The minimum difference was found between the industry skill rankings and the rankings given by the faculty members.

#### **8.1.4 Level Students’ Preparedness for the Industry**

It has been already seen that students from different study genres are still not able to retain the right knowledge or skills. Academically, socially, professionally, morally, and culturally, a student's complete personality must be shaped by mentors to be accepted by all (Keiler, et al., 2020). Moreover, these insufficient skills are not able to support them while performing a real-time job or working under a corporation. As per the responses of the Students, Self-efficacy with the highest Average mean score has been ranked first, followed by Emotional intelligence, career adaptability, and communication. Information technology has been ranked seventh by the students with the lowest Average score. The analysis of the level of skills assists the post graduate students in understanding the requirement managerial skills in the industry that helps them to develop the quality of the skills of management students (Kaso, et al., 2021). On the other hand, in terms of analyzing the gap between the industry’s expectations

and the skill set of students, a survey has been conducted with the support of faculty members. It has been also portrayed that the main skill sets of students are those that are student driven such as self-efficacy and Emotional Intelligence which cannot be developed beyond a point but is there in the nature and personality of the student and can be enhanced by themselves with the help of HIEs and faculty members. From the calculated descriptive statistics, it can be stated that there has been some difference in the skill levels of the students, which may be the reason for the gap. It has also been shown in the descriptive statistics that candidates who marked the information and technology-related skills as important were not able to mark better communication. Therefore, it can be highlighted that there are some differences between their communication skills and technology-related skills (Hora, Chhabra, and Smolarek, 2022). Exploring the factors that influence how (and why) community college instructors teach communication and teamwork skills in computer technology courses. On the other hand, it can also be highlighted that these candidates are setting priorities with a proper sense of importance and urgency. On the other hand, they are hesitating to provide new ideas while solving any issues therefore, this can be recognized as the major gap in their skill sets. Therefore, the gap can be because of the wrong priorities of the students regarding different skill sets that are expected by the industry from the postgraduate management students in Punjab. There was a difference between the rankings given by the students and the faculty. From the section in objective four, it can be analyzed the responses have been collected during the survey evaluation for understanding the right level of skill set acquired by the students enquired (Garba, 2021). In this section, multiple questions have been asked to each of the respondents regarding their skills and management-based knowledge acquired from their faculties or learning through real-time experience. According to the report of (Oleson *et al.* 2022), it has been already seen that students from different study genres are still not able to retain the correct knowledge or skills. Moreover, these insufficient skills are not able to support them while performing a real-time job or working under a corporation. Additionally, from this section, it has been found that the value of the mean and its significance level against each question has been obtained differently. The major reason behind this is assumed to be the vast and various capacity of each student to adopt or acquire any skills or gain any knowledge. Furthermore, the responses of students have

also been assumed to be different from the responses given by faculty and industry. According to the whole survey, it can be concluded that differences in students' opinions with faculties and industry's opinions toward the acquired skills and knowledge learned by students. On the other hand, several researchers and scholars around the world have stated that industries nowadays find and tend to equip those candidates who are highly skilled in all such factors including Communication, Career Adaptability, Self-Efficacy, Emotional Intelligence, Work Ethics, and Information technology. As a result, it has been seen that during the survey most of the students were effectively able to fulfill the industrial expectations and the needs of skills that every industry requires on various skills (Verma, et al., 2021). Several students have given negative responses toward their learning and claimed that they face issues during learning basic skills.

#### **8.1.5 Gap Analysis amongst Industry, Faculty, and Students**

The literature review has demonstrated that employability is a complicated concept that may be studied from a variety of angles. As a result, the employability gap, also known as the employability void, can be explored from various angles. The literature has extensively explored a variety of criteria, including skill shortages or shortcomings in the higher education system, to evaluate this gap. Through this analysis of the important stakeholders, which include employers and graduates, the nature and root of the employability gap in the current study have been determined. Such an examination seeks to go beyond the surface or macro level of skill set to analyses the employability gap that arises from it and examine its origin and cause.

According to the descriptive statistics of this study, it can be concluded that most of the student's skills and the expectations of the industry are different (Succi and Canovi, 2020). There is not much difference between the degree of skills taught by the faculty and those anticipated by the industry, according to the gap analysis. There is a discernible difference between the skills that a faculty member imparts to these students and what the industry expects for all the other abilities, except communication skills, according to the results of the t-test. As was mentioned at the beginning of the research, there may be a gap between the industry and the faculty, where the faculty does not provide what the industry expects of its students, or there may be a gap between the

skills that the faculty imparts and the skills that the students acquire, where the student may not be able to understand or grasp what the faculty is teaching or forcing him or her to learn, or where the gap may be due to skills that the faculty does not impart (Ramírez-Montoya, et al., 2021). When it comes to helping students develop their skills and become employable, the faculty must play a crucial part. The goal of the current study is to identify any gaps between the students' acquired skills and the skills taught by the faculty. When there is no discrepancy between the skill levels of the faculty and the requirements of the industry, student readiness might sometimes have an impact on employability. The disparity in the responses of these two samples about the various abilities recognized by the industry will thus be examined using an independent t-test.

There again exists the difference between the students' acquired skills and what the industry expects in terms of communication skills, career adaptability skills, work ethics, self-efficacy, and information technology among the seven skills taken into account for the gap analysis between the students and the industry (Khalid, et al., 2021). After testing the major gap analysis, a conclusion has been reached. On the other side, there is a connect between emotional intelligence and teamwork skills. which are required by the market and seen as vital for students, yet there is no gap in their ranks or priorities. Through this study, it can be seen that the majority of respondents agree that there is a significant disconnect between faculty members' perspectives and students' real talents (Wang, et al., 2021). In addition, there is also a significant gap between the perspectives of faculty and industry for the majority of the skill dimensions, and the institution's faculty members believe they have imparted all the required knowledge to students, even though this is not the case in the student's view. Except for communication abilities, there is a difference between what the industry requires and what the faculty is teaching. This suggests that educators need to put more effort into helping students develop their overall skill set and abilities keeping in view the industry expectations. One ability that is particularly valued during interviews is communication. It may not be necessary later in a career. The findings showed that there is a difference between the professors and the students in terms of communication skills, teamwork abilities, and emotional intelligence.

There also exists a difference between the career adaptation skills taught by the faculty and the skills learned by the students when it comes to industry expectations (Benaraba, et al., 2022). The same is true for work ethics, self-efficacy, and information technology. Therefore, it can be said that according to the three respondents, there is a huge gap in these competencies. However, there is no gap between these skills when they are taught to students by the faculty, and there is also a gap between industry and students regarding the skills related to emotional intelligence, maybe because these skills are self-driven and cannot be inculcated very easily. Both the faculty and industry view emotional intelligence as an important skill, and it is also ranked first by students. The same is true for teamwork abilities; while there is no difference between faculty and industry (Mozgalova, et al., 2021), there is a sizable difference between industry and student expectations as well as between faculty and student expectations when it comes to teamwork skills. The higher education institutions in Punjab must work to develop all the abilities that are viewed as crucial by employers visiting the campuses of the institutions and universities for recruitment campaigns. The gap found might serve as a compass for business, academics, learners, and higher education institutions. Everyone must work together to strengthen their skills. The discrepancies between industry expectations, faculty, and students have been identified. More work is needed to close the substantial gaps in communication, teamwork, self-efficacy, and emotional intelligence because of the wide disparity in the significant values of their results (Nair, and Fahimirad, 2019).

There is a disconnect between the knowledge and abilities that students learn in management programs and their actual work experiences. The perception of corporate recruiters about managing administrative activities, working with multidisciplinary teams, identifying and solving managerial problems, innovatively doing things, having a basic understanding of computers, networking, and numerical interfacing was found to be significantly different using an independent T-test between expected employability skills to be possessed by management graduates (Idkhan, et al., 2021). For efficient curriculum delivery, the management institutes are implementing modern teaching approaches that focus on the student. The three teaching techniques most frequently used in management institutes are market surveys and research projects, role

plays, and industry internships, etc. To better prepare their students for the demanding roles they will play in the workplace, management institutes are emphasizing stronger relationships with the industry and its professionals. The management students are taught by guest speakers, specifically active individuals from the business who share their expertise. Additionally, group discussions were found to be an excellent teaching strategy for fostering the development of management students' skills. In contrast to the above, it has also been noted that several other factors or characteristics have been found to provide outcomes that are comparable to one another. First and foremost, factors that have misinterpreted the same outcomes under two different sets of circumstances, such as learners and faculties and also candidates in industries able to comprehend the sensations and emotions of other people (Ciarrochi, Chan and Caputi, 2000). The next and among the most important components that are carried by both students and applicants is the application of theoretical concepts and real-life ideas from the fundamentals in addition, as a result of the assistance provided by this study, several gaps have been revealed to exist between the skill sets of students and indeed the industry expectations (Karunaratne and Perera, 2019).

Through the gap analyses of the important stakeholders, the employability gap has been evaluated in the earlier phases. Additionally, overcoming the perception gaps between the two stakeholder groups is necessary to close the employability gap. In keeping with the strategic assessment's concluding phase, suggestions have been made that offer ways to close the employability gap and identify perceptual gaps. The following chapter elaborates on these suggestions. The gap identified could be a guiding force for the industry, faculty, students, and also the Higher Education institutes. All must make the combined efforts towards the skill development. The gaps are well identified between the industry expectations, faculty, and students. There are more efforts required toward overall skill development as the majority of the skills were found to have the major gap identified as there was a considerable difference in the significant values of their results. In the section on assessment, it was proven that there exists a big variance in the understanding of some of the skills, skills, indicating that this gap is produced by both the instructors and the pupils in comparison to the industry expectations (Desimone and Long, 2010) from the post-graduate Management Students in Punjab.

The faculty members seemed to argue that most of the students are good at communication and collaboration skills. Hence the results from both respondents seemed to be different in that case. In this section, the analysis and the findings have been mainly focused on the gap between responses from faculty and students with the expectations of industry. Here, for this particular part, the section has used the T-test method to evaluate the gap between each response with each factor concerning the Industry, Students, and Faculty with each other. As per the opinion of (Mishra, *et al.*,2019), it has been stated that the T-test is known as one of the effective yet relevant statistical testing methods that can assess the difference between different responses from one same group or two different groups. According to the whole survey, it can be concluded that self-efficiency, Emotional Intelligence, and career Adaptability skills are ranked as most important by the students as against the work ethics skills, Team Work, and Information technology as per the Industry Expectations.

This chapter presents the findings from tests of different hypotheses and explores the specifics of the differences between the levels of skill sets in more detail. To examine how these three groups view the importance of the characteristics that affect employability, the results of opinion surveys of graduates and employers have been compiled. Additionally, it offers the phase-by-phase results of the strategic assessment procedure of the employability gap. Additionally, a summary of the employability gap determined by this study is provided. The study's conclusions are drawn, the study's findings are triangulated, and stakeholder recommendations are put forth in the next chapter.

#### **8.1.6 Strategies for Bridging the Skills Gap in Postgraduate Management Education**

To address the identified gaps between faculty skills and those acquired by postgraduate management students, higher education institutions can implement the following concrete strategies:

**Industry Collaboration:** Higher education institutions should collaborate with industry professionals to develop specialised workshops and seminars that focus on career adaptability. These collaborations can expose students to current industry trends, challenges, and the soft skills required to adapt to changing work environments.



Students can gain a better understanding of how to navigate career transitions and adapt to different work scenarios by utilising real-world case studies and professional insights.

**Internships and Externships:** Increasing internship and externship opportunities can provide students with hands-on experience in a variety of work settings. This exposure exposes students to various organisational cultures, job roles, and industry practices, improving their ability to adapt to new and diverse work environments. Such hands-on experience helps students develop the flexibility and problem-solving skills required for career adaptability.

**Career Counselling Services:** Strengthening career counselling services entails providing personalised career guidance that assists students in effectively navigating their career paths. Counselling services can offer tailored advice on how to prepare for and respond to job market changes, set realistic career goals, and develop career advancement strategies. This support enables students to develop a resilient career mindset and adapt to changing industry demands.

**Ethics Curriculum Integration:** Integrating work ethics and professionalism into the core curriculum ensures that students have a thorough understanding of ethical behaviour and professional expectations. This could include modules on ethical decision-making, workplace professionalism, and dealing with ethical quandaries. By incorporating these topics into various courses, students can build a solid ethical foundation for their professional conduct.

**Role-Playing and Simulations:** Using role-playing exercises and simulations allows students to experience realistic scenarios in which they must make ethical decisions and deal with professional challenges. These interactive methods give students hands-on experience dealing with ethical issues and workplace dynamics, reinforcing the value of work ethics in a controlled setting.

**Guest Lectures and Workshops:** Inviting industry leaders to deliver guest lectures and workshops on work ethics allows students to gain firsthand knowledge of the expectations and standards of various industries. These sessions can emphasise the

importance of ethics in professional success and provide practical advice for upholding ethical standards in a variety of career situations.

**Leadership Programs:** Creating leadership programs that include management simulations and decision-making exercises allows students to gain confidence in their leadership abilities. These programs can help students gain experience setting goals, managing teams, and evaluating outcomes, fostering a sense of competence and self-efficacy in their leadership roles.

**Project-Based Learning:** Encouraging project-based learning allows students to assume leadership roles and manage real or simulated projects. Students gain practical experience and build confidence in their problem-solving and decision-making abilities by working on projects that require goal-setting, task management, and outcome evaluation.

**Mentorship Programs:** Setting up mentorship programs connects students with experienced professionals who can provide advice, feedback, and support. Mentors can offer valuable insights into industry practices, share their own experiences, and help students gain confidence in their abilities. This one-on-one interaction increases self-efficacy by providing practical advice and encouragement from experienced professionals.

**Curriculum Updates:** Regularly updating the curriculum to include the most recent technologies, software, and tools ensures that students are trained in current industry practices. This may entail revising course content to reflect technological advancements and incorporating new IT trends and applications into the curriculum.

**Hands-On Workshops:** Offering hands-on workshops and lab sessions allows students to practise with current software and technology. These practical sessions help to bridge the gap between theoretical knowledge and real-world applications, ensuring that students become proficient in the tools and technologies they will encounter in their careers.

**Industry Certifications:** Enabling students to obtain industry-recognized IT certifications as part of their coursework improves their technical credentials and

marketability. These certifications can validate students' skills and knowledge, increasing their competitiveness in the job market and demonstrating their dedication to professional growth.

**Regular Assessments:** By implementing regular assessments and feedback mechanisms, institutions can evaluate the effectiveness of skill development programs and make necessary adjustments. Collecting feedback from students, faculty, and industry partners can help identify areas for improvement and keep programs relevant and effective.

**Stakeholder Engagement:** Collaborating with alumni, employers, and industry experts enables institutions to continuously review and improve their curriculum. By soliciting feedback from various stakeholders, institutions can ensure that their programs are in line with current job market demands and industry expectations, ultimately improving the relevance and quality of education provided.

Adopting these strategies allows higher education institutions to better align their programs with industry needs, ensuring that students acquire the skills required for successful careers and increasing their overall employability.

## **8.2. IMPLICATIONS OF STUDY**

Out of 15 skills explored through the literature, only 8 skills were retained after applying the Exploratory and Confirmatory Factor analysis. The scale of Employability as per the industry expectations from the recruiters of Punjab was formed with the help of these 7 skills and 26 Items. The skills that were retained in the final scale were Communication skills, team Work skills, Career Adaptability skills, Work ethics skills, self-efficacy skills, Emotional intelligence Skills and Information technology Skills. This skill set was further used to study the level of skills imparted by the faculty to the students and the level of skill set acquired by the students. Rankings were made on the basis of Average mean scores of different dimensions of the scale. The analysis highlights the complex relationship between different skills and postgraduate management students in Punjab's overall graduate employability (OGE). In today's

competitive job market, effective communication skills are emphasised as being essential. Graduates who possess strong career adaptability skills are better equipped to navigate the ever-changing job market and make adjustments to changes in technology, economic conditions, and industry demands. By enhancing problem-solving skills, leadership potential, cultural sensitivity, diversity management, productivity, and efficiency—all while promoting a positive work environment—teamwork skills greatly improve employability. Employability is greatly impacted by emotional intelligence (EI), which is essential for healthy interpersonal relationships, effective leadership, and general workplace success. Graduates with high self-efficacy are more confident and proactive in their approach to career development and job searches, which improves their capacity to take advantage of professional opportunities. For the benefit of both employees and their employers, strong work ethics are necessary for job performance, career advancement, and long-term career viability. Employers may also give more weight to soft skills, industry-specific knowledge, or domain expertise when assessing candidates, even though IT skills are undoubtedly important.

### **8.2.1 Theoretical Implications**

The study provides a thorough framework that goes beyond the conventional emphasis on knowledge and ability and clarifies the complex relationships between various skills and their impact on graduate employability. The research emphasizes the vital significance of integrating communication, teamwork, career adaptability, work ethics, self-efficacy, emotional intelligence, and IT skills by identifying and validating a multidimensional construct of employability. This sophisticated understanding replaces the one-dimensional, usually technical skill-focused approach with a more comprehensive one that acknowledges the variety of competencies needed to succeed in the contemporary labor market. This extensive skill set emphasizes how graduates must develop both hard and soft skills to be prepared for the intricacies of today's job markets. Fundamental communication abilities enable productive interaction and cooperation amongst heterogeneous groups. Collaboration abilities improve leadership potential, cultural sensitivity, and problem-solving skills—all essential in today's interconnected workplaces. Graduates with career adaptability skills are better

equipped to navigate the constantly shifting job market and can react quickly to changes in industry demands, economic conditions, and technological advancements.

Employers place a high value on work ethics, which are emphasized as being crucial for preserving job performance, career advancement, and long-term career viability. Work ethics demonstrate a dedication to professionalism and integrity. Self-efficacy, or the conviction that one can succeed, is essential for proactive and self-assured career management, enabling graduates to take advantage of opportunities and overcome obstacles. The significance of emotional intelligence lies in its ability to promote positive interpersonal interactions, proficient leadership, and general success in the workplace. Last but not least, graduates with IT skills are guaranteed to be proficient in leveraging technology to boost productivity and innovation in an economy driven by digitalization. The study demonstrates the interdependencies between these skills, which supports the idea that education and skill development require a balanced and integrative approach. This theoretical framework questions established educational paradigms and promotes curricula that give equal weight to hard and soft skills.

### **8.2.2 Managerial Implications**

The study emphasises the need, from a management perspective, to incorporate a broad range of skills into professional training and educational programmes in order to meet industry standards. The fact that abilities like emotional intelligence, teamwork, and communication were retained in the final scale indicates how important they are for improving workplace dynamics and overall job performance. In order to promote cooperation and avoid misunderstandings, clear and succinct exchanges of ideas are necessary for effective communication. Teamwork abilities encourage employee synergy, which propels group creativity and problem-solving, and emotional intelligence supports positive interpersonal interactions, which are necessary for a peaceful and effective work environment.

The emphasis on self-efficacy and career adaptability emphasises how crucial these skills are in equipping graduates to succeed in the quickly evolving labour market. An adaptable career gives people the fortitude and flexibility they need to deal with changes and upheavals, like improvements in technology or changes in the state of the economy. Graduates with self-efficacy, or confidence in their abilities, are better equipped to seize

opportunities and take on obstacles head-on, which increases their chances of success and career advancement. It has been determined that work ethics are essential for both long-term career sustainability and job performance. Employers place a high value on qualities like dependability, responsibility, and a strong commitment to quality because they help employees maintain high standards of work and build a culture of trust and dependability within the company. The continued significance of technical competence in the modern digital economy is reflected in the inclusion of IT skills. An IT-skilled workforce guarantees that businesses can use digital tools and platforms to boost productivity, efficiency, and creativity as technology develops further.

Graduates' employability can be considerably increased by using this integrated approach to skill development, which guarantees that their competencies are in line with the changing demands of business. Employers and educational institutions can work together to create a workforce that is not only technically competent but also flexible, resilient, and able to thrive in a fast-paced, cutthroat job market by placing a high priority on the balanced development of soft and hard skills. This alignment of strategy has the potential to propel organizational success and promote wider economic development by providing graduates with the competencies required to tackle both present and future challenges.

### **8.2.3 Implications of Skillset Validated by the Industry**

The validation of essential components includes career adaptability, communication, self-efficacy, work ethics, emotional intelligence, teamwork, and information technology skills. Their high mean scores, demonstrate the critical importance of work ethics and teamwork. Employers place a high value on teamwork abilities, highlighting graduates' capacity to succeed in group settings, adjust to change, and lead inclusive decision-making processes. This emphasises how important collaborative skills are in the modern workplace.

The eight-dimensional scale includes information technology skills, work ethics, self-efficacy, emotional intelligence, teamwork, career adaptability, communication, and overall graduate employability. Through the identification and definition of these fundamental skill dimensions, scholars and instructors can better match academic programs to industry needs, improving graduates' readiness for employment. This thorough framework offers students a road map for acquiring and demonstrating the

abilities required for success in their chosen fields of study. It creates a symbiotic relationship that fosters mutual growth and prosperity by acting as a bridge between academia and industry.

#### **8.2.4 Implications of OGE and Industry Expected Skillset**

The multifaceted relationship between communication skills and Overall Graduate Employability (OGE) emphasizes how important good communication is to landing and keeping a job. Graduates with strong communication skills are better equipped to handle the demands of the competitive job market of today. With the ability to adapt to changing industry demands, technological advancements, and economic fluctuations, graduates with career adaptability skills are better able to manage the dynamic and unpredictable nature of the job market, which in turn increases their employability. The ability to work well in a team improves graduates' employability by developing their capacity to manage cultural diversity, take on leadership roles, and solve problems. These abilities boost output and effectiveness and help to foster a positive work atmosphere, which is advantageous to employees as well as the companies they work for. Emotional intelligence (EI) is a key component of OGE because it is essential for developing strong interpersonal connections, capable leadership, and general workplace success.

Graduates who have high levels of self-efficacy are more self-assured and proactive in their efforts to advance their careers and find employment. They can take advantage of professional opportunities and improve their employability because they have faith in their ability to learn new skills, overcome obstacles, and accomplish career goals. Work ethics have a significant positive impact on employees' performance at work, their chances of career advancement, and the sustainability of their career over the long run. They also have a positive impact on employers. Information technology (IT) skills are crucial, but employers may be favouring other competencies over technical ones, such as soft skills, industry-specific knowledge, or domain expertise.

**Table 8.2.1 Implications of OGE- Industry Expected Skillset**

<b>Hypothesized Relationship</b>	<b>Results</b>	<b>Implications</b>	<b>Past Literature</b>
Communication Skills on the Overall Graduate Employability (OGE)	Supported	It highlights the multidimensional impact of communication skills on the OGE of postgraduate management students in Punjab, emphasizing the significance of effective communication in today's competitive job market.	Suleman, N., Admani, A., Rahima, R., Ali, S. S., & Sami, A. (2022).
Career Adaptability Skills on the Overall Graduate Employability (OGE)	Supported	Graduates with strong career adaptability skills are better equipped to navigate the dynamic and often unpredictable job market. They can adjust to changes in industry demands, technology, and economic conditions, thereby enhancing their overall employability.	Aliu, J., & Aigbavboa, C. O. (2021)
Team Work Skills on the Overall Graduate Employability (OGE)	Supported	Teamwork skills significantly impact graduates' overall employability by enhancing problem-solving abilities, and leadership potential, promoting cultural sensitivity and diversity management, increasing productivity and efficiency, and creating a positive work environment. Fostering these skills among postgraduate students can lead to positive outcomes for both individuals and the organizations they serve.	Suleman, N., Admani, A., Rahima, R., Ali, S. S., & Sami, A. (2022).
Emotional Intelligence Skills on the Overall Graduate Employability (OGE)	Supported	The impact of emotional intelligence (EI) skills on overall graduate employability (OGE) is significant as EI is essential for successful interpersonal relationships, effective leadership, and overall success in the workplace.	Thwe, S. B. M. (2018)
Self-Efficacy Skills on the Overall Graduate	Supported	Graduates who possess high levels of self-efficacy are more likely to approach career development and job search activities with confidence and initiative. They have faith in	Suleman, N., Admani, A., Rahima, R., Ali, S. S., &



Employability (OGE)		their capacity to pick up new skills, overcome obstacles, and realize their career objectives, which will enable them to take advantage of professional opportunities and become more employable.	Sami, A. (2022).
Work Ethics Skills on the Overall Graduate Employability (OGE)	Supported	Work ethics are essential in determining a graduate's overall employability because they affect their performance on the job, opportunities for career advancement, and the long-term viability of their career. Developing these abilities in postgraduate students can benefit the individuals as well as the organizations they work for.	Thwe, S. B. M. (2018)
Information Technology Skills on the Overall Graduate Employability (OGE)	Not-Supported	Employers may prioritize other skills and competencies over IT skills when assessing candidates for employment. This could indicate a shift in job requirements towards non-technical attributes such as soft skills, industry-specific knowledge, or domain expertise.	Netragaonkar, Y. D, 2021

This suggests that the requirements for jobs are changing to include a wider range of qualities that enhance employability overall.

### **8.2.5 Implications of Level of Skillset imparted by the Faculty and Acquired by the Students**

The replies from professors at Punjab's Post Graduate Management Institutes have various ramifications for how skills are prioritised for Overall Graduate Employability (OGE). First on the list of most important skills for graduates is communication, which is not surprising given its critical role in successful idea sharing, teamwork, and employment. The second-ranked category, work ethics, focuses on how a graduate's employability can be improved by having a strong moral compass and professional integrity. Third-placed self-efficacy emphasises how much emphasis is placed on graduates' self-assurance and initiative when taking on career-development tasks.

Fourth on the list, teamwork skills are valued but not as highly as self-efficacy, communication, and work ethics. The faculty does not place as much emphasis on emotional intelligence (ranked fifth) or career adaptability (ranked sixth), even though these abilities are critical for managing relationships with others and adjusting to changing circumstances. The fact that information technology skills came in last shows that, even with their technical proficiency, faculty members think that other non-technical skills are more important for ensuring that graduates succeed in the workforce.

The replies from students at Punjab's Post Graduate Management Institutes have various implications for how skills should be prioritized for Overall Graduate Employability (OGE). Students' top ranking of self-efficacy highlights how important confidence and initiative are to them when it comes to career development tasks. The fact that emotional intelligence and career adaptability skills are ranked second and third, respectively, shows how important it is for students to be able to manage relationships with others and adjust to changing circumstances. Students rank communication skills fourth, despite faculty ranking them first, indicating a difference in opinions about how important they are right now. Teamwork and work ethics come in second and third, respectively, suggesting that although students value these abilities, they are not their top priorities. Students and faculty alike ranked information technology skills last, indicating a consensus that technical proficiency is not as important as other skills in securing graduates' success in the workforce. This alignment suggests that, when considering employability overall, IT skills are viewed as having a relatively lower priority.

### 8.2.6 Implications of Gap found amongst Industry Recruiters, Faculty members and Students.

**Table 8.2.2 Gap Analysis**

Skill Set	Industry		Faculty		Students		Industry	Faculty	Industry
	Mean	Rank	Mean	Rank	Mean	Rank	GAP (Independent t-test)		
Communication	3.24	5	3.38	3	3.46	2	No	No	Yes
Career-	3.45	6	3.15	7	3.47	1	Yes	Yes	Yes

Team Work	3.68	2	3.26	4	3.44	3	Yes	No	No
Emotional	2.88	7	3.22	5	3.43	5	Yes	No	No
Work Ethics	3.70	1	3.30	1	3.43	6	Yes	Yes	Yes
Self-Efficacy	3.59	4	3.29	2	3.44	4	Yes	Yes	Yes
Information	3.62	3	2.95	6	3.42	7	Yes	Yes	Yes

Table 8.2.2 Shows the Gap analysis between Industry Expectations and Faculty members based on the independent t-test results as per their responses.

<b>Table 8.2.2 Gap Between Industry Expectations and Skill imparted by the Faculty to the Post Graduate Management Students in Punjab</b>				
<b>Hypothesis</b>	<b>RESULT</b>	<b>Findings GAP</b>	<b>IMPLICATION</b>	<b>PAST LITERATURE SUPPORT</b>
H0 <sub>2.1</sub> : There is no significant gap between the level of Communication skills imparted by Faculty members and the industry expectations.	Accepted	NO	It suggests that the existing curriculum sufficiently equips students with the necessary communication skills for the industry. As they are considered very important by the industry and are considered before giving employment to the Graduates, The HIE must continue to focus on the development of communication skills amongst them.	Gunaratne, N., Senaratne, S., & Herath, R. (2021).
H0 <sub>2.2</sub> : There is no significant gap between the level of Career Adaptability skills imparted by Faculty members and the industry expectations.	Rejected	YES	There is a significant gap between the skills taught and industry expectations as far as career Adaptability Skills are considered. Faculty members may need to revise their curriculum to better prepare students for the career adaptability	Atitsogbe, K. A., Mama, N. P., Sovet, L., Pari, P., & Rossier, J. (2019).

			skills required in the industry. The industry is dynamic and expects employees to shift their job roles if required. Considering the same, HIE must focus on this skill.	
H0 <sub>2.3</sub> : There is no significant gap between the level of Team Work skills imparted by Faculty members and the industry expectations.	Rejected	YES	There is a significant gap between the skills taught and industry expectations for Team Work Skills. Faculty members might find it necessary to adjust their curriculum or pedagogy to equip students more effectively with the teamwork skills needed in the industry. This is the most important skills when they have to perform in a group at workplace.	Zeidan, S., & Bishnoi, M. M. (2020).
H0 <sub>2.4</sub> : There is no significant gap between the level of Emotional Intelligence skills imparted by Faculty members and the industry expectations.	Rejected	YES	Recognizing the pivotal role of emotional intelligence skills in professional success, faculty members may need to revise their curriculum to ensure students are well-prepared to navigate the complexities of the industry, fostering stronger interpersonal relationships, effective communication, and adaptive problem-solving abilities.	Khan, U. (2019)

<p>H02.5: There is no significant gap between the level of Work Ethics skills imparted by Faculty members and the industry expectations.</p>	<p>Rejected</p>	<p>YES</p>	<p>The significant disparity between the skills taught and the industry standards emphasized the need for curriculum adjustments. Faculty members should think about improving their teaching strategies to better instill the essential work ethics skills required for success in professional settings. This adaptation is critical for developing qualities such as professionalism, integrity, and accountability in students, thereby improving their readiness for the realities of the workplace.</p>	<p>Aggarwal, P. (2021)</p>
<p>H02.6: There is no significant gap between the level of Self-Efficacy skills imparted by Faculty members and the industry expectations.</p>	<p>Rejected</p>	<p>YES</p>	<p>The clear disparity between the skills taught in schools and those demanded by industry highlights the need for curriculum refinement. Faculty members may need to update their instructional approach to ensure that students are adequately equipped with the essential self-efficacy skills required for professional success. This adaptation is critical for developing students' confidence,</p>	<p>Aggarwal, P. (2021)</p>

			resilience, and proactive problem-solving abilities, thereby increasing their readiness to face real-world challenges in their future careers.	
H02.7: There is no significant gap between the level of Information technology skills imparted by Faculty members and the industry expectations.	Rejected	YES	The apparent gap between the skills taught and the industry standards indicates that the Industry does not consider this skill to have an impact on the employability of the Graduates of Management Studies lying more emphasis on Soft Skills.	Jaykumar, P. (2018)

It seems that the current curriculum successfully gives students the essential communication skills that employers highly value. This suggests that for Higher Education Institutions (HEIs) to successfully meet industry demands, they should keep putting a strong emphasis on helping students develop their communication skills. The expectations of the industry and the skills that are taught, however, differ noticeably, especially when it comes to collaboration and career flexibility. These differences imply that the curriculum may need to be revised to better meet the needs of the industry. It is essential to be able to adjust to new roles and responsibilities because many industries are dynamic. To guarantee that students can successfully navigate changing job markets, HEIs should place a high priority on developing their career adaptability skills. In a similar vein, collaboration abilities are critical for success in work settings, but there appears to be a disconnect between industry standards and classroom instruction. Teachers may need to reconsider how they teach and what they cover to give students the tools they need to collaborate effectively in the workplace. Furthermore, emotional intelligence influences problem-solving, interpersonal interactions, and communication effectiveness, all of which are critical to professional success. Higher education institutions ought to think about modifying their curricula to

give students better emotional intelligence skills so they can handle the industry's complexities. Furthermore, the curriculum needs to be modified to address the differences in work ethics and self-efficacy abilities. HEIs should concentrate on developing in their students the professionalism, integrity, accountability, confidence, resilience, and proactive problem-solving skills that are essential for success in professional settings. Even though the industry might place more value on soft skills than on technical proficiencies like information technology, curriculum development is crucial to guaranteeing graduates have a diverse range of skills. Through increased employability and preparedness to take on real-world challenges in their future careers, this approach will better prepare students for the realities of the workforce.

*Table 8.2.3* Shows the Gap Between the level of skills imparted by Faculty members and the level of skill set acquired by the students as per the results of Independent T-test based on their responses

<b>Table 8.2.3 Gap Between the level of skills imparted by Faculty members and the level of skill set acquired by the students</b>				
<b>Hypothesis</b>	<b>RESULT</b>	<b>Findings GAP</b>	<b>IMPLICATION</b>	<b>Past Literature</b>
H0 <sub>3.1</sub> : There is no significant gap between the level of Communication skills imparted by Faculty members and the level of skill set acquired by the students	Accepted	NO	There is no evidence to suggest a difference between the communication skills taught and the skills acquired by the students. In other words, the current curriculum seems to be effective in teaching communication skills. This proficiency in communication is vital as it forms the cornerstone of effective collaboration, problem-solving, and professional interaction in various personal and professional settings.	Hodge, K. A., & Lear, J. L. (2011)

<p>HO 3.2: There is no significant gap between the level of Career Adaptability skills imparted by Faculty members and the level of skill set acquired by the students</p>	<p>Rejected</p>	<p>YES</p>	<p>The rejection of the hypothesis that there is no significant gap between the level of Career Adaptability skills imparted by faculty members and the level of skill set acquired by the students indicates the presence of such a disparity. Therefore, it suggests that there is indeed a notable gap between the skills taught and those acquired by the students. This underscores the need for faculty members to explore and implement strategies to enhance the effectiveness of teaching career adaptability skills, ensuring that students are better equipped to navigate the complexities of their future careers.</p>	<p>DaCosta, J. W. (2010)</p>
<p>HO 3.3: There is no significant gap between the level of Team Work skills imparted by Faculty members and the level of skill set acquired by the students</p>	<p>Accepted</p>	<p>NO</p>	<p>Since the hypothesis that there is no significant gap between the level of Team Work skills imparted by faculty members and the level of skill set acquired by the students was accepted, it suggests that the current curriculum is indeed adequately preparing students in teamwork skills. This implies that the teaching methods and content are effective in equipping students with the necessary collaborative abilities required for success in their future endeavors.</p>	<p>Hodge, K. A., &amp; Lear, J. L. (2011)</p>



<p>H0 3.4: There is no significant gap between the level of Emotional Intelligence skills imparted by Faculty members and the level of skill set acquired by the students.</p>	<p>Accepted</p>	<p>NO</p>	<p>Emotional intelligence development is an area that requires attention from both faculty members and students. The level of emotional intelligence skills imparted and acquired, by both can better prepare students for success in their academic and professional pursuits, though there exist. Though there is no gap, HIE must continue developing emotional intelligence skills that can lead to better interpersonal relationships, enhanced self-awareness, and improved mental health and well-being</p>	<p>DaCosta, J. W. (2010)</p>
<p>H0 3.5: There is no significant gap between the level of Work Ethics skills imparted by Faculty members and the level of skill set acquired by the students.</p>	<p>Rejected</p>	<p>YES</p>	<p>The rejection of the hypothesis that there is no significant gap between the level of Work Ethics skills imparted by faculty members and the level of skill set acquired by the students implies the existence of such a disparity. Therefore, it suggests that there is indeed a notable gap between the skills taught and those acquired by the students in terms of work ethics. This indicates a potential area for improvement in the curriculum, prompting faculty members to explore strategies to enhance the effectiveness of teaching work ethic skills, ensuring that students are better prepared for the ethical challenges they may encounter in their future careers.</p>	<p>Hodge, K. A., &amp; Lear, J. L. (2011)</p>

H03.6: There is no significant gap between the level of Self-Efficacy skills imparted by Faculty members and the level of skill set acquired by the students.	Rejected	YES	Self-efficacy skills are an area that requires attention from both faculty members and students. By working together to close the gap between the level of self-efficacy skills imparted and acquired, both parties can better prepare students for success in their future careers, where self-efficacy and confidence are essential. Additionally, developing self-efficacy skills can lead to improved self-esteem, motivation, and resilience, which can positively impact personal and professional success.	DaCosta, J. W. (2010)
H0 3..7: There is no significant gap between the level of Information Technology skills imparted by Faculty members and the level of skill set acquired by the students.	Rejected	YES	There is indeed a notable disparity between the skills taught and those acquired by the students in terms of self-efficacy. By continuing to refine teaching methods and engaging in opportunities to practice using technology, both faculty members and students can further enhance their IT skills and better prepare themselves for success in their future careers. Additionally, having strong IT skills can lead to increased efficiency, productivity, and competitiveness in the job market.	Hodge, K. A., & Lear, J. L. (2011)

The evaluation provides numerous important insights into how well the curriculum prepares students for the skills they will need for their future employment. The first indication is that the curriculum appears to be successful in imparting communication skills, which are essential for productive teamwork, problem-solving, and business interactions. Students need to be able to communicate effectively in order to navigate a

variety of personal and professional settings. Significant gaps are also shown by the analysis in other skill areas, such as self-efficacy, work ethics, and career adaptability. These discrepancies imply that students may not be sufficiently prepared by the current curriculum for the complexity and difficulties they will face in the workplace. The fact that the career adaptability skills hypothesis was rejected suggests that there is, in fact, a significant discrepancy between the skills that are taught and the skills that students acquire. To ensure that students are better prepared to navigate the dynamic nature of their future careers, faculty members must investigate and put into practice strategies to improve the effectiveness of teaching career adaptability skills. In a similar vein, the denial of the work ethics skills hypothesis implies that there is a gap in this domain as well. To better prepare students for the ethical dilemmas they may face in the workplace, faculty members should investigate ways to improve the efficacy of work ethic instruction. Moreover, the analysis indicates that there may be a gap between the level of skills taught and learned, so self-efficacy skills also need to be prioritized. Collaboratively, educators and learners can enhance students' readiness for future professions, where self-assurance and self-efficacy are critical. Furthermore, enhancing one's self-efficacy abilities can result in increased resilience, drive, and self-worth—all of which have a favorable effect on one's ability to succeed both personally and professionally.

*Table 8.2.4* Show Shows the Gap Between the Industry Expectations and the level of skill set acquired by the students as per the results of the Independent T-test based on their responses.

<b>Table 8.2.4 Gap Between Industry Expectations and Skill acquired by the students to the Post Graduate Management Students in Punjab</b>				
<b>Hypothesis</b>	<b>results</b>	<b>Findings (GAP)</b>	<b>IMPLICATION</b>	

H0 <sub>4.1</sub> : There is no significant gap between the level of Communication skills acquired by the students and Industry expectations	Rejected	YES	This suggests that students may require additional development in communication skills to excel in their careers. Strengthening these skills can better equip students to effectively convey ideas, collaborate with colleagues, and navigate professional interactions, ultimately enhancing their prospects for success in the workplace.	Lisá, E., Hannelová, K., & Newman, D. (2019)
H0 <sub>4.2</sub> : There is no significant gap between the level of Career Adaptability skills acquired by the students and industry expectations	Rejected	YES	This underscores the necessity to enhance the curriculum to better prepare students for the dynamic nature of the job market. By doing so, students can develop the agility, resilience, and versatility necessary to thrive amidst evolving industry demands and secure fulfilling career opportunities.	Atitsogbe, K. A., Mama, N. P., Sovet, L., Pari, P., & Rossier, J. (2019).
H0 <sub>4.3</sub> : There is no significant gap between the level of Team Work skills acquired by the students and industry expectations.	Accepted	NO	Since the hypothesis stating that there is no significant gap between the level of Teamwork skills acquired by students and industry expectations was accepted, it implies that the current curriculum is effectively preparing students in teamwork skills according to industry standards. This suggests that the teaching methods and content are successful in equipping students with the collaborative abilities required for success in their future careers.	Lisá, E., Hannelová, K., & Newman, D. (2019)

<p>H0<sub>4.4</sub>: There is no significant gap between the level of Emotional Intelligence skills acquired by the students and industry expectations.</p>	<p>Accepted</p>	<p>NO</p>	<p>With the acceptance of the hypothesis that there is no significant gap between the level of Emotional Intelligence skills acquired by students and industry expectations, it suggests that the current curriculum is indeed adequately preparing students in emotional intelligence skills according to industry standards. This indicates that the teaching methods and content are effective in equipping students with the necessary emotional intelligence competencies essential for navigating diverse personal and professional situations.</p>	<p>Waller, A. D. (2008)</p>
<p>H0<sub>4.5</sub>: There is no significant gap between the level of Work Ethics skills acquired by the students and industry expectations.</p>	<p>Rejected</p>	<p>YES</p>	<p>The level of Work Ethics skills acquired by students and industry expectations indicates the presence of such a gap. Therefore, it suggests that there is indeed a notable disparity between the skills students are acquiring and what employers seek in terms of work ethic. This underscores the necessity to revisit the curriculum and explore ways to better equip students with the work ethic valued in the professional world. By doing so, students can develop the integrity, reliability, and diligence necessary to excel in their careers and meet the expectations of employers.</p>	<p>Lisá, E., Hannelová, K., &amp; Newman, D. (2019)</p>

H0 <sub>4.6</sub> : There is no significant gap between the level of Self-Efficacy skills acquired by the students and industry expectations.	Rejected	YES	There is no significant gap between the level of Self-Efficacy skills acquired by students and industry expectations indicates the presence of such a gap. Therefore, it suggests that there is indeed a notable disparity between the skills students are acquiring and what employers seek in terms of self-efficacy. This underscores the need to incorporate strategies into the curriculum to develop students' self-efficacy. By doing so, students can cultivate the confidence, resilience, and proactive mindset needed to navigate challenges and excel in their future careers.	Makki, B. I., Salleh, R., Memon, M. A., & Harun, H. (2015)
H0 <sub>4.7</sub> : There is no significant gap between the level of Information Technology skills acquired by the students and industry expectations.	Rejected	YES	This highlights the necessity to update the curriculum to ensure students graduate with the latest IT skills relevant to their field. By doing so, students can better meet the evolving demands of the industry and enhance their employability in the rapidly advancing technological landscape.	Senik, R., Broad, M., Mat, N., & Kadir, S. A. (2013).

The idea that students might need more practice developing their communication skills emphasizes how crucial it is for them to keep getting better at this. To guarantee that students are competent in communicating concepts, working together efficiently, and navigating professional interactions, educational institutions ought to think about incorporating communication skill development into the curriculum. Improving students' communication abilities will increase their chances of success in a variety of social and professional contexts. The importance of adaptability in today's workforce is highlighted by the need to improve the curriculum to better prepare students for the

dynamic nature of the job market. To prosper in the face of changing industry demands, educational institutions should concentrate on helping students develop their agility, resilience, and versatility. Students who incorporate strategies to improve their career adaptability skills will be better equipped to secure fulfilling opportunities and navigate the uncertainties of their future careers. The hypothesis regarding teamwork skills is accepted, indicating that students are adequately prepared in this area by the current curriculum. Still, given that most professional settings revolve around collaboration, teamwork skills must be continuously emphasized. Institutions of higher learning should keep encouraging collaborative skills to make sure students are prepared for success in the workplace.

The recognition that the current curriculum provides students with sufficient emotional intelligence skills preparation points to the efficacy of the content and teaching strategies currently in use. However, continued improvement in emotional intelligence is still necessary because it is essential for handling a variety of personal and professional circumstances. Establishments of higher learning should keep developing emotional intelligence skills in order to better prepare their students for the intricacies of the workforce. Students' and industry expectations' demands highlight the necessity of rewriting the curriculum. Institutions of higher learning should look into how to better prepare students for the kind of work ethic that employers value in employees, emphasising the development of traits like honesty, dependability, and diligence. Strong work ethics help students succeed in the workplace and live up to employer expectations.

The recognition of a discrepancy between students' attained levels of self-efficacy skills and industry standards highlights the significance of fostering students' self-assurance, adaptability, and proactive outlook. It is recommended that educational institutions integrate strategies into their curricula to foster self-efficacy, which will empower students to overcome obstacles and achieve professional success. It is imperative that curricula be updated to guarantee that students graduate with the most recent IT skills applicable to their field, underscoring the significance of keeping up with technological developments. The incorporation of pertinent IT skills into the curriculum ought to be given top priority by educational establishments in order to improve students' employability in the quickly changing technological environment.

### **8.3. RECOMMENDATIONS**

Efforts must be made in ensuring employability and bridging the gap between academia and industry. Therefore, the need for collaboration between academia and Industry has been focused and demanded. This integration has relatively become a catchword, and the continued variances between these have been revealed by many researchers that implying a scope to reinforce this integration. So, to ensure that the employable graduates are available, for the same employers need to make their association stronger with the Universities and institutes the postgraduate level of management degrees considering faculty and the students. Such a collaboration is a must all over institutions may it be government, or self-financed private institutes or colleges that are spread across all the districts of Punjab. Also, such a coalition should extend across all the categories of educational organizations. A stable and consistent contact with HEIs done with eloquent initiatives would guarantee their awareness about the fluctuating demands and the opportunities for the graduates. As the unemployment rate is increasing in the state of Punjab, and the issue of skill development is being addressed at all the levels from the higher Education institutes to the state and central government by the means of developing the policies at all these levels. Industry wants educated and employable students or even students who are prepared for the workforce. Although there is a large supply of management graduates now, the sector is having trouble locating the suitable applicant. To reduce this gap the students should also be proactive to upskill themselves beyond what is being taught in the classrooms. This necessitates the requirement for a benchmark based on standard industry practice. The amount of expertise required for various positions varies, and job prospects in businesses depend on their size, market, and product. This could involve finding internships, workshops that play an important role in supplementing their Higher Education and gain the practical knowledge that will help to gain and sustain a position in the labor market. In case of Certain skills, the HEIs should continue to prioritize and invest in the development of such skills as there is no gap that is found between the industry expectations and the faculty members.

The Skill development has been a major concern for all. The HIEs are now focusing on developing the curriculum, pedagogies, focusing on OBE framework, Blooms



Taxonomy, Experiential Learning, participative learning with the aim of making a child competent. There is need of revisions in the curriculum or syllabi and the Faculty Development Programs (FDPs) to make sure that the skills taught line up with the requirements and the needs of the Employers of the Industry. The faculty members must be trained adequately and equipped to upskill their graduates. This has become very important. The values and skills an institute is able to inculcate not only increases the value of their students in the labour market but also their own quality and rankings. But there was a question that has arisen and that has guided to take up this study, that during the process of skill development, where actually lies the gap. Possibly between industry expectations or the skills imparted by the faculty, skills imparted by the faculty and skills acquired by the students or Industry expectations or skills acquired by the students.

Higher education institutions should incorporate knowledge and practical base programmes into their curricula by looking for opportunities to promote skill-based and realistic knowledge experience sharing by implanting new skill techniques in order to improve job-oriented skill-based education. Educational institutions should assess current capacity and determine the necessary needs. To change the learning policy and strategy, higher education institutions should create partnerships and interference programmes with Multinational Corporations, Educational Institutes, skill assessment organizations, and industries. To close the skills gap, all higher education institutions should conduct supply and demand analyses for the job-oriented, skill-based education. The involvement and participation of understanding will move to establish planning and strategies for bridging the skill gap, therefore it is extremely wise to locate the right partners from industry, academia, government organizations, agencies, and public organizations. Students and faculty can develop training-oriented assessments and knowledge-building processes with the use of smart technology. Employers, educators, academics, and policymakers are all obligated to pay attention to the skills gap, as must students, everywhere.

Colleges and higher education institutions should work to give students options for the best path for their career development. Traditional liberal arts core curriculum may be discussed notwithstanding the normal curriculum because many employers value the

development of critical and strategic thinking skills. All institutions of higher learning work hard to give students access to high-quality instruction and job placement possibilities. Numerous vocational programmes with a focus on practical experience and skill training, as well as industrial academic background, will be the essential prerequisite for emerging job opening problems. Due to the current skill gap, it is necessary to change the course curriculum to include enough possibilities for student training, among other things. By taking into account the difference in the means of responses from graduates and employers, an independent t-test is used to analyse the discrepancy between the student's perceived skill and the employer's expected skill. The firm has high standards for all talents across all industries, and the graduate's mean score falls short of those standards.

Both policymakers and the industry and educational institutions are extremely concerned about the graduate employability skill gap among Indian graduates and the necessity for an early, widespread remedial action to boost graduates' employability abilities. Should Indian corporations use competition to assert their rightful share of the global markets, this is crucial. Graduates from India are deemed to possess significantly insufficient employability abilities. These include interpersonal skills and fundamental workplace abilities, such as spoken English, ethics, and teamwork. Overall, the study's findings show that the impact of a student's perceived skill level on their employability differs from the required skill sets from other industry sectors.

The employers must also take the initiatives to bridge the skill gap between the students and industry. The industry must work together with the neighborhood schools to offer educational opportunities that will help youngsters improve employment skills. Future studies should focus on a bigger population that includes employers from diverse industries, employers from other Indian states, and graduates from both public and private colleges. A sufficient sample should be collected for the investigation over a longer period. They have identified technology management skills as a critical skill set considering the industry's rapid volatility and constant technological advancement.

There is a strong need to design the curriculum and align the teaching and learning methodologies that focus on both technical and non-technical knowledge and skill areas rather than a sole thrust of building technical expertise of the graduates, which is

primarily dictated by the curriculum. Higher education institutions are the breeding grounds for graduate employability. In addition, students should become autonomous learners and take the initiative to participate in seminars, training and development programmes, and other related activities that aim to sharpen their abilities, especially considering the limited resources provided by higher education institutions. Academic institutions that provide higher education must periodically assess the graduates' employability skills, the course offerings must be reassessed, with a particular emphasis on employability skills.

The responsibility for fine-tuning the employable skills needed by the corporation rests with the management institute. When structuring the curriculum and matching it to the expectations of the corporate world for employability skills, industry and academia should have a common understanding. In certain institutions, the traditional approach to teaching and learning has given way to a focus on skill development. To ensure increased employment prospects, management education must mix both theoretical and skill-based education. Both employment opportunities and ability enhancement information must be included in the curriculum for an employability skill enhancement programme. The major goal of choosing candidates with a variety of skill sets is that they can switch between different Job profiles, preventing a work stoppage due to a lack of personnel. Corporate Managers may be assigned to the governing boards of management institutes, ensuring active industry participation in discussions about improving the employability skills of the students and resulting in successful placement. In cooperation with industry, a variety of business competitions must be held in management institutes. There is an urgent need for higher education institutions to develop training and development programmes that emphasis students' logical and intellectual skills, encourage professors to advance their knowledge so that they can teach students, provide enough resources for computing updates, and coordinate the pace of curriculum change in relation to technological change.

Employability skills should be included in the ability enhancement programme, and both hard and soft skills should be instilled through an integrated curriculum. A student who possesses these varied skill sets is more likely to meet corporate expectations and get decent employment. The corporate-recommended employability skills should be the

focus of management education. The management institutions should take a significant part in coordinating the activities of business and academia to prepare students for better employment opportunities. The function of management institutes should be strengthened with skill-based coursework and self-adoption to make progress in the direction of employability. The programmes, curricula, approaches, and training at management schools must be revised in order to produce the industry-expected professionals of the future. Students' expectations may be brought into alignment with actual market circumstances by integrating on-the-job training inside a learning setting. The management institute has to work with local businesses to create an ongoing, integrated learning process.

The impact of the faculty's overall workload and its impact on faculty accessibility to students should be considered by management institutes. The management institutes' faculty members made an effort to include employable skills into the material they taught, but no special effort was made to do so across the whole curriculum. Numerous faculties have developed curricula that do not actually allow us to integrate employment skills. As part of the career advice process, graduates can be given access to measuring tools that evaluate their employability potential.

These recommendations could be put into practice to assist graduate students in becoming career-ready and prepared for the difficulties of a global environment. Some recommendations call on the academic staff of the institutions to employ a variety of teaching techniques in addition to standard lecturing. It shows that these abilities might be improved by giving students access to the right training, internships, and extracurricular activities. This effort should be coordinated on the part of both the student and the institution, and the result will be the best human talent. The students should receive good assistance in choosing their professional path, and if they don't, they should take assessment exams to discover their true potential and find the field that will suit them. To help its graduates, educational institutions must develop and implement the necessary programmes or initiatives (such as internships, industrial partnerships, etc.). Students can be given the duties that are similar to those done by employees in those environments by setting up the classroom to mirror essential aspects of real-world work situations. It's essential to provide high-quality training through

professional organizations. Together, the institution and business should invest in an excellence center where students would receive industry-based education. To exchange novel teaching and learning techniques, management institutes should work with overseas institutions. Given that recent research has shed light on the seriousness of the situation, this should be brought to the attention of policymakers and regulators so that appropriate action may be taken. If corrective action is not done, this will hurt how well the talent supply chain operates and is a problem. Many higher education institutions are moving in the direction of emphasizing soft skills, but there is still a gap that shows it is vital to develop these talents at the appropriate competency level rather than just on the surface.

#### **8.4. CONTRIBUTION OF STUDY**

The study's conclusions have wide-ranging effects on many stakeholders, offering specific advantages and insights to each group. The research provides a roadmap for higher education institutions, the corporate sector, government policymakers, faculty members, and students to improve employability and align with industry expectations by addressing the specific needs and skill gaps of the following beneficiaries:

##### **8.4.1 Higher Education Institutes (HEIs)**

Higher Education Institutes (HEIs) that offer postgraduate management degrees, like MBA or PGDM programs, can benefit greatly from the study's insightful recommendations on how to match their curricula with business demands. They can use the study as a guide to make sure their academic programs match industry demands and that graduates have the skills that employers are looking for. It helps them maintain current curricula and attract more students with degrees by providing insights into industry skill demands. Academic administrators can effectively address and shorten employment gaps by selecting training courses that align with the industry's essential skills. Through employer partnerships, industry trends analysis, emerging technology integration, and comparative analysis, the study plays a vital role in closing the skills gap that exists between graduates and industry requirements. Furthermore, educating students about the needs of the industry promotes proactive skill development and well-

informed decision-making, which enhances employability and draws more applicants to academic programmes.

#### **8.4.2 Faculty Members**

The study helps faculty members by providing them with direction on how to identify and acquire new skills and areas that are in demand by the industry. It provides insightful information about new business trends and difficulties, which helps faculty research and possible industry partnerships. This enables them to give priority to the creation of programmes, curricula, and instructional strategies that are pertinent to the particular skill sets required by employers. Faculty research agendas are informed by the study, allowing them to carry out research that tackles contemporary problems and presents novel solutions. This increases the relevance of academic research to industry needs and creates opportunities for partnerships with businesses. Thus, by coordinating their research and expertise with industry demands, faculty members can support economic growth and help prepare students for the workforce. Faculty members can guarantee that their students are prepared to face the demands of the contemporary workplace by developing curriculum that is specifically tailored to the needs of the students and by encouraging critical abilities like communication, teamwork, and emotional intelligence.

#### **8.4.3 Students of Post Graduate Management Institutes**

This study gives students important insights into the skills that employers value, which helps them make informed decisions about their education and careers. It improves their employability and career advancement prospects by promoting concentrated learning and skill acquisition, raising the possibility of employment by matching their skill sets with industry demands. Equipped with this knowledge, students can choose their courses of study and areas of specialization to suit the needs of the industry and make well-informed decisions about their academic and career pathways. Their employability and prospects for career advancement are improved by this alignment. The study drives students to acquire competencies highly valued by employers by highlighting the significance of targeted learning and skill development. Students can improve their

chances of landing a job and building lucrative careers in their chosen fields by matching their skill sets with industry demands.

#### **8.4.4 Industry and Corporate**

Employers visiting these campuses can gain valuable insights from the study by understanding the employers' overall perspective. With this knowledge, the sector can improve its hiring and selection practices to better meet industry standards and draw in candidates with the appropriate skill sets. Through comprehension of the requirements employers have during campus visits in Punjab, businesses can improve their recruitment and selection processes to conform to industry norms. By helping to create hiring procedures that draw applicants with the appropriate skill sets, the research helps to better match industry demands with academic curricula. This helps companies find talent that supports their organizational goals and increases the employability of graduates. By fostering a collaborative relationship between the industry and business management education institutions, the study makes sure that curricula, course content, and pedagogical innovations adapt to the ever-changing trends and dynamic job market. This alignment fosters comprehension and collaboration in workforce development and talent acquisition between academia and business.

#### **8.4.5 Government and Other Stake Holders**

The study offers a basis for developing workforce development policies and programs that effectively address issues of underemployment and unemployment for policymakers and other stakeholders. Furthermore, strategic policy-making, helps institutions such as the Punjab Skill Development Mission (PSDM) to take a targeted approach to skill development and close the employment-education gap. The government and other interested parties can use the study as a guide when creating and drafting policies about higher education. It offers information about the employability of MBA programs in Punjab, which is useful in forming policy frameworks and curriculum designs that promote workforce development. Policymakers can more successfully combat underemployment and unemployment by determining the particular skills that industries require as well as the gaps in the skill sets that exist today. Organizations like the Punjab Skill Development Mission (PSDM), for example,

can strategically focus their skill development efforts thanks to the research. PSDM can maximize the impact of their interventions and use strategic policymaking to close the employment and education gaps by coordinating their policies and programs with the study's findings.



# **Chapter-9**

## **Conclusion, Limitations and Future Scope**

## **CHAPTER 9**

### **CONCLUSION, LIMITATIONS, AND FUTURE SCOPE**

In this last chapter, we summarise our results, point out the limitations of the study, and suggest directions for further investigation. It is crucial that, as we come to an end to this study, we consider its accomplishments as well as its limitations and suggest future directions for research in this area.

#### **9.1. CONCLUSION**

The "employability gap," which has attracted much attention and is a significant concern for both academics and industry, is the foundation of the current study. This gap must now be fastened if organizations are to succeed, graduates are to develop, and the economy as a whole is to advance. This research has started with the aim of identifying the antecedents of employability and later analyzed the perceptual differences among the key stakeholders on the significance of these factors that widen the employability gap, with a focus on Punjab state, the field of study, that has been seriously wedged by the problem of employability gap. To compare the study's results with the goals and intentions that essentially drove it, these findings have been rationally connected with the main research goals. To address the research goals, the results are discussed in the following subsections. The previous chapters have covered the goals and objectives of this study, the research design used, the methodology, and the outcomes of the data analysis. In this last chapter, the study's findings are triangulated, the objectives are reviewed, and conclusions are drawn. Additionally, suggestions based on these findings have been offered. Finally, the research's limitations and its potential application have been outlined. One of the main assumptions of this research is the analysis of graduate employability and its consequent impact on the employability gap. Therefore, as envisioned in the first objective, it becomes important to identify the variables that affect graduate employability at the outset.

Even though the research constructs used in this study were mostly taken from the literature, a preliminary validation and an examination of how they interacted gave rise

to the research hypotheses and conceptual model. The conceptual research framework has been created and empirically confirmed utilizing Confirmatory Factor analysis methodologies, as intended in the first objective. This validation has been done from the point of view of the Employers. The analysis found a gap between the labor that is now available and the industry's expectations. Analysis of the variation in each skill's average concerning personal and academic criteria is done, and its effects on the employability gap for management graduates are observed. The study is distinctive because it includes an instrument to test employability abilities. The study was carried out with the main objective to find the gap amongst the industry expectations and the delivery of those skills to the students. As per the results from the studies, three categories of respondents ranked the skills in three different ways, that are evaluated by using the factor wise mean score comparisons. The ranking was different as per the industry, faculty and the students. As per the industry, Work ethics, Team Work and the last rank given to Emotional Intelligence. On the other hand, as per the faculty rankings communication stands the first, followed by work ethics with not much difference in the mean scores of the industry and faculty. Information Technology is ranked at the last place by the faculty as compared to third place by the industry. As per the students' responses self-efficacy was at the first place, followed by emotional intelligence, the last rank is same as the ranking by the faculty that is at the last place. Both the students and faculty has given the last preference to the Information and Technology Skills. As, per many recruiters' communication skills is also considered very important at the time of interview but as per the total average it is being ranked at the sixth place out of seven contrasting to the faculty who has given the first rank to the communication skills.

Everyone involved in the education ecosystem must work together to close the employability gap. The development of skills that industry stakeholders have deemed essential must be given top priority by management institutes. To encourage the development and application of skills, this calls for the implementation of specialised curricular interventions, opportunities for experiential learning, and industry partnerships. Furthermore, continuous communication and cooperation between academia and business are essential to guarantee alignment with changing labour needs. Through the utilisation of gap analysis insights and a comprehensive approach to skill

development, stakeholders can work together to improve the employability of graduates and produce favourable results for employers and students.

## **9.2. LIMITATIONS OF STUDY**

The study's limitation of its subject area to Punjab makes it difficult to generalize its findings to the entire country. While the knowledge acquired is useful in the Punjabi context, it might not be transferable to other areas with different socioeconomic, cultural, and educational environments. This limitation emphasises the need for future research projects to cover a wider geographic area in order to provide a more nuanced understanding of skill development and employability in a variety of national contexts. Furthermore, the study's emphasis on evaluating general skill gaps ignores the subtle differences in skill requirements among various kinds of colleges and universities. Because every school is different in terms of its emphasis, curriculum, and student body, developing skills requires customised methods. By ignoring this factor, the study creates a significant vacuum in our knowledge of the particular skill sets required in different educational contexts, which calls for more research to guide focused interventions and tactics.

Although the study does a good job of identifying current skill gaps, it does not offer any specific solutions. Reducing the disparity between the skills graduates possess and the skills employers demand calls for proactive actions and interventions. Thus, in addition to diagnosing skill gaps, future research projects should investigate practical tactics and interventions targeted at reducing these differences. By doing this, future research can add a broader perspective to the conversation about skill enhancement and employability, which will lead to more significant effects on people's career paths and the advancement of society as a whole.

## **9.3. FUTURE SCOPE OF STUDY**

The Present Study offers a strong framework for additional study, encouraging academics to investigate the precise processes by which these abilities interact and support professional success. This research can contribute to the scholarly conversation

about employability by providing more in-depth understanding of the ways in which employers and educational institutions can work together to maximise graduate outcomes. Future research could look into the long-term effects of these skills on career paths, the significance of contextual factors in the application of skills, and the effectiveness of various pedagogical strategies in skill development. Future studies can be carried out with the broader objective to study the employability skills in the graduates and post graduates in the Indian context. More research is required to better understand how to improve higher education programmes to improve graduates' career chances in India. Further research can be carried out to find out the Industry-wise skills expected from the graduates. More emphasis on continuing education institutions' capacity to develop curricula and learning opportunities that take into account how artificial intelligence will affect managerial and professional roles in the corporate world. For continuing education institutions to create programmes that have the most up-to-date skills employers demand for roles and jobs that have emerged and been retained, they will face significant challenges from the predicted workforce skills gap phenomenon of 2025 as well as from the proliferation of artificial intelligence technologies that eliminate tasks across industries and jobs of all levels. In order for continuing education institutions to create programmes that have the most up-to-date skills employers demand for roles and jobs that have emerged and been retained, they will face significant challenges from the predicted workforce skills gap phenomenon of 2025 as well as from the proliferation of artificial intelligence technologies that eliminate tasks across industries and jobs of all levels. Future studies should focus on the development and application of predictive analytic software systems that forecast industry growth, in-demand skills, and the timing of new programme launches.

In order to evaluate a graduate's key competencies and consider them for a particular position where they can contribute to the best of their abilities, the employability measurement instrument should be used. One of the biggest problems with recently graduated students is their lack of precise knowledge of their level of competency. For a better society and a better planet, the same study might be expanded to other regions of India, and human resource competence should be studied and appraised.

The employer determined that oral and written communication, teamwork, Self-efficacy, Emotional Intelligence, Work Ethics, Career Adaptability and Information technology. are the most crucial abilities needed for success in life and at work. According to the findings, the most important and fundamental skills. In order to accomplish the skill development goals, state governments and other stakeholders like industry groups, foreign organizations, and industry players are also making contributions through a variety of financial aid, schemes, and programmes. It is thought that developing skills is a shared responsibility of the public and private sectors, and that both should use their knowledge to collaborate and develop a comprehensive skill environment for the student. Based on their individual visions and goals, each of these programmes places a strong emphasis on skill development and job creation. To achieve the optimum results, it is imperative to align supply and demand inside the same system.

In light of the skills gap crisis of 2025, this study examined the issue of practice faced by institutions of higher education in developing programmes and methods to reduce worker skill shortages. Heightened pressure from stakeholders to create programmes and experiences that satisfied skill requirements for the workforce and employers increased the gravity of the issue. Colleges of continuing education have historically offered programmes for professional development and skill-upping that help people enhance career results. The knowledge, motivation, and organizational elements that influenced one's capacity to create market-based programmes that satisfy employers' skill demands were the main subjects of this study.

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## Annexure-1

### Questionnaire for Industry Expectations

This Questionnaire is a part of academic research to study “An Empirical Study on Gap Analysis amongst Students’ Skill Set and Industry Expectations: With special reference to Post Graduate Management Institutes in Punjab.” You are requested to take some time to respond to this Questionnaire. Your cooperation is highly solicited and your information will be kept confidential.

Please rate the skills expected from the Postgraduate management students on a scale of 1-5 (1 = Strongly Disagree, 5 = Strongly Agree)

1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree

S. no	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	Candidate is able to complete all the tasks well on time.					
2	Candidate usually prepare priority list before starting the work.					



3	Candidate often use strategies to complete the tasks effectively and quickly well before the deadlines.					
4	Due to time constraint, Candidate perform less than the expectation under pressure.					
5	Candidate always use the spare time to learn new skills.					
6	Candidate start the task only when the deadline starts approaching.					
7	Candidate is able to complete sudden tasks or responsibilities allocated to him/her well on time.					
8	Candidate prefer doing nothing in the spare time.					
9	Candidate always adjusts him/herself according to the situation.					
10	Candidate is always ready to perform new tasks with the group members.					
11	Candidate heists to take up any new responsibilities given to him/her.					

12	Candidate has the ability to adjust or reset goals given to him/her.					
13	Candidate always uses appropriate vocabulary and grammar while communicating with others.					
14	Candidate can easily persuade, convince or influence others through my communication skills.					
15	Candidate finds it easy to communicate effectively with people irrespective of their cultures, backgrounds and authority levels.					
16	Candidate always checks spellings and grammar at the time of written communication.					
17	Candidate can easily build wide and effective networks or contacts to achieve goals.					
18	Candidate does not pay attention towards vocabulary and grammar when communicating with others.					
19	Candidate does not pay attention towards spelling and the grammatical errors while writing.					

20	Candidate always believes that team work is important.					
21	Candidate encourage others to adapt to the change.					
22	Candidate always make an effort to include all the members of the group while performing any tasks or making any decision.					
23	Candidate usually takes all the decisions individually.					
24	Candidate knows how to give feedback without hurting the feelings of the members in a team.					
25	Candidate usually achieves most of the goals that he/she have set for him/herself.					
26	Candidate is certain about overcoming all the challenges while performing the tasks.					
27	Candidate is certain about the accomplishment of difficult tasks.					
28	Candidate is always confident of dealing efficiently with unexpected events					

29	Candidate is able to handle unforeseen situations well.					
30	Candidate always looks for further information to enhance my understanding of a problem.					
31	Candidate always offers unique and novel ideas that can add new knowledge and insights to a problem or Situation.					
32	Candidate usually sets priorities with a proper sense of urgency and importance.					
33	Candidate hesitates to give new ideas while solving a problem.					
34	Candidate usually takes the credit for the results of work done by others.					

35	Candidate always accepts the responsibility for the results of decisions or actions taken.					
36	Candidate upholds the ethics and values of the profession, community or workplace.					
37	Candidate always encourages responsible behaviour towards the community and the environment.					
38	Candidate finds it easy to provide direction to others, and to motivate and empower them.					
39	Candidate always takes the accountability for the consequence of decisions taken by him/her.					
40	Candidate gives the least importance to the Society or environment.					
41	Candidate does not accept the blame of others' mistake.					
42	Candidate is always ready to share his/her experience with those who are less experienced or have less knowledge.					

43	Candidate always sets an example to the subordinates through his/her decisions and actions.					
44	Candidate always challenges the subordinates to think about problems in new ways.					
45	Candidate does not usually take the opportunity to share the expertise with the others.					
46	Candidate always helps the team members to develop their strengths through learning new skills.					
47	Candidate never takes initiative to develop latest skills amongst the subordinates.					
48	Candidate always gives special recognition to someone who performs exceptionally well.					
49	Candidate is confident in the ability to draw insightful conclusions from numerical data.					
50	Candidate always breaks information into component parts to see relationships and patterns.					

51	Candidate is creative in achieving the goals by anticipating problems before they happen.					
52	Candidate cannot foresee the problems before they arise.					
53	Candidate is not so exceptional in analysing numeric data.					
54	Candidate can spontaneously change the preferences in case things go wrong.					
55	Candidate usually studies the amount of difficulty involved in the decision.					
56	Candidate always accepts the responsibility of the decisions taken by him/her.					
57	Candidate needs time to change the decisions at last moment.					
58	Candidate is able to understand why other people feel in one way or the other.					

59	Candidate is able to control the emotions and show them only when it is appropriate.					
60	Candidate can understand why he/she feels in one way or the other.					
61	Candidate do not let the emotions take over his/her responsibilities.					
62	Candidate adjusts his/her emotions as per the situation.					
63	Candidate is not aware of the emotions of the people around him/her.					
64	Candidate usually does not have any control over his/her emotions.					
65	Candidate always tries to learn concepts from the basics.					
66	Candidate usually applies theories and concepts in real life situations.					



67	It is important to have clarity of the fundamentals for better performance.					
68	Candidate does not usually apply theoretical concepts into real life.					
69	Candidate can comfortably and actively balance new and old relationships.					
70	Candidate knows many connections, but do not organize or follow them up.					
71	Candidate is quiet and introverted person and follow a step-by-step process in networking.					
72	Candidate finds it difficult to manage the relationships.					
73	Candidate is not very good at communicating with people.					
74	Candidate is able to choose software tools or equipment and related technology					

75	Candidate is able to understand the procedure of using any software required to perform a task.					
76	Candidate knows how to fix the problems with the Software					
77	Candidate is able to organize the data or records in the Software					
78	Only the Best candidates are employed in my organization					
79	My organization provides a better chance to fresh graduates					
80	Before hiring all selected candidates go through strict and detailed selection tests.					
81	The HRM professionals at my organization are experts to use the best candidates					

**Personal Information**

**Name of Respondent:**

**Name of the Organisation:**

**Designation in the Organisation:**

**Which Industry your organisation belongs to:**

**Do you Hire MBA/PGDM students from Institutes/ universities in Punjab?**

<b>Yes</b>	<b>No</b>
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## Annexure-2

### Questionnaire for Faculty members

This Questionnaire is a part of academic research to study “An Empirical Study on Gap Analysis amongst Students’ Skill Set and Industry Expectations: With special reference to Post Graduate Management Institutes in Punjab.” You are requested to take out some time to respond to this Questionnaire. Your co-operation is highly solicited and your information will be kept confidential.

Please rate the skills imparted by you to the Post graduate management students on a scale of 1-5 (1 = Strongly Disagree, 5 = Strongly Agree)  
1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree.

S. No	Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
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1	I instill in students the ability to consistently use appropriate vocabulary and grammar when communicating with others.					
2	I foster the ability of students to easily persuade, convince, or influence others through communication skills.					
3	I ensure that students consistently check spelling and grammar during written communication.					
4	I ensure that students can effortlessly establish wide and effective networks or contacts to achieve goals.					
5	I ensure that students consistently acknowledge the importance of teamwork.					
6	I ensure that students are capable of encouraging others to adapt to change.					
7	I ensure that students consistently make an effort to include all group members while performing tasks or making decisions.					

8	I ensure that students are certain about overcoming all challenges while performing tasks.					
9	I ensure that students are certain about accomplishing difficult tasks.					
10	I ensure that students are always confident of dealing efficiently with unexpected events.					
11	I ensure that students are able to handle unforeseen situations well.					
12	I ensure that students always take accountability for the consequences of decisions they make.					
13	I ensure that students uphold the ethics and values of the profession, community, or workplace.					
14	I ensure that students always encourage responsible behavior towards the community and the environment.					
15	I ensure that students find it easy to provide direction to					

	others, as well as to motivate and empower them.					
16	I ensure that students can understand why other people feel in one way or another.					
17	I ensure that students can control their emotions and show them only when it is appropriate.					
18	I ensure that students can understand why they feel in one way or another.					
19	I ensure that students do not let emotions take over their responsibilities.					
20	I ensure that students adjust their emotions as per the situation.					
21	I ensure that students always adjust themselves according to the situation.					

22	I ensure that students are always ready to perform new tasks with group members.					
23	I ensure that students can adjust or reset the goals given to them.					
24	I ensure that students can understand the procedure of using any software required to perform a task.					
25	I ensure that students know how to fix problems with the software.					
26	I ensure that students can organize data or records in the software.					

**Name the Pedagogy which is used to develop the following skill set as expected by the industry in the student.**

<b>Skill Expected by the Industry</b>	<b>Remarks</b>
<b>Communication Skills</b>	
<b>Career Adaptability Skills</b>	



<b>Team Work Skills</b>	
<b>Work Ethics Skills</b>	
<b>Self-Efficacy Skills</b>	
<b>Emotional Intelligence Skills</b>	
<b>Information technology Skills</b>	

**Personal Information**

**Name of Respondent:**

**Name of the University/ institute:**

**Designation:**

### Annexure-3

#### Questionnaire for Students

This Questionnaire is a part of academic research to study “An Empirical Study on Gap Analysis amongst Students’ Skill Set and Industry Expectations: With special reference to Post Graduate Management Institutes in Punjab.” You are requested to take out some time to respond to this Questionnaire. Your co-operation is highly solicited and your information will be kept confidential.

Please rate the skills possessed by you on a scale of 1-5 (1 = Strongly Disagree, 5 = Strongly Agree) 1= Strongly Disagree, 2= Disagree, 3= Neutral, 4= Agree and 5= Strongly Agree.

<b>S. no</b>	<b>Statement</b>	<b>Strongly Disagree</b>	<b>Disagree</b>	<b>Neutral</b>	<b>Agree</b>	<b>Strongly Agree</b>
1	I always use appropriate vocabulary and grammar while communicating with others.					
2	I can easily persuade, convince or influence others					

	through my communication skills.					
3	I always check spelling and grammar at the time of written communication.					
4	I can easily build wide and effective networks or contacts to achieve goals.					
5	I always believe that teamwork is important.					
6	I encourage others to adapt to the change.					
7	I always make an effort to include all the members of the group while performing any task or making any decision.					
8	I am certain about overcoming all the challenges while performing the tasks.					
9	I am certain about the accomplishment of difficult tasks.					

10	I am always confident of dealing efficiently with unexpected events					
11	I am able to handle unforeseen situations well.					
12	I never take the accountability for the consequence of decisions taken by me.					
13	I uphold the ethics and values of the profession, community or workplace.					
14	I always encourage responsible behaviour towards the community and the environment.					
15	I find it easy to provide direction to others, and to motivate and empower them.					
16	I am able to understand why other people feel in one way or the other.					
17	I am able to control the emotions and show them only when it is appropriate.					

18	I can understand why I feel in one way or the other.					
19	I do not let the emotions take over my responsibilities.					
20	I adjust his/her emotions as per the situation.					
21	I always adjust myself according to the situation.					
22	I am always ready to perform new tasks with the group members.					
23	I have the ability to adjust or reset goals given to me.					
24	I am able to understand the procedure of using any software required to perform a task.					
25	I know how to fix the problems with the software					

26	I am able to organize the data or records in the software					
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**Personal Information**

**Name of Respondent:**

**Name of the University/ institute:**

**Course:**

**Annerxure-4**

**List of AICTE approved Institutes in Management for PG for the state Punjab for the academic year: 2020-2021**

S.No.	Name of the Institute	Location
1	AMAN BHALLAINSTITUTE OF MANAGEMENT AND TECHNOLOGY	PATHANKOT
2	PUNJAB INSTITUTE OF MANAGEMENT & TECHNOLOGY	LUDHIANA
3	BABA BANDA SINGH BAHADUR ENGINEERING COLLEGE	FATEHGARH SAHIB
4	S.SUKHJINDER SINGH ENGINEERING & TECHNOLOGY COLLEGE	GURDASPUR
5	HOSHIARPUR INSTITUTE OF MANAGEMENT AND TECHNOLOGY	HOSHIARPUR
6	DAV INSTITUTE OF ENGINEERING & TECHNOLOGY	JALANDHAR
7	DR I T SCHOOL OF BUSINESS	PATIALA

8	LUDHIANA COLLEGE OF ENGINEERING & TECHNOLOGY, KATANI KALAN, LUDHIANA.	LUDHIANA
9	SAI INSTITUTE OF ENGINEERING & TECHNOLOGY, MANAWALA, AMRITSAR	AMRITSAR
10	GLOBAL GROUP OF INSTITUTES	AMRITSAR
11	SWIFT TECHNICAL CAMPUS	PATIALA
12	SHAHEED UDHAM SINGH COLLEGE OF ENGINEERING & TECHNOLOGY	MOHALI
13	RAM DEVI JINDAL EDUCATIONAL CHARITABLE SOCIETY GROUP OF INSTIUTIONS	MOHALI
14	CT INSTIUTTE OF ENGINEERING, MANAGEMENT & TECHNOLOGY	JALANDHAR
15	CGC COLLEGE OF ENGINEERING	MOHALI
16	PUNJAB COLLEGE OF TECHNICAL EDUCATION	LUDHIANA
17	LALA LAJPAT RAI INSTITUTE OF ENGGNEERING & TECHNOLOGY	MOGA



18	BIS COLLEGE OF ENGINEERING & TECHNOLOGY	MOGA
19	DOABA INSTITUTE OF ENGG. & TECH.	S.A.S NAGAR
20	DOABA WOMEN INSTIUTE OF ENGINEERING & TECHNOLOGY	S.A.S NAGAR
21	QUEST INFOSYS FOUNDATION GROUP OF INSTITUTIONS	MOHALI
22	A & M INSTITUTE OF MANAGEMENT AND TECHNOLOGY	GURDASPUR
23	CGC TECHNICAL CAMPUS - FACULTY OF MANAGEMENT	MOHALI
24	GURU TEG BAHADUR INSTITUTE OF MANAGEMENT AND TECHNOLOGY	LUDHIANA
25	DESH BHAGAT FOUNDATION GROUP OF INSTITUTIONS, FEROPUR ROAD MOGA	MOGA
26	GGs COLLEGE OF MODERN TECHNOLOGY	MOHALI

27	LALA LAJPAT RAI MEMORIAL INSTITUTE OF MANAGEMENT & TECHNOLOGY	MOGA
28	KHALSA INSTITUTE OF MANAGEMENT & TECHNOLOGY FOR WOMEN	LUDHIANA
29	BHAI GURDAS INSTITUTE OF MANAGEMENT & TECHNOLOGY, SANGRUR(MBA)	SANGRUR
30	SWAMI SATYANAND COLLEGE OF MANAGEMENT AND TECHNOLOGY	AMRITSAR
31	GURU NANAK INSTITUTE OF MANAGEMENT & TECHNOLOGY	LUDHIANA
32	GURU NANAK DEV ENGINEERING COLLEGE	LUDHIANA
33	INDO GLOBAL COLLEGE OF ENGINEERING	MOHALI
34	ST. SOLDIER GROUP OF INSTITUTIONS	JALANDHAR
35	CORDIA INSTITUTE OF BUSINESS MANAGEMENT	FATEHGARH SAHIB
36	SRI SUKHMANI INSTITUTE OF ENGINEERING &	S.A.S NAGAR

	TECHNOLOGY	
37	INNOCENT HEARTS GROUP OF INSTITUTIONS	JALANDHAR
38	CKD INSTITUTE OF MANAGEMENT AND TECHNOLOGY	AMRITSAR
39	LYALLPUR KHALSA COLLEGE TECHNICAL CAMPUS	JALANDHAR
40	SWAMI SARVANAND INSTITUTE OF MANAGEMENT & TECHNOLOGY	GURDASPUR
41	SWAMI VIVEKANAND INSTITUTE OF ENGG. & TECH.	PATIALA
42	UNIVERSITY INSTITUTE OF EMERGING TECHNOLOGIES (UIET), GHARUAN	MOHALI
43	PATEL INSTITUTE OF MANAGEMENT & TECHNOLOGY	PATIALA
44	APEEJAY INSTITUTE OF MANAGEMENT AND ENGINEERING TECHNICAL CAMPUS	JALANDHAR

45	MALWA COLLEGE	BATHINDA
46	A.S.GROUP OF INSTITUTIONS	LUDHIANA
47	RAMGARHIA INSTITUTE OF ENGINEERING & TECHNOLOGY	KAPURTHALA
48	RAYAT BAHRA INSTITUTE OF MANAGEMENT	HOSHIARPUR
49	CT INSTITUTE OF MANAGEMENT & IT	JALANDHAR
50	ASRA INSTITUTE OF ADVANCED STUDIES (MBA)	SANGRUR
51	VILL. KHALA KHURD, AMRITSAR-LOPOKE ROAD, NEAR RAM TIRATH, AMRITSAR	Private-Self Financing
52	ARYABHATTA GROUP OF INSTITUTES,BARNALA	BARNALA
53	CHANDIGARH ENGINEERING COLLEGE	MOHALI
	KC COLLEGE OF ENGINEERING & INFORMATION TECHNOLOGY, NAWANSHAHR	SHAHID BHAGAT SINGH NAGAR

54		
55	UNIVERSITY INSTITUTE OF ENGINEERING (UIE), GHARUAN	MOHALI
56	KHALSA COLLEGE(ASR) OF TECHNOLOGY AND BUSINESS STUDIES	S.A.S NAGAR
57	MALOUT INSTITUTE OF MANAGEMENT AND INFORMATION TECHNOLOGY, MALOUT	MUKATSAR
58	L M THAPAR SCHOOL OF MANAGEMENT	S.A.S NAGAR
59	CHANDIGARH BUSINESS SCHOOL OF ADMINISTRATION	MOHALI
60	DIPS INSTITUTE OF MANAGEMENT & TECHNOLOGY	JALANDHAR
61	GURU HARKRISHAN GIRLS COLLEGE	SANGRUR
62	CKD INSTITUTE OF MANAGEMENT & TECHNOLOGY	TARAN TARAN
63	GUJRANWALA GURU NANAK INSTITUTE OF MANGEMENT & TECHNOLOGY	LUDHIANA

64	BABA FARID COLLEGE OF MANAGEMENT & TECHNOLOGY	BATHINDA
65	M K EDUCATION SOCIETIE'S GROUP OF INSTITUTIONS	AMRITSAR
66	RIMT-INSTITUTE OF ENGINEERING AND TECHNOLOGY	FATEHGARH SAHIB
67	ARYANS BUSINESS SCHOOL (ABS)	PATIALA
68	ST. SOLDIER MANAGEMENT AND TECHNICAL INSTITUTE	JALANDHAR
69	SATYAM INSTITUTE OF MANAGEMENT AND TECHNOLOGY	JALANDHAR
70	INSTITUTE OF MANAGEMENT STUDIES- BHADDAL	RUPNAGAR
71	LUDHIANA GROUP OF COLLEGES	LUDHIANA
72	MATA GUJRI COLLEGE FATEHGARH SAHIB	FATEHGARH SAHIB

73	AKLIA EDUCATIONAL AND RESEARCH SOCIETY GROUP OF INSTITUTIONS	BATHINDA
74	GIAN JYOTI INSTITUTE OF MANAGEMENT & TECHNOLOGY	S.A.S NAGAR
75	GULZAR GROUP OF INSTITUTIONS	LUDHIANA
76	BHUTTA COLLEGE OF ENGINEERING & TECHNOLOGY	LUDHIANA
77	DOABA KHALSA TRUST GROUP OF INSTITUTIONS,1.FACULTY OF ENGINEERING,2.FACULTY OF MANAGEMENT	SHAHID BHAGAT SINGH NAGAR
78	PYRAMID COLLEGE OF BUSINESS AND TECHNOLOGY	KAPURTHALA
79	BHARAT GROUP OF COLLEGES	MANSA
80	BAHRA GROUP OF INSTITUTION	PATIALA

81	AMRITSAR COLLEGE OF ENGINEERING & TECHNOLOGY, AMRITSAR	AMRITSAR
82	S.S.D.WOMEN'S INSTITUTE OF TECHNOLOGY	BATHINDA
83	BHAI GURDAS INSTITUTE OF ENGINEERING & TECHNOLOGY	SANGRUR
84	VMS INSTITUTE OF MANAGEMENT BATALA	GURDASPUR
85	SRI SAI COLLEGE OF ENGG. & TECH	GURDASPUR
86	RAYAT GROUP OF INSTITUTIONS , ROPAR	SHAHID BHAGAT SINGH NAGAR



87	UNIVERSAL GROUP OF INSTITUTIONS (UNIVERSAL SCHOOL OF ENGG., UNIVERSAL BUSINESS SCHOOL)	MOHALI
88	SWAMI PARMANAND COLLEGE OF ENGG & TECH	MOHALI
89	AKAL GROUP OF TECHNICAL AND MANAGEMENT INSTITUTIONS	SANGRUR

Source: <https://www.aicte-india.org/>

**Table 2: List of UGC approved Universities in Management for PG for the state Punjab for the academic year: 2020-2021**

S.No.	Name	Address	Type of University
1	Central University of Punjab,	Bathinda	Central
2	Guru Nanak Dev University	Amritsar	State
3	Maharaja Ranjit Singh Punjab Technical University	Bathinda	State

4	Punjab Agriculture University	Ludhiana	State
5	Punjab Technical University	Kapurthala	State
6	Punjabi University	Patiala	State
7	Adesh University	Bathinda	Private
8	Akal University	Talwandi sabo	Private
9	Chandigarh University	Chandigarh	Private
10	Chitkara University	Chandigarh	Private
11	CT University	Jalandhar	Private
12	D.A.V University	Jalandhar	Private
13	Desh Bhagat University	Fatehgarh sahib	Private
14	GNA University	Phagwara	Private
15	Guru Kashi University	Bathinda	Private
16	Lovely Professional University	Phagwara	Private
17	Rayat Bahra University	Mohali	Private
18	RIMT University	Sirhind	Private
19	Sant Baba Bhag Singh University	Jalandhar	Private

20	Sri Guru Granth Sahib World University	Fatehgarh sahib	Private
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Source: <https://www.ugc.ac.in/>

## Annexure- 5

### List of the recruiters visiting MBA/PGDM colleges and Universities in Punjab

<b>S.no</b>	<b>Name of the Recruiter</b>	<b>Industry</b>
1	Ganpath Electroplates	Automotive
2	HDFC Bank	Banking
3	Red Carpet	Social Service
4	Rudra Investfment	Financial Services
5	Fortune Retail Group	Retail
6	Netsterz	IT
8	DCB Bank	Banking
9	Skylark Immigration Limited	Consultancy
11	Prismatic Technologies	IT
12	Universal Infotech	IT
13	Indusind Bank	Banking
14	Walmart,	Retail
15	IDS Infotech	IT
16	Just Dial	E-commerce

17	Accenture	Service
18	Axis Bank	Banking
19	IBM	Service
20	Sonalika International	Agriculture
21	Capital Area Local Bank	Banking
22	Makkar Motors	Automobile
23	Bandhan Bank	Banking
24	ESS TEE	Steel
25	Satnam Agri Products	Agriculture
27	HDFC Standard Life	Insurance
28	Vardhaman	Textile
29	Pepsi	Beverage
30	Bajaj Allianz	Insurance
31	ACC	Cement
32	Godrej	Electronics
33	Amul	Food Processing
34	Birla Sunlife	Insurance
35	HCL	IT
36	HSI IDC	Infrastructure

37	Infosys	IT
38	JK Cement	Cement
39	Jhonson and Jhonson	Pharma
40	Magma	Financial Services
41	Federal Mogul	Automobile
42	BHEL	Heavy Industry
43	CADD	IT
44	TATA	Automobile
45	FICO	Computer
46	Rockman	Cycle
47	Wipro	Conglomerate
48	G tech	IT
49	Hero cycles	Cycle
50	Ducat	IT
51	Emson	Manufacturing
52	Airtel	Telecom
53	Jaro Education	Education
54	Paras	Manufacturing
55	LG soft	Social Service

56	Open Text	IT
57	AON Hewit	HR
58	TCS	IT
59	Hexaware	BPO
60	Cognizant	IT
61	Capgemeni	IT
62	Dell	Computer
63	Tech Mahindra	IT
64	KPIT	Automotive
65	Smart School	Education
66	Ranbaxy	Pharma
67	Videocon	Electronics
68	IFB	Electronics
69	Trigent	IT
70	Ericsson	Telecom
71	Eclerx	IT
72	ICICI Bank	Banking
73	DLF	Real estate
74	Neo Soft	IT

75	ValueHR	HR
76	AIS	Agriculture
77	Cipla	Pharma
78	Verdantis	Consultancy
79	Navigant	Service
80	Karvy	Financial Services
81	Hyatt	Hotel
82	Taj	Hotel
83	Radisson	Hotel
84	yes Bank	Banking
85	Denave	Service
86	Genpact	Service
87	Metro	Shoe
88	Eastman	Manufacturing
89	Greeves Cotton	Engineering
90	HDFC Sales	Financial Services
91	BayaTree	IT
92	Zugo	IT service
93	Byju'	Education



94	Go Doctor	pharma
95	Cargill	Food Processing
96	Cvent	IT-Software
97	Talbro's	Automotive
98	Microtek	Hardware
99	CapitalVia	Research
100	global logic	IT-Software
101	Magnus	Plywood
102	Lloyd	electronics
103	Piaggio	Automobile
104	HP	electronics
105	Catalyst One	IT-Service
106	India Bulls	Financial Services
107	DHFL Pharemica	pharma
108	CeasefireIndustriesLtd.	Manufacturing
109	Tommy Hilfiger	Apparel
110	Imageconsultinggroup	Fashion
111	Kotak securities	Financial Services
112	Just Dial	E-commerce

113	EdelweissSecuritiesLtd.	Financial Services
114	LibertyVideoconGeneralInsurance	insurance
115	Om Careers	Education
116	Kent RO	HealthCare
117	Honeywell	electronics
118	Punj Lloyd	infrastructure
119	Sasken	Telecom
120	Mphasis	IT Consulting
121	Ceat	Tyres
122	Birlasoft	Consultancy
123	Satyam	IT service
124	Polaris	Automotive
125	Syntel	IT service
126	Sebiz	IT
127	Convergys	BPO
128	Mobera System	IT
129	Larsen and Turbo	Construction
130	Lido	Education
131	Honda	AUtomobile

132	John Deere	Heavy Industry
133	Think and Learn	Education
134	JBM Group	Automobile
135	Toppr	Social Service
136	Cocacola	Beverage
137	Cosmas	Pharma
138	Marriot	Hotel
139	ITC Hotels	Hotel
140	AIS	Automotive
141	Kotak Mahindra Bank	Banking
142	Mahindra and Mahindra	Automobile
143	Standard Chartered	Banking
144	Reliance Communications	Telecom
145	Maruti Suzuki	Automobile
146	Consern	Pharma
147	RBS	Banking
148	Idea	Telecom
149	Lupin	Pharma
150	Smart data	Manufacturing

151	The oberoi group	Hotel
152	Royal Orchid	Hotel
153	Taj hotels	Hotel
154	The Grand	Hotel
155	Vivanta by Taj	Hotel
156	Spicejet	Airline
157	Indigo	Airline
158	Seven Seas Hotel	Hotel
159	Amazon	E-commerce
160	Bajaj Capital	Financial Services
161	CSC	Service
162	Deloitte	Service
163	Google	IT-Software
164	Hitachi	electronics
165	Jaypee group	Construction
166	JSW	Conglomerate
167	JW Marriott	Hotel
168	Microsoft	IT-Software
169	MRF Tyres	Tyres

170	Panacea Biotech	Pharma
171	Saint Gobain	Construction
172	Samsung	Telecom
173	SAP	IT-Software
174	TAFE	Agriculture
175	The eastern park	Hotel
176	TATA AIG	insurance
177	HDFC Life	insurance
178	Chemical Brothers	chemical
179	Sportking	Textile
180	Aggarwal packers and Movers	logistics
181	Huawei	electronics
182	Mercedes Benz	Automobile
183	DFHL	Financial Services
184	IIHT	Textile
185	GILLCO	steel
186	Reliance general Insurance	Construction
187	Stealth Technocrafts	IT-Service
188	Multipesystem Networks	Media

189	Eureka Forbs	Home Appliance
190	Aarti International	chemical
191	Nestle	Food Processing
192	NFL	chemical
193	Diamond Footwears	shoe
194	Max Newyork Life insurance	insurance
195	DhanLaxmi Bank	Banking
196	Alliance Formulations	Pharma
197	Oswal	textile
198	Gammon India	Engineering
199	AMW	Automotive
200	IQRBI	electronics
201	Mindful	Heathcare
202	Suzuki Powertrain Ltd.	Automotive
203	J and K Bank	Banking
204	Carefusion	HealthCare
205	Sharekhan	Financial Services
206	PCL	Construction
207	Connect	Telecom

208	BSNL	Telecom
209	CDAC	electronics
210	Spice	Telecom
211	Econ	Engineering
212	Metallic India	Engineering
213	NSPCL	Heavy Industry
214	Amrit Banaspati	Consumer Goods
215	India Metals	Engineering
216	CSIO	Research
217	Marico	Food Processing
218	Dashmesh Automobiles	Automobile
219	NICKS India Tools	Manufacturing
220	Cheema Boilers	chemical
221	H.D. Iron and Steel	steel
222	VEECO Fabrications	Manufacturing
223	JSK Steels Pvt. Ltd.	steel
224	Mangla Sons	steel
225	Anant Engineering Works	Engineering
226	Electricfeild co.	electronics

227	DCM	textile
228	Swaraj mazda	Automobile
229	HEC Ltd.	Heavy Industry
230	Mangalam Energy Dev.co. pvt ltd.	Heavy Industry
231	Amtek	Automotive
232	Amartex industries	Textile
233	Pernod Ricard	Beverage
234	Bhushan Steels	steel
235	Angel Broking	Financial Services
236	Big Bazaar	retail
237	Beyond Sugarfree	Heathcare
238	Igen	IT-Service
239	Manpower Group	Consumer Goods
240	Bharti AXA	insurance
241	Dominos	Food Processing
242	Metro Tyres	tyres
243	Palam Hotels	Hotel
244	Park Plaza	Hotel
245	Netwebs	Automobile



246	Fresco	Beverage
247	Chemvin Plastics	chemical
248	CBL	Food Processing
249	Infowiz	IT-Service
250	Solitare Infosys	IT-Service
251	Airsoft Infosys	IT-Software
252	Agrovet	Agriculture
253	KRBL Ltd.	Agriculture
254	Preet	Food Processing
255	Country Inn	Hotel
256	Shoppers stop	retail
257	Career weavers	Education
258	JCT Ltd.	textile
259	Dainik Bhaskar	media
260	KFC	Food Processing
261	Kochar	BPO
262	Kapsons	retail
263	ICICI Prudential	insurance
264	Bharti Walmart	retail

265	Super Travels	Travel
266	Destiny Consultants	Consultancy
267	Alpha One	Construction
268	Nature Heights	Real estate
269	Digi Cult	media
270	Steelman Industries	steel
271	Emerson	electronics
272	Bajaj Financial Services	Financial Services
273	Apollo munich Health Insurance	insurance
274	Bizmerlin HR	HR
275	EH1 infotech	IT
276	IDBI	Banking
277	Digi Mantra	Consultancy
278	NSI Co.Ltd.	Automotive
279	UltraTech Cement	Cement
280	Mahindra Swaraj	Automobile
281	Jio digital Life	Telecom
282	Shapoorji Pallonji	Conglomerate
283	RDC Concrete	Cement

284	Sterling and Wilson	Engineering
285	Verka	Food Processing
286	Eicher	Automotive
287	Ashok Leyland	Automobile
288	Simplex	infrastructure
289	Concentrix	BPO
290	Hotel Residency Fort	Hotel
291	Oppo	Telecom
292	Paytm	Financial Services
293	ICG Consulting	Consultancy
294	Club JB	Entertainment
295	Walkwel technology	IT
296	One second Impression	media
297	Micro Turners	Automotive
298	Belanto water meters	Turbine
299	Mannapuram Financial Services Ltd.	Financial Services
300	Megrisoft	IT
301	Fusion MicroFinancial Services	Financial Services
302	Pingaksho Technologies	Engineering

303	Policy Bazar	BPO
304	Realeye	media
305	Sarovar Portico	Hotel
306	Religare	Financial Services
307	Shivansh Solutions	Service
308	Vertex	Pharma
309	Academia Guru	Education
310	WebAstral	IT
311	MK Electronics	electronics
312	Flipkart	E-commerce
313	Zomato	Online Food ordering
314	Muthoot Financial Services	Financial Services
315	Hampton by Hilton	Hospitality
316	Pukhraj Pure Herbal	Beauty
317	Raxa	Service
318	Kajaria	Sanitary
319	Santex	Textile
320	Make my trip	E-commerce
321	IBIS	Hotel

322	Orane International	Beauty
323	Blue Chip	Financial Services
324	Oyo	Hotel
325	Lemon Tree	Hotel
326	The lalit	Hotel
327	Ramada	Hotel
328	Kochar Accelerating Value	IT-Service
329	SBI Life insurance	insurance
330	Aditya Birla	Conglomerate
331	OCM Suitings	Textile
332	99 acres.com	Real estate
333	Netmax	Media
334	Picnframes Technologies	IT-Software
335	Aerial Telecom	Telecom
336	RH Intenational	IT
337	Mashpoint	IT-Service
338	Micro Labs	HealthCare
339	Life cell International Pvt. Ltd.	HealthCare
340	Reliance capital	Financial Services

341	My FM India	media
342	NJ India Invest	Financial Services
343	Club Mahindra	Hotel
344	Finedge	Consultancy
345	Systique	Engineering
346	Sarkaar Microsolutions	IT-Hardware
347	Adventz	Conglomerate
348	ECRU Software	IT-Software
349	Pisoft	Service
350	Swipe cubes	IT-Service
351	Bioclinica	HealthCare
352	Clicklabs	HealthCare
353	Just Tech solutions	IT-Service
354	Talent Burst	Pharma
355	Hettich	Plywood
356	Essar	Telecom
357	I Gate	BPO
358	GoldmanSachs	Financial Services
359	KPMG	Service

360	Mu Sigma	Consultancy
361	Optum UHG	HealthCare
362	Yamaha	Automobile
363	Zscaler	IT
364	ZS Associates	IT-Service
365	Allsoft	IT-Service
366	Seven Reasons	Media
367	Impinge	IT-Service
368	Appin	infrastructure
369	Webastral	IT-Service
370	Simpson	Manufacturing
371	CDI	Engineering
372	Raps Technology	IT-Service
373	Pro Ace	IT-Software
374	Zedstart	IT-Software
375	Internshala	Education
376	RTTC	Service
377	Federal Bank	Banking
378	Dabur	Consumer Goods

379	Saint Gobain	Manufacturing
380	Brunel	Engineering
381	Servetel	E-commerce
382	RTDS	HealthCare
383	Square Yards	Real estate
384	ITC	Conglomerate
385	MTR	Food Processing
386	To the New	Beverage
387	Careers 360	Education
388	IDFC	Banking
389	Petrofac	Engineering
390	Subros	Automotive
391	Urbanclap	E-commerce
392	VIVO	Telecom
393	WNS	BPO
394	Bose	electronics
395	Earnest and Young	Service
396	Moody's analytics	Financial Services
397	Upgrad	Education



398	Ecove solutions	IT-Service
399	Regal enterprises	Media
400	Ivy Hospital	HealthCare
401	Nirmal Bang	Retail
402	MRF	Tyres
403	Adani Gas	Oil and Gas
404	Royal Enfield	Automobile
405	Hewiett Packard	IT-Hardware
406	PayU	Financial Services
407	SAP	IT-Software
408	Philips	Consumer Goods
409	Danone	Food Processing
410	Vmware	IT-Software
411	LG	electronics
412	Vistara	Airline
413	Panasonic	electronics
414	Cipla	Pharma
415	Sun Pharma	Pharma
416	Glaxosmithkline	Pharma

417	Novartis	HealthCare
418	HSBC	Banking
419	Mahindra Rise	Conglomerate
420	Oracle	IT-Hardware
421	Jetking	IT-Service
422	HFC	Chemical
423	Powergrid corp.	Engineering
424	MTNL	Telecom
425	Ronald web	Printing
426	RT	Pharma
427	Shreyansh industries	Textiles
428	Unichem	Pharmaceutical & healthcare
429	Deepak Nitrate	Chemicals
430	Mind Tree	IT services IT consulting
431	TAFE	Agriculture, Manufacturing
432	SAP Labs	Enterprise software
433	Microsoft	Consumer electronics
434	Admonz	HealthCare
435	Amandeep Hospital	HealthCare

436	ANV News	Media
437	Apex Hospital	HealthCare
438	Bajwa Hospital	HealthCare
439	Bharti Foundation	NGO
440	Brilliant Life Insurance	Insurance
441	Business Executive	Education
442	Touchstone	Education
443	Softwizz Technologies	IT
444	S &P Global	Financial services
445	American Express	Banking
446	Fed Ex	Courier
447	Howden	Furniture
448	Hyundai	Automobile
449	Caddprimere	Industrial Training
450	Satyam Multiplex	Entertainment
451	GK Freeman	Engineering
452	Avon Cycles	Cycles
453	Marry wealth	Financial Services
454	Upper India Sales Ltd.	Automobile

455	Baani Milk	Food Processing
456	Ben and Gaws	Manufacturing
457	Bharti Infratel	IT
458	Bank Of America	Banking
459	Baseware	IT Software
460	BBQ Nation	Hospitality
461	Auxi Cogent	BPO
462	Artech	Consultancy
463	Amazon Pay	Financial Services
464	Algol	IT-Software
465	Agreeya	IT
466	Amazon Web Services	BPO
467	Amdocs	IT
468	Aniweb Designs	Media
469	BTES	Education
470	ST Life Augmented	IT
471	Jogindra Group	Steel
472	GNA Enterprises	Automotive
473	Art world Web Solutions	IT

474	Clickable	IT
475	Dextrous	Printing
476	EVA Solutions	IT
477	HB entertainment	Entertainment
478	Abror	IT-Software
479	Aricent	Engineering
480	Intellisense Technology	IT
481	Momentum	Media
482	Red Alkemi	Media
483	Vibe group	IT
484	Brain Guru	Education
485	Br7 Interiors	Design
486	Agnext	Food Processing
487	Aditya Telecom Solutions	Telecom
488	Acelerar	BPO
489	Syntop	Chemical
490	Absolute	IT
491	Acadecraft	Education
492	Bosch	Electronics

493	Tata Indicom	Telecom
494	Cavisson	IT
495	Home shop 18	E-Commerce
496	Hindustan Times	Media
497	Edwisor	Consultancy
498	Hexaware	BPO
499	Okaya Infocom	IT
500	Tata Housing	Real Estate
501	Noor Mahal	Hotel
502	Bristlecone	logistics
503	Siemens	Conglomerate
504	Ralson	Manufacturing
505	Extra Marks	Education
506	EasyDay	Retail
507	DeftSoft	IT
508	Decathlon	Retail
509	Conqsys	IT
510	Eastman	Manufacturing
511	Davita	HealthCare

512	Grape city	IT
513	Clearpath Technology	IT
514	Citi Financial	Financial Services
515	Chola	Financial Services
516	BVFCL	Chemical
517	BUMI	Mining
518	Mydeal.com	E-Commerce
519	Castrol	Oil and Gas
520	Carridge World	Retail
521	BNK Energy	Heavy Industry
522	BSNL	Telecom
523	de facto Infortech	IT
524	A2it	Engineering
525	Ind-Swift	Pharma
526	Eespl	Engineering
527	Oceana Tech	IT
528	Kapsons	Retail
529	Bridging gaps.co.in	Consultancy
530	Ventura Securities	Financial Services

531	Techkaledio	IT
532	The Tribune	Media
533	Fortis	Hospital
534	Beckon Drive	Telecom
535	Centuryply	Plywood
536	Droom	Automobile
537	Jubliant Food work	Food Processing
538	TVS	Automobile
539	Stellar	IT
540	Snapdeal	E-Commerce
541	Uniliver	FMCG
542	Trident	Hotel
543	Prime Focus	IT
544	Dynamic Engineers	Engineering
545	Karrox Technologies	IT
546	Star Health Insurance	Insurance
547	CINDA	Chemical
548	Nagarro	Engineering
549	Luminous	Electronics



550	Group 10	Chemical
551	Food panda	Online Food ordering
552	Anand Rathi	Financial Services
553	Alaska	Electronics
554	Navpada Knitwears	Textile
555	Think Next	Education
556	Mastek	IT
557	Lakshmi Shree Group	Financial Services
558	Steria	IT
559	Nahar	Textile
560	Orange Business services	IT
561	Diakin	Electronics
562	Citrix	IT
563	GradMener	Education
564	Tata Interactive systems	Education
565	AADTT	Textile
566	APJ Satya Research	Research
567	Asian Paints	Chemicals
568	Avaya Global Connect	IT

569	Mahaan Foods	Food Processing
570	Mahaveer Textiles	textile
571	Azim Premji Foundation	Entertainment
572	Baxter	HealthCare
573	Mindcrest	law
574	Berger Paints	Chemicals
575	Bhiwani Textile	textile
576	Navyug Info	Manufacturing
577	Black and green mobile	IT
578	Britannia	Food Processing
579	Cadence	IT
580	Nicholas Piramal	Manufacturing
581	Canon	Electronics
582	Cellent	IT
583	Code Brew	IT
584	Parabolic Drugs	HealthCare
585	Patni Computers	IT
586	Pidilite	Chemicals
587	Pipal Research	Service

588	Cremica	Food Processing
589	Praj Industries	Manufacturing
590	Daichi Sankyo	Pharma
591	Pwc	Service
592	DCM Data	Computer Hardware
593	SK Bikes	Automobile
594	Headstrong	IT
595	SRF Lab	Manufacturing
596	Hindustan Zinc	Mining
597	IBM Daksh	BPO
598	Syntel	IT
599	Impact Projects	Real Estate
600	Thoughtworks	IT
601	Torrent Pharma	Pharma
602	ultra Tiles	Sanitary
603	Welspun	textile
604	XL Dynamics	IT
605	Zuari Investment	Financial Services
606	Park Ascent	Hotel

607	Sapient	Consumer
608	Hitachi	Electronics
609	Practo	HealthCare
610	Newgen	BPO
611	Schindler	Transportaion
612	Capital IQ	Financial Services
613	Verizon	Telecom
614	FMC Technologies	Engineering
615	Redington	IT
616	Beta Soft Solutions	IT
617	Anchor	Electronics
618	Precision Group	Real Estate
619	Lenskart	Retail
620	Quick Heal	IT
621	Mondelez	Food Processing
622	Abbot	HealthCare
623	Safe express	logistics
624	JP Morgan	Financial services
625	Braun	Manufacturing

626	Maersk	Transportaion
627	Allstate	Insurance
628	Metro cash and carry	Retail
629	Lufthansa	Airlines
630	Bunge	Agriculture, Manufacturing
631	DXC Technologies	IT
632	Colgate Pamolive	Consumer Goods
633	Informatica	IT
634	SOBHA REALTY	Real Estate
635	FREYR SOLUTIONS	Pharma
636	RALLIS INDIA	Chemical
637	BANK OF COMMERCE	Banking
638	CAVINKARE PVT. LTD.	Chemical
639	BAJAJ ELECTRICAL LIMITED	Electronics
640	ELECTROMECH	Manufacturing
641	BROADRIDGE FINANCIAL	Financial Services
642	Nerolac	Chemical
643	Swiggy	Online Food ordering
644	KHIMJI RAMDAS	consumer Goods

645	DASSAULT SYSTEMES	IT
646	LOREAL INDIA PVT LTD	Beauty
647	ELGI EQUIPMENTS	Manufacturing
648	TEX FASTENERS	Apparel
649	RBS	Banking
650	LOWES INDIA	Education
651	CUEMATH	Education
652	VIRTUSA	IT
653	BLUJAY	logistics
654	CRESCENDO GROUP	IT
655	FORBES MARSHALL PVT LTD	Heavy Industry
656	EXIDE INDUSTRY LIMITED	Manufacturing
657	H & R JOHNSON LIMITED	Manufacturing
658	ADITYA BIRLA FASHION	Retail
659	OPTMYZR	Consultancy
660	MEDTRAIL	Service
661	P&O CRUISES	Hospitality
662	ASHIANA HOUSING LTD	Real Estate
663	PHABLE	HealthCare

664	CAVINKARE PVT. LTD.	HealthCare
665	FREYR SOLUTIONS	Pharma
666	RALLIS INDIA	Chemicals
667	CANARA HSBC ORIENTAL	Insurance
668	ASAHI INDIA	Manufacturing

*Source: Websites of various management colleges and Institutes of Punjab*

S · N O	Type of Paper (Journal Paper/Conference proceeding/Book Chapter)	Name of the Journal/Conference/Book	Journal indexing (Scopus/UGC/Web of Science)	Title of the Paper	Published Date (Date/Month/Year)	Volume & Issue Number	ISSN /ISBN Number	Impact Factor/SJR	Type of paper (Research/Review)	From thesis	Web link of journal indexing	Log Request ID		
1	Journal Paper	Revista de Gestao Social e Ambiental	Scopus	Evaluating Education's Impact on Workplace Readiness: A Meta-Analytical Examination	Mar-24	vol 18. no. 6	1981-982X	8.5	RESEARCH	YES	<a href="https://rgsa.emnuvens.com.br/rgsa">https://rgsa.emnuvens.com.br/rgsa</a>	66335		



## List of Conferences

1. International Conference-“Challenges in Higher education” on 26<sup>th</sup> February 2020 at Tecnia Institute of Advanced Studies.
2. International Conference on“Industry 5.0 : Human Touch, Innovation and Efficiency” on 28th January 2022 at Lovely Professional University.
3. National conference sponsored by ICSSR on “ Atmanirbhar Bharat: Building a self-reliant India (Prospects and challenges ahead” at Dr. B.R. Ambedkar National Institute of Technology, Jalandhar on 25<sup>th</sup> and 26<sup>th</sup> May 2022.
4. 37<sup>th</sup> National Conference on Computing Informatics, Network and Security at Tecnia Institute of Advanced Studies on 18<sup>th</sup> June 2022.