Analyzing the Employability Potential of Fresh Graduates of Architecture in India

Hemlata Chhikara[1], Tejwant Singh Brar[1], Navin Piplani[1], Mohammad Arif Kamal[2,*]

[1] Sushant School of Architecture, Sushant University, Gurgaon-122003, India
[2] Architecture Section, Aligarh Muslim University, Aligarh-202002, India
[*] Corresponding author: architectarif@gmail.com

Abstract: Architecture, which is considered a field that necessitates integrating diverse knowledge, including the arts, sciences, environmental awareness, and technology is getting increasingly diversified and demanding. In India, the issue of architecture fresh graduates' employment has taken on significant importance. Researchers have used the term 'employability' in the context of employment and the labor market for many years. Employability refers to the ability to work, particularly the acquisition of skills that increase a person's job opportunities. Architectural Institutions are working hard to make their students acquire employable skills; and advance their knowledge for better job opportunities. Looking at the greater market expectations and different employment functions, employers require a wide range of talents, from technical competence to soft skills. The purpose of the study was to explore the Employability Potential of Fresh Graduates of Architecture in India. To satisfy these rising workplace demands, employers today hire fresh graduate architects who are suitably prepared with essential employability skills. Lack of proficiency in employability skills by fresh graduates is considered a big challenge in today's changing scenario. The pilot study was done by a quantitative method using a survey questionnaire. The questionnaires were taken through Google forms. The questionnaire was formulated on 5 points Likert scale. Data was gathered and analyzed using Statistical Package for Social Sciences (SPSS). To increase the employability of fresh graduates in architecture, the study seeks to understand various researchers, employers, and graduates viewpoints on employability skills. The findings indicated that there is an importance on employability skills for the right career opportunities and architecture education can play a very vital role in improving the employability skills in the fresh graduates.

***Keywords*:** employability, skills, architectural education, employers, fresh graduates. India

1. Introduction

Architectural education and practice are two components of the architectural discipline that are frequently separated (Rauf, 2019). Architecture education has traditionally been believed to serve a vital role in training students to recreate their position in the professional world. A successful holistic Architectural Education is considered a blend of skills, experience, creativity, and values that develop with time (Dua, 2014). However, due to rapid changes in worldwide practice, Architecture Education has found it difficult to keep up with the Profession, which has evolved dramatically in the last few decades (Garg & Kamal, 2022), and Architectural Education has been slow to adapt to this transformation. Architectural Education approaches are facing difficulties, which seem to affect the employability of fresh graduates (Khodeir, 2020). Architecture Education is critical in shaping the profession. However, there is seen a significant gap between theory and practice in Architecture Education, resulting in a disconnect between what students learn and what they produce (Bangre et al., 2025). So fresh graduates who are attracted to the jobs find it difficult to bridge the gap to the actual requirements in the profession (Panchariya, 2019). Employers seek graduates who can quickly adapt to the work environment, use their skills and talents to help the organization thrive, and engage creatively. Despite architecture schools' dedication to providing architectural education that equips graduates with skills relevant to architectural practice, graduates still lack employability skills (Mari, 2019).

2. Literature Review

2.1 Employability and Employability Skills

Employability is defined as "a set of achievements, skills, understandings, and personal attributes that make graduates more likely to succeed in their chosen careers and find job, as this helps the workforce, the society, the economy, and each individual" (Yorke, 2006). According to Harpe (2000), "There is widespread criticism that current undergraduate courses fail to generate graduates with a set of lifelong learning abilities and professional skills that are necessary to be successful in their employment."

Graduates' employability has become increasingly crucial in today's environment. As they enter the workforce, they encounter several obstacles such as a lack of job prospects, job stability, and fast technological development. They no longer require simply technical skills or academic qualifications to make a person employable; rather, employers today require people who are eager to work. There is a significant disparity between what employers want in employees and what employees receive from their colleges and universities, resulting in an employability gap that must be filled. According to research conducted by Kubler and Forbes (2005), Employability involves cognitive skills, general competences, personal capacities, technical ability, business/organization awareness, critical assessment, reflection, and review. It is difficult to apply a comprehensive framework for employability that takes into account the roles of both individual qualities and job market conditions.

Employability is considered as an evaluation of a graduate's economic worth at the time of appointment. Employability is defined as the improved ways to obtain and maintain employment. It is a collection of transferrable skills. (Rehman, 2014). A set of essential qualities that include the growth of a knowledge base, level of competence, and mindset are becoming increasingly crucial in the modern workplace. Employability skills are frequently seen as key attributes for various job opportunities, and as a result, they have become critical to an individual's employment success at any level within their skill set. It is not equivalent to having a job; rather, it refers to a graduate's ability to stay employed and transition between jobs, allowing them to remain employable throughout their careers. It is the ability to survive in a work environment via the acquisition of skills and competence. Self-advocacy and communication skills are essential to adapt to changing conditions, pursue continuous learning, and contribute in a variety of teams.

Traditionally, these skills were gained on the job, but due to the changing nature of the job market, employers today want graduates to have employability skills in hand. Based on the different literature reviews, the most desirable employability skills expected by the employers were taken into consideration for the pilot study. These skills include:

(1) Communication Skills
(2) Critical Thinking Skills
(3) Cognitive/Problem Solving Skills
(4) Behavioral Skills
(5) Entrepreneurship Skills
(6) Leadership Skills
(7) Teamwork Skills
(8) Social Skills
(9) Technical Skills
(10) Learning Skills
(11) Creativity and Innovation Skills
(12) Self-management and Development Skills

2.2 Requirement of the Building Industry and Professionals

In the previous few decades, the globe has changed dramatically. The architectural profession has likewise changed dramatically in the recent decade (Panchariya, 2019). In India, new technologies, new materials, and new skill sets have arisen, posing new challenges to architectural education. The path of history, as well as the style and organization of architectural education, has been altered by new technologies (Khan, 2017). According to Garg and Kamal (Garg & Kamal, 2000), "Universities and academic institutions have been unable to update their curriculum in order to keep up with rapid technological advancements". As a result, the students that graduate are unprepared to satisfy the current industry needs, and employers frequently suffer additional costs, both time and money, to educate new recruits." Employers usually want graduates to be able to perform on the job, to be confident communicators, excellent team members, critical thinkers, problem solvers, and to be flexible and adaptive to new responsibilities and workplace changes. (Harvey & Morey, 2002). Sudha (2013) discovered that "the necessity to compete worldwide has driven sectors to shift, which has put pressure on the graduates to realign their skills, knowledge, and talents in order to meet the global competitive reality." According to the findings, graduates do not completely possess the types and variety of skills required for occupational success. Institutions must take the required efforts to improve their students' skills in order for them to be successful in their careers." Over time, the curriculum has become more mature and extensive, but it has been unable to keep up with the rapid development of professional practice. The contemporary professional environment, with its evolving trends and social context, necessitates a reconsideration of the B.Arch. program's core motivations (Prasad, 2016).

2.3 Council of Architecture and its FuturePlans

The Council of Architecture (CoA) has been established by the Government of India in the Ministry of Education in accordance with the requirements of the Architects Act, 1972, which was adopted by the Indian Parliament and came into action on September 1, 1972. (COA, Council of Architecture, 2021). The Act establishes requirements for architect registration, as well as educational requirements, recognized credentials, and standards of practice to be followed by practicing architects. With the permission of the Government of India, the rules have been formed and the Council of Architecture has framed Regulations as called for under the Architects Act. The un-gazetted versions 2008, 2014 and 2017 were also implemented over a period of time with a conflict until the Gazetted 2020 Minimum Standards of Architecture Education came into force. Currently, 2020 Minimum Standards are applied to faculty appointments or qualifications to serve in a suitable academic position as stipulated in the Architects Act 1972 (Kitchley, 2012). The Council on Architecture (CoA) oversees both the licensing of active architects and architectural education. To work as an architect, one's identity must be properly documented in the CoA's register of architects; otherwise, one is not legally permitted to call oneself an architect. Similarly, in order to operate an institution that offers architectural degrees, it must be included in the registry of authorized institutions and pass inspections performed by the Council on Accreditation (Chandavarkar, 2013). It is not general practice in all regions of the globe to have a single organization perform both of these duties. In light of NEP 2020, COA in year 2020 has worked out the Perspective Plan for the Architecture Education and according to that the emphasis has been considered on new technology and fulfilling the United Nations' Sustainable Development Goals (SDGs) (UN). Furthermore, in order to comprehend and define the role of the Council of Architecture within the framework of the NEP, the council has issued an interim report titled Architecture Education Way Ahead, which is aimed at education reform. The report suggests transforming higher education into a multidisciplinary undergraduate program, allowing students to pick courses from many streams as per choice.

2.4 Employment Status of Fresh Graduates of Architecture in India

In recent decades, there has been an increase in anxiety regarding the future of architectural education. This phenomenon is fueled by the fear that present approaches to teaching and practicing architecture will not be enough to meet tomorrow's problems (Al-Matarneh Rana, 2016). Employability is a key consequence of every higher education institution, whether it is for Architecture or Engineering. It is unavoidable that the architectural education system creates the curriculum to meet the demands of employers. Many studies have found that fresh graduates lack the employability skills that companies seek. Furthermore, the current economic downturn has increased the demand on architectural schools to produce graduates with the necessary skills to enter the workforce (Mari, 2019). Architecture, as a professional discipline, requires students to learn the necessary skills and information during their education in order to practise architecture. Despite architecture schools' intention to provide architectural education that provides graduates with skills relevant to the field of architecture, graduates still lack employability skills. (Mari, 2019). Employability skills are more important in today's age of technological upheaval and globalization. Employers express dissatisfaction with their workers' skills. There are around 75 million jobless youth in developing nations, and youth unemployment rates are often two to four times greater than adult unemployment rates. (Fajaryati, 2019). It is frequently said that the university or the Institutes does not generate job-ready graduates. Employability skills are essential in today's era of technological upheaval and globalization (Qadir & Kamal, 2022). Employers claim that graduates lack the necessary skills.

3. Research Methodology

The pilot study was done by a quantitative method using a survey questionnaire. The questionnaires were taken through Google forms. The questionnaire survey was divided into 2 categories of information. Part A regarding the demographics which included Gender, Age, highest qualification, and working experience while Part B included different aspects of Employability skills. The questionnaire was formulated on 5 points Likert scale. The questionnaire was constructed with the same set of questions but addressed to three types of respondents, namely Employers, Academicians, and fresh graduates. The fresh graduates who graduated in the last 3 years were considered for the survey. The surveys were sent to a total of 80 respondents (40 fresh graduates, 20 Employers, and 20 Academicians). The responses from 56 respondents were received (29 fresh graduates, 13 Employers and 14 Academicians). The data was gathered and analyzed using Statistical Package for Social Sciences (SPSS) version 26. Cronbach alpha coefficients were obtained to assess the reliability of the scale utilized. Scores obtained were 0.871 for fresh graduates, 0.771 for Employers and 0.819 for Academicians. These are well above the acceptable limits, and hence the questionnaire was considered to be reliable for the study. The acquired data was analysed and explained using descriptive statistics (frequency, mean, and standard deviation).

4. Findings and Discussion

Table 1 shows the response to question 1 about the extent to which the educational system is fostering the employable skills that the industry/professional needs. Results show that Employers, Fresh Graduates, and Academicians agree that the education system is fostering employer skills only up to some extent. Thus, the opinion is that the current education system is not high enough to foster the employability skills required by the industry. The Architecture Institutions must make an attempt to solve the issues related to employability skills.

Table 1. Perception on the educational system fostering employability skills

The extent to which the educational system is fostering the employable skills that the industry/professional needs	Employer N=13 Percentage %	Fresh Graduate N=29 Percentage %	Academician N=14 Percentage %
Not at all	7.7	6.9	-
To small extent	23.1	24.1	28.6
To Some Extent	30.8	48.3	42.9
To Moderate Extent	23.1	17.2	28.6
To Great Extent	15.4	3.4	-

Table 2 shows the response to question 2 about the importance of employability skills for the right career opportunities for the fresh graduates. Results show that more than 90% of the Employers agree that the employability skills are very important for the right career whereas more than 50% the Fresh Graduates consider the employability skills as very important for their career opportunities and almost 80% of Academicians agree employability skills as very important for right career opportunities of fresh graduates.

Table 2. Perception on the importance of employability skills for the right career opportunities

Importance of employability skills for the right career opportunities	Employer N=13	Fresh Graduate N=29	Academician N=14
	Percentage %	Percentage %	Percentage %
Not at all	-	3.4	-
To small extent	-	3.4	-
To Some Extent	7.7	41.4	21.4
To Moderate Extent	30.8	31	35.7
To Great Extent	61.5	20.7	42.9

Table 3 shows the response to question 3 about Architecture education playing a vital role in finding effective employment for fresh graduates. Results show that Employers, Fresh Graduates and Academicians agree that Architecture education has a very vital role in the employment of the fresh graduates.

Table 3. Perception on role of Architecture education in the employment of fresh graduates

Does architectural education have a vital role in finding effective employment for fresh graduates	Employer N=13	Fresh Graduate N=29	Academician N=14
	Percentage %	Percentage %	Percentage %
Yes	100	72.4	92.9
No	-	10.3	-
May be	-	17.2	7.1

Table 4 shows the response to question 4 about the level of satisfaction with the curriculum in accordance to the industry requirements. Results shows that the 77 % of employers and 71.4% academicians believe that the curriculum is satisfying the needs as per industry requirements to some or small extent while major of the fresh graduates believe that the curriculum is unable to satisfy the need as per the industry requirements.

Table 4. Perception on the satisfaction with the curriculum as per industry requirements

Satisfaction with the curriculum with respect to industry requirements	Employer N=13%	Fresh Graduate N=29%	Academician N=14 Percentage %
Not at all	7.7	31	7.1
To small extent	30.8	34.5	35.7
To Some Extent	46.2	20.7	35.7
To Moderate Extent	15.4	13.8	14.3
To Great Extent	-	-	-

Table 5 exhibits the agreement level on the current education system giving opportunities to flourish in employability skills. The result shows that more than 60% of the employers and fresh graduates don't agree that the current education system is giving the opportunity to flourish in employability skills.

Table 5. Agreement with the current educational system on employability skills

Agreement that the current educational system gives opportunities to flourish in employable skills	Employer N=13	Fresh Graduate N=29	Academician N=14
	Percentage %	Percentage %	Percentage %
Yes	7.7	13.8	28.6
No	69.2	62.1	28.6
May be	23.1	24.1	42.9

Table 6 exhibits the perception on a gap between the skill development of students and the employment. The result shows that more than 90% of the employers and fresh graduates believe that there is a huge gap between the skill development of the students and employment.

Table 6. Perception on gap between the skill development of the students and employment

Is there a gap between the skill development of the students and the employment	Employer N=13	Fresh Graduate N=29	Academician N=14
	Percentage %	Percentage %	Percentage %
Yes	92.3	96.6	64.3
No	-	3.4	-
Not Sure	7.7	-	35.7

Table 7 presents the importance of employability skills as perceived by Employers, fresh graduates and academicians. To examine the study's findings, mean score is separated into three levels of interpretation: low (1.00 to 2.33), medium (2.34 to 3.66), and high (3.67 to 5.00). Results reveal that the majority of the skills obtained mean scores of above 4 from the different stakeholders. Overall, with mean scores more than 4.0, the results revealed that the majority of the skills were seen as vital or extremely important by employers, recent graduates, and academicians. About the most important skills based on mean rating, employers rated 'Technical skills' as number 1 followed by 'Teamwork skills' and 'Learning skills'. Fresh graduates also rated 'Technical skills' as number 1 followed by 'Communication skills' and 'Teamwork skills'. On the other hand, academicians rated 'Self-management and development skills' as number 1, followed by 'Teamwork skills' and 'Critical thinking skills'.

Table 7. Total mean score of employability skills

Employability skills	Employer		Fresh Graduate		Academician	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Communication Skills	4	1.1547	4.3103	0.9298	4.1429	0.77033
Critical thinking skills	4	0.70711	3.7241	0.84077	4.4286	0.64621
Cognitive/Problem solving skills	4	0.91287	3.931	0.84223	4.2143	0.80178
Behavioural skills	4.2308	0.72501	4.069	0.92316	4.2857	0.91387
Entrepreneurship skills	3.9231	0.86232	3.4828	1.12188	4.0714	0.73005
Leadership skills	4.0769	0.75955	3.8621	0.95335	4	0.78446
Teamwork skills	4.6923	0.85485	4.1379	0.9901	4.5714	0.75593

Employability skills	Employer		Fresh Graduate		Academician	
	Mean	Std. Deviation	Mean	Std. Deviation	Mean	Std. Deviation
Social skills	4.0769	0.64051	4	0.80178	4.3571	0.8419
Technical skills	4.7692	0.43853	4.3793	0.77523	4.2143	0.89258
Learning skills	4.5385	0.66023	3.9655	0.98135	4.3571	0.63332
Creativity and Innovation skills	4.2308	0.83205	4	0.80178	4.2143	0.89258
Self-Management and Development	4.0769	0.95407	4.069	0.92316	4.6429	0.63332

5. Conclusions

The study's findings demonstrated that employers, fresh graduates, and academics all share similar perspectives of the present educational system and the need for curriculum changes based on industry demands. The findings indicated that there is a lot of importance on employability skills for the right career opportunities and architecture education can play a very vital role in improving the employability skills in the fresh graduates. The study had some limitations. The data was collected only from Pune and nearby cities using the convenience sampling method. The results could not be generalised for the architecture fresh graduates fraternity in India, as the sample size was not large enough. Extensive research can be conducted in the future to understand the perception of the fresh graduates of the state or even the country. A comparative study is highly recommended to examine the issue in detail which might help fresh graduates to overcome the lack of employability skills required by the industry.

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