

ASSESSMENT OF BASIC SKILLS REQUIREMENT FOR EMPLOYABILITY OF ENGINEERING GRADUATES: EMPLOYERS PERSPECTIVE

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Abstract

In the current dynamic job market, engineering graduates encounter numerous challenges in obtaining suitable employment. While technical knowledge and domain-specific expertise are undoubtedly crucial for success in the field, employers increasingly emphasize the significance of additional skill sets known as "basic skills." These skills extend beyond technical proficiency and encompass a diverse range of competencies that enhance employability and foster professional growth. This article explores the assessment of basic skills requirements for employability and its pivotal role in evaluating the readiness of engineering graduates to meet employer expectations.

A survey was conducted with 120 randomly selected respondents from the Peenya Industrial area, consisting of executives from top-level management actively involved in recruiting engineering graduates. The respondents completed structured questionnaires on the basic skills required for employability. Statistical analyses, including Chi-square tests, one-way ANOVA, and descriptive statistics, were performed on the collected data. The results revealed that the majority of employers (>50%) considered all the listed basic skills essential for employing engineering graduates. Among the basic skills, work-related skills ranked highest (95.10%), followed by psychological skills (89.94%) and technical skills (88.07%), with other skills ranking fourth (81.35%). Furthermore, the study identified that individuals aged 36-45 years scored highest in psychological and work-related skills, while smaller firms (less than 50 employees) had the lowest scores for required technical skills.

With these findings, this article aims to contribute to a deeper understanding of the employer perspective on basic skills assessment for educational institutions to align their curricula and assessment methods with industry demands, ultimately enhancing the employability of engineering graduates.

Keywords: Strategic Drives, Industry-Institution Engagement, Engineering Graduates, Employability

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Introduction

India has emerged as a destination offering numerous opportunities for skilled individuals from around the globe (World Economic Forum, 2020). With its large population and thriving industries, including information technology, infrastructure, and financial sectors, the country presents a promising landscape for employment (World Bank, 2021). However, despite these opportunities, many employers in India face persistent skills shortages, posing challenges to sustained economic growth and development (Planning Commission of India, 2012).

Various sectors in India, such as construction, technology, manufacturing, trade, banking and financial services, education, healthcare, and hospitality, play vital roles in driving the country's (National Skill economy Development Corporation, 2020). These sectors are in constant need of skilled professionals who possess the expertise and competencies necessarv to contribute effectively. Moreover, the STEM sector, mining, petroleum, engineering, and startup sectors also present attractive opportunities for individuals with specialized skills and knowledge (FICCI, 2019).

Despite India's robust economic potential and the availability of diverse employment prospects, employers frequently encounter difficulties in finding suitably qualified candidates to fill crucial roles (The Hindu, 2021; Kulkarni, 2021). This skills shortage issue can be attributed to various factors, including a significant gap between the skills possessed by job seekers and the skills by employers demanded (National Skill Development Agency, 2019). As a result, there is a growing emphasis on the development and demonstration of employability skills among individuals aiming to excel in the Indian job market (Confederation of Indian Industry, 2018).

In today's competitive job market, academic qualifications alone are often insufficient to secure employment. Employers seek candidates who possess a diverse set of transferable skills, commonly known as employability skills, in addition to their educational achievements. These skills encompass a range of competencies that individuals utilize in the workplace and are highly valued by employers for their ability to contribute to organizational success. In order to stay relevant and enhance their efficiency, employees must on and honing focus developing their employability skills.

This article delves into the analysis of various employability skills that are in high demand in today's workplace. Specifically, we explore three categories of employability kev skills: psychological skills, work-related skills, and technical skills. These categories have been identified through extensive research and are integral to the success of individuals in their professional endeavors. To provide a contextual foundation for this empirical study, it is important to examine the existing body of research that identifies and defines the components of these "basic skills." Previous studies have extensively explored the various dimensions and attributes encompassed within these skills and their significance in individuals' professional pursuits. By delving into the literature on basic skills, we can gain a comprehensive understanding of their essential characteristics and their impact on career success.

Psychological Skills:

Psychological skills refer to a set of competencies and attributes that influence an individual's behavior, attitudes, and mindset in the workplace. These skills encompass a range of abilities that contribute to effective interpersonal interactions, emotional regulation, and personal growth. Within the context of employability, psychological skills include, in a broader sense- emotional intelligence, self-motivation, adaptability, resilience, and effective communication.

Numerous studies have emphasized the positive impact of psychological skills on job performance, team collaboration, and overall career success. For instance, Dacre Pool and Sewell (2007) conducted a study on graduate employability and found that psychological skills, including emotional intelligence and self-motivation, significantly influenced individuals' career progression and job satisfaction. Similarly, Judge and Bono (2001) conducted a meta-analysis and demonstrated the relationship between core self-evaluations (which include emotional stability) and job performance.

One study conducted by Breevaart et al. (2020) examined the role of psychological skills in predicting job performance and career success. The researchers assessed the psychological skills of employees across various industries and found that these skills, including emotional intelligence, self-motivation, adaptability, resilience, and effective communication, were positively related to job performance. The study revealed that individuals with higher levels of psychological skills demonstrated better task performance, exhibited higher levels of proactivity, and received higher performance ratings from their supervisors. Moreover, employees with strong psychological skills were more likely to and experience career advancement job satisfaction. This study further supports the importance of psychological skills in shaping individuals' work-related outcomes, emphasizing their positive influence on job performance and career success. By developing and cultivating these psychological skills, individuals can enhance their professional capabilities and improve their overall effectiveness in the workplace.

Work-Related Skills:

Work-related skills encompass a set of competencies that are essential for efficiently fulfilling job responsibilities. These skills include problem-solving, critical thinking, decisionmaking, time management, organizational skills, and the ability to work both independently and collaboratively as part of a team.

Research has consistently demonstrated the positive impact of strong work-related skills on employee performance, productivity, and job satisfaction. For instance, Harrison et al. (2014) conducted a study that revealed a positive relationship between problem-solving and critical thinking skills and job performance. Similarly, Tett et al. (2007) found that individuals with strong work-related skills exhibited higher levels of job satisfaction and were more likely to achieve career success.

A study conducted by Bellou (2021) examined the relationship between work-related skills and job performance in a sample of employees across various industries. The findings revealed that employees with strong work-related skills, including problem-solving, critical thinking, time management, and teamwork, exhibited higher levels of productivity and job performance. The study emphasized the significant role of these skills in enhancing individual effectiveness and overall organizational success.

This study aligns with previous research conducted by Grant and Dweck (2003), who found that employees with strong problem-solving and critical thinking skills were more likely to generate innovative solutions, contribute creative ideas, and adapt to changing work environments. Additionally, a study by Parker et al. (2010) demonstrated that effective time management skills positively influenced job performance and employee satisfaction.

Individuals can improve their performance, efficiency, and job satisfaction by developing and honing work-related skills, which will also increase their overall effectiveness at work.

Technical Skills:

Technical skills are specialized competencies that are specific to a particular field or industry, and they play a crucial role in employability. In the context of engineering graduates, technical skills encompass the knowledge, tools, and techniques necessary to excel in their respective engineering domains. These skills can include proficiency in programming languages, design software, data analysis, project management, and other technical proficiencies that are highly valued by employers.

Numerous studies have highlighted the critical importance of technical skills in securing employment and advancing careers in the field of engineering. For example, Lamprecht et al. (2020) conducted a comprehensive review of the literature and found that technical skills were consistently identified as one of the primary factors influencing employability and career success in engineering disciplines. The study emphasized the need for engineering graduates to possess a strong foundation in technical skills to meet the demands of the industry.

Similarly, Muro and Andalusian Agency for Knowledge (2019) conducted a study on the skills required for Industry 4.0, which emphasized the significance of technical skills in adapting to technological advancements and digital transformation in the engineering field. The study highlighted the importance of technical proficiency in emerging areas such as automation, artificial intelligence, and robotics.

A study conducted by Wang et al. (2021) investigated the impact of technical skills on employability outcomes in the field of information technology. The researchers examined the relationship between technical skills. iob performance, and employability prospects among IT professionals. The findings revealed a strong positive association between technical skills and both job performance and employability. The study highlighted that IT professionals who possessed advanced technical skills, including programming languages, database management, and system analysis, were more likely to excel in their roles and secure better employment opportunities.

This study aligns with previous research conducted by Xu et al. (2021), who explored the role of technical skills in the software engineering industry. The findings indicated that software engineers with a strong technical skill set, such as proficiency in coding languages, software development frameworks, and system architecture, exhibited higher levels of job performance and employability. The study emphasized the criticality of technical skills in securing employment and career advancement in the software engineering domain.

By demonstrating proficiency in technical skills, engineering graduates can enhance their employability and competitiveness in the job market. Employers consistently seek candidates who possess the necessary technical expertise to contribute effectively to their organizations. Thus, acquiring and continuously updating technical skills is essential for engineers to stay abreast of technological advancements and meet the evolving demands of the industry.

In conclusion, this article aims to assess the basic skills requirement from the employer's perspective for the employability of engineering graduates. The study conducted by Chen et al. (2021) provides valuable insights into the perceptions and expectations of employers regarding the essential skills needed for employability in the engineering field. The findings highlight the significance of a comprehensive skill set that encompasses technical, work-related, and psychological skills.

Employers consider technical skills as foundational competencies that engineering graduates should possess. These skills enable graduates to apply their specialized knowledge effectively in practical situations. However, employers also emphasize the importance of work-related skills, such as problem-solving, critical thinking, and teamwork, which are crucial for successful job performance in dynamic engineering environments.

Moreover, psychological skills like adaptability, resilience, and effective communication are recognized as vital for career growth and longterm success in the engineering field. These skills enable graduates to navigate challenges, collaborate effectively with colleagues, and adapt to evolving industry demands.

The primary objective of this article is to narrow the disparity between the skillsets possessed by engineering graduates and the skillsets sought by employers. By gaining insights into the employer perspective on basic skills requirements, this study aims to facilitate a better alignment between the two. This alignment is crucial in addressing the gap that exists and ensuring that engineering graduates possess the necessary skills and competencies that meet the expectations and demands of employers in the industry. The insights gained from this study will inform recommendations for educational institutions to align their curricula and assessment methods with demands, thereby industry enhancing the employability of engineering graduates.

Hence, this article is titled as, "Assessment of Basic Skills Requirement for Employability of Engineering Graduates: Employers Perspective."

Method

Population and Sample

There are approximately 170 industries recruiting fresh graduates from technical institutions in the Peenya Industrial area located at north of Bengaluru city. The researcher selected randomly 120 respondents based on the formula given by Krejcie and Morgan (1970). The sample selected considering executives from top level management who were actively engaged in recruiting engineering graduates.

Tool developed and administered

The first author in consultation with the experts in the field developed a structured inventory for required basic skills by the industries in employing engineering graduates through various industry institute engagement practices. Initially a large pool of skills was enlisted and validity of the inventory was done by experts in the field of commerce. business management, Human resource management executives, and statistical consultants. After validation a total of 18 skills were retained which were more commonly required by the industries and they were divided into four groups of the major required skillspsychological, work related, technical and others. The respondent has to answer by reading each basic skill and tick one of the options given asunimportant, somewhat important, moderately important, important, and very important on a 5 The details of the tool point Likert scale.

reliability indices (obtained	below.	
Basic skills	No, of skills	Cronbach
		alpha
Psychological (1,4,5,9,10, 11, 16)	7	0.836
Work related (2,3,12,13)	4	0.661
Technical (6,14,15)	3	0.603
Others (7,8,17,18)	4	0.766
Total (1 to 18)	18	0.890
100001 (100 10)	10	0.020

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developed in terms of various skills, number of statements and reliability indices (obtained

The reliability coefficients obtained through Cronbach alpha method were found to be high for skills on various required basic skills as well as for all the skills ranged from .603 to .836 and for all the skills the reliability coefficient was found to be .890. Hence the tool employed in the present study for required basic skills for employability of engineering graduates was found to be reliable.

Procedure

On the whole 120 respondents were randomly selected from the Peenya Industrial area of Bengaluru. A minimum of 6 months working in the industry and having involvement in frequent recruitments was confirmed before the data collection process. The respondents were briefed about the study and assured of confidentiality of information were given the questionnaire on required basic skills for employability for graduates through Industry Institute engagement practices. To avoid unanticipated mistakes, the survey instrument was pre-tested in a non-sampled region. A consent letter was obtained from the respondents before the commencement of the data collection process.

through Cronbach alpha) are presented in the table

Statistical analysis

Both descriptive and inferential statistics were employed for the study. Descriptive statistics included N, mean, standard deviation, percentage and rankings. Inferential statistics included Chisquare test, one-way ANOVA and Scheffe's post hoc test. One-way ANOVA was employed to find out the significance of mean difference between respondents in different age groups as well as the size of the firm on the various required basic skills. Scheffe's post hoc test was employed as a post hoc test for multiple comparisons between mean values, whenever F value was significant. For data analysis SPSS for windows version 20 was used.

Table 1: Frequency and percent responses by the employers on the required basic skills required by
the graduates for employability

Sl. No.	Basic skills		Responses					
			UI	SI	MI	I	VI	Test statistics
1	Attitude to work	F	-	-	-	33	87	$X^2 = 24.30;$
		%	-	-	-	27.5%	72.5%	P=.001
2	Time management	F	-	-	4	11	105	$X^2 = 159.05;$
		%	-	-	3.3%	9.2%	87.5%	P=.001
3	Team work	F	-	-	-	21	99	$X^2 = 50.70;$
		%	-	-	-	17.5%	82.5%	P=.001
4	Decision making	F	-	-	11	39	70	$X^2 = 43.55;$
		%	-	-	9.2%	32.5%	58.3%	P=.001
5	Leadership skills	F	-	-	16	35	69	$X^2 = 36.05;$
		%	-	-	13.3%	29.2%	57.5%	P=.001;
6	Analytical Ability	F	-	-	8	47	65	$X^2 = 42.45;$
		%	-	-	6.7%	39.2%	54.2%	P=.001
7	General Ability	F	3	-	8	34	75	$X^2 = 108.47;$
		%	2.5%	-	6.7%	28.3%	62.5%	P=.001
8	General Knowledge	F	-	8	4	42	66	$X^2 = 86.67;$
		%	-	6.7%	3.3%	35.0%	55.0%	P=.001
9	Communication	F	3	-	-	25	92	$X^2 = 107.45;$
	Skills	%	2.5%	-	-	20.8%	76.7%	P=.001

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10	Problem solving	F	-	6	4	40	70	$X^2 = 98.40;$
	skills	%	-	5.0%	3.3%	33.3%	58.3%	P=.001
11	Creative thinking	F	-	3	3	41	73	$X^2 = 114.27;$
	skills	%	-	2.5%	2.5%	34.2%	60.8%	P=.001
12	Professional skills	F	-	-	13	36	71	$X^2 = 42.65;$
		%	-	-	10.8%	30.0%	59.2%	P=.001
13	Willingness to learn	F	-	-	_	16	104	$X^2 = 64.53;$
	new things	%	-	-	_	13.3%	86.7%	P=.001
14	Technical Ability	F	-	-	10	46	64	$X^2 = 37.80;$
		%	-	-	8.3%	38.3%	53.3%	P=.001
15	Computer Literacy	F	3	4	_	62	51	$X^2 = 95.67;$
		%	2.5%	3.3%	-	51.7%	42.5%	P=.001
16	Emotional Stability	F	3	3	15	52	47	$X^2 = 94.83;$
		%	2.5%	2.5%	12.5%	43.3%	39.2%	P=.001
17	Academic	F	3	-	46	41	30	$X^2 = 36.87;$
	Performance	%	2.5%	-	38.3%	34.2%	25.0%	P=.001
18	Pre graduate work	F	3	11	41	39	26	$X^2 = 47.00;$
	experience	%	2.5%	9.2%	34.2%	32.5%	21.7%	P=.001

Note: UI-Unimportant; SI-Slightly Important, MI-Moderately Important; I-important; VI-Very Important

For assessing the importance of basic skills required for employability as required by the employers, majority of the employers (>50%) were of the opinion that all the listed skills in the Table 1 are important to very important. The percentage importance from important to vary important for the skills Attitude to work (100.0%), Time management (96.7%), Team work (100.0%), Decision making (90.8%), Leadership skills (86.7%), Analytical Ability (93.3%), General Ability (90.8%), General Knowledge (90.0%), Communication Skills (97.5%), Problem solving skills (91.6%), Creative thinking skills, Professional skills, Willingness to learn new things, Technical Ability, Computer Literacy (100.0%), Emotional Stability (100.0%), Academic Performance (59.2%) and pre-graduate work experience (54.2%) were found to be more than 50%.

Chi-square test revealed significant frequency differences between

Table 2: Descriptive statistics and rankings for various basic skills required by graduates as required
by the industries in employing engineering graduates

by the industries in employing engineering graduates								
Basic Skills	Mean	S.D	Percent	Rank				
Psychological	31.48	3.550	89.94	2				
Work-related	19.02	1.270	95.10	1				
Technical	13.21	1.587	88.07	3				
Others	16.27	2.756	81.35	4				

On the whole it was found that 'work related skills' (95.10%) ranked one for the required skills for employability, followed by psychological

skills (89.94%), technical skills (88.07%), which ranked 2 and 3 respectively and lastly other skills (81.35%) ranked 4.

Table 3: Mean scores on various strategies employed by the industries in employing engineering
graduates through various industry-institute engagement practices by age groups and results of One-

	way	ANOVA			
Basic skills	Age groups (in years)	Mean	S.D	F value	P value
Psychological	18-25	33.06 ^{ab}	2.727	3.713	.014
	26-35	31.33 ^{ab}	3.638		
	36-45	34.67 ^{ab}	.577		
	46-55	29.10 ^a	2.807		
Work-related	18-25	19.18 ^b	.809	10.861	.001

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	26-35	19.17 ^b	1.041		
	36-45	20.00 ^b	.000		
	46-55	17.10^{a}	2.183		
Technical	18-25	13.41	1.121	1.763	.158
	26-35	13.17	1.717		
	36-45	15.00	.000		
	46-55	12.70	.675		
Others	18-25	16.53	2.528	2.136	.099
	26-35	16.23	2.848		
	36-45	19.67	.577		
	46-55	15.20	1.874		

Note: mean values with different superscripts are significantly different from each other as indicated by Scheffe's post hoc test (alpha=.05).

One-way ANOVA revealed significant mean differences between respondents with varied age groups in their perception on required basic psychological and work related skills. The F values obtained for mean differences for psychological skills (F=3.713; p=.014), and work related skills (F=10.861; p=.001) were found to be significant. Those who were in the age group of

46-55 years had least scores and those who were in the age group of 36-45 years had highest scores and others in between both for psychological and work related skills, which is further confirmed by Scheffe's post hoc test. However, respondents in differed scores did not different significantly in their perception on needed technical (F=1.763; p=.158) and other skills (F=2.136; p=.099).

Table 4: Mean scores on various strategies employed by the industries in employing engineering graduates through various industry-institute engagement practices by size of the firm and results of

		One-	way ANOVA		
Basic skills	Size of the	eMean	S.D	F	Р
	firm			value	value
Psychological	<50	31.00	4.079	1.231	.302
	51-100	33.80	1.789		
	101-150	34.33	1.155		
	151-200	30.93	4.497		
	>200	31.47	3.237		
Work-related	<50	18.65	1.384	1.042	.389
	51-100	19.60	0.548		
	101-150	19.67	0.577		
	151-200	19.00	1.359		
	>200	19.08	1.253		
	<50	12.62 ^a	1.791	2.750	.032
Technical	51-100	13.80 ^{ab}	0.447		
	101-150	14.67 ^b	0.577		
	151-200	14.00 ^b	0.961		
	>200	13.17 ^a	1.592		
	<50	15.23	3.374	1.765	.141
	51-100	17.00	0.707		
Others	101-150	18.67	2.309		
	151-200	16.71	1.939		
	>200	16.42	2.668		

Note: mean values with different superscripts are significantly different from each other as indicated by Scheffe's post hoc test (alpha=.05).

Size of the firm had significant influence over only one of the required skiils ned by graduates-'technical skills' for the mean difference, F value of 2.750 was found to be significant at .032 level. From the mean values it is evident that those with <50 firm size had least score of 12.62, those with 101-150 firm size had the highest scores score of 14.67 and others in between, which is further

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confirmed by Scheffe's post hoc test. However, F values obtained for mean differences for required skills-psychological (F=1.731; p=.302), work related (F=1.042; p=.389), and other skills (F=1.765; p=.141) were all found to be non-significant confirming that size of the firms did not have significant influence over their required scores on for psychological, work related and other skills.

DISCUSSION

The major findings of the study are

- Majority of the employers (>50%) were of the opinion that all the listed basic skills required for employability in employing the engineering graduates.
- Work related skills' (95.10%) ranked one for the required basic skills for employability, followed by psychological skills (89.94%), technical skills (88.07%), which ranked 2 and 3 respectively and lastly other skills (81.35%) ranked 4.
- In basic skill requirement of psychological and work related skills, those who were in the age group of 46-55 years had least scores and those who were in the age group of 36-45 years had highest scores and others in between both for psychological and work related skills
- •On technical skills needed by the employers, those with <50 firm size had least score of 12.62, those with 101-150 firm size had the highest scores score of 14.67 and others in between

The finding that employers highly value a comprehensive set of basic skills aligns with previous research (Arthur et al., 2010; Tett et al., 2007) emphasizing the importance of a wellrounded skill set. Nair and Sreekumar (2017) conducted a study focused on the IT sector in India and found that employers highly valued technical, work-related, and communication skills. The study highlighted the significance of technical expertise, problem-solving abilities, teamwork, effective communication skills and for employability in the IT industry. These findings support the notion that Indian employers prioritize a combination of skills when assessing the employability of engineering graduates. Consequently, engineering graduates should develop a diverse skill set that encompasses technical proficiency, work-related competencies, and effective communication abilities to enhance their employability prospects.

The ranking of work-related skills as the highest required basic skill for employability aligns with previous studies emphasizing the significance of problem-solving, critical thinking, and teamwork in the workplace (Lamprecht et al., 2020; Muro & Andalusian Agency for Knowledge, 2019). These skills are essential for addressing complex challenges, driving innovation, and fostering collaboration within organizations. Similarly, psychological skills like adaptability, effective communication, and resilience have been identified as crucial for professional success (Goleman, 1998; Luthans et al., 2007). These skills enable individuals to navigate diverse work environments, manage relationships, and cope with change.

Malpani and Chaudhary's (2018) study in the engineering sector further supports the importance of work-related and psychological skills. The study emphasized the value placed on problemsolving, critical thinking, adaptability, effective communication, and self-motivation by employers, highlighting their significance for employability among engineering graduates. These findings stress on the prioritization of workrelated and psychological skills by employers, emphasizing the need for engineering graduates to develop and showcase these competencies to enhance their employability.

The observed age group differences in the importance of psychological and work-related skills can be attributed to generational and experiential factors. Younger professionals, who are familiar with emerging work trends and technologies, demonstrate proficiency in contemporary problem-solving approaches and collaboration methods (Ng et al., 2012). Their exposure to newer technologies allows them to excel in work-related skills such as problemand teamwork. Conversely, solving older professionals may possess extensive domainspecific expertise but could benefit from further developing psychological and work-related skills to adapt to evolving work environments (Rudolph et al., 2017). Strengthening skills related to effective communication and leadership becomes crucial for them to manage teams and guide projects successfully.

Chaudhary and Garg's (2018) study supports the existence of age-related differences in skill preferences among Indian employers. Younger employers (below the age of 35) emphasized work-related skills such as problem-solving and teamwork, aligning with the present study's findings. In contrast, older employers (aged 45 and above) valued psychological skills such as

effective communication and leadership abilities for employability. These findings highlight the importance of continuous skill development and lifelong learning for professionals across all age groups. Younger professionals should leverage their familiarity with emerging trends, while older professionals can enhance their employability by cultivating and refining psychological and workrelated skills. This emphasizes the need for individuals to adapt to changing work environments and proactively develop the necessary competencies to remain relevant and competitive throughout their careers.

The relationship between firm size and the importance placed on technical skills can be attributed to the varying resource capacities and job demands in different organizational contexts. Larger firms often undertake more complex projects that require a higher level of technical expertise (Chang et al., 2020). Their operations and projects may involve advanced technologies, intricate systems, and specialized knowledge, necessitating a greater emphasis on technical skills.

In contrast, smaller firms may prioritize adaptability and flexibility due to their resource limitations and the need for employees to handle multiple responsibilities (Chen et al., 2020). Smaller firms often operate with leaner teams and have a higher level of interdependence among employees. As a result, they value individuals who can adapt quickly to changing circumstances, possess a diverse skill set, and contribute across different areas.

These findings are consistent with the study conducted by Pal and Sarangi (2017), which explored the relationship between firm size and employability skills. The study revealed that larger firms placed greater importance on technical skills, such as programming languages and domain-specific knowledge, due to the complexity and scale of their operations. Smaller firms, however, placed more emphasis on a combination of technical skills and adaptability to meet the diverse requirements of their projects. These findings support the association between firm size and the emphasis placed on technical skills observed in the present study.

Conclusion:

This study highlights the importance of the basic skill set for the employability of engineering graduates from the perspective of employers. The findings demonstrate that employers highly value a combination of technical, work-related, and psychological skills including other skills. Workrelated skills, such as problem-solving and teamwork, ranked as the highest required skills, followed by effective communication and adaptability. These findings clearly emphasize the need for engineering graduates to cultivate a diverse set of skills to meet the expectations of employers.

The study also reveals age group differences in the importance placed on certain skills. Younger professionals prioritize work-related skills, benefiting from their familiarity with emerging trends, while older professionals can enhance their employability by developing psychological and work-related skills to adapt to changing work environments.

The implications of this study emphasize the importance of aligning educational curricula and individual skill development with the demands of the job market. By addressing the skills gap and fostering a comprehensive skill set, engineering graduates can enhance their employability and career prospects.

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