Navigating The Future: Examining Technology As A Pivotal Employability Skill Among Final Year Graduates In Kasargod District

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Abstract

Employability skills are becoming more and more crucial for job seekers in today's employment market. Companies are beginning to evaluate applicants based on these skills more and more than merely their academic standing. So, graduate students need to equip themselves with these essential skills in order to increase their chances of landing a job in the global industry. The investigator conducted a comprehensive assessment to determine the level of proficiency in self-management abilities of final-year graduates from the educationally underprivileged Kasargod district. The study's findings provide light on the employability of these graduates, particularly in relation to their ability to handle technology. The results show that just 33.27 percent of candidates for final-year degrees possess the technology skill required to meet the demands of the job market.

Introduction

Employability skills are a broad category of non-technical competencies that have long been necessary for a successful and fruitful career. These skills are receiving more attention as businesses begin to value them more and more. In addition to technical proficiency, companies often value problem-solving abilities, dependability, responsibility, and the social skills and dispositions needed to collaborate well with others. Unlike technical or occupation-specific skills, employability skills are more transferable across industries and work functions. Skill to handle technology is a crucial skill for employment today.

Employability Skill

According to Yorke and Knight (2004), employability refers to accomplishments including knowledge, abilities, and character traits that greatly increase graduates' chances of finding work and succeeding in their chosen fields. Success like this helps not just the individual but also the economy, community, and labour force. Employability skills enable workers to take on more responsibility and grow in their professions. They are essential for effective job performance. These abilities are widely applicable across industries and job levels, making them indispensable. They serve as the cornerstone for flexibility, adaptability, and growth on both a personal and professional level. Beyond job-specific competences, employability skills, emphasised by Husain et al. (2012), contribute to the prosperity of individuals, organisations, and industries. Employers are concerned that higher education institutions may not be providing graduates with the necessary skills, as there is a recognised skill gap that emphasises the necessity for graduates to acquire these skills (Morley, 2001; Andrews and Wooten, 2005; Peddle, 2000). In conclusion, employability skills are a diverse range of

qualities that are essential for personal achievement and social contributions, promoting effectiveness, flexibility, and development across a range of career paths.

Literature review

Employability has been the subject of numerous studies, leading to a wide range of definitions and interpretations. Prominent academicians including Yorke and Knight (2004), Hillage and Pollard (1998), and Pool and Sewell (2007) have all examined the nuances of the idea. Employability is a term that is used in many different settings and, due to its complexity, frequently lacks a useful definition, according to Hillage and Pollard (1998). De la Harpe et al. (2000) expressed concerns regarding undergraduate programmes' failure to provide graduates with the professional skills and knowledge required for lifelong learning and career success. Work experience and the acquisition of vital skills are two significant ways that education plays a critical role in enhancing employability, according to the Dearing Report on Higher Education (1997).

In their 2005 article, Kubler and Forbes expanded on the discussion by stating that employability is comprised of several components, including technical proficiency, cognitive skills, business/organization awareness, personal capabilities, critical evaluation and reflection abilities, and generic competencies. Yorke and colleagues have proceeded to develop the employability notion by building on these roots. Building on their previous research, Yorke (2006) defined employability as a set of skills and accomplishments that, while important, do not by themselves ensure a job. This viewpoint emphasises the complex nature of employability and the fact that it involves more than just the development of skills; it encompasses a wider variety of qualities and capacities.

Technology

Recognizing technology as an Employability Skill underscores its significance beyond a task skill, encompassing various workplace functions. In employability, it entails effective use, adaptation, and leveraging of technological tools. This includes proficiency in software applications, programming, digital communication, industry-specific software, data analysis, and information management. In the dynamic work environment, technological proficiency is vital for staying competitive, contributing to organizational goals, and excelling in specific fields. It signifies the ability to navigate digital tools prevalent in modern workplaces, emphasizing the essential role of technology in shaping individual employability in today's rapidly evolving professional landscape.

Significance of Technology skill in the work setting

Lingard and Straker's (2014) UK study, spanning a decade, observes an increasing significance of technology skills for employability among university graduates. Proficiency in digital communication, information retrieval, and data analysis is crucial. Kumar and Singh's (2013) research highlights employer demand for advanced proficiency in programming, database management, cloud computing, and project management. The study also notes the rising importance of "non-technical" skills like communication, teamwork, and critical thinking in navigating complex client projects in the competitive Indian IT landscape.

US study by Friedman and Martinez (2014) challenges conventional "technology literacy" for employability, advocating "technology fluency." It stresses active utilization and innovation, promoting strategies like project-based learning and fostering creativity. Brown and Green's (2012) study explores technology's broad impact on work and employment, emphasizing adaptability and continuous learning to navigate future uncertainties in the rapidly changing technological landscape. Gupta and Kumari's (2014) research delves into Indian IT employers' perspectives, revealing a demand for advanced proficiency in software development, database management, and cloud computing. The study also underscores the increasing significance of "soft skills" like communication and teamwork for success in collaborative IT projects.

Kumar and Pandey's (2012) research tackles rural challenges in India, underscoring targeted technology training's potential to bridge the urban-rural digital gap. Focused on computer literacy and internet skills, these programs empower individuals, granting access to information, job opportunities, and participation in the digital economy. Patel and Jain's (2013) study explores social media's growing impact on career development in India. Highlighting employers' use of social media for screening, it urges young graduates to cultivate social media literacy, grasp professional online etiquette, and strategically manage their online presence to enhance employability and connect with career opportunities.Joshi and Kumar (2013) and Dutta and Singh (2012) emphasize the integration of manufacturing processes with technology, emphasizing the need for employees proficient in digital interfaces and automation. Mehta and Chandra's study (2012) and Reddy and Sinha's research (2010) highlight technology's role in enhancing efficiency in diverse contexts. In hospitality, employees navigate various technological tools for optimal service delivery, from reservation systems to guest services applications. Studies in general management practices by Chatterjee et al. (2014) and Gupta and Verma (2015) reveal the broad relevance of technology, with digital communication, data-driven decision-making, and strategic technology use emerging as essential managerial skills across sectors, shaping leadership roles and overall employability.

Perception of technological skill

In today's tech-dominated era, technology's role in employability is pivotal (Sharma & Reddy, 2015; Singh & Malhotra, 2014). Employers and employees universally recognize its centrality (Chatterjee et al., 2014; Dutta & Singh, 2012), valuing technological proficiency for organizational success. Companies seek adept individuals who navigate the digital landscape, enhance efficiency, and contribute to overall growth. Rather than divisive, technology is seen as a unifying force by both employers and employees, fostering a collaborative mindset that transforms it into an enabler, not a disruptor (Gupta & Verma, 2015).

Employers' Perspective

In the IT sector, where technology is paramount, employers stress specialized technical skills and adaptability to emerging technologies (Sharma & Reddy, 2015; Singh & Malhotra, 2014). Dutta and Singh (2012) underscore the demand in manufacturing for employees navigating automated systems and showcasing digital interface competence. Kapoor and Gupta's (2011) depiction of the healthcare sector emphasizes employers' expectations for technological acumen among professionals for efficient patient care. Reddy and Sinha (2010) reveal hospitality's reliance on technology for reservation systems and guest

services. In general management, Gupta and Verma (2015) highlight technology's broader relevance, with employers valuing digital communication and data-driven decision-making. Employers seek a workforce adept not only in current technologies but also in swiftly adapting to emerging ones (Joshi & Kumar, 2013), perceiving technology-savvy employees as contributors to streamlined processes and enhanced productivity (Mehta & Chandra, 2012).

Employees' Perspective

The employees' perspective on technology as an employability skill aligns with employers' expectations. Studies by Mehta and Chandra (2012) and Joshi and Kumar (2013) in hospitality and manufacturing, respectively, underscore employees' recognition of the need for technological proficiency to enhance their efficiency and overall employability. In healthcare, Rajan et al. (2013) demonstrate that healthcare professionals acknowledge the impact of technology on their effectiveness and the quality of patient care. Chatterjee et al. (2014) in general management echo similar sentiments, with employees recognizing the broader relevance of technology in their roles. Employees, across sectors, acknowledge the need to stay updated with evolving technologies to remain competitive in the job market (Joshi & Kumar, 2013). They also believe that technological skill plays a role in optimizing their workflow and contributing to their overall workplace efficiency. Digital literacy is recognized as a fundamental aspect of their professional toolkit (Kapoor & Gupta, 2011).

Objectives of the study

1) To assess the level of technology skill possessed by the students.
2) To examine the association between gender and the technology skill of the undergraduate students of Kasargod district.
3) To understand the employability of undergraduate students in terms of their technology skill.

Methodology

This study was designed as a project based assignment which an evaluation method that focuses on assessing participants' knowledge, skills, and abilities through the completion of a project or task. Unlike traditional assessments that rely on survey, project-based assessments require participants to apply their learning to real-world situations or complex problems. Project-based assessments can be implemented at various educational levels and across different subjects or disciplines. They promote active learning, problem-solving, collaboration, and critical thinking skills. Computer based practical assignments were individually given to the participants to assess their proficiency in technology.

Scaling Techniques

The ability to work in team was assessed using a score with maximum of ten and minimum of one. The scores 1 and 2 represented very poor expression, 3 and 4 represented poor expression, 5 and 6 represented average expression, 7 and 8 represented high expression and 9 and 10 represented very high expression. So the range of score between 1 – 4 represents a poor level/expression of a skill, 4.1 – 6 represents a medium level/expression of a skill and 7.1 – 10 represents a high level/expression of a skill.

Sample Design

From the population of 2775 students, 523 students from 12 Colleges belonging to Government, Aided and Self financing colleges were selected at random for the study, which is 18.85 percentage of the population. Approximately 45 students from each College were selected who belonged to one/two courses depending on the number of students in each course. The course/s was/were selected at random and sufficient care was taken to ensure that students belonging to the three streams are uniformly included in the study. The Stratified Random Sampling technique is adopted here. The gender wise split up of the sample is given below.

Table 1 – Gender wise split up of the sample

Gender	Frequency	Percent
Male	195	37.3
Female	328	62.7
Total	523	100.0

Source: Primary data

Tools for data collection

This study was designed as a project based assignment which an evaluation method that focuses on assessing participants' knowledge, skills, and abilities through the completion of a project or task. The students selected as sample for the study were asked to perform basic computer operations using word processing, spread sheet, internet browsing etc. that reflect the manifestation of technology skill. The performance of each participant was observed as part of the evaluation process. Data on the basis of performance in the computer operations were collected using structured observation method.

Hypotheses

H1: The undergraduate students who are getting ready to enter the job market do not possess the technology skill.

H2: There is no significant difference between male students and female students in their technology skill.

Scaling Techniques

The technology skill was assessed using a score with maximum of ten and minimum of one. The scores 1 and 2 represented very poor expression, 3 and 4 represented poor expression, 5 and 6 represented average expression, 7 and 8 represented high expression and 8 and 9 represented very high expression. So the range of score between 1 – 4 represents a poor level/expression of a skill, 4.1 – 6 represents a medium level/expression of a skill and 7.1 – 10 represents a high level/expression of a skill.

Table 2 – Technology score of the respondents

Gender		Technology score of the respondent								Total
		1	2	3	4	5	6	7	8	
Male	Count	0	10	30	35	50	35	20	15	195
	Percentage	.0	1.9	5.7	6.7	9.6	6.7	3.8	2.9	37.3
Female	Count	8	32	32	80	72	48	56	0	328
	Percentage	1.5	6.1	6.1	15.3	13.8	9.2	10.7	.0	62.7
Total	Count	8	42	62	115	122	83	76	15	523
	Percentage	1.5	8.0	11.9	22.0	23.3	15.9	14.5	2.9	100.0

Source: Primary data

Table 3 –Level of Technology skills of respondents

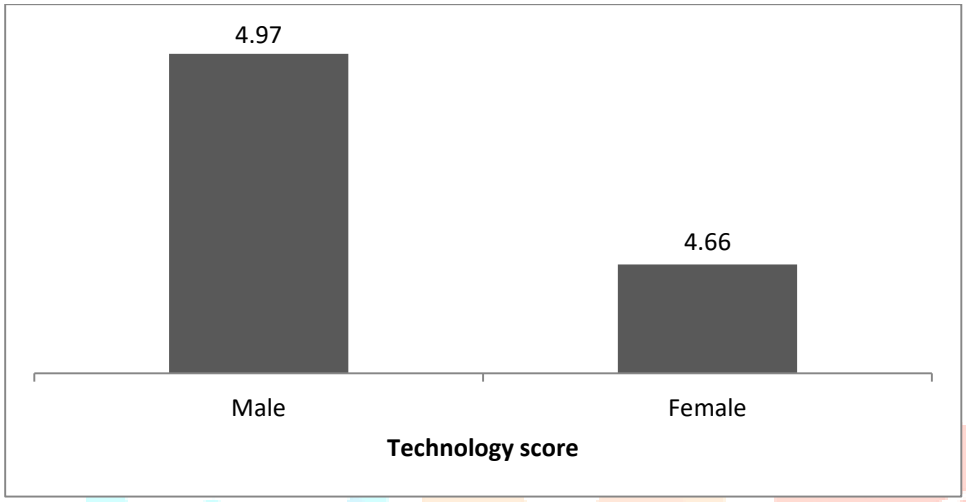
Gender		Level of Skill			Total	Mean Score
		Low	Medium	High		
Male	Count	75	85	35	195	4.97
	Percentage	38.5	43.6	17.9	100	
Female	Count	152	120	56	328	4.66
	Percentage	46.3	36.6	17.1	100	
Total	Count	227	205	91	523	4.78
	Percentage	43.4	39.2	17.4	100	

Source: Primary data

Table 4 – t test for equality of means of technology score

t-test for Equality of Means			
Variable	t	df	Sig. (2-tailed)
Technology score of the respondent	2.168	521	.031

Diagram 1 – Diagram showing the technology score of respondents



Interpretation

The Technology score of 43.4 percent students are low, 39.2 percent students are medium and 17.4 percent students are high. In a gender wise comparison, it reveals that 38.5 percent of male students have low, 43.6 percent have medium and 19.9 percent have high team work score. Among female students, the figures are 46.3percent, 36.6percent and 17.1percent respectively. The mean Technology score of male students is 4.97 and that of female students is 4.66. The mean Technology score of the whole group of students is 4.78 out of 10. The difference in technology score between the male students and female students is statistically significant.

Criteria for deciding Employability Skill

The researcher could not come across any study that specified a methodology for assessing the employability score of a person or recommended a cutoff score. Therefore the researcher proposes a very common practice being followed in academic evaluations. In the measurement of academic performance, 60 percent (First Class) is considered as an indication of high performance. If a student selected for study had secured sixty percentage (6) or more of this maximum score (10) he/she is considered as possessing employability skills or in other words, employable.

Employable and Unemployable Students on the basis of technology skill

The following table show the gender wise split up of the sample. 41.02 percent of the male students (80 out of 195) are employable and 19.51 percent of female students (64 out of 328) are employable. As a whole, only 27.53 percent of the final year degree students are employable.

Table 5 - The employability status of students

Employability status	Male		Female		Total	
	Count	Percentage	Count	Percentage	Count	Percentage
Employable	70	35.90	104	31.71	174	33.27
Not Employable	125	64.10	224	68.29	349	66.73
Total	195	100	328	100	523	100

Source: Primary data

Testing of hypothesis No.1

In order to test the hypothesis that the undergraduate students getting ready to enter the job market do not possess the required self management skill, one sample t test was applied. The test value is taken as 6 which is the minimum score required to be considered as an employable person.

Table 6 - One-Sample t Test Statistics

	Test Value = 6			
	t	df	Sig. (2-tailed)	Mean Difference
Technology score of the respondent	-17.307	522	.000	-1.22371

The test produced a t value of – 17.307 and the significance value was .00 which is less than the p value 0.05.The result can be interpreted that mean score is not 6 and since the t value is negative, the mean score is less than the test value of 6. Further, from the research it is revealed that only 33.27 percent of students are employable when the technology skill is considered. Therefore the hypothesis that the undergraduate students who are getting ready to enter the job market do not possess the employability skills in terms of their technology skill is accepted.

Testing of hypothesis No.2

Statistical testing has proved that the difference in technology skill among the male students and female students is significant. So the hypothesis that there is no significant difference between male students and female students in technology skill is rejected.

Findings

The major findings of the study are summarized below.

1. The average technology skill score of the final year degree students is only 4.78 out of 10, which means the graduates are going out of the campuses with a moderate technology skill. When gender wise analyzed, male students are slightly better than female students in their technology skill and this difference is found statistically significant also.

2. When the technology skill of a final year graduate student is considered, only 33.27 percent of the final year degree students are found to be employable. On a gender wise comparison, the 35.90 percent of the male students and 31.71 percent of the female students are employable. The difference between the male and female is found to be statistically significant.

Conclusion

The corporate are looking beyond the so called academic performance for the employability skills when they are recruiting employees. Therefore the graduates who are getting ready to enter the job market should be well equipped with these essential skills. In a global perspective, the employability skill comprises technology skill also. The researcher made an attempt to assess the level of technology skills possessed by the final year graduates of educationally backward, Kasargod district of Kerala state. The study revealed that only a minority of the final year graduates possess the employability skills.

References

1. Brown, P., & Green, S. (2012). Technology and the changing nature of work: Implications for employment and employability. Work, Employment & Society, 26(1), 1-17.
2. Chatterjee, S., et al. (2014). Adapting to Change: Employee Perspectives on the Importance of Technological Adaptability. *Journal of Indian Management, 11*(2), 55-68.
3. Daring, R. (1997) Higher Education in the Learning Society. Report of the National Committee of Inquiry into Higher Education. HMSO, Norwich.
4. De la Harpe, B., Radloff, A. & Wyber, J. (2000) Quality and generic (professional) skills, Quality in Higher Education. 6 (3) 231-243
5. Dutta, A., & Singh, R. (2012). Technology in Manufacturing: A Case Study of Employee Perspectives. *International Journal of Business and Management, 9*(4), 125-136.
6. Friedman, T., & Martinez, L. (2014). From literacy to fluency: Building
7. Gupta, P., & Verma, P. (2015). Technology Integration in General Management Practices: A Case Study of Indian Workplaces. *Journal of Organizational Effectiveness: People and Performance*, *2*(2), 78-93.
8. Gupta, V., & Kumari, V. (2014). The skills jigsaw: An analysis of employer perceptions of essential IT skills for employability in India. Management & Innovation Journal, 3(4), 126-132.

9. Hillage J., Pollard E. (1998). *Employability: Developing a Framework for Policy Analysis.* London: Department for Education and Employment (DfEE).

10. Joshi, A., & Kumar, R. (2013). Technology Management and Employee Performance: A Study in the Indian Context. *International Journal of Applied Business and Economic Research, 11*(7), 229-239.
11. Kapoor, A., & Gupta, A. (2011). Technology Management Practices in Indian Workplaces: An Empirical Study. *Indian Journal of Positive Psychology, 6*(1), 95-100.
12. Kubler, B. and Forbes, P., (2005). Student Employability Profiles. London: CIHE.

13. Kumar, R., & Pandey, P. (2012). Bridging the rural-urban divide: Technology training and employability in rural India. International Journal of Business and Management, 7(10), 72-80.
14. Kumar, R., & Singh, U. (2013). Developing technology skills for employability: A case study of the Indian IT industry. International Journal of Business and Management, 8(8), 75-82.
15. Lingard, L., & Straker, D. (2014). Technology skills for employability: A longitudinal study of graduates' perspectives. Education and Information Technologies, 19(3), 567-585.

16. Mehta, S., & Chandra, B. (2012). Technology and Team Dynamics: An Empirical Analysis in Indian Organizations. *International Journal of Applied Engineering Research, 7*(3), 2050-2054.

17. Morley L. (2001). Producing new workers: quality, equality and employability in higher education. *Q. High. Educ.* 7 131–138. 10.1080/13538320120060024

18. Patel, M., & Jain, P. (2013). Leveraging Social Media for Employability: Exploring New Strategies for Indian Graduates. International Journal of Human Resource Management, 24(8), 1748-1765.

19. Pool L. D., Sewell P. (2007). The key to employability: developing a practical model of graduate employability. *Educ. Train.* 49 277–289.

20. Rajan, R., et al. (2013). Employee Well-being and Productivity: An Empirical Study in Indian Organizations. *The Indian Journal of Industrial Relations, 49*(3), 447-461.

21. Reddy, K., & Sinha, S. (2010). Employee Training and Development Programs: Enhancing Technology Skills in the Indian Context. *Journal of Human Values, 16*(2), 143-158.
22. Sharma, A., & Reddy, P. S. (2015). Technology Management Practices in Indian Organizations: An Empirical Study. *The Indian Journal of Industrial Relations, 50*(3), 385-397.
23. Singh, R., & Malhotra, A. (2014). Adaptability in the Indian Workplace: A Cross-Industry Perspective - An Empirical Study on Employee Perceptions. *Management and Labour Studies, 39*(2), 123-139.
24. Yorke (2006) 'Employability in Higher Education: what it is - what it is not', Higher Education Academy/ESECT

25. Yorke M., Knight P. T. (2004). *Embedding Employability into the Curriculum.* York: Higher Education Academy.