

The Mismatch Between Traditional Higher Education Degree Programs and the Emerging Labor Market Expectations in the Era of the Gig Economy: Evidence from Pakistan

Amna Bibi^{1*}Rizwan Ali Shinwari²Riffat Shabbir³

Department of Governance and Public Policy, NUML, Islamabad, Pakistan

*Corresponding author: amnafareed720@gmail.com

Accepted: 14 Aug, 2025

Published: 30 January, 2026

ABSTRACT

This paper critically examines how the conventional university degree programs in Pakistan are aligned with the demands of the modern labor market, especially the rapidly growing gig economy. There are national programs such as Digi-Skills, NICs, and HEC guidelines, yet their implementation and integration into academic programs are remarkably weak, so students do not gain any substantial benefits. The study will systematically measure the evidence of the acquisition of necessary skills by university students, analyzes how various stakeholders perceive traditional degrees, identifies which skills are most important in gig and digital employment, and suggests practical curriculum changes to make students more employable. The qualitative approach of the study is based on carefully conducted semi-structured interviews with 35 respondents, including students, university teachers, and HR managers/recruiters, and the data were analyzed through thematic analysis. Results indicate that there is a significant disparity between education and employment requirements; most of the academic programs are more theoretical and are not sufficiently exposed to the real world. Traditional degrees alone are largely insufficient for the employment, they are not enough without digital, freelancing, and entrepreneurial skills. To succeed in the Gig economy, stakeholders emphasized the need to focus on soft skills, problem-solving, and practical experience.

Based on these findings, the research proposes curriculum changes, incorporation of skill-based courses, mandatory internships, portfolio projects, as well as stronger industry-academia partnerships and faculty development to prepare graduates to meet the modern demands of employment. The study will help to thoroughly comprehend the challenges in education in Pakistan and effectively recommend practical steps to structure higher education in accordance with the needs of digital and gig economies.

Keywords: Gig Economy, Micro-Credentials, Freelancing, Digital Skills, Employability Skills, Traditional Degree Programs, Skills Gap, Entrepreneurship Skills, Industry–Academia Collaboration, Practical Exposure

INTRODUCTION

The paper presents an in-depth investigation into the traditional degree programs and their conformity to the existing job market in the context of the gig economy. In the search of flexible and short-term work projects, the term 'Gig Economy', introduced to the labor markets, wherein individuals enjoy the pleasures of personal choices rather than following the rigid and traditional full-time work environment (Batmunkh et al., 2022). However, the progressive review of global literature specifies that recruiters need 21st-century skills, for example, digital platform proficiency, communication, adaptability, and micro-credentials, which are necessary for the current job market, but traditional degree programs still only provide mere rote learning instead of preparing students to excel in gig-economy careers (Taushar & Sooraksa, 2023). The rise in unemployment has not only shifted the focus towards the gig-economy but also raised questions on the relevance and presence of the traditional educational and degree programs which lay the knowledge and philosophical foundation of a nation. Moreover, studies also emphasize that employment patterns have been reshaped by technological changes and raise concerns about graduate employability (Jung et al., 2024).

According to Pakistan's Labor Force Survey, 2024-25, the unemployment rose from 6.3% in 2021-22 to 7.0% in 2024-25 (Pakistan Labor Force Survey, 2026). The survey reveals the magnitude of the unemployment crisis in Pakistan which has forced individuals to pursue alternative routes including self-employment for making their livelihood. Gig economy has emerged as the alternate route which specifically introduces a flexible working environment that offers both flexibility and short-term employment opportunities. Its introduction in the job market will

mitigate the risk of unemployment and financial crisis to a certain level; however, traditional institutions and higher educational programs fall short of imparting the work-based skills that the gig economy demands. Freelance professions explicitly require digital skills including but not limited to graphic designing competencies, problem solving, analytical thinking and entrepreneurship strategy. Resultantly, it has created a great disparity between what is taught in universities and what the job market demands currently. Even after graduation, students spend extra time and resources to gain digital skills, this expresses the needs that before entering the labor market graduates possess the industry-relevant digital competencies (Fiers, 2024). A study conducted in Pakistan found that graduates are facing unemployment crisis because of the huge skills gap which has occurred due to misalignment between job market needs and higher education programs which has been taught to the students (Gulzar & Khanam, 2025).

The research study Focuses on the rapidly growing unemployment issues in Pakistan and how individuals have begun creating their own jobs and became self-employed, relying on the short term and flexible gig economy that minimizes the unemployment problem to a certain degree. The gig economy career in question requires practical skills and micro-credentials such as graphic designing, content writing, communications, problem-solving, analytical thinking, entrepreneurship strategies, and digital skills, which are not directly taught at university level and traditional education systems. As such, the learning outcomes of university students mismatch the demands of the present job market. The students do not have hands-on skills that are acquired later through

the investment of their time and capital even after graduation.

Amid a vast analysis of pressing concerns, i.e., mitigating the risk of unemployment and curriculum reforms, less effort has been invested in understanding the worth of traditional degree programs in enhancing the skill set of pupils required for the gig economy. The prevailing literature mainly revolves around studying the general skill gap or policy reforms; however, a severe setback has been observed in preparing students for freelancing, digital platforms, and flexible work structures, especially in developing countries like Pakistan. Moreover, employer requirements and students' perspectives are often studied separately and considered disconnected, resulting in unprepared graduates.

The main objective of this study is to examine the connection between traditional degree programs and the development of digital competencies, freelancing abilities, entrepreneurship, and problem-solving, and

LITERATURE REVIEW

The literature claims that education systems have significant misalignment with labor markets, particularly within the context of the gig economy. As Abbas et al. (2024) and Ali et al. (2024) argue, there are major discrepancies in the qualifications of graduates, disjointed curricula, and ineffective connections with the industry, especially within the Pakistani education and TVET system. Similarly, Zaman and Nadeem (2024) note that the Pakistani education model is not attuned to practical and market-oriented skills as compared to India. Authors Ahsan (2025) and Hamid (2025) highlight the role of 21st-century skills, such as communication, creativity, and problem-solving, but do not outline the associated methods of implementing the related policies, particularly in the context of freelancing and digital

to assess the capabilities of graduates to compete in the evolving job market. Furthermore, it also examines the perspectives and growing requirements of the modern job market. It explores the learning outcomes of higher education among students, teachers, and employers regarding the preparedness of graduates to opt for different professions.

The study is guided by the following research questions, which are based on the objectives to be achieved:

1. How effective are universities in imparting job market skills?
2. How do employers, students, and teachers view traditional degree programs and their applicability?
3. What are the practical requirements to be successful in the gig economy?
4. What can universities do to adjust their curricula in order to equip students to work on digital platforms and in the market?

work. Additionally, higher education institution is expected to equip students with digital skills needed by the evolving and modern workplaces (Hughes & Davis, 2024). The imbalanced expectations between soft skills on the employer side and practical learning, which students prefer, are also mentioned in Valdez et al. (2025). Likewise, recent studies also enlighten that if both students and employers emphasize using micro-credentials as an effective tool then it will improve the employability (Alenezi et al., 2024). Furthermore, employability is closely associated with work-integrated learning and student practical experiences such as internships (Jackson, 2024). In a bid to solve the shifting workforce demands, Wheelahan and Moodie (2021) and Nguyen et al. (2025) consider the notion of micro-credentials as

additional skills-based solutions for augmenting employment prospects, but they are likely to be quantified only in the short term. In addition, micro credentials delivered through online or digital platforms are highly accepted as another effected pathway for employability (Narayanaswamy et al., 2024). Moreover, Lobel (2016) briefly addresses the legal dimension of the gig economy as he claims that labor protections and changes in policy in favor of gig workers must be implemented. Overall, the literature indicates that there is a strong necessity to redesign education, combined with industry and policy integration, which helps create new forms of work, such as freelancing and platform-based employment. An increasing number of studies highlights a mismatch between students graduating with traditional degrees and job market requirements. Abbas et al. (2024) explore that many employers are dissatisfied as the graduating students don't have the skills demanded by employment. The study also focuses on the weak integration between educational institutions and industry; however, it does not significantly highlight evolving job market needs. Similarly, Valdez et al. (2025) find a gap between employer demands such as analytical, communication, problem-solving, and digital skills, and student competencies, which are more based on theoretical learning. This mismatch presents challenges for engaging in and earning through freelancing and gig-based work. Structural deficiencies in education systems further exacerbate this problem. Zaman and Nadeem (2024) compare India and Pakistan's education system, and they conclude that instead of focusing on practical skills, Pakistan's education system emphasizes more on theoretical memorization. In addition, Ali et al. (2024) explore the weaknesses in Technical and Vocational Education and Training (TVET), including

poor or less implementation, and outdated infrastructure.

In response to emerging labor market demands, a growing body of studies highlights the necessity of 21st-century skills and curriculum modification. Ahsan (2025) proposes improvements in curriculum design, technology integration, and teacher training, emphasizing skills such as communication, creativity, and problem-solving. Meanwhile, the study emphasizes more planning than implementation and does not address outcomes related to employment or gig-economy-related careers. Similarly, Hamid (2025) focuses on the importance of these competencies but does not give practical suggestions for their use in digital work environments.

Some research also identifies alternative learning routes, which include micro-credentials and short courses. Wheelahan and Moodie (2021) explain that education is more aligned with industry demands through short-term skills building, although this shift may overlook broader developmental aspects. Similarly, blended-learning and micro-credential approaches have been highlighted to enhance employability through multi-stakeholder engagement in higher education (Sharma et al., 2024). Nguyen et al. (2025) further highlight that micro-credentials can improve employability by providing flexible and targeted skill development opportunities. Moreover, Micro credentials are increasingly considered as influential ways to develop industrial-relevant skills (Ahsan et al., 2023)

Finally, Lobel (2016) argues about policy and regulatory obstacles within the gig economy, including the lack of social protection and worker misclassification. While the study focuses on reforms, such as benefits and legal changes, it is more focused

on a developed country context and does not fully consider the situation of low-income economies.

METHODOLOGY

The study adheres to exploratory qualitative research design to gain profound insights into the views of the major stakeholders such as students, teachers and HR managers/recruiters. Qualitative approaches enable the pursuit of experiences, opinions, and perceptions of the skills offered by universities and the loopholes in equipping students to work in the gig economy.

The researcher used purposive sampling strategy to choose respondents that would give relevant and varied information on the research issue. Initially, a smaller sample size was considered; however, to increase the sample size, diversify the participants, and improve the validity of the findings, the sample was expanded to 35 respondents of the results. The identified expansion also enabled the incorporation of the visions of various stakeholders including 12 new graduates, 10 educators and 13 employers/human resources managers.

The above three groups are attributed to the fact that the research will be focusing on determining the misfit between education and employment market both in the supply (students and educational institutions) and the demand side (employers). The variety of opinions will also enable the study to gain a better and more balanced image of the problem.

Data were collected through semi-structured interviews through online platforms, Interviews questions were shared with the participants over email, online google forms so that they can answer it at their convenience, it enabled the participants to give their free and in-depth opinions without the time and environment pressure. The interview questionnaire was made based on existing literature review on skill gap, employability, and gig economy. It worked in three main areas

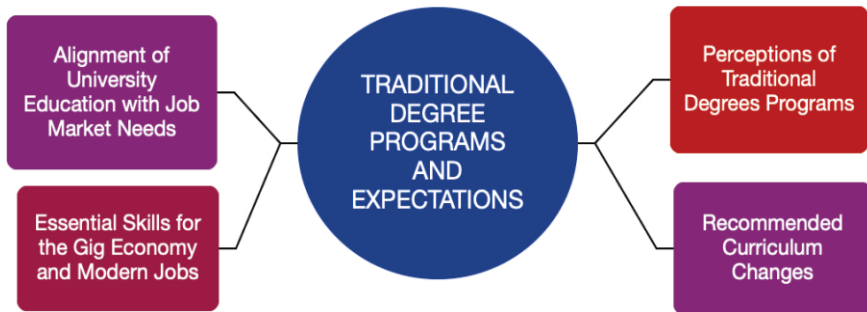
- 1) Value of degree programs in universities in relation to the present job market requirements.
- 2) Gaps and lack of skills in practical and digital skills.
- 3) freelancing, entrepreneurship views, and micro-credentials.

All the responses were submitted in writing and recorded by all the participants; the responses were compiled and transcribed to find out the results.

The sample size was deemed to be quite large, as data saturation had been achieved, wherein any further interview could not possibly reveal anything new, better, or otherwise significant. Moreover, the inclusion of more individuals assisted in enhancing the credibility of the results, as the range of experiences and views was broader.

THEMATIC MAP

Figure 1. Designed and made by authors using NVIVO software



DATA ANALYSIS TECHNIQUES

The study applied *Six Steps of Thematic Analysis* as proposed by Braun and Clarke (2006) to systematically identify, analyze, and report patterns within the qualitative data. The analysis steps include

- 1) Introducing the data through regular reading of the interview transcripts
- 2) Creation of preliminary codes that represent important ideas and concepts
- 3) Thematic searching using the similarity of codes
- 4) Check themes to make sure that they reflect the data

5) Categorizing and labeling themes to represent fundamental findings and

6) The final report which relates the themes to the research objectives.

This study has been performed through thematic analysis because it allows exploring the subjective experiences in detail and gives a clear structure to reveal the patterns that are applicable to skill gaps, curriculum failures, and needs of the gig economy.

The coding process was administered manually by carefully assessing the data and gathering codes and themes to explore the recurring patterns

ETHICAL CONSIDERATIONS

The research followed ethical standards to ensure the protection and privacy of participants. All interviewees gave informed consent prior to the data collection. The participation was voluntary and the

participants could withdraw any time. Anonymity of the participants was ensured by ensuring their names and affiliation was anonymized. The information was securely stored and used solely for research purposes

THEORETICAL FRAMEWORK

The research focuses on analyzing the strong link between the skills needed by the dynamic and evolving job market and the university's traditional degree programs, specifically in terms of the modern gig economy.

The dependent variable is employment in the current and competitive job market, specifically in terms of the gig economy. The features include effective problem-solving abilities, strong communication or soft skills, digital platform service skills, and entrepreneurial and freelancing abilities.

While the independent variable is the university's traditional degree programs, the indicators include lack of practical skills, outdated teaching methodologies, excessive memorization and rote learning, theoretical-focused instruction, and an outdated and rigid curriculum.

With rapid globalization and digitalization, job market needs have also been significantly influenced, and students are facing increasing unemployment because they do not have the relevant and proper skills demanded by the job market. So, if universities start focusing on practical experiences, real-world training, advanced digital skills, students will easily pursue sustainable careers in the gig economy.

FINDINGS

This paper has demonstrated that incompatibility between the higher education received in universities and the demands of modern day job market has been on the rise. In all interviews, students were generally dissatisfied with the amount of skills training offered in universities. One of the student gave a pessimistic response by saying "courses are not taught to us in order to train us on the skills". The view is a symptom of a current-day panic that universities are fixated on abstract education and can no longer provide practical

This study is supported by Human Capital Theory, which states that a person's productivity and employment opportunities are improved through continuous investment in education and skills training. As per this theory, a person's value in the job market increases when they learn more relevant skills, updated knowledge, and other essential competencies. Therefore, if higher education institutions do not provide specific and market-oriented skills, students will face unemployment, especially in today's fast-changing job market, such as the gig economy. Furthermore, if university degree programs are restructured and modernized and equipped with digital skills, practical experiences, and professional soft skills, they can be better aligned with the versatile and competitive job market.

By implementing this theory, the research analyzes whether conventional degree programs in Pakistan enable students with the required human capital needed for the gig economy and digital jobs, and how employment outcomes can be improved through strategic curriculum modifications (Becker, 1975)

education to students. It was also confirmed by a another participant that there is knowledge implementation that is very hardly implemented and is taken very lightly. These reactions are related to poor material, however, not to competent use of information.

One common theme of the data is the disconnect between theory and practice. Students have reiterated several times that they have always learned their theories but with limited exposure to the practical

world. One of the interviewees mentioned that “uni courses are too theoretical and he misses out on the practical stuff” and the other stated that “no one ever teaches us how to use them in the workplace”. Even where universities were seen to have offered some sort of preparation, it was characterized as inadequate. In one example, a respondent stated that “Yes, university courses assist to some extent... but courses are also somewhat out of date meaning that whatever limited preparation there is, is not in line with the industry needs.”

This argument is further reinforced by the problem of an outdated curriculum. Both the students and the teachers noted that the content of the courses is not in line with the current market requirements. The former remarked critically, though, upon the fact that employers are now more concerned with practical skills, and that aspect is lacking, and the latter commented that courses are quite theoretical... out of date literature. This implies that the issue is structural and systemic as it is embedded in the curriculum rather than the individualized practice of teaching. The discord between academics and industry requirements was clearly pointed out by a respondent who said that the requirements are completely different from what the courses offer

The educators did not deny these failures, however, they also cited institutional constraints. Although there are some attempts to introduce practical aspects, e.g practical tasks, discussion of real-life cases, these endeavors are still rather narrow in their range and impact. The educators also stressed that our system is more theoretic and that universities are holding on to old ways. These assertions suggest that, institutional inertia, and sluggish change hamper significant reforms. Further, implementation difficulties were noted, one respondent citing that, “difficulties occur

during implementation”, which means that even with good reforms, they fail to be implemented effectively. The most critical view was offered by employers, well supporting the idea of a skills gap. Graduates were found wanting in many areas with most of the employers complaining that graduates were not ready with one even declaring unequivocally No. One other employer pointed out that graduates lack the requisite skills and yet another respondent that they were not job-ready. One of the most notable things came out of the portrayal of the graduate as a raw material... need help shaping it where employers see universities as incomplete training providers. This is further underpinned by the fact that they are saying they need training, and that they have to train them as zero which is an extra heavy burden to the organizations.

Communication and practical application were two areas of deficiency, as they manifested themselves. The employers observed that they had no communication with them and the graduates were a bit experiencing trouble, in applying the knowledge. Another respondent was also critical of the system by stating that “Bookish Knowledge does not correspond to the present-day Job requirement of being able to demonstrate the real-life application of the purely theoretical knowledge.” All of these results lead to a desperate lack of fit between the products of universities and the needs of the labor market.

Despite these shortcomings, the traditional education system is not so essentially worthless. Others of the respondents saw its input in the dimension of inculcating rudimentary knowledge. To illustrate, one student stated that it instills us with the minimum amount of Basic knowledge of subjects, and another student added that it provides us with a good base of academics. Teachers also shared this view but added that there should be theoretical knowledge as it

enables students to understand concepts in detail. Yet this ability is perceived as a weakness unless it is accompanied by practical abilities. Having theoretical knowledge is not sufficient as one teacher pointed out but significant.

Employers highly emphasized the little utility of degrees alone. One of the respondents described the degree as not being a qualification in his mind, and another pointed out that the degree is not relevant as much as skills. This is a pointer to a shift in the employment practices where skills are being appreciated more than education. Degrees are slowly becoming less of a guarantee of employability and more of a basic screening instrument and a simple screening instrument. The implication of this discovery is the fact that higher education has been remodeled totally by its perceived value in the employment market.

The study also concludes with a list of skills that can be considered mandatory within the area of employability. One of the primary requirements was digital skills, and the respondents claimed that in the current time, digital skills are extremely important and respondents emphasized that digital and technical skills are extremely important. Communication skills were also a major focus with the participants pointing out that communication skills matter a lot, and there is a huge discrepancy on the part of the employers who portrayed that there was no communication. This contrast reveals an absence of correlation between awareness and actual skill development.

The other important competencies included critical thinking and problem-solving. One of the respondents emphasized that, they had to know how to resolve issues, and the employers revealed the absence of it, stating that the “graduates cannot resolve real issues”. Similarly, they also referred to flexibility and self-

education as needed in a rapidly evolving environment, one interviewee asserted that we ought to adhere to the emerging technologies. However, Another mismatch emerged when employers reported that graduates did not adapt easily that they do not easily adapt.

According to the trends of the changes in employment, the themes of freelancing and entrepreneurship became important. Students acknowledged that they had significant opportunities in freelancing one huge chance in the field of freelancing and teachers emphasized the importance of entrepreneurial spirit. Based on these data, it can be seen that there is a tendency towards not so traditional types of employment and more flexible and autonomous directions.

Regarding skill development, the respondents have proposed a number of effective approaches. The focus was made on online learning where one participant said that “students should use online platforms”. The importance of the internships was also thought of specifically, as internships are very important, and it gives the exposure into the real world. To this, employers reinforced with the need of training at job is necessary. These observations show that experiential learning is vital in the transformation of the education-employment gap.

The last significant discovery is associated with the necessity of curriculum change. It is generally agreed that the present system needs serious alterations by all the parties interested. Students stressed that the courses were to be revised based on the needs of the market, and there was a need to have more practical work. On the same note, the importance of skill-based education was also noted as the respondents said that: universities must be oriented to skill-based education.

Digital integration was also pointed out, with the need to add digital courses.

Teachers confirmed these recommendations and noted that the curriculum had to be updated periodically, and the practical part had to be increased. They also put stress on the aspect of collaboration with industry, saying that there has to be good collaboration with industry. Employers had a very strong opinion on this point of view saying that education had to be market-based. One employer said that “courses are job oriented and the other who gave me emphasis said that students should be trained before joining jobs”.

Among the findings that might be of specific interest, one should mention the need of a real-life exposure. Employers emphasized the fact that students must be exposed to actual working environment and that experience was important to learn. We also identified

the need to have communication training where one of the respondents stated that, “communication skills training is ضروری.” All this indicates that the general curriculum is required to be re-modeled in a bid to ensure that the graduates possess the appropriate skills.

Overall, the findings indicate that the universities have a very good academic background but lack in providing a hands-on skill of the students that are necessary to fit the demands in the job market. The result of the persistent theory/practice divide, old-fashioned curriculum and minimal industrial exposure, are work-unready graduates. These issues need to be addressed through systematic changes of the education system, its transformation to orientation on skills development, practical training and adjustment to the needs of the industry.

INTEGRATION BETWEEN EMPIRICAL FINDINGS AND THEORETICAL FRAMEWORK.

Results of this research are mostly in line with those of Human Capital Theory (Becker, 1975) that states that education and skills can increase the employability of an individual. Nevertheless, the findings have shown that not every kind of education works the same way towards the relevant human capital in the current dynamic job market.

The statistics indicate that university courses mostly offer theoretical information but not practical and market-driven skills. The participants observed that courses are too theoretical, and no one is taught how to use them in work environments, hence implying that the skills learned do not relate to the demands of the job market. At the level of Human Capital, this is the failure to invest in education that is paid off at the economic level.

The implication of employers is an added support to this argument with most stressing that degree alone is not sufficient and that they are more concerned with skills. This helps in backing the notion that employability is tied to exploitable competencies and not the qualification alone.

Another addition to the theory, which is made by the findings, is the increasing significance of digital skills, freelancing, and adaptability in the gig economy. Respondents stressed that today digital skills are extremely crucial, which implies that the contemporary human capital must contain technological and entrepreneurial skills.

In general, the research proves the fact that as much as education is necessary, its usefulness relies on the topicality and useful implementation of skills. In the

absence of real-world training and market-oriented competencies, university training does not help people

create the kind of human capital needed in the modern and gig-based human capital market.

CONCLUSIONS

It is possible to conclude based on the findings of the study that there is a massive gap between university or higher education and job market requirements. Since most universities continue to provide a decent theoretical base and academic knowledge, they are not providing the students with practical skills they need to secure employment. Theory-based teaching with little or no practical exposure and outdated curriculum have resulted in graduates who do not fit in the industry. The study also shows that all the stakeholders involved in this issue including students, teachers, and the employer never fail to recognize this issue. Students are dissatisfied with the failure to cultivate skills, teachers identify systemic and implementation problems, and employers identify the failures of communication, practice, and employment preparation. All these points of intersection support the thesis that the problem presented is systemic, not personal. Although the traditional system of education

RECOMMENDATIONS

Resting on the findings of the work given, several recommendations are provided to allow bridging the gap between university education and employment requirements.

It has been argued that universities should abandon an excessively theoretical approach and adopt a more practical and skills-based approach to learning. Practical aspects, such as internships, workshops, case studies and project-based learning should be included in all academic programs in order to enhance the level of practical application of knowledge.

There shall be a periodical curriculum adjustment to align it with current trends in industry and technology.

is considered an adequate and sufficient method of providing students with conceptual knowledge and academic background, it is also becoming apparent that the system is not sufficient in its own right. The growing stress on competencies over qualifications is a reaction to the shifts in the market relations where employability does not solely consist in the competencies acquired but, in the ability, to apply the knowledge in real-world scenarios. The paper concludes that the gap between the two can only be bridged by a radical change in the education system. Otherwise, until modern skills, useful training and industrial co-operation are included, universities will continue to produce graduates who are scholarly yet useless in the profession. Therefore, it is not only necessary to ensure that education is in line with needs of the market, but it is a dire need to attain better employment outcomes and sustainable development.

The outdated course content must be replaced by updated and market-oriented content, namely in the digital skills related domains and in the new areas.

Universities should also foster soft skills like communication, critical thinking, problem-solving skills, and adaptability that are paramount in the employability arena. These competencies need to be strengthened through intensive training programs and courses.

Close association between industry and universities is strongly welcomed. Employers should be included in curriculum design, by using guest lectures or training programs in such a way that the outcomes of the

educational process can be checked against the expectations of the market. They must be compulsory to allow the students a chance to work what they have learned.

Other career choices should also be encouraged such as freelancing, and entrepreneurship. Universities can offer mentoring, education and services to help students explore self-employment opportunities.

Career counseling services need to be strengthened to help students in making good choices of careers and

ORIGINAL CONTRIBUTION OF

THE STUDY

The study also adds value to the discussion on the issue of the skills gap in higher education because it eliminates the biases of students, teachers and employers to provide a comprehensive picture of the problem. Unlike in other past studies where one specific set of stakeholders is identified, the study presented in this study because of the similarity in opinions of all the three groups represents the validity

LIMITATIONS OF THE STUDY

Instead of significant insights, this study still has several limitations. To begin with, the sample is quite small and thus it might not be possible to generalize the findings. The research is based on qualitative interviews that offer detailed information but can be subject bias by the respondents. In addition, the information is context-dependent and is based on the impressions of participants of a specific educational and cultural environment which is not likely to be

also to understand the market requirements. In addition, policymakers must take actions to transform the education system so as to make it flexible, dynamic and adaptable to changing economic conditions.

By following these suggestions, it is possible to reduce the gap between education and employment and produce graduates not only academically prepared but also professionally prepared and ready to meet the demands of the new labor market.

of research findings. The study also has value because it introduces new fields of enquiry that have not been well studied in traditional education research such as freelancing, digital skills and entrepreneurship. In addition, it provides country-specific information applicable specifically to the developing world, where the gap between education and the workforce is the largest.

generalized to other locations. The research is also based more on perceptions, but not on quantifiable results, e.g. employment or level of skill proficiency. Also, the use of self-reported information can bring in subjectivity since the study participants can over-/understand their experiences. Although these limitations imply that future studies require the use of large significant samples and mixed methods.

REFERENCES

- Abbas, Q., Hussain, S., Rehman, M., Tabassum, S., & Mehdi, M. (2024). 21st century skills through STEAM education: Analysis of school leaders' perspectives. *Journal of Asian Development Studies*, 13(3), 464–471. <https://doi.org/10.62345/jads.2024.13.3.39>
- Ahsan, K., Akbar, S., Kam, B., & Abdulrahman, M. D.-A. (2023). Implementation of micro-credentials in higher education: A systematic literature review. *Education and Information Technologies*, 28(10), 13505–13540. <https://doi.org/10.1007/s10639-023-11739-z>
- Ahsan, H. (2025, July 31). A pathway to promote employability skills. *Business Recorder*. <https://file.pide.org.pk/pdf/pideinpress/pip-a-pathway-to-promote-employability-skills.pdf>
- Alenezi, M., Akour, M., & Alfawzan, L. (2024). Evolving microcredential strategies for enhancing employability: Employer and student perspectives. *Education Sciences*, 14(12), Article 1307. <https://doi.org/10.3390/educsci14121307>
- Ali, W., Rahman, A., & Karsidi, R. (2024). Sustainable skill development in Pakistan: Bridging gaps in vocational and technical education policy—A systematic literature review. *Society*, 12(2), 656–673. <https://doi.org/10.33019/society.v12i2.734>
- Batmunkh, A., Fekete-Farkas, M., & Lakner, Z. (2022). Bibliometric analysis of gig economy. *Administrative Sciences*, 12(2), Article 51. <https://doi.org/10.3390/admsci12020051>
- Becker, G. S. (1975). Investment in human capital: Effects on earnings. In *Human capital: A theoretical and empirical analysis, with special reference to education* (2nd ed., pp. 13–44). University of Chicago Press. <https://www.nber.org/chapters/c3733>
- Fiers, F. (2024). Resilience in the gig economy: Digital skills in online freelancing. *Journal of Computer-Mediated Communication*, 29(5), Article zmae014. <https://doi.org/10.1093/jcmc/zmae014>
- Gulzar, S., & Khanam, A. (2025). Curriculum, skills, and employability: Reimagining higher education for Pakistan's workforce. *Journal of Academic Research for Humanities*, 5(3), 80–92. <https://jar.bwo-researches.com/index.php/jarh/article/view/562>
- Hamid, S. (2025). The reforming Pakistan's education system: Bridging the gap for 21st-century skills. *Dialogue Social Science Review*, 3(3), 637–647. <https://dialoguessr.com/index.php/2/article/view/391>
- Hughes, H. P. N., & Davis, M. C. (2024). Preparing a graduate talent pipeline for the hybrid workplace: Rethinking digital upskilling and employability. *Academy of Management Learning & Education*, 23(4), 578–599. <https://doi.org/10.5465/amle.2023.0106>
- Jackson, D. (2024). The relationship between student employment, employability-building activities and graduate outcomes. *Journal of Further and Higher Education*, 48(1), 14–30. <https://doi.org/10.1080/0309877X.2023.2253426>
- Jung, J., Wang, Y., & Sánchez-Barrioluengo, M. (2024). A scoping review on graduate employability in an era of “technological unemployment.” *Higher Education Research & Development*, 43(3), 542–562. <https://doi.org/10.1080/07294360.2023.2292660>
- Lobel, O. (2016). The gig economy & the future of employment and labor law. *University of San Francisco Law Review*, 51(1), 1–16. <https://ssrn.com/abstract=2851093>
- Narayanawamy, R., Albers, C. S., Knotts, T. L., & Albers, N. D. (2024). Sustaining and reinforcing the perceived value of higher education: E-learning with micro-credentials. *Sustainability*, 16(20), Article 8860. <https://doi.org/10.3390/su16208860>
- Nguyen, H. T., Van Dyke, N., & Spittle, M. (2025). Micro-credentials in higher education: Perceived benefits for graduate employability and interest levels in micro-credentials. *Studies in Higher Education*. <https://doi.org/10.1080/03075079.2025.2516709>

Sharma, H., Jain, V., Mogaji, E., & Babbili, A. S. (2024). Blended learning and augmented employability: A multi-stakeholder perspective. *International Journal of Educational Management*, 38(4), 1021–1044.
<https://doi.org/10.1108/IJEM-12-2022-0497>

Tushar, H., & Sooraksa, N. (2023). Global employability skills in the 21st century workplace: A semi-systematic literature review. *Heliyon*, 9(11), Article e21023.
<https://doi.org/10.1016/j.heliyon.2023.e21023>

Valdez, E. C., Perez, M. O., Samson, Z. K. T., Valtoribio, H. T. C., & Pumihic, M. B. (2025). Employability skills perception of employers and student interns. *International Journal of Multidisciplinary: Applied Business and Education Research*, 6(8), 4238–4258.
<https://doi.org/10.11594/ijmaber.06.08.36>

Wheelahan, L., & Moodie, G. (2022). Gig qualifications for the gig economy: Micro-credentials and the “hungry mile.” *Higher Education*, 83, 1279–1295.
<https://doi.org/10.1007/s10734-021-00742-3>

Zaman, M. R.-U., & Nadeem, M. S. (2024). Comparative analysis of skill-based education curriculum in Pakistan and India: A contemporary review. *Journal of Academic Research for Humanities*, 4(3), 187–197.
<https://jar.bwo-researches.com/index.php/jarh/article/view/500>