

Supporting Doctorate Holders: Career Preferences and the Way Forward for Creating Career Opportunities

Muhammad Muneeb
PhD Scholar (Education),
Department of Educational Research & Assessment, University of Okara, Pakistan.
E-mail: muneeb2076@gmail.com

Dr. Nadia Gilani
Assistant Professor of Education,
Faculty of Education, University of Okara, Pakistan.
E-mail: nadia.gilani@uo.edu.pk

Dr. Syed Abdul Waheed
Assistant Professor,
Department of Educational Studies, University of Okara, Pakistan.
E-mail: s.a.waheed@uo.edu.pk

Abstract

This research aimed to explore the experiences of doctorate holders who are unemployed and how their experiences are addressed by the stakeholders in Pakistan. The perspectives, emotions, attitudes, and experiences of unemployed doctorate holders were studied qualitatively, who were selected through purposive sampling including four females and eight males. To gather data, the participants were interviewed using a semi-structured interview guide with open-ended questions. Purposive phone calls, text messages, and personal meetings were undertaken to schedule interviews with the selected participants. The collected data were analyzed using the Interpretative Phenomenological Analysis (IPA) approach. The emergent themes include institutional support and placement, the relevance of HEC policy, response from organizations, subject importance, PhD desperation, and unfairness. The study revealed that doctorate holders were unable to find employment due to a lack of institutional guidance and support, fewer job opportunities in their fields, and the production of 'unskilled' graduates, and desperately, some of them left the country. By offering a solid mechanism to support unemployed Pakistani doctorate holders, the conditions of higher education and the graduates can be improved in the country.

Keywords: Pakistan, Higher Education, Unemployment, Institutional support, Interpretative Phenomenological Analysis (IPA)

Introduction

In the academic and scientific community of a country, the working PhD graduates, contribute greatly to the economic and intellectual growth of that nation. However, unemployed graduates are problematic and less productive for both themselves and the country as a whole, which causes numerous other problems that slow down national progress. In the last ten years, Pakistan has produced roughly 14162 male and female PhD graduates who have earned their degrees in various

disciplines from national or international institutions. The local universities awarded PhD degrees to 11991 (female=3994, and male=7997) students (Khan, 2020).

However, on the opposing side, more than 290 PhD scholars protested against HEC, claiming that despite receiving HEC scholarships to help them finish their doctoral degrees, they were unable to find employment (Aamir, 2017). Pakistan Today reported on February 2, 2018, that despite students spending billions of rupees on their doctoral degrees, unluckily 400 PhD graduates remained jobless (Wazir, 2018). In addition, several PhD degree holders who are now without employment protested outside the HEC headquarters and in front of the Prime Minister's Residence. Only 150 persons are listed as jobless on the HEC job application page, according to these protestors, whereas 600–800 PhD holders are unemployed (Bari, 2019). On March 25, 2019, the newspaper “Pakistan Today” once more reported that the PhD graduates’ association has 764 members who are and are looking for employment opportunities. Similarly, according to Asia Dialogue (2019), 800 Pakistani citizens with PhDs are unemployed. They comprise 20% of the arts and social sciences sector and 80% of the science and technology field (Hashmi & Iftkhar, 2019). By the end of 2020, there will be around 3000 unemployed PhD graduates (Yousafzai, 2020; Khan, 2019; Zaman et al., 2022).

The Pakistani government established the Higher Education Commission (HEC) intending to have 40000 PhDs on staff by the end of 2020. The current state of HEC's PhD courses and employment development is in the worst possible shape due to officials' poor management and handling of the problem (Hashmi, 2019). In other words, a major problem in Pakistan is that a lot of PhDs have been produced without considering the need and there is an elevated rate of unemployment among PhD graduates. If many of these PhD graduates are unemployed for an extended period, their dissatisfaction will grow and Pakistan will lose access to their valuable skills. Therefore, to highlight and solve the issue of jobless PhD graduates in Pakistan, research was required. The experiences of unemployed PhD graduates were examined, as well as how such experiences were handled by job-giving organizations in Pakistan.

There is no doubt that doctoral education courses influence people’s academic careers (Johnsrud, 2019). Doctoral education plays a crucial part in a nation's economic growth since it produces a skilled workforce, which boosts a nation's economy (Qazi, Raza, & Sharif, 2017; Waheed et al., 2019). The establishment of a global knowledge-based economy and the recruitment of the best-trained individuals for the best research work are both made possible by doctorate education (Bao et al., 2016; Gappa et al., 2007; Usher, 2002). The knowledge-based economy is also operated by PhD graduates at the national level (Arimoto et al., 2019; Neumann & Tan, 2011). It indicates that no country will be able to experience economic progress, development, research work, and the generation of qualified human resources if highly educated individuals (PhD graduates) are kept unemployed. If these protesters (jobless PhDs), who are Pakistan's assets, were given employment opportunities, they would not only be able to contribute significantly to the country's economic growth but also would be able to produce more highly qualified workers in various fields, including the education sector. Therefore, there was an ominous need and solid justification for looking into the topic of unemployed PhD graduates in Pakistan.

Research Questions

Following research questions were addressed to proceed with this study:

1. What is the current role of managerial bodies and stakeholders of higher education in supporting jobless PhD graduates?
2. To what extent, Pakistani employment organizations are taking an interest in minimizing the unemployment of the PhD graduates?
3. Being unemployed, what are the future career preferences of PhD graduates, and in which area of study, the graduates are affected the most?

Methodology

As this study was about to explore the experiences of Pakistani unemployed PhD graduates, therefore, this qualitative study was phenomenological. Further, to investigate intensely personal experiences of people, how persons recognize, understand, and make sense of different events most of the researchers use IPA (Noon, 2018). Consequently, most researchers utilized the Interpretive Phenomenological Analysis (IPA) method to explore the detailed experiences of unemployed PhD graduates. The IPA method also enhances the connection between researchers and participants, providing researchers a great chance to explore participants' personal life experiences. Further, it employs a collaborative approach, allowing individuals the freedom to express their emotions and life experiences without distortion or fear of repercussions (Alase, 2017).

Philosophical paradigm

This work falls within the constructivist philosophical school of thought. Constructivists argue that there is no objective truth and that people's interactions with one another and their environment create reality (Ontology). They observe the world from a personal yet distinctive vantage point. According to constructivist ideology, reality is dependent on social and individual conceptions, and there is no such thing as a universal or common reality. Reality is also controlled by geography, time, the circumstances surrounding each occurrence, and the perceptions of people. According to epistemology, knowledge is socially produced and is dependent on the thoughts of people. Since the researchers engaged with participants to gain their personal information and draw conclusions about the study's research topics, this qualitative investigation is cast in the shadow of a constructivist philosophical perspective (Chilsia, Kawulich, 2012; Mertens, 2008; Creswell, 2009).

Selection of Participants

In this study, participants were selected based on the objectives of comprehension, illumination, interpretation, ease of access to suitable participants, and the researchers' judgment. The purposive sampling method was employed to avoid selecting irrelevant individuals for data collection and to ensure the reliability of the data (Ishak & Abu Bakar, 2014). Furthermore, given the presence of dispersed unemployed PhD graduates across Pakistan's provinces, a purposive sampling approach was the best choice to select participants from the Punjab province of Pakistan.

Data Collection

Semi-structured interview schedules with open-ended questions were used to acquire the data. Depending on the participants' availability, some interviews were performed over the phone calls and others in person. To ensure accurate findings based on truth, participants were fully informed about the objective of the interviews before the interview process. The interviews that were done were recorded and kept on a mobile device. The recorded audio from each participant's interview was independently transcribed. To record correct facts from each interview, handwritten notes were also recorded in a notebook. Each participant's interview transcript underwent a separate analysis. Examining the accuracy of findings was done via member checking or respondent validation because one of the best validation strategies is the member checking methodology. In this strategy, participants get study's results to verify correctness in light of their experiences. (Birt et al., 2016).

Data Analysis

The interview procedure utilized in this study was then used to conduct a careful first assessment and analysis of the data. The researcher compiled all instances and participants' experiences connected to joblessness and how Pakistani policy is applied to jobless PhD graduates from interviews. Participants' difficulties in finding employment were also noted. While interpreting the material, the researcher kept the research objective and the content under consideration. The interview transcripts were examined line-by-line allowing the researchers to formulate codes, categories, and themes. Significant content was highlighted and selected for analysis of the text. Consequently, the following themes emerged after going through the analysis of the interview transcripts.

Results

Research Question 1

What is the current role of managerial bodies and stakeholders of higher education in supporting unemployed PhD graduates?

Institutional support and Placement

The participants believed that institutes just circulate employment opportunity advertisements as a formality as candidates have already been chosen there before job advertisements. In Pakistan, universities lack a comprehensive selection and support policy for their certified PhDs. *"Institutions do not support their students to give them jobs in Pakistan,"* participant "A" claimed. Further, participant "B" reflected that, *"In Pakistan, there are few vacant vacancies in the public and private sector but a large number of PhD graduates are applicants there"*. It is terrible that institutions fail to provide any justification for rejecting a candidate when they receive a job application. Universities seldom send rejected candidates emails, messages, or feedback to inform. Participant "D" stated, *"My thesis defense was delayed by the department by 1.5 years and did not give any helpful guidance for job requirements in the future and on my request said that leave this matter, we merely perform our university job and giving job is not in our control"*.

This was an unusual response from university teachers. Similarly, participant "E" also observed that employers do not assist their graduates in finding employment. Further, she reflected on the

views of university stakeholders, *“After receiving a PhD, there are two different paths, one for you and one for us”*. Participant “F” also elaborated that being a very elderly student at the same institution supplied zero benefits concerning job assistance and guidance as he completed his B.Ed to PhD in the same university. In the same way, participant “G” experienced that since there aren't enough teaching positions at the university level, institutions should provide their PhD graduates with the right counseling to prepare for the PPSC hiring process to take advantage of good employment opportunities at the college level. Another point to remember is that unskilled PhDs are being graduated from several Pakistani universities. Therefore, throughout the hiring process, these PhDs are disregarded concerning employment. Participant “F” noted, *“Reference of my university degree is not considered strong in some universities and there is a perception that my university is outdated and obsolete”*.

HEC Policy

Pakistan's public and private universities routinely generate PhD graduates each year and the proportion of these graduates who are unemployed climbs yearly. Additionally, as they are required to return to serve in Pakistan by HEC, roughly 3200 PhD recipients with scholarships are prepared to re-enter the country. HEC, on the other hand, did not add some new roles. Participant “A” stated that owing to a lack of employment prospects, Pakistani PhD graduates who come from middle-class or low-income households will be willing to accept the position of peon in the next years. Furthermore, the member “H” depicted, *“private colleges don't take after choice criteria concurring to HEC approaches, hence, joblessness is increasing”*. Another participant “D” observed that after receiving a PhD, a graduate has challenges in the hiring process due to a lack of knowledge and information about the job prerequisites.

In addition, he felt that the lack of his name in the HEC country directory, not knowing how to prepare an effective resume, not knowing how to have several published articles at the local and international level, and how to become an HEC supervisor were the factors that created barriers to becoming an assistant professor in a university. The participant went on to describe that despite his best efforts, it proved to be an extremely difficult and expensive recruitment process that created financial difficulties for him. Further, he explained that although HEC had announced scholarships for young PhDs (under 40) the age factor had proven to be a barrier to employment for PhDs above that age. He elaborated *“Honest, passionate, well qualified, devoted HEC chairman and well-established government can solve the issues of jobless PhDs. Private universities are producing more PhDs and unemployment has blocked very skilled researchers because they do not have money to do next research work for country development”*.

Research Question 2

To what extent, Pakistani employment organizations are taking an interest in minimizing the unemployment of the PhD graduates?

Response from Organizations

Some organizations in Pakistan collect employment applications regularly and demand a fee for application submission and recruitment process, yet they never employ a single PhD graduate. Participant “D” observed, *“I made three separate applications and paid processing fees to the same university, yet not a single PhD was hired there”*. Similarly, participant “E” stated, *“I had hoped that we would have accomplishments to add to our resumes after completing our PhDs,*

but that hasn't happened. There are no selection criteria that are merit-based. Although I had an experience and an impressive interview I was unable to secure a job despite meeting all job requirements at many colleges. The announcement of seats makes those who have previously been chosen for permanent appointments. Even some institutions only ask for 3000 to 4000 rupees and do not schedule interviews”.

Another participant "F" had great hopes for his or her future profession after earning a PhD. He expressed *“I had thought that we would have accolades after completing our PhDs, but there were none quite like this”*. Likewise, participant “G” remarked, *“After the hiring procedure for previously submitted job applications was complete, a private institution revised its selection policy and again listed job openings in the media. However, I never received a message or call to schedule an interview. Another private university gathered employment applications twice and charged a fee rate for both occasions”*. Furthermore, he reflected, *“To save money, it is a sad fact that private institutions only hire the bare minimum of personnel for many classes”*.

Unfairness

It has been observed that employment in universities lacks fairness. Participant "F" remarked, *“There is a mafia in every department of every institution. For personal gains, they hire visiting assistant professors who are paid a few thousand rupees, and PhDs perform this work exactly like class four employees. These PhDs are required to work in offices in addition to teaching classes”*. Respondent "G" also encountered a public university that offered a weak justification for declaring her ineligible for an associate professor position because she had not received her PhD degree notification five days in advance. An employment offer was made to participant “H” at a private institution and had such an experience that when the HEC inspection team came to inspect the university. The HEC team questioned each assistant professor about the policies of the university, their compensation, and the resources available to them.

All employees remained silent and did not criticize the university administration in any way. Although there were not enough offices for department heads and the associate professor's remuneration did not follow HEC guidelines. Some department heads did not get daycares. There were several department heads crowded into one space. Further, she said, *“The university administration forced us to stay away from making any negative remarks about the university for fear of losing our jobs”*. Participant “I” stated that HEC instructs institutions to appoint PhDs on an interim basis for a period of one year, but after that time, a hired individual is once more jobless. He said, *“I am frustrated because of political gamesmanship, dishonest hiring procedures, and a corrupt system in Pakistani universities which is unfair”*.

Research Question 3

Being unemployed, what are the future career preferences of PhD graduates, and in which area of study, the graduates are affected the most?

PhD Desperation

Some PhD graduates who cannot find employment in Pakistan are attempting to apply abroad. Participant “E” reflected, *“If Pakistan produces more and more PhDs, the problem of unemployment will become worse in the future and Pakistan will be short on trained laborers as they leave the country in search of employment abroad. I am hoping that I will get hired after applying in several foreign countries”*. Similarly, a buddy of Participant “A” recently earned his

doctorate from the United States and returned to Pakistan with high hopes for finding stable work. His only option for stable, well-paying employment during that year was an interim position. His profile was valued by the selection committee at Harvard University in the United States; therefore he left Pakistan and enrolled there for 2.5 million rupees a month. Another participant “B” remarked, *“A large number of highly qualified and skilled persons will not stay in Pakistan to provide their services if the governing body of Pakistan did not set up new institutions to increase job opportunities”*.

He earned his PhD in 2021, and as a result of a lack of employment opportunities in Pakistan during the previous year, he joined Peking University in China in November 2022 at a salary of half a million rupees. Further, he stated, *“The Chinese PhD degree holders do not prefer to do work in the USA or UK for employment and the government of China is supporting them and they are serving in China and playing crucial role for their country development”*. The participant “F” planned to work as an associate professor in the higher education department after completing her PhD, but desperately began private schooling. Similarly, participant “I” who earned his PhD in environmental science in 2020 discovered that he had applied to several public and private institutions two years prior but had received no response. Since he has completed all the necessary required paperwork; he has opted to travel to China for job placement till January.

Subject Importance

Some PhD recipients in the social sciences noted that since education is an optional area of study, there are fewer work opportunities than for other fields. As participant “E” observed, *“[Most of the employment opportunity advertising did not include education subject-based seats since there are not many institutions that provide B.Ed or M.Ed programs, etc. I applied to several private universities to teach education subjects, but none of them offered the course to their students”*. Similarly, participant “F” shared the opinion that career opportunities based on education subjects are uncommon in Pakistani institutions. He reflected, *“My PhD is in the field of education subject. Despite my best efforts, there were fewer opportunities than with other subjects to get employment in my field of study”*. Furthermore, participant “G” reported that despite applying for an assistant professor position at a public institution more than ten months ago, she had not been contacted for an interview. She felt that Pakistan's government was ignoring the enormous number of unemployed PhDs, particularly in the social sciences and HEC needed to have control over further creation of PhDs.

Discussion

We discovered from the subject “Institutional support and placement” that the reasons why PhD graduates were unable to find employment included a lack of institutional direction and support for their graduates, job opportunities advertised only for formality, and unskilled production of PhD graduates.

The research looked inductively at the variables that can affect a postdoc's transition to a profession outside of academia. The investigation identified several human, organizational, and policy issues, including a lack of job-relevant abilities, a lack of institutional support, pushback from the heads of departments in certain cases, and a lack of preparation and training for other than academic careers (Hayter & Parker, 2018). According to another study, there are too many graduates, their talents aren't suited to their fields of study, and they have the wrong abilities. Policymakers are ignoring to control the unemployment rate by boosting the amount of job

opportunities available to jobless graduates (Oppong & Sachs, 2015). Similar connections between the university and relevant local and international community members allow the university's academic programs to be tailored to serve local and international interests. Other similar connections include adopting and operating a suitable counseling unit to give students career guidance and fostering industrial capabilities that can be used for self-employment to reduce unemployment.

Universities may continue to nurture academic excellence and quality making significant contributions to enhance the employability of fresh graduates. Additionally, within a context of cooperative participation and shared interests, the state and community can provide useful input to support institutional initiatives to increase graduate employability (Mbah, 2014; Waheed et al., 2021). Additionally, personalized and specialized career counseling throughout and after obtaining a PhD may be able to give them the help they need to get ready for their shift. As well, it's important to work internationally to emphasize the talents that PhD holders gain throughout their studies and explain how these skills may be helpful in a variety of industries to promote the doctoral degree among hiring managers, especially those outside of academia (Bebiroglu, Dethier, & Ameryckx, 2019). In a similar vein, Mamaleka (2020) found that black graduates lacked the qualifications and abilities necessary to satisfy the demands of the labor market. They were mostly responsible for their unemployment due to a lack of job-related skills work experience, and social networks.

The investigation on the theme of "HEC policy" showed that certain institutions in Pakistan do not adhere to the HEC's suggested selection criteria and that the HEC's monitoring mechanism is not ideal.

New PhD graduates have difficulties throughout the hiring process since they are unaware of the HEC standards needed to secure employment. Due to the overproduction of PhDs across fields, the failure of HEC to take aggressive action to address the unemployment problem may compel PhD graduates from middle-class households to work in class four positions. The challenging situation of PhD graduates in Pakistan is a result of a variety of elements. In light of these elements, the chairman of the HEC, program coordinators, and planners, in particular, are ineffective and incompetent, which is the main cause. Therefore, the HEC and universities' lack of cooperation has also had a substantial impact on unemployment. Another obstacle to addressing the unemployment problem is favoritism and a corrupt structure in institutions. Furthermore, HEC executives' attitudes toward jobless PhD graduates who have requested flexibility in bond terms and are making every effort to find work are also not favorable (Hashmi & Iftkhar, 2019). Similar to this, because of weak government policy, institutions are unable to provide incentives to their PhDs.

They claim that if there is an incentive, they will take a few people only. As the number of PhD graduates has grown and the labor market has become more competitive, the academic sector has become stagnant (Olivos & De Malpica, 2020). Another to be noted is that due to ineffective rules, retired PhD graduates are more frequently assigned to open posts in Pakistan than fresh PhD graduates. It's time to update HEC's old policies (Khan, 2020). Additionally, the HEC stated that 36,000 PhD graduates were required across a variety of fields in 2017 and requested an increase in funding from the Pakistani government. However, after one year, a sizable number of PhD graduates traveled to Islamabad in search of jobs. It indicates that HEC has not received entirely accurate information and that a significant number of PhD holders are now without jobs.

HEC should cease new PhD students' enrollment because there are already a bit opportunities to employ these graduates (Amer, 2022). To solve this issue policymakers may control the unemployment rate by boosting the amount of work options available to recent graduates (Oppong & Sachs, 2015).

The subject "Response from organizations" revealed that several institutions in Pakistan gather employment applications repeatedly and charge a processing fee, yet they do not hire even a single PhD graduate. Despite meeting all employment requirements at several institutions, such as possessing a PhD degree, experience, a well-given interview, and a strong presentation, the effort was in vain. Moreover, private institutions hire minimal staff to teach several subjects to save money in light of the current economic crisis.

According to a study, several institutions use PhD degree holders to fill temporary positions and provide them with inexpensive labor for work in teaching or research projects (Amer, 2022). There is no doubt that the global economic crisis has put pressure on the unemployment of PhD graduates both inside and outside of academia and academic hiring of PhD graduates has been a challenge. For example, due to the financial crisis, PhD graduates in the Netherlands are not being given long-term positions as researchers to sign a contracts in institutions and are not compensated well outside of the academic world due to the economic crisis. Another explanation was that some of the unemployed PhDs had just a few publications and a few conference papers to their credit and they were turned down at the time of job defense for these grounds (Schoot & Sonneveld, 2012). Further, Boulos (2016) explored that highly qualified graduates in the social sciences and humanities face several difficulties finding employment that matches their skills and compensation. This study drew attention to higher education and academic institution practices that affect career opportunities for PhD graduates. This study also identified some potential solutions, such as the possibility for interdisciplinary academic research to advise higher education policy about how to address labor market difficulties related to the applicability of PhD graduates' abilities.

Here we discussed the "unfairness" issue and how certain visiting faculty members in some universities are required to perform office duties and teach classes in addition to their other duties. Further, we explored that some PhD graduates do not seek jobs because certain private institutions do not provide wages and facilities following the HEC policy. Still HEC does not have any plans to employ a sizable number of unemployed PhD graduates. Additionally, the supervising management engaged an increasing number of PhD graduates even though the an excess supply of new PhD graduates to get personal benefits such as monthly pay, bonuses for the synopsis, thesis defense fees, status of supervisor ship, and publications (Gilani et al., 2020; Amer, 2022).

The study's findings on the issue of "subjects' importance" revealed that there are fewer career opportunities for skilled PhD graduates in optional disciplines than in other areas of studies, particularly in the social sciences and humanities. The fact that few optional disciplines are offered at the undergraduate level contributes to the lack of work options. Boulos (2016) investigated highly educated graduates in the humanities and social sciences who encounter several obstacles while trying to find employment that is appropriate for the background of their studies. Therefore, to help humanity and the social sciences workforce, institutions, and PhD programs should be given favor in the employment field (McAlpine & Austin, 2018).

According to the study's desperation theme, jobless PhD graduates are being forced to accept employment in foreign countries. Due to the lack of career opportunities in academia in Pakistan, several PhDs have formed their businesses or are attempting to enter into any non-academic profession. The PhD graduates who don't come from wealthy families are willing to work at certain private institutions for very little pay. Due to a lack of employment opportunities brought on by Pakistan's ongoing political and economic disorder, many highly competent individuals have left the country.

The situation is such alarming that a PhD candidate from Bahria University allegedly committed suicide due to unemployment. The PhD graduates are the foundation of our nation and country, however, the majority of recent PhD graduates are jobless and in need of assistance since they lack attractive future employment possibilities (Khan, 2020). To earn money to lead life many jobless PhD graduates have entered into other professions like industry or the labor sector as a source of income owing to a lack of openings in academia (McAlpine & Austin, 2018). Similar to this, the Bureau of Immigration said in a paper that in 2022, 765,000 highly educated persons departed Pakistan in search of a better future abroad. Accountants, IT professionals, engineers, nurses, and medical professionals were among the highly educated individuals (Ahmad, 2022). However, the Observatory of Research and Scientific Careers (ORCS) contradictory reported that PhDs at the start of their careers have a high level of employment opportunities and that the majority of them can find a job within four months of finishing their doctorates (Bebiroglu, Dethier, & Ameryckx, 2019).

Conclusion

The current study pointed out the difficulties fresh qualified PhD graduates encounter while trying to find a job in Pakistan after receiving their degree and how jobless PhD graduates' experiences are addressed by the state of Pakistan. The study concluded that PhD graduates were unable to find employment due to a lack of institutional direction and support for their graduates, job opportunities advertised only as a "formality", and the production of unskilled graduates. Certain institutions in Pakistan do not adhere to the HEC's suggested selection criteria and the HEC's monitoring mechanism is also not ideal. Several institutions in Pakistan gather employment applications repeatedly and charge processing fees, yet they do not hire even a single PhD graduate meeting all employment requirements, such as possessing a PhD degree, experience, a well-given interview, and a strong presentation, but the effort was in vain. Furthermore, private institutions hire a minimal staff to teach several courses to save money in the light of the current economic crisis. There are fewer career opportunities for PhD graduates in the social sciences and humanities. Due to the lack of career opportunities in academia in Pakistan, several of them have established their businesses. Due to a lack of employment opportunities in Pakistan, several highly competent individuals have left the country as the government of Pakistan did not pay attention to their future careers.

References

- Ahmad, W. (2022, December 12). *Country's brain drain situation accelerated in 2022*. Retrieved December 12, 2022, from The EXPRESS TRIBUNE: <https://tribune.com.pk/story/2390704/countrys-brain-drain-situation-accelerated-in-2022>
- Alase, A. (2017). The Interpretative Phenomenological Analysis (IPA): A Guide to a Good Qualitative Research Approach. *International Journal of education & Literacy Studies*, 5(2). <https://doi.org/10.7575/aiac.ijels.v.5n.2p.9>

- Amer, K. (2022, February 6). *Glut of PhDs*. Retrieved November 22, 2022, from BOL NEWS: <https://www.bolnews.com/pakistan/2022/02/glut-of-phds/>
- Aamir, A. (2017, May 29). *PhD Holders Protest Against HEC Due to Unemployment*. Retrieved November 5, 2020, from Balochistan Voives: <https://www.balochistanvoices.com/2017/05/phd-holders-protest-hec-due-unemployment/>
- Arimoto, A., Daizen, T., Huang, F., & Kim, Y. (2019). Japanese Doctoral Students' Career Plans and Research Productivity: Main Findings from a 2017 National Survey. *International Journal of Chinese Education*, 8 (2), 117-133. <https://doi.org/10.1163/22125868-12340109>
- Bari, F. (2019, april 19). *PhD holder and unemployed*. Retrieved November 15, 2020, from DAWN: <https://www.dawn.com/news/1477079>
- Bebiroglu, N., Dethier, B., & Ameryckx. (2019). *Employment status of PhD holders in the Federation Wallonia-Brussels*. Observatory of Research and Scientific Careers. Belgium.: ORCS Thematic Report Series #1.
- Birt, L., Scott, S., Cavers, D., Campbell, C., & Walter, F. (2016). Member Checking: A Tool to Enhance Trustworthiness or Merely a Nod to Validation? *Qualitative Health Research*, 26(13), 1802-1811. <https://psycnet.apa.org/doi/10.1177/1049732316654870>
- Boulos, A. (2016). The labour market relevance of PhDs: an issue for academic research and policy-makers. *Studies in Higher Education*, 41(5), 901-913. <https://doi.org/10.1080/03075079.2016.1147719>
- Chilisa, B., & Kawulich, B. (2012). Selecting a research approach: Paradigm, methodology and methods. *Doing social research: A global context*, 5(1), 51-61.
- Creswell, J. W. (2009). *Research design: Qualitative, Quantitative, and Mixed Methods Approaches* (3rd ed.). (V. Knight, Ed.) London: SAGE Publisher.
- Gappa, J. M., Austin, A. E., & Trice, A. G. (2007). *Rethinking faculty work: Higher education's strategic imperative*. Jossey-Bass.
- Gilani, N., Waheed, S. A., & Shaheen, A. (2020). Making a debut in teaching: Uncovering prospective teachers' first-time teaching experiences in schools. *Universal Journal of Educational Research*, 8(11), 5443-5452, <https://doi.org/10.13189/ujer.2020.081147>.
- Hashmi, S. A., & Iftekhar, S. (2019, March 01). *The plight of unemployed PhD graduates in Pakistan*. Retrieved December 11, 2020, from The Asia Dialogue: <https://theasiadialogue.com>
- Hayter, C. S., & Parker, M. A. (2018). Factors that influence the transition of university postdocs to non-academic scientific careers: An exploratory study. *Research policy*, 48 (3), 1-60. <https://doi.org/10.1016/j.respol.2018.09.009>
- Ishak, N. M., & Abu Bakar, A. Y. (2014). Developing Sampling Frame for Case Study: Challenges and Conditions. *World Journal of Education*, 4(3), 1-7. <http://dx.doi.org/10.5430/wje.v4n3p29>
- Johnsrud, K., Skagen, K., Seierstad, T., Skjelland, M., Russell, D., & Revheim, M.-E. (2019). 18F-FDG PET/CT for the quantification of inflammation in large carotid artery plaques. *Journal of Nuclear Cardiology*, 26(3), 883-893. <https://doi.org/10.1007/s12350-017-1121-7>
- Khan, M. Z. (2020, August 12). *Justice for Jobless PHDs in Pakistan*. Retrieved May 23, 2021, from PKnama: https://pknama.com/?_ga=2.189822888.209264569.1621756907-1022182723.1621756907
- Khan, A. A. (2019, February 8). *Rising number of jobless PhD scholars causes concern*. Retrieved March 7, 2020, from University World News: <https://www.universityworldnews.com/post.php?story=20190208093402982>
- Mamaleka, M. (2020). Experiences of unemployed black graduates from the University of Limpopo with their pathways to finding employment, University. <https://hdl.handle.net/10210/454463>
- Mbah, M. F. (2014). The Dilemma of Graduate Unemployment within a Context of Poverty, Scarcity and Fragile Economy: Are there Lessons for the University? *International Journal of Economics and Finance*, 6 (12). <http://dx.doi.org/10.5539/ijef.v6n12p27>
- McAlpine, L., & Austin, N. (2018). Humanities PhD Graduates: Desperately Seeking Careers? *Canadian Journal of Higher Education*, 48 (2), 1-19. <https://doi.org/10.7202/1057100ar>

- Mertens, D. M. (2008). *Research Methods in Education and Psychology*. London: SAGE Publications.
- Neumann, R., & Tan, K. K. (2011). From PhD to initial employment: The doctorate in a knowledge economy. *Studies in Higher Education*, 36(5), 601-614. <https://doi.org/10.1080/03075079.2011.594596>
- Neubauer, E. B., Catherine, T. W., & Varpio, L. (2019). How phenomenology can help us learn from the experiences of others. *Perspectives on Medical Education*, 8(18). <https://doi.org/10.1007/s40037-019-0509-2>
- Noon, E. J. (2018). Interpretive phenomenological analysis: An appropriate methodology for educational research. *Journal of Perspectives in Applied Academic Practice*, 6(1). <http://dx.doi.org/10.14297/jpaap.v6i1.304>
- Olivos, M., & Tippin de Malpica, S. (2020). Expanding experiential learning opportunities to alumni for the development of job-search skills: A case in a Peruvian university. <https://hdl.handle.net/20.500.12640/2962>
- Opping, S., & Sachs, P. R. (2015). Managing graduate unemployment in emerging economies: critical analysis of the skills mismatch and oversupply theses. *Poslovna izvrsnost*, 9(1), 125-137. <https://hrcak.srce.hr/139871>
- Usher, R. (2002). A diversity of doctorates: fitness for the knowledge economy? *Higher Education Research & Development*, 21(2), 143-153. <https://doi.org/10.1080/07294360220144060>
- Qazi, W., Raza, S. A., & Sharif, A. (2017). Higher Education Development and Unemployment in Pakistan: Evidence from Structural Break Testing. *Global Business Review*, 18 (5), 1-22. <https://doi.org/10.1177/0972150917710344>
- Waheed, S. A., Gilani, N., Raza, M., & Ahmad, F. (2021). The beginning of more worries: Doctoral candidates' untold stories after submission of dissertation. *Frontiers in Psychology*, 11:537366,1-9, doi: 10.3389/fpsyg.2020.537366
- Waheed, S. A., Gilani, N., Shoukat, L. (2019). The study abroad decision: A qualitative case study of Pakistani doctoral students. *Global Regional Review*, 4(4),328-335.
- Wazir, H. K. (2018, February 2). *Jobless PhD scholars: HEC fails to adjust PhD scholars in varsities* . Retrieved December 5, 2020, from Pakistan Today: <https://archive.pakistantoday.com.pk/2018/02/02/jobless-phd-scholars-hec-fails-to-adjust-phd-scholars-in-varsities/>
- Yanhua Bao, Barbara M. Kehm & Yonghong Ma (2018) From product to process. The reform of doctoral education in Europe and China, *Studies in Higher Education*, 43:3, 524-541, DOI: [10.1080/03075079.2016.1182481](https://doi.org/10.1080/03075079.2016.1182481)
- Yerkes, M., van de Schoot, R., & Sonneveld, H. (2012). Who are the job seekers? Explaining unemployment among doctoral recipients. *International Journal of Doctoral Studies*, 7, 153. <http://dx.doi.org/10.28945/1573>
- Zaman, S., Waheed, S. A., & Gilani, N. (2022). An Assessment of the Usefulness of Online Performance Evaluation Reports (PERs) in Comparison to Manual Reports in Schools. *Pakistan Journal of Educational Research*, 5(4), 321-333. <https://pjer.org/index.php/pjer/article/view/713>