



Original Article

Issues, Challenges & Opportunities of Education for Marginalized Communities in Pakistan

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ABSTRACT

Education is a right for every individual in Pakistan. Pakistan has various socio-economic classes, cultures, and geographical locations tend to suffer socio-economically, culturally, and geographically. This research aims to focus on multiple issues related to educational inclusiveness for underprivileged groups, such as women living below the poverty line, religious minorities, and rural populations, and discuss gaps and opportunities within policies. Qualitative research involving focus group discussions addresses systemic issues- fiscal issues and issues related to gender bias and infrastructural issues- as well as curriculum biases. It discusses how the existing policies cannot address these problems. Schooling by the community, targeted scholarships, vocational training, and all-inclusive curricula reforms are opportunities for improvement. The findings focus on sustainable, culturally inclusive, and community-driven solutions to bridge educational inequity. Addressing such issues is significant in fostering social cohesion, reducing inequality, and promoting sustainable development. This study's contribution to policymakers, educators, and advocates for increased access to education for the marginalized will provide actionable insights and recommendations for action. In this regard, these challenges can ensure that Pakistan ensures its most vulnerable populations' right to education.

Introduction

All over the world, education is widely accepted as an essential right and an influential motor of social and economic development. Yet, quality education is unequally accessible for everyone – and especially marginalized communities – around the world. These gaps are strong in Pakistan, and with different ethnic, social financial, urban and country part

movements that more encourage instructive prolapse. People in marginalized communities, those in remote rural areas, low-income urban communities, and areas in conflict—have a set of barriers to education based on a mix of social, economic, and political factors. Their perpetuation means these barriers limit the individual opportunities and constrain national development through cycles of poverty and social exclusion. The educational needs of these marginalized groups need to be addressed for promoting social cohesion, reducing inequality and making for a sustainable development for Pakistan (Ali & David, 2021).

Despite its abysmally high population, Pakistan's education system has long suffered from problems of access, quality and inclusivity. The government has bridged these gaps through its programs and policies such as the National Education Policy and non-targeted forms of interventions for disadvantaged criteria. But these efforts have thus far failed because it has been so challenging and multifaceted to serve marginalized communities. As per the data revealed recently, roughly 22 million children are absent from the school in Pakistan, a large part of them belonging to disadvantaged communities. And for these groups it is not just about having physical access to education, but about socio cultural factors like gender discrimination, inadequate infrastructure and lack of economic opportunity forcing the child into labor instead of into classrooms. By the way, in those areas, such as Balochistan, Gilgit Baltistan, and Federally Administered Tribal Areas (FATA), which are geographically isolated, these communities do not have access or the trained teachers (Maqsood et al., 2021).

Given the fact that a particular marginalized community possesses its specific challenges and needs, it is important for formulating policies actually addressing educational inequalities. Though, the existing literature provides an understanding of general barriers to education in Pakistan there is a need for studies focusing on particular issues faced by marginalized groups. To fill this gap, this research intends to diagnose the core challenge(s) of marginalized communities, examine the value of current educational policies, and investigate various options for developing an inclusive and sustainable approach to education. According to the study, findings from it will add to the nuanced understanding of the educational landscape in Pakistan, with the understanding that marginalized groups need targeted approaches in consideration of the socio economic and cultural backdrop (Zohra et al., 2023).

To address these aims, this research is guided by three primary objectives: Using a Case Study of the Mera Lahoo Campaign, (1) this research aims to identify critical challenges faced by marginalized communities in accessing quality education in Pakistan such as social, economic, and infrastructural barriers; (2) to study the effect of present educational policies and programs on these communities regarding their effectiveness in changing the educational accessibility and outcomes; and (3) to study the opportunities and strategies to improve educational accessibility and equity for marginalized communities in Pakistan, particularly sustainable and cultural inclusive ways. Finally, this framework will allow the study to show us how Pakistan's education system can continue to change in ways that benefit its most vulnerable populations, and what actually actionable recommendations can be conveyed to policymakers, educators, and community leaders (Sain, 2023).

In a nutshell, this study goes in depth about multifaceted education issues confronting marginalized communities in Pakistan. This research seeks to contribute to this broader goal of equitable access to education for all by examining the challenges, assessing policy impact and suggesting areas of opportunity to promote inclusive education. These objectives need to be addressed to empower the marginalized groups and to build a more just and inclusive

society, which recognized education as the way of social and economic advancement (Anwar Khan & Sultan, 2020).

Literature Review

Education access for marginalized communities is a grave worldwide problem; studies have revealed a host of obstacles barring marginalized groups from getting into education. Communities located in conflict, crisis and poverty, in particular, face especially severe gaps in education in Pakistan. In this literature review, we look at the many barriers to education that these communities face, the shortcomings of policy intervention ideas, and the possible solutions offered in current literature. There were various key themes such as socio-economic challenges, gender gaps, geographical difficulties, cultural differences, and exploring the innovative models of educational system to enhance access and equity (Amir, Sharf & Khan, 2020).

Socio-Economic Challenges

Consistently, socio economic barriers are portrayed by communities in Pakistan as barriers of gaining educational access. Absent accountability, failing families are blocked from seeking the education their families need and can't always afford school fees, uniforms or transportation, children drop out and contribute to their household income through labor (UNESCO, 2022). Pakistan's Education Statistics report shows that out of the school children, many of them are from households of marginalized economic status and parents have to grapple with hard choices between short term economic needs and long-term educational benefits. Financial inadequacy, which frequently leads to educational disparities, continues to act as a barrier to socio economic mobility that spreads from one generation to another. Mostly it is the secondary and tertiary education enrollment that suffers due to financial hardships because families prefer to spend their meagre resources on basic literacy instead of further schooling (Tabassum & Jamil, 2014).

Gender Disparities in education

Profound gender-based barriers restrict the educational opportunities for girls in marginalized communities in Pakistan. The literature focuses on early marriage, domestic responsibilities, and tight gender norms, which lower the volumes of enrollment and hold rates for girls, especially in rural or conservative spots (Akram et al., 2021). Girls belonging to a marginalized community in Pakistan have a 15 per cent lower chance of completing primary education than boys and are even often denied the chance of secondary education. The studies argue that these gender disparities have much to do with deep cultural attitudes that do not recognize female education as vital as boys' education. In response, some researchers argue that targeted interventions should be developed to forcefully challenge these norms through interventions such as gender-sensitive policies and awareness-raising campaigns in the community (Abbas, 2021).

The top of these mountains is separated from the rest of the mountains' terrain by some great distance (Geographical Isolation). Geographical barriers, most importantly in the academically deprived communities of Balochistan and Gilgit Baltistan, make education inaccessible for them. A World Bank report (2022) indicates that a lack of adequate educational infrastructure (schools, classrooms, trained teachers) is very common in rural areas of Pakistan (Baig & Jamil, 2020). In these regions, children have to walk long distances

to school, increasing attendance consistency, often because of dropouts or lack of girls' attendance, especially since they face extra safety concerns. The infrastructure deficiencies, such as the nonexistence or nonexistence of sanitation facilities and no boundary walls, deter enrollment and attendance. Furthermore, the number of untrained staff in the schools and teacher shortage also contributes to the poorer quality of education in these communities, establishing more hiatus between urban and rural educational areas (Tabassum & Jamil, 2014).

Cultural and Social Barriers

Economic, geographical, social and cultural attitudes also lead to educational exclusion for the marginalized communities. According to studies, within particular areas, communities promote traditional roles and livelihoods and view formal education negatively, as it is considered irrelevant to their socio-cultural context. In areas that are heavily tribal and feudal by nature, parents may be unwilling to risk sending children, especially girls, to schools located outside their community because they have been made to feel that sending them away poses threats to family honor or cultural values. These social barriers need to be addressed by researchers and require culturally sensitive approaches that engage local leaders, and align educational efforts with community values (Farooq, Rathore & Mansoor, 2020).

Policy Interventions and Gaps

The Pakistani government has made several policy efforts to increase educational access, but important ones still remain to be addressed in fulfilling the needs of marginalized communities. However, education is not accessible to all children with the enactment of the Right to Education Act and other programs, which are not effectively well implemented in practice due to shortage of resources, political instability, governance, etc. Critics claim that policy frameworks aren't specific enough in terms of marginalized communities and frequently take on a one-size-fits-all approach that fails to account for the special struggles of those living with disadvantages. Haider, Ahmad & Ali (2014) advocate for more decentralized policy actions that allow local communities to have a stake in the policies as well as the interventions being carried out are made to fit specific socio-cultural contexts.

Inclusive Education opportunities

Several innovative approaches to offering improved access to education for the marginalized communities in Pakistan are emerging in the research. Also, technology-based solutions, including mobile learning platforms and digital classrooms, are promising in traversing geographical barriers. In addition, non-governmental organizations (NGOs) and private sector initiatives have made important contributions with alternative education models, namely, informal schools, vocational training and programs for distance education in these communities. Alternative approaches show that in addition to formal centers, flexible, context-sensitive education models can be used to reach underserved populations (Habib-ur-Rahman et al., 2022).

An outstanding illustration of this is the introduction of community-based schooling programs that use local teachers and are patterned along the cultural setting of that area (Ali & David, 2021). It has been demonstrated to increase community support and encourage school attendance. Researchers say community involvement in the management and delivery of education might help mitigate the mistrust impoverished and marginalized communities may

have towards mainstream educational institutions. Additionally, with increasing awareness and recognition of the value of vocational and skill-based training, these have gained acceptance as important alternatives to formal education in communities where formal education has typically been undervalued (Tabassum & Jamil, 2014).

Existing literature denotes that educational exclusion from marginalized communities in Pakistan is multi-dimensional, shaped by socio-economic, cultural, geographic and policy-related factors. According to Jamil (2021), although government efforts in terms of policy reforms are being made, there are still gaps to bridge to address the challenges peculiar to these communities. Moving towards adopting flexible, culturally inclusive, and community-driven educational models appears to be essential to extending educational access for Pakistanis marginalized populations, research suggests. From here forward, there are policy implications related to economic and infrastructural challenges as well as the social and cultural contexts of these communities. While focusing on these factors, educational interventions more easily pave the way for promoting equity, inclusion, and long-term socio-economic improvement of the marginalized groups around Pakistan (Iqbal et al., 2022).

Research Objectives

1. To identify the critical challenges marginalized communities face in accessing quality education in Pakistan.
2. To examine the impact of existing educational policies and programs on marginalized communities.
3. To explore potential opportunities and strategies for enhancing educational access and equity for marginalized communities in Pakistan.

Methods

In this qualitative research, the problems, issues, challenges, and opportunities related to education in Pakistan's marginalized communities will be explored holistically. There is a strong rationale for applying qualitative research in this study, as qualitative research is needed here to gain in-depth knowledge of people's experiences, perceptions, and insights about practices concerning expertise in education, human rights, or social inclusion. For this study, qualitative data will be collected from focus group discussions, thereby allowing rich contextual analysis of the views presented by the participants (Muhammad et al., 2024).

For this research, as many as seven participants were conducted with different educational backgrounds and working experience with respect to advocacy, social inclusion and community empowerment (Khan & Abid, 2021). In a focus group format, participants are able to have an in-depth dialogue, share personal insights, and bring to the surface collective challenges with collective solutions. This collective approach was taken to provide a list of experiences and views on problems that face the education of these disadvantaged groups and how to change (Ali & David, 2021).

The sampling approach is purposive, and it best fits qualitative research that demands informed individuals in the field. The participants are selected based on their professionalism and being directly involved with the marginalized communities in Pakistan. These individuals include human rights activists, educators, legal professionals, and development experts, each contributing a unique perspective on the challenges and opportunities related to the education of marginalized groups (Khan et al., 2021).

Table 1: Participant Profiles

Participant ID	Designation	Area of Expertise	Professional Background
P1	Human Rights Activist	Human Rights and Constitutional Law	Renowned lawyer, professor, and author with expertise in human rights and constitutional law.
P2	Human Rights Defender	Advocacy for Religious Minorities	A retired member of The Salvation Army with extensive experience in social inclusion and minority rights.
P3	Education Leadership Expert	Transformative Education for Marginalized Groups	MPhil in Education Leadership, with 25+ years in curriculum design and vocational training (Shah, 2018).
P4	Disability Rights Advocate	Special Needs Education	PhD in Special Needs Education, published researcher, and conference speaker.
P5	Technical Education Expert	Skills Development	MS in Electrical Engineering, with experience in technical education and public administration.
P6	Transgender Rights Activist	Social Advocacy	Transgender activist with over a decade of experience supporting marginalized groups in Punjab.
P7	Development Sector Leader	Women’s Empowerment and Youth Engagement	15+ years in development sector leadership with strategic partnerships across multiple regions.

Data Collection

Data shall be collected through a semi-structured focus group discussion, whose questions are guide-based yet left open-ended. This semi-structured nature is beneficial because the participants can give answers and elaborate on them. At the same time, the researcher can probe for further information and clarification where appropriate. The discussion will revolve around the perspectives of these participants regarding:

1. The main educational barriers challenging these marginalized communities.
2. Opportunities are available currently, and possible solutions are being proposed to enhance equal access to education.
3. Challenges in Policy Implementation and Resource Allocation.
4. Strategic Recommendations on Inclusive Equitable Education Practice.

The session’s audio recording will be made with the participants’ consent so that authentic data can be captured and later transcribed for analysis.

Data Analysis

A thematic analysis of the data from a focus group discussion is used. Thematic analysis will be appropriate for exploring and describing patterns within qualitative data. The following steps will follow this method:

1. Familiarization: Transcription of the audio recording, careful reading, and pondering of the data for an initial understanding.

2. Coding: Break down data into meaningful units and assign codes to capture the essence of the response.
3. Thematization is the agglomeration of relevant codes into higher-order themes that encapsulate the salient themes of the issues, challenges, and opportunities surrounding marginalized communities' lives.
4. Theme Review: Checking whether the identified themes represent the data adequately and have meaningful contributions to the research questions (Sain, 2023)
5. Defining and Nomenclature of Themes: The formulation of concise definitions for each theme and its nomenclature to capture each theme's central ideas.

Ethical Consideration

The ethical considerations covered the whole research activity. Before the focus group, all participants were informed about the details of the study objectives and rights, such as voluntary participation, confidentiality, and the right to withdraw at any time. Consent forms were obtained, and pseudonyms were used in the final report to protect identity (Tabassum & Jamil, 2014).

Limitations

Focus groups provide informative data, but some limitations are also present here. Group dynamics might skew individual responses because the individuals attending the focus group will tend to align themselves with what is dominant (Khushik & Diemer, 2020). The findings may only represent some of Pakistan's marginalized communities because the group represents a minimal sample size. However, broad ramifications in looking into policy and educational initiatives can be expected from the diverse backgrounds of participants (Zohra et al., 2023).

Analysis

Women below the Poverty Line

Issue & Challenge 1: Low financial capacity for education and high dropout rates—financial handicaps greatly limit the purchasing power of low-income girls' education, leading to higher dropout rates. "Without enough Money, no girl can afford books or uniforms or school fees as luxuries in poor people's homes."

Issue & Challenge 2: Cultural barriers to girls' education. In many areas, traditional social norms and gender stereotypes bar girls from school. In many communities, girls are supposed to stay indoors and fulfil domestic roles that do not require much school education, thus reducing their perceived value of education.

Issue & Challenge 3: Poor transportation and unsafe schools to attend—Geographical and safety-related issues make schools challenging to participate in for girls living in poverty-stricken regions. Families are often hesitant to send girls to distant or unsafe schools, especially when they must travel alone.

Opportunity 1: Government-sponsored scholarships and stipends-Government scholarships and stipends would reduce the burden on families, thereby increasing school enrolment and retention for girls from poor backgrounds.

Opportunity 2: Community-based schooling initiatives-Local, community-led schools provide affordable and accessible schooling within the communities. Therefore, it will become easy to send girls to school without fail.

Opportunity 3: Tailor-made vocational training for women—Vocational training programs help women by giving them the skills and training to seek employment. They also help women gain economic independence, which helps to change the community’s perspective toward women’s education positively.

Religious Minorities

Issue & Challenge 1: Inclusiveness in teaching materials and content—there is discrimination that religious minorities suffer from within the curriculum and classroom settings; hence, they feel out of place. The lack of representation of their history and culture in textbooks makes it seem that the entire education experience is alienating.

Issue & Challenge 2: Minority teachers and mentors are underrepresented-teacher minorities. Lack of proportion with students will make the class less representative and lead students of the same race to find few role models or mentors.

Issue & Challenge 3: Access to Tertiary Education is restricted due to prejudices—Access to tertiary education is often limited among religious minorities because of systemic discrimination in admissions and hiring processes, which can lead to inequitable educational results.

Opportunity 1: Initiatives toward inclusive curriculum reform—Curriculums that open up to better and more complimentary views of religious minorities can contribute to a feeling of belonging and an appreciation of diversity.

Opportunity 2: Scholarships and education support programs focusing on minorities—these scholarships and education support programs, which focus on minorities, can eliminate both financial and social barriers to greater minority access to education.

Opportunity 3: Community alliances to advocate for education rights—Minority communities, NGOs, and advocacy groups can raise agitation for education equity and ensure that support is offered to minority students.

Differently abled Learners

Issue & Challenge 1: Inaccessible Infrastructure in Schools—most school institutions in Pakistan lack accessibility features at the most basic level, including ramps, elevators, and accessible toilets, which prevent differently-abled learners from accessing facilities comfortably.

Issue & Challenge 2: The shortage of trained teachers qualified enough to teach special needs students is the other severe shortage of trained teachers to handle disabled children. This leads to learning environments that need to be more organized and less friendly.

Issue & Challenge 3: Access to assistive technology and learning resources is often highly restricted. Differently able students usually do not have access to elementary tools such as screen readers or hearing aids in schools or appropriate learning material and means for their access in different contexts.

Opportunity 1: Inclusive education policies and support structures—Inclusive education policies encourage schools to adopt accessible infrastructures and foster an environment that better supports students with special needs.

Opportunity 2: Developing special education training for teachers would provide some training on special needs in education to prepare and deliver more supportive learning environments for differently abled learners.

Opportunity 3. Collaboration with NGOs for Assistive Device Provision—Schools can collaborate with NGOs to deliver assistive technologies, providing differently-abled students with the fundamental tools to enhance their educational experience and learning outcomes.

Transgender People

Issue & Challenge 1: Stigma and discrimination in schools—Transgender people face a broad stigma in schools that becomes bullying or social exclusion and even harassment by fellow students and teachers, which negatively affects the educational experience.

Issue & Challenge 2: There are significantly few dedicated policies supporting transgender education—very few policies in place specifically to protect educational rights for transgender individuals; thus, there is very little support and understanding at the institutional level for such needs.

Issue & Challenge 3: Bullying and Rejection in Class There are no policies or awareness programs regarding bullying, so transgender students become an easy target for bullies. Such bullying will lead to a high rate of dropout levels and mental problems.

Opportunity 1: Transgender-friendly schools or programs- Develop specific programs or schools dedicated to transgender students. This can provide a safe and inclusive learning environment for any transgender student from discrimination.

Opportunity 2: Promotion of policies on inclusion and anti-bullying practices—Protection of specifically transgender school students from bullying would provide a friendly climate at school and will help to reduce the dropout rate.

Opportunity 3: Scholarships and targeted educational grants to transgender students—Scholarships and funding tailored specifically to transgender students may expand student access and participation.

Youth in Jails

Issue & Challenge 1: Limited Access to Formal Education and Learning Resource—Incarcerated Youths in Pakistan generally have limited access to formal education, both in terms of teachers, textbooks, and learning hours.

Issue & Challenge 2: Stigmatization affecting social reintegration—Youths are stigmatized whenever they are released from jails and find it hard to integrate into society, more so in school and working life.

Issue & Challenge 3: Merely vocational preparation for work after detention—Detained youth lack the necessary training for successful work after release, which may hinder them from being productive outside of jail.

Opportunity 1: Prison education programs—when educational programs are developed in prison, incarcerated youth can return to studies and improve their chances for successful reintegration.

Opportunity 2: Vocational skills training for inmates—Vocational training prepares young offenders with practical skills to gain employment after their release and minimize the chances of recidivism.

Opportunity 3: Support for education-based rehabilitation programs for reintegration—in this sense, support for reintegration is provided with education and rehabilitation services meant to reintegrate people into society better after prison.

Out-of-School Children

Issue & Challenge 1: Poverty and Family Pressure to Work Instead of Studies Out-of-school children are from low-income families who depend on their child's earnings, compelling the child to work instead of attending school.

Issue & Challenge 2: Geographic remoteness and school infrastructure—Children in distant or rural areas often cannot access schools, as schools lack the infrastructure, which includes roads and transportation services, increasing the out-of-school population.

Issue & Challenge 3: Low awareness of the importance of school Low recognition of the need to go to school causes most individuals to be out-of-school children. Parents give little regard or value to the formal education system.

Potential Opportunity 1: Community outreach and awareness campaigns—these campaigns can emphasize the importance of education and encourage more families to send their children to school.

Opportunity 2: Models for mobile or informal schooling—Mobile schools or informal learning centers may provide access to schooling and reach children in remote or disadvantaged areas.

Opportunity 3: Partnership with NGOs for accessible education involves developing programs on learning resource provision and access to education opportunities for out-of-school children, reducing their barriers.

Conclusion

A historical look into the dialectical relationship between socio-economic imbalances, cultural traditions, and systemic ineptness can be seen from the reasons why Pakistan's marginalized communities cannot get quality education. Thus, this study highlights a multi-dimensional solution, which includes financial constraints, gender-based discrimination, geographical isolation, inadequate infrastructure, and biases in teaching materials. Though various governments and NGOs have launched numerous policies and programs, the lacunae in the policies and programs underway could not fill up the vacuum resulting from resource constriction, weak governance, and a one-size-fits-all approach. However, there are considerable opportunities for making education more accessible and equitable for disadvantaged groups. Some solutions proposed include community-based schools, scholarship provision, vocational training, and culturally inclusive curriculum reform. Using technology for education and engaging local communities, NGOs, and agencies in collaborations can further heighten accessibility and inclusiveness. Emphasizing that

educational inequalities demand a focus on flexibility, sustainability, and sensitivity to context, findings underscore the need for policymakers to prioritize the incorporation of the voices of marginalized groups in educational planning and policy development so that interventions reflect the socio-cultural realities of affected populations. Promoting gender equity, diversification of curricula, and targeted resources can change the education topography of Pakistan.”

Education is the vitally important gateway to empowerment and social mobility, and equal access for the marginalized is at the core of not only moral imperatives but also national progress. With innovative solutions and systemic barriers being broken down, Pakistan can establish an inclusive society that fosters value and potential productivity in all its citizens. The positive socio-economic developmental implications of education for the previously marginalized groups would ensure a more cohesive and equitable future for Pakistan.

References

1. Abbas, J. (2021). Crisis management, transnational healthcare challenges and opportunities: The intersection of COVID-19 pandemic and global mental health. *Research in Globalization*, 3, 100037. <https://doi.org/10.1016/j.resglo.2021.100037>
2. Akram, H., Aslam, S., Saleem, A., & Parveen, K. (2021). The challenges of online teaching in covid-19 pandemic: a case study of public universities in Karachi, Pakistan. *Journal of Information Technology Education: Research*, 20, 263–282. <https://doi.org/10.28945/4784>
3. Ali, A., & Khemlani David, M. (2021). Challenges to Data Collection: Digital Divide Causing Double Marginalization of the Bagri Community in Sindh, Pakistan. *IARS International Research Journal*, 11(2), 24–34. <https://doi.org/10.51611/iars.irj.v11i2.2021.166>
4. Amir, S., Sharf, N., & Khan, R. (2020). Pakistan’s education system: An analysis of education policies and drawbacks. *Electronic Research Journal of Social Sciences and Humanities*, 2.
5. Anwar, M., Khan, A., & Sultan, K. (2020). The barriers and challenges faced by students in online education during COVID-19 pandemic in Pakistan. *Gomal University Journal of Research*, 36(1), 52–62.
6. Baig, M., & Jamil, N. (2020). A review on the learning technologies to address the issues of education in Pakistan. *2020 IEEE 23rd International Multitopic Conference (INMIC)*, 1–6. <https://doi.org/10.1109/INMIC50486.2020.9318128>
7. Farooq, F., Rathore, F., & Mansoor, S. (2020). Challenges of online medical education in Pakistan during COVID-19 pandemic. *J Coll Physicians Surg Pak*, 30(6), 67–69.
8. Habib-ur-Rahman, M., Ahmad, A., Raza, A., Hasnain, M. U., Alharby, H. F., Alzahrani, Y. M., Bamagoos, A. A., Hakeem, K. R., Ahmad, S., Nasim, W., Ali, S., Mansour, F., & EL Sabagh, A. (2022). Impact of climate change on agricultural production; Issues, challenges, and opportunities in Asia. *Frontiers in Plant Science*, 13, 925548. <https://doi.org/10.3389/fpls.2022.925548>
9. Haider, K., Ahmad, N., & Ali, Z. (2024). Problems and Challenges Faced by Non-Muslim Students in achieving Higher Education at universities of Pakistan: An Evaluative Study. *Spry Contemporary Educational Practices*, 3(1). <https://doi.org/10.62681/sprypublishers.scep/3/1/15>

10. Iqbal, S. A., Ashiq, M., Rehman, S. U., Rashid, S., & Tayyab, N. (2022). Students' Perceptions and Experiences of Online Education in Pakistani Universities and Higher Education Institutes during COVID-19. *Education Sciences*, 12(3), 166. <https://doi.org/10.3390/educsci12030166>
11. Jamil, S. (2021). From digital divide to digital inclusion: Challenges for wide-ranging digitalization in Pakistan. *Telecommunications Policy*, 45(8), 102206. <https://doi.org/10.1016/j.telpol.2021.102206>
12. Khan, R. U., Salamzadeh, Y., Shah, S. Z. A., & Hussain, M. (2021). Factors affecting women entrepreneurs' success: A study of small- and medium-sized enterprises in emerging market of Pakistan. *Journal of Innovation and Entrepreneurship*, 10(1), 1–21. <https://doi.org/10.1186/s13731-021-00145-9>
13. Khan, Z. H., & Abid, M. I. (2021). Distance learning in engineering education: Challenges and opportunities during COVID-19 pandemic crisis in Pakistan. *International Journal of Electrical Engineering & Education*. <https://doi.org/10.1177/0020720920988493>
14. KHUSHIK, F., & DIEMER, A. (2020). Education and Sustainability, How SDG4 Contributes to Change the Representations of Developing Issues? The Case Study of Pakistan. *International Journal of Management and Sustainability*, 9(2), 101–119. <https://doi.org/10.18488/journal.11.2020.92.101.119>
15. Maqsood, A., Abbas, J., Rehman, G., & Mubeen, R. (2021). The paradigm shift for educational system continuance in the advent of COVID-19 pandemic: Mental health challenges and reflections. *Current Research in Behavioral Sciences*, 2, 100011. <https://doi.org/10.1016/j.crbeha.2020.100011>
16. Muhammad, Y., Bokhari, T., & Anis, F. (2024). Inclusive education in Pakistani schools: Theoretical perspectives, challenges and opportunities. *Pakistan JL Analysis & Wisdom*, 3, 135.
17. Sain, Z. (2023). Revitalizing Education in Pakistan: Challenges and Recommendations. *International Journal of Higher Education Management*, 9(2). <https://doi.org/10.24052/IJHEM/V09N02/ART-4>
18. Shah, A. (2018). Leadership and community mobilization for education access to marginalized communities: The case of an NGO in Sindh, Pakistan.
19. Siddiqui, G., Ali, M., Zarar, N., Asghar, S., & Munir, H. (2023). Public education system In Pakistan: An exploration into major problems. *Journal of Positive School Psychology*, 1311–1323.
20. Suleman, N. (2020). A case of several jeopardies: A study on the intersecting inequalities in the everyday lives of poor minority Christian women and girls in Pakistan.
21. Tabassum, S., & Jamil, S. (2014). The plight of marginalized: Educational issues of the transgender community in Pakistan. *Review of Arts and Humanities*, 3(1), 107–119.
22. Tamim, T. (2021). Language, Class, and Education: Deconstructing the Centre to Rethink Inclusivity in Education in Pakistan. *Cogent Education*, 8(1), 1897933. <https://doi.org/10.1080/2331186X.2021.1897933>
23. Usman, M., & Ab Rahman, A. (2021). Financing higher education through waqf in Pakistan: Issues and challenges. *Jurnal Pengurusan*, 62, 159–171.

24. Zakar, P., Qureshi, D., Ullah, D., Zakar, D., Aqil, N., & Manawar, D. (2020). Universal primary education in Pakistan: Constraints and challenges. *South Asian Studies*, 28(2).
25. Zohra, F., Rehman, R., & Muhammad, T. (2023). Examining the impact of NGOs on education promotion in underprivileged areas of Pakistan: A case study of idara-e-taleem-o-agahi. *Annals of Human and Social Sciences*, 4(3), 514–526.