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Constructing Inclusive Higher Education: A Grounded Theory Study of Faculty Experiences with Disability Accommodation in Pakistani Universities

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ABSTRACT

The present, grounded theory study explored faculty perceptions for fostering the implementation of disability accommodation at Pakistani universities to develop an integrated understanding of the determinants governing inclusive practices in higher education. Qualitative data were analyzed using constant comparative methods using MAXQDA software for data management and were used to collect data through semi-structured interviews with 20 university faculty members (5 each from 4 major universities in Pakistan). As illustrated in the emergent grounded theory model, the complex interplay of knowledge and awareness, challenges, strategies, and attitudinal shifts serve to shape faculty experiences. Such findings highlight the need for support in terms of both institutional avenues and resources and sensitivity training for better faculty practices and development in this area. In conclusion, this study contributes to the scarce literature available on the topic of disability accommodation, particularly from the Pakistan context, with implications that may help promote better equity and accessibility in various educational systems. The importance of the fundamental right to education of persons with disabilities should be convinced by this study, shared by all those stakeholders of higher education in Pakistan who readmit and need to improve practice around access to higher education for disabled students.

Introduction

There has been increasing interest in disability accommodation in higher education lately, marking a global, ongoing move towards more inclusive practices and, in turn, more equitable access to learning (Osuna-Juárez & González-Castellano, 2024). Nonetheless, applying accommodations is a multifaceted question, especially in developing nations, where resources and support systems can be scarce (Shaukat, 2015; Shaukat et al., 2013). These challenges are the reflection of a much larger problem that exists in Pakistan. The higher education sector in the country was facing hurdles in catering their environment towards people with restrictions even though legislation has been introduced to protect such individuals' rights.

This grounded theory study investigates the faculty experience of disability accommodation within Pakistani universities. This research hopes to create a rich picture of faculty perspectives, challenges and approaches that contribute to inclusive environments in higher education. The study will explore the following research questions: (1) How do educators experience and perceive the process of providing disability accommodation? (2) What obstacles are posed to faculty when implementing accommodations, and how do faculty navigate these obstacles? (3) How do faculty create inclusive learning environments accommodating students with disabilities?

Moreover, it is significant in adding to the few available studies on disability accommodation within Pakistani settings. This study uses a grounded theory strategy assisted by MAXQDA software for qualitative data analysis to develop substantive theory related to the intricacies of faculty experiences. These insights can inform the policy and training efforts toward faculty at higher education institutions in Pakistan and the institutional and systems-level initiatives to provide support systems for such students (Johnson & Lee, 2021). The study also seeks to describe the challenges and best practices through a developing country's context, which would contribute to the global discourse on inclusive education, whilst the findings might prove to be insightful towards enhancing efforts toward equity, accessibility, and education in several educational contexts.

Literature Review
Theoretical Frameworks

This study emanates from two complementary theoretical frameworks: the social model of disability (Oliver, 2013) and the Universal Design for Learning (Cast, 2018). According to the social model of disability, a person does not experience disability as part of their nature but because of the physical or social barriers encountered within the environment (Oliver, 2013). This views disability not as a collection of individual impairments but rather as a systemic failure to be fully participatory and inclusive. Within the higher education environment, the social model focuses on the responsibility of institutions to provide access along with a range of enabled and facilitated forms of learning (Barnes, 2007).

In contrast, UDL acts as a guideline to develop a well-designed practice in education, where the purpose of such guidelines is to support a learning environment that considers the varying needs of all learners in one environment (Cast, 2018). Universal Design for Learning (UDL) principles promote the availability of multiple means of representation, expression, and engagement, which allows students different avenues to access information, showcase their learning, and be active participants in learning activities (Meyer et al., 2016). UDL empowers faculty to incorporate accommodations and inclusivity practices ahead of time, positioning their environment for the success of all learners as "the same grapes."

Disability Accommodations: What Faculty Want

Research examining faculty attitudes towards and experiences of disability accommodation has produced mixed results. The majority of faculty report positive attitudes toward inclusion, but many either feel unprepared or lack information on accommodating students (Avramidis & Norwich, 2002). This can result in inconsistencies in accommodations adapted for students while inherently affecting the achievement of students with disabilities.

In developing countries, similar issues can also be seen as faculty attitudes towards disability and accommodation depending upon the culture, society, and resources. Mullins and Preyde (2013) state that further, faculty members cannot enact accommodation alone, a situation which Mullins and Preyde attribute to institutions both undertraining faculty regarding accommodations, as well as under-resourcing accommodations efforts and negative societal stigma inhibiting faculty members from enacting harm-minimizing accommodations for their students. In India, other research has found broad consensus on the need for faculty development programs designed to build knowledge and skills on disability inclusion (Sharma et al., 2018).

Barriers to Inclusive Education in Pakistan

In Pakistan, inclusive education practices face some hindrances. The extent to which faculty members provide accommodation is further affected by attitudinal barriers such as social stigma and negative perception of disability (Muhammad, Bokhari et al., 2024; Safdar et al., 2024; Saif et al., 2024). In addition, institutional barriers such as lack of resources, inaccessibility, and low provision of support services also impose a barrier to equitable education (Muhammad, Waqar et al., 2024b, 2024a; Rashid et al., 2024).

The majority of university faculty members in Pakistan receive little training and have very little knowledge about disability legislation and policies (Haider & Hussain, 2021; Khalid & Othman, 2022). Faculty development programs and institutional support could enhance inclusive practices.

Approaches for Promoting Inclusive Practices

One strategy would be the implementation of initiatives that recommend a framework for recognition programs, faculty workshops, and community engagement projects that rely heavily on inclusive practices, enabling a more integrated approach in higher education. There certainly are efforts, such as Johnson and Lee (2021), stating that effective staff training should cover, ideally, the principles of considering disability, the university's legal obligations, and practical strategies for creating evidence-based accommodations. These programs can improve the knowledge, skills, and confidence of faculty members concerning their roles in addressing the needs of students with disabilities.

Structural supports (e.g., dedicated disability services offices, clear policies and procedures) are important for sustaining inclusive practices (Lombardi et al., 2015). These support systems provide faculty with guidance and resources and help implement accommodation.

In partnership, faculty, disability services, and students with disabilities help create environments that accommodate a wide range of learning needs (Stein, 2014). Building collaborative working relationships between students and faculty, encouraging dialogue, and taking a team approach to find common ground will allow those accommodations to be more specific to individual students while ensuring uniformity throughout both courses and programs.

Methodology

This study employed a grounded theory approach (Charmaz, 2024) to investigate the faculty experiences of disability accommodation in Pakistani academic contexts. Grounded theory is a qualitative research methodology aimed at generating theory from data using an iterative approach to data collection, analysis, and theoretical sampling (Glaser & Strauss, 1967; Lindqvist & Forsberg, 2023). This approach was selected because it allows us to capture the complex and rich nature of the experiences of the faculty and to develop a solid theory grounded in the realities of participants (Birks & Mills, 2015).

Data were collected using purposeful theoretical sampling strategies (Morse, 2010). This study relies on a purposive sampling of faculty members from various disciplines and ranks in universities in Pakistan who have taught students with disabilities. Participants had to have at least two years of teaching experience and made modifications to include students with disabilities in their courses.

Emergent concepts and categories were deepened and developed through theory sampling during ongoing data collection and analysis (Charmaz, 2024). This involved seeking out more participants who could shed light on particular aspects of the developing theory, e.g., the challenges faced at the stage of accommodation and the strategies employed to create inclusive classrooms.

Data were collected through semi-structured interviews and document analysis. Interviews were conducted in person or via video-conferencing platforms, depending on the interviewees. The interview guide included open-ended questions regarding the experiences, perceptions, and practices of faculty members when accommodating students with disabilities. Interviews were then audio recorded and transcribed verbatim for the analysis. For example, documents such as institutional policies, accommodation guidelines, and faculty training materials were analyzed to help further contextualize the experiences of faculty (Bowen, 2009), 2009). They documented their access to the mechanisms of institutional support and their attainments of institutional resources.

Data analysis was performed according to the constant comparative method (Glaser & Strauss, 1967)—a systematic process of coding, categorizing, and comparing data in order to explore states and relationships therein. The analysis commenced with open coding, breaking the data into discrete incidents, and assigning descriptive codes (Charmaz, 2024). Similar codes were merged into categories and subcategories as coding proceeded (Charmaz, 2024).

The axial coding was used to examine the link between the categories, leading to a richer understanding of the phenomenon (Corbin & Strauss, 2015). In particular, they identified the conditions, actions/interactions, and consequences for each category. Selective coding was the process of relating categories to form a theoretical framework (Corbin & Strauss, 2015). From the narrative lines, a core category emerged that situates the essence of the study in the center and builds theoretical significance around faculty experiences.

Qualitative data were coded and analyzed using MAXQDA software (Kuckartz & Rädiker, 2019). The software was used to organize, code, and retrieve data and to visualize relationships between categories and themes.

Several strategies were employed to verify the validity and credibility of the results gained from the research process. Agreement with participants was evaluated through member checking

(Lincoln & Guba, 1985)—the draft of preliminary findings were verified with participants to gain feedback about accurate reporting of their experiences.

Researcher reflexivity (Berger, 2015) was established through memos and a reflective journal that facilitated the examination of individual biases, assumptions, and interpretations. Rigor in this analysis was further enhanced through peer debriefing (Creswell & Poth, 2024) with colleagues who discussed participants' interpretations.

Results

The study involved 20 faculty members (12 males and eight females) from 4 Pakistani universities. Participants hailed from a variety of disciplines, including education (n = 6), social sciences (n = 5), engineering (n = 4), natural sciences (n = 3), and humanities (n = 2). The average teaching experience reached 7 years (SD = 2.5), and all participants had accommodated students with disabilities in their courses.

Through the process of data analysis, our findings were organized around four major themes: (a) faculty knowledge and awareness of disability accommodation; (b) challenges in implementing accommodations; (c) strategies for creating inclusive classrooms; and (d) attitudinal shifts and personal growth. Each of the themes enclosed multiple categories and subcategories, which are unpacked further below.

Faculty Familiarity and Awareness of Disability Accommodation

There was a wide range of knowledge and awareness about disability accommodation among participants. Formal training or workshops on inclusive teaching practices were received by some faculty members (n = 7), while others referred to their own experiences and informal consultations with colleagues (n = 13). A common theme articulated by participants was the need for more structured training with respect to disability laws, accommodation strategies, and assistive technologies. As one participant said, "I feel like I'm learning as I go, but I wish there were more guidance and support from the university (Participant 8).

Barriers to Accommodation Implementation

Faculty members experienced different struggles when implementing the accommodation. Often, a lack of resources like funding, infrastructure (physical or in the environment), and assistive technologies are mentioned as barriers. They also described a lack of institutional support, such as vague policies and procedures, insufficient coordination with disability services, and inadequate administrative support. As one participant put it, "It often feels like we're out here on our own trying to figure out how to accommodate students without the support of the university" (Participant 15).

Building Supportive Classroom Environments

Yet even amidst common challenges, faculty creatively leveraged strategies to create inclusive learning spaces. This included approaches to teaching with multiple means of representation (i.e., visual aids and audio recordings) and expression (i.e., oral presentations and written assignments. Flexible methods were used to meet their diverse learning needs. Participants also underscored the importance of working with disability services and communicating openly with students to provide appropriate accommodation. In fact, one participant noted, "I talk to each student who needs accommodation and try to assess their needs and how I can help" (Participant 3).

Attitudinal Changes and Self-Development

The process of obtaining accommodation has created a change in attitude and personal growth in the faculty. Participants reported greater empathy, patience, and understanding with their students with disabilities. They acknowledged that continuous self-reflection and professional development were necessary to strengthen their inclusive teaching practices. As another participant noted, "This experience has made me more aware of the wide variety of needs my students have and has pushed me to be a more empathetic and adaptable teacher" (Participant 7).

A Grounded Theory Model of Faculty Experiences

The emerging grounded theory model shows how the dynamic interplay of factors influences accommodation experiences to meet the needs of faculty with disability in Pakistani universities. The model foregrounds faculty knowledge and awareness, which is shaped through both personal experience and purposeful training supported by their institutions. Workers need first-rate accommodation, available resources, and institutional support. Nonetheless, educators address these challenges through differentiated pedagogies, partnerships with disability services, and candid dialogue with learners. It is this process of attitudinal changes and personal growth that bolstered faculty members' commitment to establishing inclusive learning environments.

This model puts mutual influence within all these factors at the very center, where each one influences the others and is influenced by others in an ongoing learning and adjustment process.

Faculty Experiences in Disability Accommodation

Faculty Knowledge and Awareness	Strategies for Inclusive Classrooms
Informal Experiences	Flexible Teaching Methods
Formal Training	Communication with Students

Challenges in Disability Accommodation

Institutional Support	Self-Reflection
Lack of Resources	Empathy Development
Barriers to Implementation	Attitudinal Changes

Figure 1: A diagram depicting Grounded Theory Model of Faculty Experiences

Discussion

This study explores the experiences of teaching faculty members in Pakistani universities on disability accommodation by employing grounded theory approaches. The themes and categories

emerging from this analysis align with the literature on inclusive education practices yet highlight Pakistani contextual challenges and strategies.

The discrepancy in the knowledge and awareness of disability accommodation levels among faculty members is consistent with results in previous studies. The suggestion by syllabi of minimal to no training received was crying out for comprehensive faculty development programs that prepare faculty to make better use of the relevant laws, accommodation strategies, and assistive technologies (Johnson & Lee, 2021). In Pakistani higher education practice/stream, the fundamental for empowerment is the knowledge gap, and it can only be reduced by continuing professional development opportunities (Haider & Hussain, 2021).

The issues faced by faculty, like limited resources and a lack of institutional support, mirror what has been reported previously in developing countries (Khalid & Othman, 2022; Mullins & Preyde, 2013). These challenges also suggest a systemic/structural approach to accommodations in higher education that advocates changes to institutional policies and the provision of resources (Barnes, 2007). For this reason, the social model of disability (Oliver, 2013) provides a useful lens for exploring these challenges, highlighting the environmental and attitudinal barriers that underpin the experiences of disabled students.

These strategies reflect the principles of Universal Design for Learning (Cast, 2018), including flexible academic methods, principles of inclusion, and collaboration with (disability) services, which demonstrate the faculty's dedication to humanitarianism. These so-called proactive approaches will create multiple means of representation, expression, and engagement that would help to address different learning needs (Meyer et al., 2016).

Participants' reports of attitude change and personal development further highlight the potential for transformation through inclusive practice. By overcoming challenges and applying strategies, faculty acquire greater empathy, patience, and understanding of students with disabilities. The results support the previous study, which indicates that inclusive experiences have positive impacts on faculty attitudes and beliefs.

The emerging model of grounded theory from the study discusses the experiences of faculty members regarding disability accommodation in Pakistani universities. Documenting students' acquisition of knowledge that may facilitate their ability to participate is important but does not represent a cascade of students with complex differences, providing evidence that the knowledge and awareness of faculty, the challenges related to overcoming poor attitudes, strategies employed, and changes in attitudes and beliefs all work upon one another. This model stresses the interdependence of the various factors and that both personal and systemic factors need to be addressed and aligned to create inclusive practices.

Therefore, the performance of higher education institutions in Pakistan cannot be ignored, and these research findings are highly significant for policy and practice. There is an undeniable gap in how this issue is practically addressed in terms of comprehensive faculty development programs, institutional support mechanisms, and resource allocation (Johnson & Lee, 2021). Haider and Hussain (2021) recommend that policymakers and higher-ups in university administration must focus on creating clear policies and procedures on disability accommodation to which faculty members can reliably refer. Well-designed inclusive partnerships among faculty, disability services, and students should also promote effective accommodation provision (Stein, 2014).

Although this study reports new important findings, limitations need to be noted. The research's qualitative design and small sample size constrain how applicable the results are in other settings (Charmaz, 2024). Future studies could use larger, more diverse samples than our sample and apply quantitative analysis to increase the transferability of the findings. Moreover, students with disabilities' perspectives were not directly considered in this investigation, reflecting the future research recommendations that can shed light on their experiences and thoughts about university accommodation practices in Pakistan.

The theoretical contributions of this study are linked with the refinement of the social model of disability (Oliver, 2013) in a Pakistani context, in addition to the application of Universal Design for Learning principles (CAST, 2018). The findings contribute to a grounded theory model that can help illuminate how inclusive education is enacted and experienced, aiding in the development of policies and practices that promote fully inclusive education for all students. This model will pave the way for future research theory-building in inclusive education in Pakistan and other developing countries.

Conclusion

Grounded theory study shows new insights into disability accommodation for faculty members of Pakistan's universities. The elements discussed in the paper, such as knowledge and awareness, obstacles, strategies, and attitude changes, are areas of interplay that shape inclusive education practices, and the results depict the interplay in this regard. The emergent grounded theory model provides a comprehensive understanding of the dynamic nature of these factors and their reciprocal relationships.

The research highlights the critical importance of ensuring that Pakistani higher education institutions have strong faculty development initiatives and organizational support structures and are allocating resources towards the implementation of inclusive practices (Johnson & Lee, 2021). Policymakers and university administrators should emphasize the establishment and enforcement of clear policies and procedures on disability accommodation so that members of the faculty will be better prepared. To ensure that accommodation is effective and promotes a learning environment that fosters inclusiveness, collaborative partnerships should be formed between faculty, disability services, and students.

The importance of this study is the ideas that contribute to the existing body of literature related to disability accommodation in the context of Pakistan. These findings will inform policy formulation, train faculty, and address the need for institutional support infrastructure toward these ends at Pakistani universities. Also, in overcoming the challenges and better practices in the context of a developing country, this study contributes to the international literature on inclusive education and helps highlight the potential pathways to better equity and access in a variety of contexts (Mullins & Preyde, 2013).

This study has theoretical implications in terms of its contributions to the social model of disability and Universal Design for Learning applications in Pakistan. This grounded theory model presents a complex process of factors in understanding inclusive education practices based on previous research with approaches at individual, institutional, and societal levels. The model can act as a base for future research and a theory building in the field of inclusive education in Pakistan and other developing countries.

This study is thus a call to action for all stakeholders in Pakistan's higher education to take inclusive practices and disability accommodation seriously. Universities can move towards more equitable and accessible learning environments for all students by addressing the challenges pointed out in this research and implementing the strategies and best practices promoted by faculty members. This study is not merely beneficial, but it can generate systematic changes to achieve an inclusive culture in the Pakistani higher education system and help fulfill the basic right to education for people with disabilities.

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