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Abstract: *This paper explores school-based determinants that can affect the development of activities of daily living (ADLs) among students with intellectual and developmental disabilities (IDD) in Pakistan. The self-care, mobility, and social participation are the ADLs necessary to promote independence and long-term quality of life (QOL). Data were gathered using quantitative descriptive research design with a sample size of 200 teachers in seven special education schools in Lahore, Pakistan. To investigate the perceptions of teachers regarding the environmental, instructional and social factors that influence development of daily living skills among students, a self-administered questionnaire, with five-point Likert scale was used. The results indicate that self-direction on the part of the students, teacher-student relationships, and classroom supportive environments are associated with better ADL performance. On the contrary, poor school infrastructure, teacher training, behavioral issues and information processing were also cited as significant impediments. Another critical aspect that was mentioned in the study is the role of family involvement and peer interactions in enhancing student independence. These findings underscore the importance of systemic interventions, such as more effective professional development of teachers, better accessibility in school environments and more effective partnership between schools and families. The study is a contribution to the body of literature on inclusive education and it offers practical implications that can be used to enhance educational provision to students with IDD in Pakistan.*

Introduction

Students with intellectual and developmental disabilities (IDD) are frequently faced with great difficulty in executing activities of daily living (ADLs) such as self-care, mobility, communication, and social participation. These competencies are necessary in promoting independence, enhancing quality of life (QOL), and facilitating successful transitions to adulthood. In the school setting, the students with IDD should attain, besides academic performance, functional competencies that allow them to be active

participants in daily activities. The constraints in the ADL performance may inhibit the participation of students in educational environments and decrease the access to inclusion and long-term autonomy (Huus et al., 2021; Lee et al., 2023; Chen et al., 2022; Burns et al., 2019).

The ADLs among students with IDD have become a focus of research within the past few years, and especially since the beginning of the 2020s, as part of the effort to facilitate an inclusiveness-focused education as a Sustainable Development Goal 4 (SDG 4). Modern research is keen on the fact that both environmental and individual factors are important in ADL development. The cognitive impairments, difficulties in executive functioning, and motor impairments can influence the ability of the students to gain independence in activities like dressing, hygiene, and socialization. Meanwhile, the contextual barriers of school systems, including the lack of accessibility, insufficient resources, and the lack of instructional support, may further limit the opportunities to learn ADL (Chen et al., 2022; Fazil, 2023; Bani Odeh and Lach, 2024).

School-based interventions have come to be of paramount importance in facilitating functional skill development of students in both home-school and community environments. There is evidence that supports the notion that structured routines, activities supported by peers and individualized teaching strategies can improve ADLs independence of students. Nevertheless, systematic reviews also suggest that there are current gaps in the consistency and ecological validity of such interventions, especially in the educational context of low-resource settings (Lee et al., 2023; Huus et al., 2021; Chen et al., 2022).

In Pakistan, the learning experiences of students with IDD are still influenced by significant differences in access, infrastructure, and support services. Despite the prevalence of disability at an estimated 2.49 percent of the population, there has been disparities in enrollment of students with disabilities among provinces with further disturbances being raised by the COVID-19 pandemic. The ongoing issues are the lack of teacher training, assistive devices, access to schools, and the lack of integration of functional life-skills training into classroom teaching (Fazil, 2023; Munir et al., 2023; Rahi et al., 2024).

Although government programs like Single National Curriculum are supposed to enhance equity, there is a mismatch between the concept of inclusive education and its real application. The barriers to physical inaccessibility, stigma, lack of professional development opportunities among teachers, and poor cooperation between families and educational institutions remain a problem in many schools. Such institutional barriers frequently deny students with IDD the ability to learn the necessary daily living skills that enable them to live independently and engage in social activities (Bani Odeh and Lach, 2024; Huus et al., 2021).

Literature on ADL development published in the years 2020 through 2024 also shows that multifaceted school-related barriers such as peer exclusion, limited instructional resources, poor teacher-parent communication, and insufficient behavioral support systems have an influence on developing ADL. Despite the fact that the strategies, including task analysis, visual aids, peer mentoring, and structured skill-building programs have demonstrated the promise of enhancing daily living skills, their application remains uneven within the educational settings (Lee et al., 2023; Chen et al., 2022; Ramdoss et al., 2012).

Although international studies have provided useful information about the ADL interventions and measurement methods, not much evidence has been established that studies school-specific factors that predict ADL development among students with IDD in Pakistan. The current research does not pay much attention to culturally specific aspects, including the social stigma, lack of resources, and educational recovery after the pandemic. Thus, more studies are required to comprehend how environmental, social, and instructional factors in Pakistani schools influence the independence and

normal functioning of the students with IDD (Fazil, 2023; Munir et al., 2023; Bani Odeh and Lach, 2024). The current study fills this gap by discussing the environmental, personal, and social determinants of ADL performance among students with IDD in special education schools in Lahore, Pakistan. The study will help to inform evidence-based interventions, enhance inclusive educational practices, and help students with disabilities develop a higher level of independence, making it possible through the identification of the most important facilitators and barriers in school settings.

Research Objectives

The main aim of the study is to investigate school-based aspects that determine the growth and achievement of ADLs in the learning environment of students with IDD in Pakistani learning institutions. In particular, the research aims to:

1. Determine the most important environmental, social, and personal factors that influence activities of daily living performance (e.g., self-care, mobility, and social participation) in students with IDD in schools.
2. Evaluate the existing school-level resources and obstacles that affect the acquisition of activities of daily living (ADLs) like the training of teachers, classroom setting, access to infrastructure, interaction with peers.
3. Offer evidence-based suggestions and intervention methods to improve activities of daily living competence and independence in students with IDD in the Pakistani setting.

Research Questions

In order to cope with the aims of the research, the following research questions were developed:

1. Which are the strongest factors that affect the performance of activities of daily living in school-going students with intellectual and developmental disabilities in Pakistan?
2. What are the effects of school resources, teacher preparedness, classroom climate and home-school collaboration on the development of activities of daily living in students with IDD?
3. Which evidence-based learning activities may be used to enhance activities of daily living proficiency and enhance higher independence among students with IDD in Pakistani schools?

Literature Review

The ADLs constitute vital functional skills that promote independence and personal autonomy as well as QOL in people with IDD. These activities encompass personal hygiene, dressing, preparing meals, mobility, time management and social participation. In students with IDD, acquisition of ADLs is especially crucial in the school setting, where functional learning will supplement academic growth and lead to long-term inclusion. More recent studies that started to be published in 2020 are more and more emphatic about the fact that school environments are critical in determining ADL proficiency, but substantial barriers still exist within educational settings (Chen et al., 2022; McDermott et al., 2022; Shi et al., 2023; Huus et al., 2021).

Intrinsic developmental characteristics are very strong determinants of the performance of ADLs in students with IDD. The students can be limited to perform daily self-care activities on their own because of cognitive limitations, diminished adaptive functioning, lack of motor coordination, and executive functioning. As an example, planning, initiation, and decision-making impairment have been associated with reduced participation in daily tasks, especially in the case of adolescents with IDD (Shi et al., 2023; McDermott et al., 2022).

Difficulties in the process of acquiring daily living skills can be further aggravated by comorbid developmental conditions, including autism spectrum disorder. Comparative research has revealed that students with IDD are usually seen to score much lower on functional independence measures

compared to those with no disability, and this is where the structured and repetitive learning opportunities are required (Kilincaslan et al., 2019). Regardless of such difficulties, personal factors like intrinsic motivation, resilience, and reinforcing skills gradual development have been determined as facilitating factors to help achieve the long-term improvement in ADL development (McDermott et al., 2022; Batool and Sajjad, 2025).

The learning environments can either support or restrict the ability to develop ADL with or without resources, accessibility, and instructional support. The school facilities such as ramps, adaptive equipment and accessible classroom layouts are of great importance especially to students with mobility and self-care requirements. Physical inaccessibility can be discussed as a stable challenge that hinders student engagement in academic and functional activities in low-resource settings (Bani Odeh & Lach, 2024; Lee et al., 2023).

Research has indicated that in Pakistan, there are numerous special education institutions that do not have requisite materials and programs to teach daily living skills. Moreover, the lack of teacher training and professional development chances decrease the ability of educators to help students with IDD develop independence-based skills (Fazil, 2023; Munir et al., 2023). Evidence at the international level also indicates that structured classroom routines, visual schedules, and enabling instructional contexts can have a significant beneficial effect on student engagement in functional activities when they are regularly introduced (Huus et al., 2021; Lee et al., 2023).

ADL development is also based on social processes in schools. Peer inclusion, positive social interaction, and emotional support are some of the factors that help students engage in the day to day activities. On the other hand, stigmatization, bullying, and marginalization may decrease the engagement and interfere with the formation of autonomy. Students with IDD are likely to be marginalized by negative peer attitudes and low social integration opportunities, especially in culturally stigmatized settings (McDermott et al., 2022; Shi et al., 2023).

The attitude of teachers also has an impact on student engagement in functional learning. Positive teacher-student interactions contribute to psychological safety, motivation, and confidence, which allows students to better practice self-care and socialization skills (Bani Odeh and Lach, 2024; Huus et al., 2021). Cultural norms and misunderstandings of disability often contribute to the worsening of exclusion in South Asian environments, which supports the necessity to raise awareness and implement inclusion in schools (Shaukat, 2023).

Involvement of families is important in strengthening daily living skills outside the classroom. Home-based practice is a consistent practice that enhances transfer of ADL competencies learned in school. Nonetheless, socioeconomic barriers, poor awareness of parents, and poor teacher-caregiver communication tend to limit efficient home-school partnership in Pakistan (Lee et al., 2023; McDermott et al., 2022).

Cross-cultural data show that frequent parent-teacher interactions increase consistency in the teaching of ADL and more sustainable independence results. Active family involvement programs in keeping track of progress and strengthening functional routines have been more successful in enhancing the participation in daily living (Lee et al., 2023; Huus et al., 2021).

Treatment to ameliorate ADLs in students with IDD is increasingly becoming more structured and holistic in nature. Task analysis, which divides the complex daily activities into small manageable steps, is commonly known as a successful teaching approach. Another potential method to facilitate acquisition of independent living skills has been shown to be visual aids, technology-assisted instruction, and step-by-step modeling (Ramdoss et al., 2012; Vascelli et al., 2023).

Multi-component interventions involving behavioral, social, and environmental strategies have been discovered to yield more successful results compared to single-instructional methods (Taconet et al., 2024; Yamada and Maebara, 2024). Although these developments have taken place, the adoption of evidence-based solutions has been uneven, especially in less well-resourced school systems, including that in Pakistan (Fazil, 2023; Munir et al., 2023).

In spite of the fact that the body of global research has provided a lot of knowledge on the development of ADLs and the intervention approaches, little empirical studies have been conducted on the school-specific determinants of ADLs in the Pakistani school settings. The available literature usually does not contain longitudinal evidence, culturally-adapted assessment frameworks, and local research of post-pandemic effects on students with IDD (Fazil, 2023; Munir et al., 2023).

Consequently, the current research will fill the research gap by exploring the environmental, social, and instructional issues affecting the ADL performance of students with IDD in special education schools in Lahore, Pakistan. It is important to understand these determinants to inform inclusive educational reforms, enhance teacher preparedness, and promote functional independence in students with disabilities.

Methodology

Research Design

The research design used in this study was a quantitative descriptive research design to determine the school-based factors that impact ADLs among students with IDD. The descriptive approach was found suitable since the aim of the study was to investigate the perception of the teachers concerning the environmental, social and instructional conditions that enable or impair the independence of the students in their daily living skills.

The structured survey design was used to collect the data, which enabled the researcher to quantify the level of contribution to ADL development by various school-related factors. The rating scale had five points in form of Likert scale whereby the teachers were rated in respect to their agreement with statements regarding barriers and facilitators to self-care, mobility and social participation.

Population

The study population was the teachers who dealt with students who were diagnosed with IDD in the special education institutions in Pakistan. Key informants were chosen as teachers because they are the central figures in helping the development of functional skills in students in the school setting and have a direct experience in following their daily living struggles and improvements.

Sampling Technique

A non-probability purposive sampling technique was adopted in this study. Purposive sampling was adopted to make sure that the participants included in the study possessed pertinent professional experience in teaching students with IDD and were directly engaged in the instruction of the daily living skills. This sampling method was deemed appropriate to get informed views on school-based determinants of ADL performance.

Sample and Setting

A sample of 200 teachers was taken in seven special education schools located in Lahore, Pakistan as summarized in Table 1. The choice of these institutions was due to the fact that they offer specialized educational services to students with IDD and have teaching staff involved in training daily living skills. The sample size was deemed to be sufficient to provide descriptive statistics analysis and to provide substantive information about the factors that influenced the development of ADL in the urban Pakistani school setting.

Table 1: Participating Special Education Schools and Number of Teacher Respondents

Special Education Schools	Number of Teacher Respondents
Dar-ul-Mussarat, Lahore	15
Amin Maktab School	28
Rising Sun Education and Welfare Society	44
Sprout Resource Center Lahore	26
Social Welfare Center, Lahore	28
Noor Drug Rehabilitation and Psychiatric Drug Center	33
National Education Consortium (NEC)	26
Total	200

Instrument Development

Data were collected using a self-administered questionnaire developed from the existing literature on ADLs and disability-related educational supports. The instrument consisted of 20 statements organized into six domains reflecting school-based factors:

- Personal factors (self-direction, friendships, student-teacher attachment)
- Classroom environment (communication, participation, emotional stability, psychological environment)
- Teaching and learning related (teacher attitude, engagement, varied techniques)
- School environment (accessible infrastructure, assistive technology)
- Routine schedule (daily routine boredom, activity order, aggression)
- Psychological factors (information processing, emotional support, psychological safety, teacher collaboration, counseling)

All items were measured using a five-point Likert scale (1= Strongly Disagree to 5 = Strongly Agree). This format enabled quantitative assessment of teachers' perceptions regarding factors influencing ADL outcomes among students with IDD.

Validity and Reliability

To establish content validity, the questionnaire was reviewed by four experts of the field, who evaluated the relevance, clarity, and appropriateness of the instrument items for the study objectives. The internal consistency reliability of the scale was assessed using Cronbach's alpha, which yielded a coefficient of 0.872 (Table 2). This value indicates a high level of reliability and suggests that the instrument items consistently measured the intended constructs related to ADL support and barriers.

Table 2: Reliability Statistics for the ADL Perception Scale

Cronbach's Alpha	Number of Items	N
0.872	20	200

Data Collection Procedure

Data were collected through scheduled visits to the participating schools. The questionnaire was distributed directly to teachers who met the inclusion criteria of having professional experience in teaching students with IDD.

Participants were informed about the purpose of the study, and responses were collected in an organized manner to ensure a high response rate and contextual accuracy. The survey captured teachers' observations regarding the daily living activity performance of students and the school-related factors influencing these outcomes.

Ethical Considerations

Ethical principles were maintained throughout the research process. Participation was voluntary, and informed consent was obtained from all respondents prior to data collection. Teachers were assured that their responses would remain confidential and would be used solely for academic research purposes. No identifying personal information was included in the analysis or reporting of results.

Data Analysis

After data collection, responses were entered into the Statistical Package for the Social Sciences (SPSS) for analysis. Descriptive statistics, including frequencies, percentages, means, and standard deviations, were used to summarize demographic characteristics and teacher perceptions of ADL-related factors. The analysis focused on identifying the most prominent facilitators and barriers affecting students' daily living activities within school environments. Reliability measures were also confirmed during the analysis stage to ensure statistical consistency.

Results

This section presents the findings of the study based on the responses of 200 teachers working with students with IDD in special education schools in Lahore, Pakistan. Results are organized into two main parts: demographic characteristics of respondents and teacher perceptions regarding factors influencing ADLs among students with IDD.

Demographic Characteristics of Respondents

The demographic distribution of participants is summarized in Table 3. The sample consisted of both male and female teachers, with female respondents representing the majority of the participants. In terms of gender, 128 teachers (64%) were female, while 72 teachers (36%) were male. Regarding age, the largest proportion of respondents belonged to the 21-30 years age group ($n = 108$, 54%), followed by teachers aged 31-40 years ($n = 60$, 30%). Smaller proportions of respondents were within the 0-20 years ($n = 16$, 8%) and 40-50 years ($n = 16$, 8%) categories.

With respect to academic qualifications, most teachers held a graduate degree ($n = 86$, 43%), while 67 teachers (33%) reported having an MPhil qualification. Additionally, 40 teachers (20%) had an undergraduate qualification, and only 7 teachers (3.5%) held a PhD.

Institutional representation indicated that the majority of respondents were employed in private special education institutions ($n = 149$, 74.5%), whereas 51 teachers (25.5%) worked in public sector institutions. These demographic characteristics provide important contextual insight into the professional backgrounds of educators contributing to the study.

Table 3: Demographic Characteristics of Teacher Respondents (N = 200)

Variable	Category	n	%
Gender	Male	72	36.0
	Female	128	64.0
Age	0-20	16	8.0
	21-30	108	54.0
	31-40	60	30.0
	41-50	16	8.0
	50+	0	0.0
Qualification	Undergraduate	40	20.0
	Graduate	86	43.0
	MPhil	67	33.5
	PhD	7	3.5
Institution	Public	51	25.5
	Private	149	74.5

Teachers were asked to report their level of agreement with statements related to personal, social, instructional, and environmental factors affecting the daily living activities of students with IDD. Responses are summarized in Table 4.

Table 4: Teacher Perceptions on Factors that affect the Activities of Daily Living of Students with IDD.

Statement	SD	D	N	A	SA	Mean	Std. Dev.
Self-direction of students with IDD affects positively daily living activities of students with IDD.	12	20	68	64	36	3.46	1.08
The ability to make friends with others affects these students in a positive manner.	4	12	76	84	24	3.56	.85
Student-teacher attachment positively affects the daily living activities of students with IDD.	8	4	48	80	60	3.9	.98
Effective communication has positive impact on daily activities of students with IDD.	12	12	12	100	64	3.96	1.08
Classroom participation has a positive impact on the daily living activities of students with IDD.	12	8	48	84	48	3.74	1.05
Emotional stability of the students have a positive impact on daily living activities	8	8	68	44	72	3.82	1.09
Positive psychological environment of the classroom encourages participation of students IDD in daily living activities.	4	4	44	112	36	3.86	.8
Teachers' positive attitude towards students with IDD encourages informal learning of the students.	4	4	44	112	36	3.86	.8
Teacher's ability to engage the students with IDD in classroom assists in learning in a better way.	3	16	50	83	48	3.79	.95
Teacher's ability to use varied teaching techniques for better understanding helps students learn better.	4	12	76	84	24	3.56	.85
Accessible school infrastructure can play vital role in promoting daily activities.	12	16	56	72	44	3.6	1.1
Assistive technology helps in improving daily living activities.	12	16	28	108	36	3.7	1.04
Typical daily routine brings boredom for students with IDD.	20	8	56	68	48	3.58	1.18
Order of the activities can help in managing daily activities of the students.	4	20	48	104	24	3.62	.89
Aggression harms the daily living activities of the students.	4	8	56	68	64	3.9	.96
Problems in information processing affect daily living activities.	8	8	48	84	52	3.82	.99
Teacher and classmates provide emotional support to students with IDD which positively impact their engagement in daily activities.	4	4	56	96	40	3.82	.84

Psychologically safe environment of the class positively affects the daily living activities of students with IDD.	4	20	48	88	40	3.7	.96
Collaboration between special education and general education teachers enhances the participation of IDD in daily living activities.	8	12	52	64	64	3.82	1.7
Counseling and mental health services have positive impact on daily living activities of IDD	8	8	48	84	52	3.82	.99

Domain-Specific Items Responses

Table 4 indicates the responses of teachers in the six areas of the questionnaires. Personal factor, classroom environment and teaching practices were the items that had the largest levels of agreement as positive contributors to ADLs. Psychological support (counseling) and environmental factors (infrastructure) were also positively perceived whereas behavioral issues (aggression) and assistive technology were more mixed in their perceptions. The item means ranged between 3.46 and 3.96 ($M = 3.74$, $SD = 0.98$), so teachers tended to agree that school-based factors have a positive impact on ADLs, with the highest level of agreement on classroom psychological climate ($M = 3.86$, $SD = 0.80$) and the least on routines ($M = 3.58$ -

Discussion

The current research study explored the school-based determinants that have an effect on activities of daily living (ADLs) in students with intellectual and developmental disabilities (IDD) in Pakistani special education institutions. The results present valuable proof that the development of ADL is determined by a complex of individual, social, teaching, and environmental factors. In line with the current research in the international sphere, the findings indicate that the personal traits of students and the situational school factors are essential in promoting functional independence.

Among the major discoveries that this research had made was that self-direction and social engagement was seen as a significant facilitator of ADL performance. Educators indicated that learners who are more autonomous in choice and decision-making can better handle the routine activities of life e.g. personal hygiene, eating habits and classroom attendance. This is consistent with the past literature that highlights the fact that independence-related skills are strongly connected to adaptive functioning and executive capabilities among students with IDD (Huus et al., 2021; Chen et al., 2022).

Also, friendship-forming skills and peer relationship skills were found to be helpful in everyday living involvement. Social inclusion improves the interactions, motivation, and informal learning qualities that are critical in functional acquisition of skills. Other researchers have reached similar conclusions and identified peer support as one of the primary factors influencing the socialization and participation outcomes of students with disabilities (McDermott et al., 2022; Lee et al., 2023).

The results also highlight the importance of teacher student attachment and emotional support in facilitating ADL engagement. The teachers believed that students with IDD are more ready to conduct their everyday living skills when they feel met and motivated in the classroom setting. This is consistent with the current literature that states that positive teacher-student relationships are one of the best predictors of student engagement and learning, especially in relation to those students in need of structured help and support (Bani Odeh & Lach, 2024).

In addition, the psychologically safe classroom environments were considered essential in promoting independence. Inclusion, emotional stability, and acceptance in classrooms have a higher chance of providing the student with IDD to participate in functional routines without stigmatizing or feeling

excluded. This result is in agreement with studies that highlight that favorable school environments increase involvement in daily tasks and minimize obstacles associated with marginalization (Huus et al., 2021; Shi et al., 2023).

One of the significant contributions of this study is the emphasis on the issues of contextual barriers in Pakistani educational institutions. Teachers cited poor infrastructure and inaccessibility as challenges that inhibit the performance of the students in carrying out their daily living activities independently. Physical obstacles, including a lack of ramps, adaptive facilities, and available classroom set-ups, continue to be a thorn in the flesh of most low-resource school systems. Such findings are aligned with the international evidence that inaccessible environments can greatly impact the functional engagement of students with disabilities (Lee et al., 2023; Bani Odeh and Lach, 2024).

Even the perceived insignificance of assistive technology in this study is indicative of relevant systemic issues. Technology-based interventions have proven to be promising on an international level, but in order to be effective, they require a proper application, training of teachers, and inclusion into everyday instruction. As previous studies indicate, assistive tools could not be used to achieve better results unless they are supplemented with more extensive educational approaches (Ramdoss et al., 2012; McDermott et al., 2022).

In this study, teachers described that aggression and information-processing challenges adversely affect the students in their acquisition and maintenance of ADL competencies. The behavioral issues can interfere with classroom activities, diminish interest and restrict peer communication. The result is consistent with the previous research that has detected behavioral challenges as the major impediments to independence and engagement in routine school activities among students with IDD (McDermott et al., 2022; Huus et al., 2021). Equally, cognitive processing limitations can make students unable to learn multi-step daily living activities effectively, which is why structured interventions like task analysis, visual aids, and one-on-one instructions should be considered.

The research also emphasized the need to support family in daily living skills reinforcement in the non-school environment. Teachers have noted that learners will show more improvement when their parents are actively involved in practicing ADLs at home. Socioeconomic factors and parental lack of awareness, however, were viewed as impediments to home-based reinforcement. The results are consistent with the current body of literature indicating that effective home-school cooperation is a key ingredient to the long-term development of functional skills (Lee et al., 2023).

Moreover, the lack of teacher training was also cited as one of the key impairments that influence ADL teaching in Pakistani schools. The special training of teachers is more effective to apply evidence-based practices of fostering independence, behavior management, and functional learning. This supports past studies that have highlighted that inclusive and competency-based education depends on professional development (Fazil, 2023; Bani Odeh and Lach, 2024).

In general, the results of this research prove that the development of ADLs in students with IDD should be a multifaceted process that should consider the personal skills, classroom interactions, school organization, behavioral management, and involvement of the family. In Pakistan, better teacher training, inclusive school climate and accessibility are the key steps to the independence and quality of life of students with disabilities.

Conclusion

This paper has analyzed the school based variables that affect activities of daily living (ADLs) in students with intellectual and developmental disabilities (IDD) in special education schools in Lahore, Pakistan. The results prove that the development of ADL is conditioned by a multifaceted interaction of individual,

social, teaching, and environmental factors. The student self-direction, peer relationships, and favorable teacher-student interactions in daily living routines were found to be the most important facilitators identified by the teachers. Also, psychologically secure and inclusive classroom settings were seen as a key in facilitating participation and acquisition of functional skills. On the other hand, poor school infrastructure, accessibility, teacher training, behavioral issues, and cognitive processing problems were cited as significant issues which limit the development of students in daily living skills. In general, the findings underscore the idea that effective ADL interventions that support students with IDD should be based on holistic educational initiatives that focus on the individual student and the systemic school-wide interventions. It is imperative to strengthen the inclusive practice in Pakistani schools, which will enhance autonomy, social participation, and the long-term quality of life of students with disabilities.

Recommendations

In accordance with the results of this research, the following recommendations would be offered in order to improve ADL development in the Pakistani educational institutions among students with IDD:

1. Enhance Teacher Training and Professional Development.

The special education teachers are to be provided with ongoing training that is targeted at functional life-skills training, behavioral management, and evidence-based teaching of ADLs. Teachers can be helped by professional development programs in their efforts to enhance independence and engagement of students with IDD.

2. Enhance School Accessibility and Infrastructure.

Schools ought to be more accessible physically with ramps, adaptive classroom setups, and supportive learning resources. The availability of good infrastructure is necessary to empower students with IDD to engage in independent activities during their day-to-day activities in schools.

3. Encourage Healthy Classroom Environment and Inclusion of peers.

The schools are supposed to adopt inclusive classroom practices that promote psychological safety, peer support, and social participation. Stigma can be lessened through structured peer-interaction programs that will make students with IDD more active participants in both functional and social activities.

4. Improve Family Involvement and Home-School Collaboration.

Reinforcement of daily living skills should be done at home with parents and caregivers playing a vital role. Communication with families can be enhanced by schools by providing frequent progress updates, training, and joint planning, to ensure uniformity in ADL learning in different settings.

5. Behavioral and Counseling Support Services.

Since aggression and emotional instability have a negative effect on ADL performance, schools must incorporate counseling and behavioral support interventions in terms of assisting students to control their emotions and engage in everyday activities.

Limitations of the Study

Despite the fact that this study gives valuable insights, a number of limitations must be noted. To begin with, the analysis was based exclusively on the views of teachers that might not fully reflect the experiences of students and their family views. Second, the study was based on just special education schools in Lahore, which restricts the assessment of results to other parts of Pakistan. Lastly, the descriptive design cannot be used to make causal conclusions about the relationships between identified factors and ADL outcomes.

Future Research Directions

Further research must consider mixed-method designs involving qualitative interviews with students, parents, and school administrators in order to learn more about the contextual issues. Longitudinal

studies are also required to understand the development of ADL over time, and the effects of school-based interventions on the development of independence in the long term. Also, assessment tools that are culturally modified must be designed to assess ADL performance in a Pakistani school setting more effectively.

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