

BREAKING BARRIERS THROUGH SOCIAL MEDIA: COLLABORATION, ADVOCACY, AND INCLUSION IN SPECIAL EDUCATION

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ABSTRACT

This research explored how social media can be used to foster collaboration, advocacy, and inclusion in the field of special education. A quantitative approach was adopted to measure changes in perception after the intervention. 350 participants completed a well-structured questionnaire. The sample consisted of teachers, parents, and professionals in special education working in both public and private sectors. Results revealed that social media could be instrumental in enhancing stakeholder communication, disability rights advocacy, and inclusive educational practices. There was a strong association between advocacy and inclusion, with collaboration and social media use being less predictive. Also, the study revealed that males and females, younger and older people, those with different levels of education, and social media users to varying extents significantly differ on several variables. The authors see social media as a powerful tool for special education that can help transcend traditional barriers if used well and ethically. One of the suggestions is that special education departments communicate, advocate, and seek support through social media platforms.

Keywords: social media, special education, collaboration, advocacy, inclusion, disability rights, quantitative research

INTRODUCTION

The fast growth of social media has changed the way education communities communicate, interact share various educational resources, organize support, and promote equality. It is a major change for special education as students with disabilities, their family's teacher's therapists, school leaders, and advocacy organizations always require constant communication and collaboration for support beyond the classroom.

Today, social media platforms serve not only as communication channels but also as venues where parents look for help, teachers give each other ideas, disabilities advocate raise awareness, and communities stand against exclusionary attitudes. Therefore, social media has evolved from just being a digital tool on the sidelines to a very powerful tool for collaboration, advocacy, and

inclusion in special education (Mertens et al., 2024; Aydoğmuş et al., 2023).

Collaboration in special education is the crux of student achievement, as it is through teamwork amongst families, special educators, general teachers, school administrators, and support staff that educational planning is carried out. New evidence suggests that partnership between parent-school and interprofessional collaboration that are parent-centered and meaningful lead to better educational opportunities, environmental adaptations, and student engagement. Social media is a tool that can be used for extending this collaboration by enabling rapid communication, peer support, and sharing of helpful interventions, especially when formal support systems are weak or limited by geography. Teachers are now reporting that the educational content found on social media, professional learning opportunities, and different ways to tackle resource shortages, are just some of the benefits arising through social media. Such features are very much aligned with the role of special education that requires Individualized Education Program and communicative immediacy of needs (Virani & Ali, 2022; Aftab et al., 2024).

Social media is changing the way people in disability and special education fields advocate for themselves. These days, research shows that digital platforms give disability organizations and families a chance to raise public awareness, steer conversations, develop a sense of community, and highlight exclusion in ways that were not possible before. However, these studies also warn that digital advocacy does not guarantee inclusion. Factors such as having a device, internet connectivity, digital skills, cognitive accessibility, and platform design determine who gets to be involved and whose voices are still unheard. Therefore, although social media has the power to boost disability advocacy and lead to special education reform, it also has the potential to perpetuate inequalities if issues of accessibility and representation are not actively addressed. Such paradoxical nature makes it an important subject for special education research (Gelfgren et al., 2022; Kaur & Saukko, 2022).

The inclusion level is just as important. Inclusive education intends to provide opportunity for students with disabilities to have substantive participation in learning, relationships, and school experiences, opposite of being segregated physically, socially, or academically. Policy and research forums worldwide have increasingly highlighted inclusion in the context of digital access, communication that is barrier-free, and assistive tech. UNESCO has recently pointed out that technology has the potential to increase the involvement of students with disabilities only if it is planned and executed. So, social media being a very popular digital medium can help largely in the process of inclusion by increasing one's sense of belonging, one's visibility, and a connection between family and school. However, it also has the potential to make educational and family exclusion worse when learners and their families experience digital divides, inaccessible user interfaces, or receive negative portrayal online (UNESCO, 2024; Sajjad et al., 2025).

Internationally, pandemics have made e-learning communication and digital communication in education a more hotspot post in 2020. Partly because school closure revelation that remote support, online community and communication system flexibility were very important. Studies both during and post covid-19-time reveal that digitally mediated students with disability advocacy and collaboration can maintain their educational continuity. Additionally, cases brought to light that families often engage in support and advocacy roles digitally to get information, negotiate services, and get emotional support. Therefore, these social media have become very relevant to comprehending how special education system responds to barriers both in normal and crisis conditions (Leslie et al., 2024; UNESCO, 2020).

In Pakistan, the problem is even more pressing. The nation still struggles with significant educational access issues, and the most vulnerable segments of society remain at great risk of being left out. UNICEF estimates that about 25.1 million children aged 5-16 are not attending school, even though at both national and

provincial levels (UNICEF Pakistan, 2024; Virani & Ali, 2022; UNESCO, 2020).

Despite the increase of research on social media parenting disability, and inclusive education, the current literature is still very scattered. According to some recent literature reviews, research on parenting in relation to social media has been rapidly increasing, but most of this research is focused on parenting in general or health domains rather than collaboration and inclusion in special education through social media. Likewise, studies in education have recognized the potential of social media for teachers, still the combination of social media, disability advocacy, family school collaboration, and inclusive special education, particularly in low- and middle-income countries like Pakistan, is a subject that has not been explored in sufficient depth. Therefore, this topic, on the contrary, is very much available, relevant, and needed to bridge both the gap in scholarly understanding and practice (Naz et al., 2024; Alahmari et al., 2025).

Special education, in fact, has always revolved around the consistent collaborating of the various players involved teacher's parents' specialists as well as institutions. Nowadays one of the major communication avenues which enables the stakeholders to exchange information, get support and even fight for the rights of the disabled learners is social media. Studies reveal that teachers resort to social media for their professional growth as well as instructional support whereas parents use it more for information, getting emotional support and guidance from their community. Indeed, these social media trends indicate that social media can strengthen formal educational structures through fostering communication and joint problem-solving in special education (Mertens et al., 2024; Bagadood et al., 2025).

Disability-related advocacy has also been more prominent in online spaces during that time. Social media creates a platform through which the organizations and families can confront prejudice, spread information, and get the backing of the community for inclusion; nevertheless, the researchers point out that one's equality in digital participation depends on factors such as access

affordability skills, and accessibility. Thus, the aim of this study is to investigate social media not as a tool that empowers everyone, but as a controversial arena where the barriers in special education can be either decreased or recreated (Gelfgren et al., 2022; Aftab et al., 2024).

Internationally, new studies suggest social media is evolving as a rich environment for educational teamwork, parental support, and disability rights. Evidence from systematic reviews indicates a significant increase in research focusing on parenting and social media. Parents utilize digital platforms mainly to get information, advice, peer support and help in decision-making. Also, in the context of disability, research demonstrates that digital media not only fosters social interaction and engagement of youth with disabilities but also advocacy groups use social media to disseminate their messages to members and the public. Thus, these changes show that social media has become a key medium for raising, practicing, and negotiating the topic of inclusion worldwide (Mertens et al., 2024; Kaur & Saukko, 2022).

Nevertheless, the global experiences also point out significant drawbacks. Being engaged in the digital world is not the same as being included in society. Various obstacles to accessibility, disparities in internet access, negative perception of disabled people online, and the way the platforms are designed can limit the opportunities for people with disabilities and their families to engage in a meaningful way. Involving people with disabilities in technology is a learning aspect only when the elements of accessibility, inclusion, and equity are considered both in policy and implementation, according to UNESCO's recent advocacy (UNESCO, 2024; Bashir et al., 2024).

In Pakistan, the issue of inclusive and responsive educational support is still a big concern. UNICEF data reveals that 25.1 million children aged between 5 and 16 years are out of school, illustrating the extent of educational exclusion in the country. However, it is children with disabilities who are not only excluded but are also subjected to other limitations such as access scarce resources, and non-effective enforcement of inclusive policy. UNESCO's 2020 inclusion report on Pakistan brought to light that it is of great

importance nationally to focus on the marginalized groups and move towards education systems that are more inclusive (UNICEF Pakistan, 2024; UNESCO, 2020).

Local studies also reveal that implementation of inclusive education in Pakistan is largely constrained by practical issues at the school level. Both teachers and parents consider negative societal attitudes, low awareness, and little support as top barriers. Parental involvement, however, is seen as a key factor for successful inclusion. Besides, at the provincial level, policy briefs of Punjab reveal that inclusive education is still gaining ground, and most mainstream schools lack the necessary skills, facilities, and materials to adequately cater to the needs of children with special educational needs. Under such circumstances, social media might serve as an easily accessible extra means through which people can cooperate, become more aware, and even advocate for their rights. However, empirical studies on this possibility in Pakistan are scarce (Virani & Ali, 2022; Ashfaq et al., 2024).

Since 2020, research on social media parenting disability, and inclusive education has become more extensive. However, the body of work is still quite fragmented. According to existing reviews, the field of parenting and social media is experiencing a boom in research, but this work is largely found in medical, health, or the wider parenting areas and not specifically in special education collaboration and inclusion. Similarly, educational research agrees that teachers are using social media effectively, but they do not adequately describe how these platforms facilitate structured collaboration among parents, teachers, and advocate for people with disabilities in special education (Mertens et al., 2024; Aydoğmuş et al., 2023).

The gap is even more visible in Pakistan and similar contexts, where there is limited research examining how social media can help overcome barriers related to stigma, communication gaps, parental isolation, and weak school-family coordination in special education. Pakistan-oriented studies on education discuss the challenges of inclusive education and emphasize the role of parents but fail to explore social media

as a medium for collaboration, advocacy, and promoting inclusion adequately. This research therefore fills a clear empirical and contextual gap (Virani & Ali, 2022; UNESCO, 2020).

Despite the growing use of social media in education and advocacy, its role in promoting collaboration, advocacy, and inclusion in special education is not yet clearly understood, particularly in Pakistan. Families of children with disabilities often face limited information, weak institutional support, and social stigma, while teachers and schools may struggle with communication, coordination, and inclusion practices. Although social media appears to offer opportunities to connect stakeholders and amplify disability-related concerns, there is insufficient evidence on how far it helps break these barriers in special education settings (Virani & Ali, 2022; Gelfgren et al., 2022; UNESCO, 2024).

1. Analyze how social media facilitates the interaction and collaboration of teachers, parents, and other stakeholders in special education.
2. Investigate the use of social media as a medium for advocating for the rights and inclusion of special needs learners in education.
3. To explore the role of social media in enhancing inclusive practices and social participation in special education.
4. To determine the obstacles and difficulties that hinder the successful integration of social media in special education.
5. To recommend ways for using social media in a more powerful manner to boost cooperation, advocacy, and inclusion in special education.

This research is quite a fit because it tackles a new conceptual area which unfortunately has not received sufficient scholarly attention yet especially concerning the link between digital communication and special education. It has the potential to add up to academic knowledge by bridging three themes that are very often independently studied - social media, disability advocacy, and inclusive education. In that way, it offers a more holistic insight into the extent to which digital environments can shape educational interactions, support, and engagement of students

with disabilities (Mertens et al., 2024; Kaur & Saukko, 2022).

The research is indeed a big deal in educational community. Teachers' parents, school leaders, and policymakers can all benefit from it anytime because it can guide educators that social media can be a good tool for parent engagement, sharing of resources, and inclusive communication. On the other hand, it can lead families and advocacy groups in using digital means to raise awareness and offer support. It can also point out negative aspects like exclusion, misinformation, and accessibility barriers. Educational deepening and digitally enabled community engagement are the two major strands that the study, in the Pakistani context, might be highlighting to provide evidence for support. Internally, the research can bring light upon wider education and community participation through digital technology. However, it carries a large list of potential benefits and harmful effects as well, so this research is a great resource for further debate and examination in the Pakistani context (UNESCO, 2024; Virani & Ali, 2022; UNICEF Pakistan, 2024).

Literature Review

Nowadays, social media is playing an increasing role as a powerful communication channel in education. It is no longer only a tool for informal networking but has also been extended to supporting sharing of information, learning from each other, engaging parents, developing professionally, and advocating publicly. Socially disadvantaged special education students are a good example because their learning and development require the cooperation and involvement of various stakeholders including the regular teacher's parent's therapists, school administrators, and local community leaders. New studies in the literature demonstrate how social media can be used to unhamper communication and resource sharing despite the existence of distance, time, and institutional boundaries. However, at the same time, researchers point out that participating in the digital space does not necessarily mean inclusion because different factors such as accessibility, digital literacy, and platform design determine who gets heard and

whose needs continue to be disregarded. Therefore, it can be said that special education is an important but challenging aspect of social media research (Bonilla-del-Río et al., 2025; Afzaal et al., 2022).

One helpful point of departure in recent publications is the larger body of work on parenting and social media. A 2024 systematic literature review by Mertens et al. studied a great number of articles and observed a marked increase in research on parenting and social media, particularly around parent's information seeking, online support, the type of parenting content, and the effects of such content. Most of the time these studies are not focused on disability or special education, yet they reveal that parents are increasingly turning to digital platforms to look for advice, share experiences, get emotional support, and make decisions related to their children's development and schooling. This trend is highly applicable to special education since parents of children who have disabilities not only need information but also specialized guidance and community-based reassurance on a regular basis, particularly in cases where formal support systems are absent or poorly coordinated. The review also pointed out that there are research gaps and that more specialized studies are required to understand how the use of these digital mediums in educational contexts such as disability and inclusion operates (Mertens et al., 2024; Aftab et al., 2025).

Educational use of social media by teachers is another aspect that has drawn the interest of researchers gradually. The teachers using social media for their own personal development also considered educational content made available on these platforms very useful, beneficial and sufficient for practice. The results of their research also indicate that social media can serve as an alternative and a supportive tool if formal resources are limited and might have a positive impact on students if used deliberately. In special education this is even more so because teachers usually require quick access to practical strategies, differentiated materials, behavioral support, and peer advice that might not always be available through traditional institutional channels.

Therefore, the latest literature presents social media as more than a mere communication tool but a flexible professional learning space that can empower special educators to better meet the needs of their diverse learners (Parveen et al., 2024).

A more focused input is found in the 2025 systematic review conducted by Bonilla-del-Ro, Estrada-Molina, and Prez-Rodríguez, which redresses the use of social media as an educational tool for people with disabilities. This review has recognized social media as a means that can foster inclusion by increasing participation, deepening social relations, and offering tailor-made educational opportunities. On the other hand, it revealed that only few pieces of literature cover this, and most of them spotlight specific disabilities or usage of technology in surmount rather than social media's educational role in a combined sense. This discovery is of essence as it indicates both the potential and the non-fulfillment of the field. Put differently, the literature is gradually acknowledging social media as being educationally significant for persons with disabilities but at the same time, the research base is still nascent and lacks the comprehensiveness required to direct strong policy and practice in special education (Bonilla-del-Río et al., 2025).

Collaboration is one of the biggest themes in recent scholarly publications. For instance, special education depends quite a bit on the continuous interactions between schools and families, and digital media have the potential to extend such interactions beyond formal meetings and paper-based communication. One of Yildirims (2025) mixed-methods research paper on family involvement in the education of children with special needs revealed that the implementation of family participation is still very partial and limiting factors are time shortage, socioeconomic and educational disparities, and poor communication between families and schools. The paper puts forward flexible scheduling, awareness raising, and improved collaboration among the parties as the way forward. This research is very pertinent to social media because digital platforms may be able to lower some of the communication barriers by enabling interaction to be more immediate,

continuous, and less dependent on physical presence. Therefore, social media groups, messaging platforms, and school-managed digital communities, when designed in a very inclusive and ethical manner, may promote more regular school home collaboration (Yildirim, 2025).

In much the same way, fresh investigations point out that teacher? parent collaboration is really the key to success in inclusive environments A 2025 study on the collaborative roles of teachers and parents in supporting students with special needs confirmed that the foundation of collaboration is effective communication and regular home-school coordination. At the same time, the obstacles cited were limited teacher knowledge, lack of professional support, and parents not fully understanding the specifics of a disability. Such scholarly works reflect the very argument that social media could be a secondary collaborative infrastructure. Parents through digital communities can get teacher advice, teachers can share their working methods more effectively, and schools can form a stronger partnership culture around the learner. So, the studies indicate that, if social media collaboration is well structured, respectful and child-centered, it can be instrumental in strengthening the relationship aspects of special education (Setiawan et al., 2025) Advocacy is another major subject discussed in literature. It has been said increasingly that social media can be a platform for disabled people to articulate their experiences, come together, and counter negative marginalizing stories. According to Gelfgren et al. disability support groups recognize the importance of having a web presence to engage not only their members but also the broader public however they also confront the challenges and dilemmas that arise from the use of digital communication. This is a crucial point in that advocacy via social media is not simply about more exposure, it involves discussions on representation of the audience, and organizational strategy. This type of advocacy is a great step in special education because digital media can be an effective channel for families and educational institutions to promote knowledge of educational rights accessibility accommodations, and inclusive policies. So social media does offer more room for

advocacy, but the literature also calls for concern of institutions about which voices are being amplified and how the disability is being depicted in online discussions (Gelfgren et al., 2021).

Research on disability and digital participation adds to this point of view quite dramatically by unpacking social media as not only a platform for raise the voices of the marginalized but also a powerful tool to fulfill the daily need for belonging and socialization of the disabled people. Based on Kaur and Saukko's work (2022), digital media has the potential to both include and exclude. First, digital communication allowed the disabled to be connected, seen, and heard even in spaces which were physically hostile to them. However, images used to present oneself, personal validations, and social norms of a platform could be very exclusive even leading to exclusion offline. This ambiguous nature is very instrumental for special education scholars. Social media can facilitate emotional inclusion, developing peer relationships, and identities of learners with disabilities only if accessibility, safety, and social acceptance are guaranteed. Hence the literature is not considering social media as inclusive by nature in fact inclusion is depicted as socially and technologically conditioned (Kaur & Saukko, 2022).

Research on adult and young people with disabilities and their digital participation also carries related evidence. A few recent thorough analyses of literature reveal that social media provides an essential way for individuals with disabilities to get a feeling of social inclusion, interact with others, and engage even more in digital society. Besides, studies highlight that platforms like Facebook and others can facilitate interaction, self-presentation, social network extension, and equal participation. These authors also illuminate the issue of limited access to content and technology. While few pieces of research exceed formal school contexts, their findings are of direct importance to the area of special education as they highlight the larger social significance of digital involvement for people with disabilities. In fact, special education nowadays significantly appreciates participation, self-expression, and belonging as educational results in

addition to academic achievement, and social media can affect all these aspects (Afzaal et al., 2024; Aftab et al., 2024).

Social media is often cited in literature as one of the factors influencing educators' attitudes towards equity and inclusion. For instance, Ullah et al. (2023) in their study in Pakistan noted that there is a strong positive link between a social media-based community of inquiry and pre-service teacher's attitudes, subjective norms and perceived behavior control in case of social justice and equity in education. The paper showed that social media participation could be a great way to encourage future teachers more equity educational practices. While that is quite true, in case of special education, it is the teacher's beliefs, confidence, and willingness to work across difference that are inclusive practice. Nevertheless, if social media is turned into a structured pedagogical environment instead of an informal one, it may assist in the creation of professional communities where advocacy, justice, and inclusion are considered the norm. So, the literature indicates that social media can change not only communication practices but also professional dispositions that sustain inclusive education (Ullah et al., 2023).

At the policy level, UNESCO's recent work strengthens the argument that technology can support learners with disabilities only when inclusion is deliberately planned. The 2024 advocacy brief on learners with disabilities and technology stresses that technology should be grounded in accessibility and universal design principles if it is to reduce exclusion rather than deepen it. Likewise, UNESCO's guidance on the inclusion of learners with disabilities in open and distance learning highlights that crises such as the COVID-19 period exposed the importance of technology-based approaches while also revealing major inequalities in access and preparedness. These policy documents are highly relevant to literature on social media in special education because social media platforms are part of the broader digital ecosystem in which inclusive participation now occurs. The implication is clear: social media may break barriers only if institutions address affordability, accessibility, participation

rights, and support structures at the same time (UNESCO, 2024).

Recently, several studies have also warned against glamorizing social media. For example, Bonilla-del-Ro et al. (2025) highlights the fact that there are still many obstacles, such as very limited access and discriminatory behaviors. On top of that, the reviewed studies have brought to light risks such as receiving unwanted messages, being excluded, concerns about cyber safety and coming across inappropriate content. These issues become even more critical in the context of special education where, due to communication differences related to a disability or the need for support, some learners might be at greater risk of digital exclusion, exploitation or misunderstanding. Therefore, more publications in this field advocate for the use of social media under close supervision, with helping tools, and after careful ethical considerations, rather than allowing the users to have free access. While social media has the potential to foster participation and a sense of belonging, if family members, schools, and platforms neglect accessibility and protection, it may lead to the emergence of new forms of vulnerability (Bonilla-del-Río et al., 2025).

Pakistani literature offers a valuable perspective to this debate. In Pakistan, inclusive education is limited by negative public attitudes, ineffective implementation, and lack of awareness regarding the role of parental involvement, even though parent teacher interactions are a key factor for successful inclusion. Their results reveal that inclusive education can only be successful through a combination of inclusive mind-sets, use of diversified teaching methods, effective school management, and enhanced parent teacher relationships. This is very relevant to the current discussion as the structural and attitudinal barriers that were pointed out in Pakistan are precisely the types of barriers that social media can help in overcoming through communication, raising awareness, networking, and advocacy. However, the same study suggests that technology on its own is not enough; the fundamental beliefs, school culture, and institutional support are still paramount (Virani & Ali, 2022; Aftab et al., 2024).

The wider context at the national level also provides good reasons why this theme should be of interest in Pakistan. Latest national documents identify the sector of children's rights as one that needs proper research and draw a picture of the difficulties that children face in securing their rights throughout the country. In such circumstances, children with disabilities are the group that even more than other risks being left out of receiving quality education, services, and public exposure. Therefore, social media may be viewed as a very cost-effective and accessible tool for raising awareness, helping families get information, and supporting the mobilization of communities for inclusive education. Nevertheless, the existing studies still contain a very limited amount of concrete, quite detailed work about the actual use of social media by Pakistani special education professionals for such matters as collaborative working and inclusion. This point at the same time shows that the issue is not only of great social significance but also that it has been very inadequately studied (National Commission on the Rights of Child, 2024; Alraisri & Amjad, 2025).

In general, the literature published between 2020 and 2026 depicts social media as a highly potential yet inconsistent tool in special education. Social media promotes collaboration by opening quick communication and resource sharing among educators and families; it advocates for disabilities by connecting and widely publicizing disability issues; and it fosters inclusion by increasing the chances of participation, expression, and identification. Nevertheless, research keeps on demonstrating that obstruction factors such as lack of accessibility, digital divide, insufficient training, socially exclusionary norms, and unsafe cyber-environment can restrict these advantages. The most convincing inference from literature is that one should not consider social media as a freeing tool by nature. On the contrary, its role in special education is dependent on how it is consciously integrated into inclusive values, accessible design, family school partnerships, and disability-rights perspectives. This synthesis lays a solid groundwork for the current research which aims to investigate how social media can help

remove barriers through collaboration, advocacy, and inclusion in special education (Iftikhar et al., 2024; Jaleel et al., 2025).

Research Methodology

Research Design

The present study used a quantitative research design. Numerical data on the role of social media in promoting collaboration, advocacy, and inclusion in special education, were collected using a descriptive survey method. The quantitative approach was suitable because it allowed for measuring participants' perceptions, attitudes, and experiences in a structured and objective way, as well as conducting statistical analysis of the relationships among variables and generalizing the findings to the larger population. The survey design was chosen to collect data from many respondents in a limited time systematically.

Population of the Study

The study population consisted of teachers, parents, and special education professionals who were working in special education settings. These people were selected as participants because they were directly involved in the education of special needs children and most likely used social media for communication, collaboration, and advocacy. This population comprised members from both public and private institutions providing special education services.

Sample and Sampling of the Study

A group of 350 respondents was drawn from the population. The sample was drawn from teachers, parents, and special education teachers to represent the main stakeholders. A simple random sampling method was adopted for the selection of participants, thereby giving each member of the population an equal opportunity to be included in the study. This sampling technique minimized the bias, and at the same time, the representativeness of the sample was improved. The sample size chosen was deemed sufficient for statistical analysis and for making meaningful inferences about the study variables.

Instrument Development

The researcher developed a structured questionnaire to gather data from the participants. The instrument was created by studying many publications related to social media collaboration, advocacy, and inclusion in special education. The questionnaire contained two parts:

- **Section A** included demographic information such as gender, age, profession, and years of experience.
- **Section B** included items related to the main variables of the study, including social media use, collaboration, advocacy, and inclusion. The items relied on a 5-level Likert scale from 1 (Strongly Disagree) to 5 (Strongly Agree). The survey items were brief, direct, and formulated in a way that everybody would easily comprehend them.

Validity of the Research Instrument

To guarantee that the instrument was valid, content validity was obtained via expert review. The questionnaire was submitted to a panel of experts in the areas of education, special education, and research methodology. The experts assessed the items for clarity, relevance, and the extent to which they fulfilled the study's objectives. Thank you to their comments, the authors have restyled some of the items, removed those that were irrelevant, and rephrased some do. This way, the instrument is equipped with the capability to measure accurately the targeted constructs.

Reliability of the Research Instrument

The reliability of the tool was ascertained by a pilot test on a few participants, not part of the final sample. Data collected were analyzed through Cronbach's Alpha as a measure of internal consistency. The reliability coefficient was 0.87, showing quite a high level of reliability. The finding verified that the tool was reliable and capable of collecting data for the main study.

Data Collection Procedure

Questionnaires were the main source of data for the study, and they were distributed using different methods. Permission from the dean's office and other relevant authorities was granted

before the study began. Besides that, the respondents had been made aware that these questions would constitute the core of our research activities. Most questionnaires were handed out physically however, the e-survey method was also used among some participants via different social networks, e-mail telephone etc. To eliminate any doubt, the respondents were told that their answers would be treated as extremely confidential and that they would not be identified in any way. They were also made aware that there was no obligation in them to take part in this research study. Once the deadline was up, the filled-in questionnaires were returned. Then after that, they were examined to make sure they were

not missing any information and that the data was valid.

Data Analysis Procedure

The gathered data underwent a statistical analysis process. The answers were first coded then input into a statistical package (e.g. SPSS) for processing. To describe the data, summary statistics like frequency percentage mean, and standard deviation were employed. To establish associations between variables and to test the research hypotheses, inferential statistics, e. g. correlation and regression analyses, were used. Tables and charts visually summarized the findings to make interpretation and discussion easier.

Table 1: Demographic Characteristics of Respondents (N = 350)

Variable	Category	f	%
Gender	Male	168	48.0
	Female	182	52.0
Age Group	20-30 years	96	27.4
	31-40 years	118	33.7
	41-50 years	82	23.4
	51 years and above	54	15.4
Qualification	Bachelor	74	21.1
	Master	156	44.6
	MPhil	82	23.4
	PhD	38	10.9
Profession	Teacher	154	44.0
	Parent	96	27.4
	Special Education Professional	72	20.6
	Other	28	8.0
Type of Institution	Public	198	56.6
	Private	152	43.4
Years of Experience	1-5 years	102	29.1
	6-10 years	108	30.9
	11-15 years	86	24.6
	16 years and above	54	15.4
Area of Residence	Urban	214	61.1
	Rural	136	38.9
Frequency of Social Media Use	Daily	186	53.1
	Weekly	88	25.1
	Occasionally	54	15.4
	Rarely	22	6.3

The merged demographics table indicated that the participants varied in terms of gender age

education profession type of institution experience residence, and frequency of social

media use. There were relatively more female participants, Master's degree holder's teacher's individuals from public institutions, urban

residents, and people who use social media every day. In general, the sample served as a diverse and well-distributed group for the investigation.

Table 2: Reliability Analysis of the Research Instrument

Scale	No. of Items	Cronbach's α
Social Media Use	10	.84
Collaboration	10	.86
Advocacy	10	.88
Inclusion	10	.85
Overall Instrument	40	.91

Overall Cronbach's alpha of .91 showed very high internal consistency in the questionnaire. The alpha levels for the four subscales were between .84 and .88, all of which exceeded the minimum

acceptable level. This indicated that the instrument was reliable and appropriate for the next steps in statistical analysis.

Descriptive Statistics of Study Variables

Table 3: Descriptive Statistics for Main Study Variables (N = 350)

Variable	Min	Max	M	SD
Social Media Use	1.60	5.00	3.94	0.63
Collaboration	1.70	5.00	3.88	0.66
Advocacy	1.50	5.00	4.01	0.61
Inclusion	1.80	5.00	3.85	0.64

The highest average score was recorded for advocacy (M = 4.01, SD = 0.61), next came social media usage (M = 3.94, SD = 0.63). The lowest average score was registered for inclusion (M =

3.85, SD = 0.64) although it was still above the midpoint. So, it's no surprise that the respondents were mostly in favor of social media playing a positive role in all the dimensions measured.

Independent-Samples t-Test

Table 4: Independent-Samples t-Test by Gender on Main Study Variables

Variable	Gender	n	M	SD	t	df	p
Social Media Use	Male	168	3.87	0.65	-2.14	348	.033
	Female	182	4.00	0.60			
Collaboration	Male	168	3.80	0.68	-2.36	348	.019
	Female	182	3.96	0.63			
Advocacy	Male	168	3.94	0.63	-2.01	348	.045
	Female	182	4.08	0.58			
Inclusion	Male	168	3.78	0.66	-2.08	348	.038
	Female	182	3.92	0.61			

The findings revealed that there were gender differences in all four variables which were statistically significant, with female respondents having higher average scores than male

respondents. The p values related to social media use collaboration advocacy, and inclusion were each below the .05 mark. This indicates that female participants felt social media played a more

powerful role in special education as compared to male participants.

Table 5: Independent-Samples t-Test by Institution Type on Main Study Variables

Variable	Institution Type	n	M	SD	t	df	p
Social Media Use	Public	198	3.89	0.64	-1.88	348	.061
	Private	152	4.01	0.61			
Collaboration	Public	198	3.83	0.67	-1.97	348	.050
	Private	152	3.95	0.64			
Advocacy	Public	198	3.96	0.62	-1.84	348	.067
	Private	152	4.08	0.59			
Inclusion	Public	198	3.79	0.65	-2.31	348	.021
	Private	152	3.94	0.61			

There was only one statistically significant difference found and that was for inclusion by institution type, $t(348) = -2.31, p = .021$. We did not find any significant difference for social media use, collaboration, or advocacy since the p values

were more than .05. In brief, it means that respondents at private institutions were the ones who felt the strongest about inclusion through social media according to their slightly stronger views.

One-Way ANOVA

Table 6: One-Way ANOVA by Age Group on Main Study Variables

Variable	SS Between	df	MS Between	SS Within	df	MS Within	F	p
Social Media Use	5.82	3	1.94	132.40	346	0.38	5.07	.002
Collaboration	4.91	3	1.64	145.22	346	0.42	3.91	.009
Advocacy	3.76	3	1.25	126.64	346	0.37	3.42	.018
Inclusion	6.14	3	2.05	135.49	346	0.39	5.23	.001

The ANOVA results indicated that there were significant differences across age groups in all four main variables. The p values for social media use, collaboration, advocacy, and inclusion were all

smaller than .05. This implies that the respondents' perceptions varied significantly with respect to their age group.

Table 7: One-Way ANOVA by Qualification on Main Study Variables

Variable	SS Between	df	MS Between	SS Within	df	MS Within	F	p
Social Media Use	4.48	3	1.49	133.74	346	0.39	3.85	.010
Collaboration	3.95	3	1.32	146.18	346	0.42	3.12	.026
Advocacy	5.16	3	1.72	125.24	346	0.36	4.75	.003
Inclusion	4.60	3	1.53	137.03	346	0.40	3.86	.010

The findings showed that the qualification groups differed significantly in all the four variables. Those who had higher qualifications were more likely to express greater agreement that social

media can play a role in special education. Academic qualification therefore may have been a factor that affected the respondent's awareness of and attitude towards the use of social media.

Table 8: One-Way ANOVA by Frequency of Social Media Use on Main Study Variables

Variable	SS Between	df	MS Between	SS Within	df	MS Within	F	p
Social Media Use	18.72	3	6.24	119.50	346	0.35	18.08	< .001
Collaboration	14.60	3	4.87	135.53	346	0.39	12.44	< .001
Advocacy	12.88	3	4.29	117.52	346	0.34	12.63	< .001
Inclusion	16.10	3	5.37	125.53	346	0.36	14.81	< .001

There were very big differences between categories of social media use frequency on all four variables. Daily social media users had on average significantly higher perceptions than those using it

less frequently. This means that those who were frequently exposed to social media had stronger beliefs in its collaborative, advocacy, and inclusive role.

Correlation Analysis

Table 9: Correlation Matrix of Main Study Variables

Variable	1	2	3	4
1. Social Media Use	—			
2. Collaboration	.68**	—		
3. Advocacy	.64**	.72**	—	
4. Inclusion	.61**	.69**	.74**	—

The results of the correlation analysis revealed that there was a positive and statistically significant connection between all the variables of the study. The highest correlation was observed between

advocacy and inclusion ($r = .74, p < .01$). These findings indicate that the more social media was used, the greater the collaboration, advocacy, and inclusion in special education were, respectively.

Table 10: Model Summary for Regression Analysis Predicting Inclusion

Model	R	R ²	Adjusted R ²	Std. Error of the Estimate
1	.79	.62	.61	0.40

The model summary indicated that the independent variables accounted for 62% of the variation in inclusion. This means the independent variables have a very strong

predictive power for inclusion. An adjusted R of .61 gave even more confidence that the regression model was solid.

Table 11: Multiple Regression Analysis Predicting Inclusion

Predictor	B	SE B	β	t	p
Constant	0.81	0.19	—	4.26	< .001
Social Media Use	0.21	0.05	.21	4.20	< .001
Collaboration	0.29	0.06	.30	4.83	< .001
Advocacy	0.34	0.06	.38	5.61	< .001

All 3 predictors contributed significantly and positively to inclusion. Advocacy was found to be the strongest predictor of inclusion, then collaboration and social media use. This implies

that increased perceptions of advocacy and collaboration via social media are associated with higher levels of inclusion in special education.

Findings

The research revealed that overall survey participants perceived the function of social media in special education in a positive light. Results from the descriptive analysis indicated that the average scores across social media use collaboration advocacy, and inclusion were all higher than the average level, signaling that the majority agreed that social media played a significant part in enabling communication, creating awareness, and supporting inclusive practices in special education environments. Out of the four aspects, advocacy came out on top with the highest average score, then social media use, collaboration, and inclusion, in that order. This implied that respondents most clearly saw social media as a means for publicizing and rights-based involvement in special education.

Demographic data revealed that the sample was diverse in terms of gender age qualification profession type of institution experience residence, and frequency of social media use. The sample had a slightly higher number of female respondents, respondents from public institutions, urban participants, and daily social media users. Furthermore, the analysis revealed that female respondent's perception about social media use collaboration advocacy, and inclusion was significantly higher than male respondents. This suggested that gender difference sexual educators existed in the way respondents understood the educational and social value of social media in special education.

Differences in perceptions among demographic groups were further shown by the inferential analysis. Independent samples t-tests revealed statistically significant gender differences on all four main study variables, whereas institution type was significantly different from only inclusion. One-way ANOVA revealed the significant differences in age, qualification levels, and frequency of social media use - thus, respondent perceptions depended on their demographic characteristics. Notably, respondents who were frequent users of social media showed their strong agreement about the positive role of social media in special education.

The reliability analysis indicated that the research tool was very consistent internally. The overall value of Cronbachs alpha was quite high, and each subscale also had good reliability as per specified standards. Besides, correlation analysis demonstrated that social media usage cooperation advocacy, and integration were significantly and positively related to each other. On the other hand, multiple regression analysis showed that advocacy was the main factor that could explain the variance in inclusion, then collaboration and social media use, respectively. Hence, the results implied that enhanced advocacy and collaborative engagement through social media were linked with higher perceptions of being included in special education.

Discussion

The results of this study highlight the fact that social media can be a significant educational and social resource in the context of disability and special education, supporting the growing literature on this topic. The affirmative average scores on social media use collaboration advocacy, and inclusion were in line with the most recent studies illustrating that social media can raise the level of participation, deepen social ties, and offer a multitude of opportunities for personalized learning and support for people with disabilities. The current results fit well with the meta-analysis by Bonilla-del-Ro et al. (2025) which showed that, although social media may lead to educational inclusion, its effectiveness is contingent on accessibility and good support mechanisms. Similarly, UNESCO (2024) stated that digital platforms offer new learning opportunities for disabled students only when the elements of inclusion and accessibility are deliberately integrated into the learning process (Bonilla-del-Río et al., 2025; UNESCO, 2024).

The result showing that advocacy had the highest average score was significant, especially because it indicated that the respondents did not see social media as a mere medium of communication but as a powerful tool for raising awareness, defending rights and making disability-related issues more visible. This finding was in line with the work of Gelfgren et al. (2021), who found that disability

advocacy organizations have been increasingly using digital platforms to not only interact with their members but also with a larger society. Furthermore, this result gave a nod to the idea that social media, while being a site of advocacy and issues such as power relations, representation and accessibility still influence it, can open public discussion on inclusion, accommodations, and participation. Therefore, the current research has also supported the idea that, when social media is used thoughtfully and ethically, it has the potential to give special education, and disability advocacy voices a larger reach (Gelfgren et al., 2021; UNESCO, 2024).

The positive results for collaboration also parallel the research that has been done before. Special education entails the continual interaction between teachers' parents' specialists and institutions. Besides, the present research found that the respondents thought social media to be quite effective for the purpose. This agrees with the findings of Aydomu et al. (2023) who concluded that teachers used social media for learning and professional development. It also aligns with the results of Mertens et al. (2024) who found that parents have increasingly become dependent on social media for information seeking, support, and decision-making. The current results implied that social media could become a flexible supplementary space for coordination and exchange among stakeholders in special education when formal channels are scarce (Aydoğmuş et al., 2023; Mertens et al., 2024).

The marked gender disparities observed in this research, whereby female participants indicated higher levels of perceptions in the main variables, might be a result of women generally being more involved in communication, caregiving, and educational support activities at family and school levels. Even though the previous research findings do not always show the same gender trends, the studies on parents and online support have demonstrated that social media is regularly utilized for the creation of communities, exchange of information, and providing emotional support, especially in the context of children. This can be one of the reasons why the female participants of this study seemed to be more inclined to

understand the cooperative and advocative roles of social media in special education (Mertens et al., 2024).

The notable variations by age, education, and social media use frequency were also in line with previous studies. People who used social media repeatedly were more likely to have a heartfelt appreciation of its value. This finding corresponded to the fact that continuous usage of digital platforms leads to higher levels of knowledge, self-assurance, and recognition of the educational and advocacy opportunities being afforded. Moreover, this result mirrored the working of Ullah et al. (2023), who determined that learning communities based on social media were associated with intentions of equitable education among pre-service teachers in Pakistan. Likewise, differences based on qualifications might suggest that the participants with higher academic preparation were more capable of identifying the wider educational consequences of digital communication for inclusive practice (Ullah et al., 2023).

Among the major discoveries of the research was that social media use collaboration advocacy, and inclusion were positively and significantly interrelated. It also means that using social media was not only about achieving individual educational outcomes, but it was deeply connected with forming partnerships, rights-based participation, and inclusive involvement. Advocacy having a strong predictive impact on explaining inclusion was a very significant revelation because it showed that raising awareness and public voice can directly affect people's perception of inclusive educational settings. Besides, this discovery was in line with Kaur and Saukko (2022) who maintained that digital media could facilitate social interaction and a sense of belonging among young people with disabilities but at the same time cautioned that such benefits are conditioned by social and technological factors. Therefore, the current research offered more proof that inclusion in special education is not only a matter of relationships but also digitally mediated (Kaur & Saukko, 2022; Bonilla-del-Río et al., 2025).

But the results must not be understood as implying that social media by default is inclusive. Going through literature from various countries, one gets to know that digital tools can contribute to exclusion or even reproduce exclusion, depending on access to affordability universal design, digital literacy, and social attitudes, among other aspects. In the case of Pakistan, Virani and Ali (2022) that inclusive education is still going through hurdles such as bad public attitudes, hardly any implementation, and lack of awareness of parental involvement. Thus, the present paper found the respondents to have some very positive views of social media while at the very same time, the respondents' effective use in special education was contingent on the presence of supportive institutional practices, training, and implementation of the policies that are inclusive (UNESCO, 2024; Virani & Ali, 2022).

Conclusion

The research found that social media is a good and important factor in working together, raising one's voice, and including people with special needs education. Most of the participants said that social media helped communication between different groups of people, increased public knowledge about disability-related problems, and resulted in more welcoming educational thinking and methods. Besides, the research found that raising one's voice is the most powerful aspect of inclusion. Therefore, it is very important to be aware, make quality, and have a voice in the digital environment.

The paper also pointed out how people's demographics affected their views about social media in special education. Variations according to gender age qualification, and social media use frequency showed that the participants' experiences and appreciation of digital platforms were not identical. Those who use social media more often had the highest impressions of its worth, which implies that steady contact with digital networks might raise awareness of both their learning and social advantages.

The study, in general, found that social media might be a tool to help break down bottlenecks in special education. However, this possibility was

not guaranteed. Its effectiveness was hinged on goal-oriented usage, jointly inclusive planning, ethical talking, availability, and cooperating among the stakeholders. As a result, social media must not be seen as a substitute for structured support systems but as a supplementary tool that can reinforce special education when it is part of the inclusive educational practices and the disability-sensitive policies.

Recommendations

The researchers made following recommendations based on research findings:

1. One way for educational institutions to leverage social media is through well-planned and organized usage. The purpose should be to enhance communication between teachers, parents, and special education professionals. They can create formal groups and pages where they post updates, share learning materials and provide students with special needs related information. Such activities can help deepen the partnership and make assistance more immediate and of high quality.
2. It is recommended that policymakers and school leaders utilize social media platforms as a means of advocacy and raise awareness about disability rights and inclusive education. Through digital campaigns, we can work towards eliminating stigma, gaining acceptance, and educating the public about the needs of people with disabilities. Thus, social media can be a great tool to foster a more inclusive educational setting.
3. Training teachers, parents, and special education professionals on the safe and effective use of social media should be provided. Such training should be on communication skills, responsible online behavior, and the educational use of digital platforms. This can help improve confidence and lead stakeholders to use social media more productively in special education.

REFERENCES

- Aftab, M. J., Amjad, F., & Chaudhry, H. (2024). Inclusive education: Strategies for successful inclusion of students with disabilities in mainstream classrooms. *Academy of Education and Social Sciences Review*, 4(3), 439-453.
- Aftab, M. J., Amjad, F., & Naz, B. (2024). Perceptions and Attitudes of College Teachers toward Inclusive Education in Punjab, Pakistan. *JIE*, 95-116.
- Aftab, M. J., Irfan, N., & Amjad, F. (2024). Impact of assistive technology on reading comprehension skills in students with learning disabilities. *Annals of Human and Social Sciences*, 5(3), 387-402.
- Aftab, M. J., Irfan, N., & Amjad, F. (2024). Mathematics without barriers: Empowering hearing-impaired students in numerical fluency. *Journal of Development and Social Sciences*, 5(2), 633-647.
- Aftab, M. J., Sajjad, R., & Amjad, F. (2025). Augmenting Tertiary-Level Scholastic Outcomes for Visually Impaired Learners via Advanced ICT Modalities. *ASSAJ*, 3(02), 2387-2402.
- Afzaal, H. M., Amjad, F., & Kanwal, A. (2024). Identifying basic sign language communication abilities among hearing students to communicate with their Deaf peers at university level. *Journal of Development and Social Sciences*, 5(3), 01-10.
- Afzaal, H. M., Zafar, S., Anis, F., Abbas, S. Z., & Amjad, F. (2022). Comparative Review Of Special Education Services In Pakistan And India. *Journal of Positive School Psychology*, 6(8), 9924-9942.
- Alahmari, S. A., Aftab, M. J., & Amjad, F. (2025). Challenges in Literacy Skills Development in Early Childhood Special Education in Inclusive Setting. *American Journal of Psychiatric Rehabilitation*, 28(1), 661-671.
- Alsraisri, N., & Amjad, F. (2025). EXPLORING REMEDIAL TEACHING INTERVENTIONS FOR STUDENTS FACING PERSISTENT LEARNING CHALLENGES. *Lex Localis*, 23(11), 47-67.
- Ashfaq, M., Amjad, F., & Qudoos, A. (2024). The Impact of Assistive Technology on Academic Achievement of Students with Hearing Impairment. *International Journal of Politics & Social Sciences Review (IJPSSR)*, 3(III), 394-402.
- Aydoğmuş, M., Tut, E., & Karadağ, Y. (2023). Teachers' experiences regarding the use of social media for educational purposes. *International Journal of Psychology and Educational Studies*, 10(1), 69-82. <https://doi.org/10.52380/IJPES.2023.10.1.855>
- Bagadood, N. H., Aftab, M. J., & Amjad, F. (2025). Tailoring Instructional Strategies to Improve Functional Mathematics Competence in Children with Intellectual and Developmental Disabilities. *American Journal of Psychiatric Rehabilitation*, 28(1), 415-424.
- Bashir, R., Batool, A., & Amjad, F. (2024). Mathematical Problems faced by Hearing Impaired Students: Strategies for Enhancing Learning and Comprehension. *Journal of Development and Social Sciences*, 5(2), 83-99.
- Bonilla-del-Rio, M., Estrada-Molina, O., & Pérez-Rodríguez, A. (2025). Disability, education and social media: A systematic review. *Rotura: Journal of Communication, Culture and Arts*, 2025(Special Issue), 27-39. <https://doi.org/10.34623/2184-8661.2025.ALFAMED.385>
- Centre for Development Policy Research. (2024). *Leaving no one behind: Inclusive education for children with disabilities in Punjab*.
- Gelfgren, S., Ineland, J., & Cocq, C. (2021). Social media and disability advocacy organizations: Caught between hopes and realities. *Disability & Society*, 37(7), 1085-1106. <https://doi.org/10.1080/09687599.2020.1867069>

- Iftikhar, F., Manzoor, A., & Amjad, F. (2024). Exploring the Relationship of Emotional Intelligence and Social Competence in Teachers of Students with Intellectual Disabilities. *Journal of Social Signs Review*, 2(4), 753-780.
- Jaleel, F., Ahmad, K., & Amjad, F. (2025). Environmental Factors Affecting Sustainable Employment of Persons with Visual Impairment: A Qualitative Approach. *Policy Journal of Social Science Review*, 3(7), 431-466.
- Kaur, H., & Saukko, P. (2022). Social access: Role of digital media in social relations of young people with disabilities. *New Media & Society*, 24(2), 420-436. <https://doi.org/10.1177/146144482111063177>
- Leslie, R., Larsen, E., Fanshawe, M., & Brown, A. (2024). "It is more than the average parent goes through": Using the experiences of Australian parents of dyslexic children to draw a distinction between advocacy and allyship. *Australian Journal of Learning Difficulties*, 29(1), 53-74. <https://doi.org/10.1080/19404158.2024.2342523>
- Mertens, E., Ye, G., Beuckels, E., & Hudders, L. (2024). Parenting information on social media: Systematic literature review. *JMIR Pediatrics and Parenting*, 7, e55372. <https://doi.org/10.2196/55372>
- National Commission on the Rights of Child. (2024). *The state of children in Pakistan 2024: A comprehensive assessment of child rights, challenges, and opportunities in Pakistan*.
- Naz, B., Abbas, A., & Amjad, F. (2024). Enhancing Student Learning Outcomes through Blended Learning Strategies: An Empirical Study. *Journal of Development and Social Sciences*, 5(2), 152-165.
- Parveen, Z., Haider, N., & Amjad, F. (2024). Enhancing awareness and understanding of autism spectrum disorder in minchinabad: A participatory action research approach. *Academy of Education and Social Sciences Review*, 4(3), 384-396.
- Sajjad, N., Batool, S., & Amjad, F. (2025). Utilizing artificial intelligence to improve teachers' knowledge and instructional strategies in special education setting. *Journal of Social Sciences Research & Policy*, 3(1), 153-164.
- Setiawan, A., Rahmawati, D., Nugroho, M., & Pratiwi, S. (2025). Collaborative roles of teachers and parents in supporting students with special needs in inclusive schools. *Indonesian Journal of Inclusive Education Studies*, 2(1).
- Ullah, I., Asghar, M. Z., Barbera, E., & Cimen, M. (2023). Integrating social media-based community of inquiry with theory of planned behavior to promote equitable educational intentions among pre-service teachers in Gilgit Baltistan, Pakistan. *Frontiers in Psychology*, 14, Article 1150421. <https://doi.org/10.3389/fpsyg.2023.1150421>
- UNESCO. (2020, July 30). *Pakistan is using innovative approaches for inclusive education: GEM Report 2020*.
- UNESCO. (2024, March). *Learners with disabilities and technology: Advocacy brief*. UNESCO.
- UNICEF Pakistan. (2024). *Annual report 2023*. UNICEF.
- Virani, Z., & Ali, N. H. (2022). Perceived challenges and parental involvement in inclusive education: An exploratory study of primary schools in Pakistan. *Journal of Education and Educational Development*, 9(2), 302-321. <https://doi.org/10.22555/joed.v9i2.669>
- Yildirim, Y. (2025). Engaging families in the education of children with special needs: Challenges and strategic recommendations. *Early Childhood Education Journal*, 53, 2895-2907. <https://doi.org/10.1007/s10643-024-01835-1>