Human Nature Journal of Social Sciences
Vol.4, No.1 (March, 2023), Pp.518-532
ISSN(online): 2788-5240, ISSN(print):2788-5232

Human Nature Research Publisher

Original Article **http://hnpublisher.com**

Investigating the Social Media Practices among Aurally Challenged Students (ACS): The Challenges and Issues

Muhammad Ali[1], Anza Nasir[2]

[1]Assistant Professor, Department of Communication and Media Studies, Fatima Jinnah Women University, Rawalpindi, Pakistan
[2]Department of Communication and Media Studies, Fatima Jinnah Women University, Rawalpindi, Pakistan
Correspondence: m.ali@fjwu.edu.pk[1]

ABSTRACT

Aim of the Study: This study explored the social media practices among aurally challenged (DHH) students in Pakistan. The themes in current researchers were drawn and further analyzed using the thematic analysis approach.

Methods: The researchers applied the semi-structured interviews of the aurally challenged (DHH) in twin cities (Rawalpindi and Islamabad).

Findings: Results revealed that the qualitative results configured with the research questions that using and engaging the aurally challenged (DHH) students with social media have an immense potential to provide them with learning and social interaction skills. Sometimes, aurally challenged (DHH) students also face difficulties regarding learning speed and making relationships with normal-hearing students. There is a need to empower aurally challenged (DHH) students to use social media in a meaningful and objective manner that may steer them toward innovation.

Conclusion: Thus, it is concluded that social media offers several opportunities to aurally challenged (DHH) students. It enables them to attain social affordances, connectivity, social rapport, the collaborative discovery of information and content creation, sharing, knowledge generation, information accretion, and content alteration. Also, providing them with equal learning opportunities, primarily through social media, is the need of the day. The researchers further propose several implications, and study limitations are highlighted accordingly.

Keywords: Social Media Usage, Deaf and Hard of Hearing, Aurally Challenged Students, Pakistan.

Article History

Received:
December 17, 2022

Revised:
March 26, 2023

Accepted:
March 28, 2023

Published:
March 30, 2023

Background of the Study

According to WHO (2021), about 5% of our world's population has some degree of aurally challenged deficiencies. The relevant organization also projects that by 2050, this world will have 2.5 billion aurally challenged (DHH) people. Around 80% of the aurally challenged population lives in low-middle-income

countries. Specifically, Pakistan belongs to 3rd World countries, and contrary to the developed nations, no specific data record was found about the statistics related to the aurally challenged population. However, Alnfiai & Sampali (2017) argued that almost 8-10% of Pakistan's population has hearing loss. In this regard, educating the aurally challenged (DHH) students in the area has caught the attention of researchers worldwide. Initially, the Deaf were lesser human beings and faced discrimination, so their learning needs and subsequent gratification were badly ignored (Aljedaani et al., 2021). In the Pakistani context, the history of education for the aurally challenged individually can be traced back to 10920 when a school named "Gung Mahal" was created by some parents of deaf children (DHH) (Awed & Hammad, 2022a). In December 2021, there were almost 1 million deaf children of school-going age in Pakistan, and about 5% of them went to school (Barboza et al., 2019). Keeping their educational activities, it is also notable that the aurally challenged individuals also resort to social media for educational, entertainment, communication, and information-gathering purposes that have changed the overall educational experience of aurally challenged (DHH) students. Souza & Amorim (2019) argued that "through digital devices, DHH students can learn the language with the help of translator apps, images, videos and texts, becoming more proactive and independent in the learning process". Social media supports DHH students to upgrade their academic performance when they utilize "blended learning environments". Today, when social media is helping normal students, aurally challenged (DHH) students are also taking maximum advantage of it (Boholano, 2017).

Social media enables opportunities for undertaking knowledge sharing that drives social learning and creates networking through building synergetic communal relationships supported by mutual trust, sustenance, and altruism (Toofaninejad et al., 2017). Studying social media can indicate its influence on information collection, behaviour mining, evaluating political developments, co-creation, copromotion, and others (Basri et al., 2021). Talking specifically about the aurally challenged students, the DHH community faces much trouble in their social interactions and information attainment. Because neither they can communicate nor understand what others say, they have very few educational forums and institutions. The aurally challenged (DHH) students are deprived of basic educational facilities. Also, there is less representation in mainstream media, which gives a sense of marginalization to the aurally challenged (DHH) student community. But a massive social media adoption has been observed among them. As noted by di Laurea (2019), the DHH students must practice social media usage as motivated by the newer technologies. The Internet has brought a complete shift in educational activities at all levels worldwide. The use of digital devices such as computers, laptops, multimedia, and mobile phones for academic purposes has changed the outlook and insight of education. Social media sites and platforms are also being used for interactions in social and academic settings lately.

Study Aims and Gap

As identified by Afzaal et al. (2018), despite vast literature, social media usage for learning needs to be clarified. Studies regarding the effect, challenges, consequences, and other aspects still need much more investigation. More specially, research on social media usage among aurally challenged (DHH) students requires careful consideration. Especially after the Covid-19 pandemic, the relevant area needs strong consideration, indicating a grey area in the existing literature. Besides, the marginalization of aurally challenged (DHH) in the Pakistani context also needs empirical investigation to examine their social media usage, challenges, and issues they face daily. There needs to be more information about the use of social media by DHH students; however, the focus remains on the overall usage and impacts. Instead of seeing the Deaf and Hard of Hearing population as a disabled population, this study views the aurally challenged (DHH) community as a 'group with a unique culture' as guided by Goodley et al., (2018). Based on the above deliberation, this research aims to measure the experiences of aurally challenged students using social media.

Review of Literature

Social Media Interaction by DHH Students

As per the literature, Deaf and Hard Hearing students use Facebook (64%) as the most used social networking site. Followed by blogs (30%), other social networking sites, such as Google hangouts, Wikis, skype, and video-calling apps, were also used prominently (Barboza et al., 2019). Besides, it is also shown that WhatsApp is the most popular app among the DHH population, followed by Facebook and Instagram. An increased social media usage among aurally challenged (DHH) students is also attributed to the feasibility of social interactions alongside normal students (Khasawneh, 2020). Social network sites on Smartphones have opened new communication opportunities to aurally challenged (DHH) people by providing specific interfaces: a) multimedia contents display interface, (b) posting interface, and (c) multi-function organization interface. The deliberate participation of aurally challenged (DHH) people in online platforms has a positive impact on community building and orientation for aurally challenged (DHH) people (Mack et al., 2020). Social Networking Sites allow aurally challenged (DHH) people to participate fully in society, education, and business. Also, they provide chances for personal and professional growth. Today, the aurally challenged (DHH) population has adopted smartphone usage, which has made communication easier for them and keeping themselves informed. Findings from the study conducted by Awed & Hammad (2022b) "social media tools can effectively support positive social networks and knowledge exchange for people with disabilities."

Education through Social Media

Social media has changed the education experience of DHH students as well. Due to their special physical needs, the DHH students' education is challenging and difficult (Oyewumi et al., 2019). It was argued that "through digital devices, DHH students can learn the language with the help of translator apps, images, videos, and texts, becoming more proactive and independent in the learning process". Social media help in improving the academic performance of DHH students when used in "blended learning environments" (Lynch et al., 2020). The students use social media for collaborative learning. The study's results Lynch et al. (2020) also supported the idea that social media has much potential to aid the learning of aurally challenged (DHH) students. Social media make aurally challenged (DHH) students better at using and understanding written language. Mack et al. (2020) concluded that "identification with the hearing online world has a positive effect on written language skills." A positive effect of online Deaf identity on the frequency of written communication was found in the same study. There is frequent use of smartphones and personal computers, specifically for text-based communication and web surfing among aurally challenged (DHH) students (Pudans-Smith et al., 2019).

Aurally challenged (DHH) students in online communities communicate mostly in writing rather than sign language. Regarding the thinking, learning, and reading skills of deaf children as per prevailing culture, aurally challenged (DHH) students are provided with a visual support channel to apply their inherent cognitive capabilities, language, and literary skills (Zafar et al., 2021). According to Baloch & Taddese, (2020), parents and deaf teachers should provide them adequate guidance and impart formal learning to become a part of the world of aurally challenged. It is likely that aurally challenged (DHH) students should be helped by their deaf teachers to undertake "set up visual learning environments by incorporating elements of deaf culture, they can open the channels of language, reading, and academic learning to develop foundations of thinking, cognition, and learning" (Zafar et al., 2021).

Technology Designed for DHH

According to Khan et al. (2021), "with the adoption of technologies based on oral communication such as the telephone, radio, and television, the deaf community became excluded from society since common channels were less accessible too and adaptable for the needs of the aurally challenged." The related literature shows that in developed nations, there are technological apps and devices for users with special needs (i.e., DHH) (Jahanzaib et al., 2021), such as TTY (Telephone Typewriters), relay services, and fax

machines. Other studies show multiple social networking sites specially designed for the DHH community in other parts of the world (Kushalnagar et al., 2019).

A Survey Lake (2018) shows that Facebook is the most used SNS by DHH users. Besides discussing the aurally challenged students, this literature review will shed light on the explicatory role of self-efficacy beliefs originally researched by Albert Bandura in 1982) and other researchers, sources of self-efficacy, self-efficacy, Activated Processes, self-efficacy of teachers, and aurally deficient students. Self-efficacy reflects a personal belief about managing formal activities to get the required outcomes successfully. Self-efficacy regulates the feelings, thoughts, enthusiasm, and behaviors found among people. It resorts to defining the probable level of effort rendered by people to tackle issues and obstacles along with aversive situations. So, people with a high sturdier self-efficacy belief are likely to adopt a strong attitude against obstacles and show more resilience. Self-efficacy means Teachers' beliefs and abilities to bring positive changes in students about behavior and achievements. This kind of efficacy belief affects the general orientations of teachers during the educational process regarding their instructional activities. Building a congenial learning environment helps foster students' development of competencies that show a heavy reliance on talent and teachers' self-efficacy and perceptive beliefs. Teachers with more teaching self-efficacy beliefs like to be involved in academic activities more and take an interest in guiding students on how to face and overcome difficulties using their academic accomplishments. To accomplish this motive, they employ inventive teaching methods, effective techniques of classroom management, observing students' progress, give directions for inquiry (Adigun, 2020)

Critical Disability Theory CTD

Critical disability theory provides theoretical support to current research. The relevant theory examines societal standards that classify specific qualities as impairments and social variables that emphasize branded features in particular groups. According to critical disability studies, disability is a daily experience in which individuals with disabilities views are crucial to understanding their position and a socioeconomic and cultural description due to the societal power dynamics. It is critical to reshape public perceptions about disabilities (Dela Fuente, 2021). Although the prevailing concepts might change as language develops, this discussion demonstrates a long-marginalized society's struggles to express how they should be characterized on their concepts (Cornielje, 2022). Critical theory locates, characterizes, and examines the underlying or sublimated sources of historical and social traditions, ideologies, and structures. The relevant theory contains a varied range of ideas that primarily strive to explain disability as a societal, economic, and social reality rather than as a personalized medical condition tied to the body. It shares aims with traditional theory and practice in this sense as it views the domination in society as a problem, and a domination-free society is needed. Critical disability Theory CDT, as a member of the critical theory family, is a theoretical approach to the concept of disability that is simultaneously explanatory, practical, and normative (Pudans-Smith et al., 2019). The theory is built upon the argument that "disability is not fundamentally a question of medicine or health, nor is it just an issue of sensitivity and compassion; rather, it is a question of politics and power (lessness), power over, and power to". Talking specifically about its applicability in current research, since aurally challenged DHH students to use sign language to communicate their feelings, lack hearing ability, or have some aurally challenged deficiency. Thus, they face difficulty in communication Cornielje, (2022) indicated, "the very essence of the disability of aurally challenged deficiency is its effects on communication and the resulting impact of communication on behavior." Like the other marginalized groups, social media platforms are also used and opted for by the Deaf and Hard of Hearing population may be because these platforms provide several communication features (Dela Fuente, 2021). Thus, based on the aims of the study and cited literature, this research will address the following questions:

RQ1: How do Aurally challenged individuals use social media in Pakistan?

RQ2: How does social media usage affect aurally challenged individuals?

Methodology

This research is based on the exploratory design as the relevant study problem has yet to be studied in detail, particularly in Pakistan. Further, the researchers adopted the qualitative approach as Ali et al. (2022) noted, "qualitative research methods were developed in the social sciences to enable researchers to study social and cultural phenomena in a broader interpretative context. Since the area of aurally challenged students is less investigated in the Pakistani context, the qualitative research design was selected to analyze practices of social networking sites by aurally challenged students in the natural setting of two prominent cities in Pakistan. The data were gathered by applying a semi-structured interview to establish credible, consistent, and transferable evidence acquired from the selected sources. Furthermore, data acquired through the semi-structured questionnaire supports the interview data. And they also enable us to generate data based on conversations in the form of talking and listening to people. Table 1 summarizes the themes used in this research:

Table 1: *Themes for Analysis Purposes*

S/R.	Themes
Theme 1	Collaborative learning
Theme 2	Social presence
Theme 3	Uncertain feelings about time, content, and isolation Code 1: Vulnerability to privacy threats
Theme 4	Individual grooming
Theme 5	Literacy skills
Theme 6	Support provisions

Sampling Procedure

The population for the study was comprised of aurally challenged (DHH) students (male and female) of Rawalpindi & Islamabad. The researchers applied semi-structured interviews in this study and selected a sample of *n*= 10 aurally challenged (DHH) participants using the snowball sampling technique employed by past studies. In the first step, two institutions of aurally challenged students were selected and approached through a liaison start-up to approach the principle of the respective institutions. Ethically, principals were informed about the research objectives and asked to help the researcher select and interview suitable DHH students per this research's criteria. The principle was to extend this cooperation by giving an interpreter (expert in sign language), allowing us to conduct face-to-face interviews with the target sample. The interview schedule was set with the target participants through Zoom, Facebook, and WhatsApp. For the sake of selection criteria, those participants were to be taken as samples which were regular users of social networking sites for the last 1-2 years before this interview. Further, the researchers conducted the thematic analysis to synthesize the data and managed to consult key papers on the use of social media used by aurally challenged (DHH) students where social constructionism was used (Baloch & Taddese, 2020).

Interview Guide Formation

Previous studies were considered to formulate the interview guide for conducting the semi-structured interviews, and themes were generated accordingly. These themes helped in structuring the questions. After the questions about the demographics of the participants, the interview process was sectioned into different parts explained in analysis and findings.

Ethical Considerations

All ethical issues were taken care of with the view to implementing ethical considerations for this qualitative research study. The researchers gave the participants informed consent, sharing details of the research aims, procedures, and results. Besides, the researchers also ensured that their data would be kept confidential and not used for commercial purposes.

Analysis and Results

Only those aurally challenged (DHH) students (male and female) were selected to participate in the research activity who prefer social media usage regularly and have issues concerning hearing. As summarized in Table 2, most participants were males (*n*= 07) while *n*= 03 participants were females. Concerning the age of the participants, n=5 participants were in their tweens while the rest of *n*= 5 five were in their thirties.

Table 2: *Demographics of the Participants*

S/R.	Gender	Age	School
1	Female	24	Private
2	Female	30	Public
3	Female	26	Public
4	Male	35	Public
5	Male	23	Private
6	Male	23	Private
7	Male	25	Private
8	Male	33	Private
9	Male	32	Private
10	Male	29	Private

Primary Findings

After completing all the interviews, the responses were divided into different sections in light of reviewed literature. The relevance and contradictions of the responses with the existing knowledge are analyzed. The major findings of the interviews are:

i. Communication Process

The findings of the interviews show that the prioritized language for communication by the majority of DHH students is Sign Language. This finding is like Al-Sarayrah et al. (2018), which says that DHH students majorly use American Sign Language in their communication. Participants revealed that they learned it through their special schools. A few of them pointed out that they learned Sign Language through 'their families.'

The findings revealed that there is no specific Sign Language in Pakistan. American Sign Language is opted along with some locally used signs. There is no written form of signs. When asked about written sign language, all respondents said no specific sign language exists. Some of them mentioned that they have *"signs for alphabets."* Some participants also mentioned the use of the English language in the form of writing while communicating with hearing friends and family members. Participant 3 said, *"with hearing, I enjoy written communication,"* and participant 4 said, *"When communicating with hearing, we write in English."*

ii. Access to Smartphones

When asked about their smartphone access, the participants responded that all of them use it and indicated that they use Android phones. Participant number 7 said:

> *"I have recently switched from android to iPhone, and I am finding it a bit difficult to use, according to my understanding."*

iii. Preferred Social Media

To analyze social media usage, the participants were asked about the most preferred social media platform for communicating with hearing and aurally challenged (DHH) individuals. Consequently, *"WhatsApp"* turned out to be a majorly used platform preferred by all of the participants.

This finding contrast with that of Jafar et al. (2020), which showed "Facebook" as a primarily opted platform.

Which place WhatsApp as the most used platform? The reason for using WhatsApp majorly is its easy-to-use interface and the quality of video calling, which enables the smoothness of sign language communication. One of the respondents pointed out that he switched from using Facebook and Instagram due to *"lack of time*." Some participants mentioned Facebook and Instagram as their second choices. *"IMO"* is the most disliked and unused application mentioned by many of the respondents and the reasons are it being not "user friendly" and "lacking privacy feature," as participant number 4 said

"It (the application IMO) gives your number without your permission."

This shows that aurally challenged (DHH) individuals are concerned about their privacy. One of them termed Instagram as *"a bit difficult to use."* And the rest responded that there is no such application that they dislike or stop using.

iv. Content Sharing

The participants were asked to tell the types of content they share on their public platforms (having hearing Friends and Family). The responses suggested that most of them share content related to random things such as fashion, news, the world, and Pakistan. Some also indicated that they share the content in *"Sign Language"* and "*Promotes Deaf culture."* Those participants who are working as professionals in different fields responded that they share the content which is related to their work. A professional photographer participant said, "*I use social media to showcase my work and get feedback from people."* Only one participant pointed out using public content sharing for *"wishing friends and family on birthdays."*

During the interview, the participants were inquired about the type of content shared in their closed groups (with other DHH individuals). The answers revealed that most of them share the content which promotes or is about *"Deaf Culture."* The responses show that in close groups, community building and upbringing is the prime purpose of communication by the participants. A participant also said that he shares content that *"resolves the personal issues of DHH individuals. "*Some participants responded that they shared their work-related content.

v. Desired Functionalities

The researchers posed about any desired functionalities and featured the aurally challenged (DHH) individuals with these social media platforms supported. To the relevant question, the participants had mixed responses. Some wanted captions, while others wanted "auto-interpretation in Sign Language." One of the participants said it has an HD video quality feature, which was the key finding of the research (Alnfiai & Sampali, 2017) and another half of the participants said they did not want additional features.

Those who listed out the desired features reasoned that caption-less content makes it difficult for them to understand and thus creates a communication barrier. One of the participants said that due to the lack of desired functionalities, *"hearing people cannot understand us."*

vi. Opportunities Provided by Social Media

The findings correlated with the study Jafar et al. (2020), as many of the aurally challenged (DHH) regarded social media as a great opportunity for building up their relationships and community. The respondents mentioned that before social media and cellular phones, the aurally challenged (DHH) people had no such link with the world. Other forms of media, such as Radio and TV, require hearing which is detached from the world. But now, due to social media, they get to know what is happening around and they also get to tell the world about themselves. One revealed, *"if there are no social media, there is no life."*

vii. Social Media in Education

The primary aim of the study was to determine the use of social media by aurally challenged (DHH) students in educational settings, keeping in mind the studies that highlighted the role of social media and its impact on the education and upbringing of aurally challenged (DHH) students. The findings took the current study to a new angle as it was explored that no social media or technological device is used in special educational settings for the aurally challenged (DHH). The students revealed that despite knowing how to use social media, they have never used any such platform or computer software for their educational goals.

Some participants mentioned using Social Interaction platforms such as Google Meet, Skype, and Zoom to attend non-academic learning seminars and sessions during the Covid-19 lockdown. Still, none of these activities was aimed to avail educational purposes.

Drawing Major Themes

This section throws light on the themes drawn from the qualitative interviews taken from ten DHH students and presented in tabular form:

Table 3: *Major Themes and Number of Participants*

Major Themes	No. of Participants
Theme 1: Collaborative learning	2
Theme 2: Social presence	2
Theme 3: Uncertain feelings	2
Theme 4: Individual grooming	2
Theme 5: Literacy skills	1
Theme 6: Support provision	1

Explaining Themes 1-10

Theme 1: Collaborative learning

Code 1: Collaboration

Collaboration is a soft skill of the 21st century (Dela Fuente, 2021). Collaboration takes in working together; parties work beyond the limitations of contractual agreements or hierarchical structure. Subsequently, effective collaboration needs self- regulate the behavior to create coordination with others and mutually maintain shared focus. Much research witnessed the benefits awarded by collaboration at workplaces. Moreover, social networking sites provide tools that enhance communication, collaboration, and access to peers, resources, and teachers in the combined learning environment. For instance, Student Nos. 8 admitted utilizing social media tools such as Wikis, blogs, Facebook, YouTube, and WhatsApp and other collaborative projects from social networking sites (SNS).

Code 2: Material

Material points to objects, tools, physical infrastructure, and hardware that affects behavior (Lake, 2018) either at the individual or group level regarding social media practices. The material depends upon the infrastructure that proves a conduit to use different supportive apps, particularly for aurally challenged students, like talk to the deaf, deaf bible, and deaf sign language. One aurally challenged (DHH) student attracts to IT-based infrastructure; it fascinates the others to follow.

Code 3: Competencies

Competencies refer to specific abilities, knowledge, and skills that incite using social media practices to understand and adopt newer technology. For instance, some aurally challenged (DHH) students need updated knowledge and skills about the consistent flow of technology and its usage. Additionally, their

family members urged them to use and follow social media. They want to learn new features prevalent in the world, and for this purpose, they will be happy with DHH to feel active and dynamic. This will create harmony within the family. They have a strong desire to learn new technology and its diversified features.

Theme 2: Social Presence

Code 1: Social Wisdom

Social presence leads to social influence on high use of social media platforms, particularly when life is limited to the house due to the Covid-19 pandemic. Social media practices have led to increasing information sharing and engagement with friends and peers among the public. Seeing this, people like to copy each other in this learning exposure in the days of uncertainty. The use of social networking sites proves useful for them. The time spent with IT and its infrastructure changed the learning scenario of an aurally challenged student; this has promoted the use of social media among DHH students in their daily life.

Furthermore, social media usage has limited both aurally challenged (DHH) and normal students to their respective homes. They contact each other through social media and keep social distancing. Social media practices provide social proof to their users to influence others regarding their learning and intellectual growth; aurally challenged (DHH) students try to take advantage of this impression.

Some students believed that social media and its networking sites facilitate education and the use of technology-based apps, encouraging them to use digital operations available online. It looks easy to create a video and sharing links and feedback informs about its helpful nature or effectiveness. Almost all the sample interviewees remarked that they get a great deal of social proof from social media.

Code 2: Promptness

Social media practices via digitalization have given promptness. As a user, one must share their reviews quickly, either positive or negative, and make recommendations through social networking sites. Some aurally challenged (DHH) students believe that using social networking sites provides the best thing by contributing quick solutions to issues. For instance, student 1 remarked, "*I use sign language, and I learned this language from my father because he is deaf." Student 10 indicated that he learned sign language from Google. Online working has given promptness for facilities.*

Theme 3: Uncertain feelings about time, content, and isolation Code 1: Vulnerability to privacy threats

Vulnerability indicates a risky state of confronting privacy issues during social practices. Aurally challenged (DHH) students may become vulnerable to uncertain feelings, whether they are feeling good or wasting their time. According to Casagrande (2013), social media networking sites leave negative effects, which may lead to depression among aurally challenged (DHH) students.

For instance, student No. 5 indicated that they get feelings of depression under uncertainty of time wastage or use of inappropriate content or may not cut from the rest of the world. Student No. 7 highlighted the isolation factor as well. Analysis of these two answers reveals that aurally challenged (DHH) students have difficulty working alone and need group support.

Code 2: Fear of Wasting Time

Under the feelings of uncertainty, aurally challenged (DHH) students may feel uncertain about wasting time on social media. They may not become isolated from the external world or rely on unreliable content. In these conditions, they get support from their peers or normal-hearing peers to get out of this uncertainty. Student No. 5 expressed the same views and indicated that aurally challenged (DHH) students can improve their work if working with other groups on social networking sites.

Code 3: Self-Efficacy

Self-Efficacy refers to the self-confidence required to use social media practices from all the sources that facilitate accelerating the users' capabilities. The interviews revealed that students seek help from their fellow members to boost their self-efficacy and learn the right technique, particularly while operating the new technology. This occurs based on mutual trust and convenience. For instance, Students No. 3 & 6 indicated that DHH students need to build their self-efficacy using their affiliated known or unknown affiliated resource.

Theme 4 Individual Grooming

Code 1: Increased Comprehension

Due to limited literacy levels among aurally challenged (DHH) students, most young people cannot use social media the way they desire (Rocco & Delgado, 2011). The literacy level among aurally challenged (DHH) students is comparatively low compared to normal students (Boholano, 2017). This blocks individual grooming at an individual level. Social networking sites, particularly Facebook and WhatsApp, provide opportunities to aurally challenged (DHH) students having communication disabilities to develop literacy skills and get individual grooming while working on an individual basis. Lacking literacy levels among aurally challenged (DHH)students negatively influences social media reading and written comprehension. However, aurally challenged (DHH) students having better literacy levels actively use social media to improve their reading and writing comprehension. For instance, Students No. 4,5,9&10 indicated that they actively use social media learning sites and learn much due to their literacy level.

Code 2: Increased Social Presence

Establishing improved social relationships can help aurally challenged (DHH) students for their well-being and support the quality of friendship between aurally challenged (DHH) students and their hearing peers. Though social media cost one to detach from family as the user spends much time on networking site (Dela Fuente, 2021), however, social media helps families to live with the aurally challenged (DHH) person. Online interaction using social networking sites enabled DHH students to establish their social presence, like hearing peers(Dela Fuente, 2021).

For example, students No. 1,2,4 and 5 remarked that they could not give much time to their families due to social media practices. However, families know the learning aspect of social media and emphasize to use with moderation.

Theme 5: Literacy Skills

Code 1: Developing reading and Writing Skills

As a result of using social media networking sites like Facebook, aurally challenged (DHH) students get the motivation to develop reading and writing skills. A study following an experimental design established that using social media as an asynchronous platform positively relates to aurally challenged (DHH) students for their learning motivation. Many other studies presented the same conclusions for normal-hearing students (Cornielje, 2022). Goodley et al. (2018) confirmed that learning motivation leads to social interaction that attracts aurally challenged (DHH) students to learn from social media platforms and their peers and teachers. *For example, students No. 7&9&10 indicated that they experienced a great deal of learning through developing reading and writing skills.*

Theme 6 Support provision

Code 1: Learning Support

Social media networking technologies support learning support using feedback processes and technical assistance (Dela Fuente, 2021). According to Guess et al. (2020), social media as an online platform of asynchronous properties could support aurally challenged (DHH) students after class activities. For

instance, the asynchronous platform provides the facility to chat with tutors and assist students in addressing their key course deficiencies. A social network medium aided through Ning.com to impart English learning as a 2nd language for aurally challenged (DHH) students that deployed sign language as their 1st language. For example, *student No. 6&8 remarked that they happened to learn English as a language since their primary use was sign language.*

Code 2: Access to Information

Social media enables access to information for every student, particularly aurally challenged (DHH) students, through tools including learning management systems (LMS) and lip-reading technologies. Aurally challenged (DHH) students often utilize Facebook, Twitter, blogs, and Instagram to access library resources and services in the form of audio and video information. Due to finding and accessing information more readily, aurally challenged (DHH), students prefer to use Facebook (Glenn-Smith, 2019). Cuculick regarded Facebook as the potential way for aurally challenged (DHH) students to get updated information regarding events and news within and beyond education.

According to Dela Fuente (2021), 38% of aurally challenged (DHH) students employ social media to collect instructional materials. Because of constrained social networks and resources, Deaf and Hard of Hearing students get a reduced flow of information. To reduce the probable gap of limited information, Mack et al., (2020) argued that aurally challenged (DHH) students utilize internet resources more frequently than normal peers to undertake communication at an individual and group level. For example, all interviewed students indicated that they need unhindered access to information to stay updated about news and other educational needs as this platform vehemently provides this information.

Thematic Analysis Approach

The researcher organized the data based on verbatim transcripts to analyze the data in three phases for the thematic analysis. In the first stage, responses of aurally challenged (DHH) students were analyzed. The most repeated words spoken during the interviews were identified, and the words were reviewed to make a group of these and then transformed into codes. After completing this step, themes were coded based on their visible meanings. In 2nd stage, words from different responses were extracted and analyzed to analyze the practical usage of social networking sites. In the 3rd stage, responses and experiences were integrated to portray the holistic view of the phenomena to share experiences.

During the interview, participants reflected on gestures, voice tone, and different words, which were observed and captured by the researchers. The relevant approach helped to get insights regarding the practices relating to social media networking sites. An audio recording of the interviews was made after seeking permission from the principal or guardian of participant aurally challenged (DHH) students to observe their responses through their non-verbal language using the iteration technique. This technique helped to analyze the narratives built based on interview questions that were integrated with responses from the participants and students' observations. This proved a better approach in which observations while analyzing phenomena were not different from data acquired from interviews. Generated themes and codes were integrative of data generated through interviews and researchers' observations.

Discussion of the Results

This study provided empirical evidence on the social media practices of aurally challenged (DHH) students. It analyzed the strengths and weaknesses among the relevant individuals beyond their field of education. The analysis validates the existing literature on the area of investigation that may serve as a guide for future research. One of the aims of this study was also to inquire whether aurally challenged (DHH) students can develop potential social relationships as they get to a congenial environment and find the ability to exercise social skills with teachers and peers sharing a common language.

Research acknowledges that children grow in social skills based on observational learning by practicing social skills with their social circle, and these are the methods popularly employed by children. Results

produced by this research find its theoretical relevance with the Critical disability theory proposing the issues and concerns confronted by aural challenges (DHH) individuals in a society. Despite these individuals having the capacity to learn and adopt new skills, different socio-economic factors hinder their learning leading to an unequal distribution of sociocultural resources among the different sectors of society. Besides society, the critical disability theory was also supporting the overall research. The researchers also focused on providing evidence regarding the challenges faced by aurally challenged (DHH) people, their strive and efforts to learn from social media, and finally, their perceptions about the features that may make social media easy to use and understand for them.

Notably, social media technology has wider acceptance for personal and educational purposes and constant information flow to enhance learning experiences (Barboza et al., 2019). Several novel practices such as weblogs, Wikis, and social networking sites help students to refine their learning skills and acquire new experiences. Through following social media, learners find exponential opportunities to grow their mutual linkage. aurally challenged (DHH) is also eager to join the digital world by overcoming its natural limitations (Al-Sarayrah et al., 2018).

The findings further indicated that social relationships, including family and peers, come under the influence of increased social presence. Furthermore, social wisdom and promptness are the direct outcomes of including social media in learning settings. The qualitative results configure with the concern that using and engaging the DHH students with social media is too immense potential of social media as a popular and reflective medium to provide them learning. Generally, aurally challenged (DHH) students are threatened by the learning speed and face difficulty making relationships with normal-hearing students. The themes drawn were collaboration learning, more social presence, individual grooming amid feelings of uncertainty, increased literacy skills, and learning support provision. The codes generated are collaboration, material, competencies, social wisdom, promptness, vulnerability to privacy, self-efficacy (Adigun, 2020), fear of wasting time, increased comprehension, increased social relationship, developing reading, and writing skills, learning support, and assessing information. Furthermore, social wisdom and promptness are the direct outcomes of including social media in learning settings (Aljedaani et al., 2021).

Conclusion

Social media is a source of greater opportunities and advantageous for learners to interrelate with peers and faculty (Aalbers et al., 2019). The academic benefits associated with social media is noticeable when these influences reach the aurally challenged (DHH), having some disadvantage in traditional contexts of face-to-face learning and social skills. DHH students (deaf on hard of hearing) can avail new opportunities through social media. This paper conceived the premise based on the assumption that aurally challenged (DHH) students get an enhanced learning experience due to social media. The analysis in current research indicated that a positive impact of social media was reported by aurally challenged (DHH) students on their learning because of increased interaction, a stimulus to learning, and support and feedback. However, several apprehensions were reported by students in the form of privacy, fear of wasting time, unsuitable content, perceptive isolation, and family confrontation to adoption. Besides the evidence reflected by the literature, our analysis throws light on the fact that researching the social media practices of aurally challenged (DHH) students is an under-researched area of investigation, particularly in Pakistan. A semi-structured face-to-face survey was adopted to collect data on the social media practices used by DHH students and their fellow students to improve their understanding and attain a concerted learning experience. Students were familiar with Facebook, Google Scholar, Dropbox, Twitter, Skype, Google Drive, Google Docs, Google Presentation, Google Spreadsheet, wikis, emailing, and texting. At varying degrees, such technologies offer social affordances, connectivity, social rapport, the collaborative discovery of information and content creation, sharing, knowledge generation, information accretion, and content alteration.

Implications of Research

This study indicates that research design and patterns followed regarding aurally challenged (DHH) students can be replicated in other contextual conditions. Social Media has been integral to our lives for the last decade. It has changed our patterns and behaviors. The heavy use of Social Networking Sites (SNS) has grabbed the interest of researchers to examine and explore how social media is revolutionizing our lives (Dela Fuente, 2021). This indicates that social media can potentially engage aurally challenged (DHH) students to quest their learning needs beyond the class boundary.

Mass communication is essential for normal and aurally challenged (DHH) individuals. People participating in forums, blogs, newsletters, etc., create previously impossible ties. The Media have role models who are imitated and inspired by individuals. Even when they are, various groups are virtually connected. The education process indicates enhanced learning through which knowledge, habits, and skills are transferred through interpersonal and inter-generation systems. As a result of societal progression and complications in a digital era, the knowledge may be consecutively passed on to coming generations that require a formal learning environment online. It is also important to note that the learning environment is an important factor in enabling students to flourish their talents and abilities without discrimination or unequal distribution of resources.

Study Limitations

This research has certain limitations regarding its scope. First, the physical limitation involved accessing the aurally challenged (DHH) students. Second, the researchers adopted the snowball sapling, a part of non-purposive sampling that is challenged due to its nature and applicability. Another limitation involved communicating effectively with the aurally challenged (DHH) challenged students to conduct the semi-structured face-to-face interviews. Besides, the researchers also needed help selecting the right DHH students as the sample to make it representative. The study faced geographical limitations being statistically unrepresentative, which may question the generalizability of results.

Acknowledgments

None

Conflict of Interest

Authors declared no conflict of interest.

Funding Source

The authors received no funding to conduct this study.

ORCID iDs

Muhammad Ali [1] https://orcid.org/0009-0002-2545-5821
Anza Nasir [2] https://orcid.org/0009-0000-2032-7789

References

Aalbers, G., McNally, R. J., Heeren, A., de Wit, S., & Fried, E. I. (2019). Social media and depression symptoms: A network perspective. *Journal of Experimental Psychology: General*, *148*, 1454–1462. https://doi.org/10.1037/xge0000528

Adigun, O. T. (2020). Self-esteem, self-efficacy, self-concept and intimate image diffusion among deaf adolescents: A structural equation model analysis. *Heliyon*, *6*(8), e04742.

https://doi.org/10.1016/j.heliyon.2020.e04742

Afzaal, H. M., Zafar, S., Anis, D. F., & Abbas, S. Z. (2018). *Comparative Review Of Special Education Services In Pakistan And India*.

Ali, S., Pasha, S. A., & Khalid, A. (2022). *COVID-19, Vaccination, and Conspiracies: A Micro-Level Qualitative Study in Islamabad, Pakistan*. 15.

Aljedaani, W., Aljedaani, M., AlOmar, E. A., Mkaouer, M. W., Ludi, S., & Khalaf, Y. B. (2021). I Cannot See You—The Perspectives of Deaf Students to Online Learning during COVID-19 Pandemic: Saudi Arabia Case Study. *Education Sciences*, *11*(11), 712. https://doi.org/10.3390/educsci11110712

Alnfiai, M., & Sampali, S. (2017). Social and Communication Apps for the Deaf and Hearing Impaired. *2017 International Conference on Computer and Applications (ICCA)*, 120–126. https://doi.org/10.1109/COMAPP.2017.8079756

Al-Sarayrah, W., Al-Aiad, A., & Jararweh, Y. (2018). Social Networking Sites and Deaf and Hard of Hearing People in Jordan: Characteristics and Preferences. *2018 IEEE/ACS 15th International Conference on Computer Systems and Applications (AICCSA)*, 1–5. https://doi.org/10.1109/AICCSA.2018.8612893

Awed, H. S., & Hammad, M. A. (2022a). Relationship between nomophobia and impulsivity among deaf and hard-of-hearing youth. *Scientific Reports*, *12*(1), 14208. https://doi.org/10.1038/s41598-022-17683-1

Awed, H. S., & Hammad, M. A. (2022b). Relationship between nomophobia and impulsivity among deaf and hard-of-hearing youth. *Scientific Reports*, *12*(1), 14208. https://doi.org/10.1038/s41598-022-17683-1

Baloch, I., & Taddese, A. (2020). *EdTech in Pakistan: A Rapid Scan*. EdTech Hub. https://doi.org/10.53832/edtechhub.0035

Bandura, A. (1982). *Self-Efficacy Mechanism in Human Agency*.

Barboza, C. F. S., Ramos, A. S. L., Abreu, P. A., & Castro, H. C. (2019). Physical Education: Adaptations and Benefits for Deaf Students. *Creative Education*, *10*(04), 714–725. https://doi.org/10.4236/ce.2019.104053

Basri, S. R., Fatim, G., & Hanif, S. (2021). *FACTORS AFFECTING MENTAL HEALTH OF HEARING IMPAIRED STUDENTS AT ELEMENTARY SCHOOL LEVEL: PERSPECTIVE OF SPECIAL EDUCATION TEACHERS AND PSYCHOLOGISTS*.

Boholano, H. (2017). Smart social networking: 21st Century teaching and learning skills. *Research in Pedagogy*, *7*(2), 21–29. https://doi.org/10.17810/2015.45

Cornielje, H. (2022). HELP: Help Educate Low-Income Countries to Set their Own Priorities. *Disability, CBR & Inclusive Development*, *32*(4), 3. https://doi.org/10.47985/dcidj.565

Dela Fuente, J. A. (2021). Facebook Messenger as an Educational Platform to Scaffold Deaf Students' Conceptual Understanding in Environmental Science Subject: A Single Group Quasi-Experimental Study. *International Journal of Education*, *14*(1), 19–29. https://doi.org/10.17509/ije.v14i1.31386

di Laurea, T. (2019). *Learning Languages in Social Networks*.

Glenn-Smith, S. K. (2019). *The use of social media as a conduit to promote social justice in the Deaf Community, as a cultural and linguistic minority, through the visual language of American Sign Language: A movement against Audism*.

Goodley, D., Liddiard, K., & Runswick-Cole, K. (2018). Feeling disability: Theories of affect and critical disability studies. *Disability & Society*, *33*(2), 197–217. https://doi.org/10.1080/09687599.2017.1402752

Guess, A. M., Lerner, M., Lyons, B., Montgomery, J. M., Nyhan, B., Reifler, J., & Sircar, N. (2020). A digital media literacy intervention increases discernment between mainstream and false news in the United States and India. *Proceedings of the National Academy of Sciences*, *117*(27), 15536–15545. https://doi.org/10.1073/pnas.1920498117

Hassan, S.A.U., Safdar, G. (2022). Relationship between Self-Esteem and Problematic Use of Facebook among University Students. *Annals of Social Sciences and Perspective, 3*(1), 199-217.

Jafar, I., Ayub, D. S. I., Jaffar, S., & Zaman, M. W. U. (2020). *Contemporary Educational Issues Of Pakistani Children And Their Causes And Remedies (An Applied Study Of Pakistani Society In The Light Of Sirat-Un-Nabi□).*

Jahanzaib, M., Fatima, G., & Nayab, D.-. (2021). Inclusive Education Opportunities in Punjab Pakistan: A Locale Based Comparison. *Sustainable Business and Society in Emerging Economies*, *3*(3), 301–308. https://doi.org/10.26710/sbsee.v3i3.1952

Khan, A. M., Sami, A., & Salahuddin, A. (2021). *Attitude of Hearing Impaired Students towards Inclusive Education in Pakistan*.

Khasawneh, M. A. S. (2020). *Problems Teaching English to Deaf Students*.

Kushalnagar, P., Holcomb, J., & Sadler, G. R. (2019). Genetic testing and eHealth usage among Deaf women. *Journal of Genetic Counseling*, *28*(5), 933–939. https://doi.org/10.1002/jgc4.1134

Lake, C. (2018). *Social Isolation, Fear of Missing Out, and Social Media Use in Deaf and Hearing College Students*.

Lynch, P., Kaye, T., & Terlektsi, E. (2020). *Pakistan Distance-Learning Topic Brief: Primary-level Deaf Children*. EdTech Hub. https://doi.org/10.53832/edtechhub.0043

Mack, K., Bragg, D., Morris, M. R., Bos, M. W., Albi, I., & Monroy-Hernández, A. (2020). Social App Accessibility for Deaf Signers. *Proceedings of the ACM on Human-Computer Interaction*, *4*(CSCW2), 1–31. https://doi.org/10.1145/3415196

Oyewumi, A., Isaiah, O., & Adigun, O. (2019). *Influence of social networking on the psychological adjustment of adolescents with hearing impairment in Ibadan, Oyo State, Nigeria*.

Pudans-Smith, K. K., Cue, K. R., Wolsey, J.-L. A., & Clark, M. D. (2019). To Deaf or not to deaf: That is the Question. *Psychology*, *10*(15), 2091–2114. https://doi.org/10.4236/psych.2019.1015135

Rocco, T. S., & Delgado, A. (2011). Shifting lenses: A critical examination of disability in adult education. *New Directions for Adult and Continuing Education*, *2011*(132), 3–12. https://doi.org/10.1002/ace.426

Shabir, G., Iqbal, Y.W., Safdar, G. (2014). Demographics‟ Differences in Social Networking Sites Use: What Communication Motives Does it Gratify? *International Journal of Social Work and Human Service Practice, 2*(5), 184-194.

Toofaninejad, E., Zaraii Zavaraki, E., Dawson, S., Poquet, O., & Sharifi Daramadi, P. (2017). Social media use for deaf and hard of hearing students in educational settings: A systematic review of literature. *Deafness & Education International*, *19*(3–4), 144–161.

Zafar, A., Gull, H., Farooq, U., Rahim, M. S. M., & Abid, A. (2021). Teaching English and Science to the Deaf Students. *2021 International Conference on Innovative Computing (ICIC)*, 1–6. https://doi.org/10.1109/ICIC53490.2021.9692947