The Role of Social Media in Promoting Inclusive Communication between the Non-Disabled and People with Disabilities through Accessibility Features

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Abstract

The study sought to establish whether social media can promote inclusive communication between people with disabilities and those without through accessible features in Saudi Arabia. Two areas of interest in the study were inclusivity and accessibility of social media features. People with disabilities must be included in the online space and have access to features that enable them to communicate easily. Social media communication can be sending a friend request, chatting, or responding to people's posts. The study engaged a self-report of 154 participants of varied levels of education and age groups, including gender, different provinces around the country, and the social media platforms they preferred. The descriptive and inferential analyses show that social media platforms can promote inclusive communication if accessible features are available. Accessible features include alt text, a simple user interface, hashtags, emoticons, and captions.

Keywords: social media, non-disabled, people with disabilities, social relations, inclusive communication, Saudi Arabia

1. Introduction

Social media is an integral tool for most people regarding social interactions (Mammadova & Ahmadov, 2017). The non-disabled can use the platform to interact easily due to features that make this possible. However, are social interactions possible for those with disabilities (is there bias), and do social media provide accessibility features? These two questions guide the study, hypothesizing that social media facilitates inclusive communication between non-disabled individuals and people with disabilities through accessible features. This is possible due to social media accessibility features that make their use possible for those with varying disabilities. Most social media platforms have integrated features that enable people with various disabilities to interact with normal users. Some features include screen reader compatibility for visually impaired users, clear and concise language for those with cognitive impairment, alternative text description (alt text) for screen readers, and adjustable display settings to facilitate participation and contribution (Fraccastoro et al., 2020). Still, even with the existence of such features, online discrimination is possible reflecting on offline tendencies (Doran & Schnackenberg, 2019).

This study will highlight the challenges faced by persons with disabilities when using social media and social media features developed to address the issues. The study also notes the role of stakeholders including policymakers, advocacy agencies, and non-disabled users in promoting social media accessibility through policy-making, advocacy, and application of accessibility features respectively. Integrating social media accessibility is part of best practices and adherence to the law. In America, where social media companies such as Facebook, Instagram, YouTube, and X are headquartered, social media practices fall under Section 508 of the Rehabilitation Act of 1973 for government agencies and organizations that partner with them. Web companies that do not partner with government entities require their platforms to adhere to the Americans with Disabilities Act (ADA) standards for equal accessibility (Packin, 2021). This shows the need for countries to formulate laws that govern social media platforms to ensure equal accessibility for those with disabilities.

1.1 Aim and Objectives

The study aims to determine whether social media enables communication between the non-disabled and people with disabilities. This would be achieved through the following objectives:

1) A review of related literature;

2) Collection of first-hand data through a survey targeting the general public;

3) Analysis of the data through statistical means;

4) A reporting of the findings.

1.2 Significance of the Study

The study is significant in educating the public about social media accessibility features that promote communication with users with disabilities. The study also informs people about the roles they can play in improving communication with users with disabilities. The reason is that while some social media platforms have integrated accessibility tools most stakeholders are unaware of their existence. This shows the need for sensitization to include people with disabilities. The role of disability agencies in advocacy and policymakers in policy formulation is also discussed to notify that stakeholders have a role to play in improving social media accessibility.

1.3 Literature Review

1.3.1 Social Media and Content Creators' Role in Enhancing Accessibility for People with Disabilities

Social media platforms have a role to play in providing accessibility tools for the non-disabled and people with disabilities. Likewise, the non-disabled should activate such features when using social media because they do not come as default features (Botelho, 2021). It is important to note that obstacles to accessibility come in different forms (Doran & Schnackenberg, 2019). The table below shows common accessibility barriers for different disabilities and possible solutions.

Table 1. A summary of accessibility barriers and possible solutions [Source: Saran et al., 2023].

Accessibility barrier	Disability affected	Possible Solution
Videos and live broadcasts without captions	Audio/hearing impairment	Integrating closed captioning and providing transcripts.
Missing alt text on images	Blind and the visually impaired	Including a brief, clear, and relevant text description that fits the image.
Low color contrast between text and background	Low vision and color blindness	Content creators can set their color palette so that the text does not appear in a background that is too close in color. Alternatively, providing a high contrast mode setting for users.
Complex interfaces	Cognitive disabilities or learning differences	Ensuring the platforms are simple. For instance, enabling short videos allows for a clean interface with intuitive swiping as is the case with TikTok.
Overwhelming amounts of information	Users with cognitive disabilities, neurodevelopmental disorders, and learning differences	Content creators should use few and easy words to communicate. That entails cutting down on quantity for quality.
Disabled keyboard navigation	Physical disabilities and visual impairment	Media platforms should provide reliable keyboard navigation.
Overly technical and unclear language	Cognitive and learning differences	Writing, simply, and directly. Avoidance of jargon and slang by content creators.

The solutions provided in the above table also show that normal users (non-disabled) can improve communication between them and those with disabilities and that this is not only a preserve of social media companies.

Research on new digital trends that improve social media accessibility for people with disabilities shows that they exist and continue to be improved. The first major development is alt text which is common in most social media platforms. Alt text is an accessibility feature for screen reading and text-to-speech that enables users to read texts using speech synthesizers or braille displays on a computer screen (Kaur & Saukko, 2022).   For instance, when there is an image on a screen, a blind or poor-vision individual using a screen reader requires a description of what is being depicted in the image and this happens through alt text. Therefore, alt text is a descriptive text that serves as a text replacement for an image conveying what that image contains (Kaur & Saukko, 2022).

Secondly, captioning, descriptive transcript, and sign language especially for videos posted on social media (Packin,

2021). Social media platforms such as Facebook and YouTube that enable video uploads have included open and closed captions to accommodate persons who are deaf and difficult to hear. Open captions are those that are automatically embedded into the video, while closed captions can be clicked on or off in the form of auto-captioning (Packin, 2021). However, the onus is on the content creator to provide captions to ensure accuracy. The American Foundation for the Blind notes that closed captioning is fine but creators should open the captions since they normally come closed, highlighting the role of individual users in enabling such features. Another crucial feature related to video and audio recordings is descriptive transcripts. This feature is promoted by the Web Content Accessibility Guidelines (WCAG), which is a standard for online accessibility for accommodating people who are deaf and blind (Botelho, 2021). The other feature is social media videos that include sign language interpreters, a role that can be done by social media companies to accommodate the deaf and content creators. In the case of the latter, arranging an interpreter fluent in sign dialect is crucial to include all audience (Packin, 2021).

Aspects to be considered by content creators are typography, design, and color contrast to cater to people with vision-related impairment including people with dyslexia and other learning challenges (Kaur & Saukko, 2022). To ensure accessibility, content creators should opt for typography that is simple, with easy-to-read fonts, making them large enough for readability (Kaur & Saukko, 2022). Unfortunately, not all platforms enable users to customize their social media appearance and social media platforms should integrate this option. There is also the use of hashtags in CamelCase to help users access content linked to a specific subject (Kaur & Saukko, 2022). For this to work, however, the hashtags need to be formatted correctly because a screen reader can have difficulty differentiating terms in text-set (Kaur & Saukko, 2022). Therefore, capitalizing the first letter of each word, a technique known as CamelCase, is the solution and indicates that a screen reader should read hashtags as separate words rather than one long one (Kaur & Saukko, 2022). Lastly, content creators can use emojis and emoticons as they are available on most social media platforms (Saran et al., 2023). The benefit of an emoji is that it has an assigned description. For instance, if a screen reader were to encounter an emoji of a smiling face, it would indicate "happy or smiling" (Saran et al., 2023). One thing to note is that people with disabilities are not the only ones who benefit from social media accessibility. A text written in CamelCase is universally easier to read and captions are helpful to those who are not deaf.

Table 2. Summary of social media platforms and their accessibility features for those with disabilities [Source: Saran et al., 2023]

Social media	Accessibility features
Facebook	- AI-powered automatic alt text to all screen readers. - The media's accessibility statement provides keyboard shortcuts, closed captions, and assistive technology questions and answers. - The media has included a Meta accessibility for users to stay up-to-date on accessibility developments.
Instagram	- Automatic alt text that can be edited before posting – screen reader compatibility is essential because the media focuses on visuals (photos and videos).
Snapchat	- This media does not offer any known feature in the way of accessibility based on its support page.
TikTok	- The video-focused platform enables people with various abilities through the use of auto-captions. - Some of its current accessibility features include text-to-speech, animated thumbnails, and photosensitivity toggles.
Tumblr	- This platform helps people with visual impairment using hashtags. If the content is tagged with #captioned or #uncaptioned, a user with blindness or visual disability can click on the hashtag to interact with the captioned content.
X	- This media has AI-captioning for images but it is up to the user sharing the content to turn on the setting. - The page's accessibility features provide support for people with visual, auditory, mobility, and cognitive disabilities.
YouTube	- Screen reader compatibility. - The platform's app accessibility page provides instructions on how to search, upload, delete, videos on android, iPhone and iPads.

This subsection has shown that the onus is not only for social media platforms to make accessibility possible but also other users. Social media accessibility is a sign of respect and consideration towards people with disability who use social media making a reason to prioritize it.

1.3.1 Digital Inclusivity Challenges and Developments within Different Cultural Contexts Globally

Information technology is viewed as a significant facilitator of social inclusion for people with disabilities. International

organizations such as the European Commission have made progress but still not achieved much regarding technology-based applications and digital services (Manzoor & Vimarlund, 2018). This shows that challenges are being experienced in Western countries despite efforts. The challenges have existed since the inception of digital communication with improvements occurring after major feats were done for the standard population (Manzoor & Vimarlund, 2018). Botelho (2021) concludes the same, noting that accessibility for persons with disabilities is neither certain nor constant and a conscious and systemic effort is required to guarantee the potential of digital technologies for inclusion is achieved. He further notes that this would require a chain of dependencies where training, hardware, software, content, and standards blend (Botelho, 2021). For instance, smartphones should be compatible with hearing aids required by those with hearing impairment, touch screens should accommodate those with motor impairment, and webpages should have text labels needed by screen reading software used by those with visual impairment (Botelho, 2021).

Various challenges have faced stakeholders that would enable an effective digital disability inclusion strategy. The major challenges that face companies and decision-makers are how to integrate technologies and services into daily routines and how organizations can leverage technological innovations in their effort to create alternatives that support social integration (Manzoor & Vimarlund, 2018). Moreover, the absence of analysis of the degree of impairment suffered by people and any user differences linked to gender, age, culture, and socio-economic status made the adoption of proposed technologies and services a difficult venture (Manzoor & Vimarlund, 2018). Therefore, there is a need to define technical terms clearly, describe the objectives linked with each technology properly, and evaluate the suggested solutions in line with existing policies and guidelines for inclusion (Manzoor & Vimarlund, 2018). Progress has been made through various interventions despite the challenges. For instance, social and communication training and personal assistance have improved the social behavior and skills of people with disabilities (Saran et al., 2023).

Social media can promote and enhance communication on the global level. Agencies use social media for advocacy and to promote cross-cultural dialogue ranging from online communities and campaigns (Fazil et al., 2024). Buchi and Hargittai (2022) note that marginalization, which affects people with disabilities, is associated with differential resources that are noticeable in unequal access to digital devices, support, or different skills relevant to digital media use. Consequently, the preconditions affect the extent and types of social media use linked with diverse positive and negative outcomes such as psychological (Buchi and Hargittai, 2022). This is particularly evident for people with disabilities because social media presents a means to integrate them into society to reap both intrinsic (enjoyment experience) and extrinsic (networking) benefits all necessary for social connectedness and well-being (Kim & Zhu, 2020). Advocacy organizations in Sweden use social media to inform and support their members to speak on behalf of their members in society concerning what the government can do to improve situations (Gelfgren et al., 2021). Yet, advocacy groups still encounter challenges while considering the interests of different groups such as people with various disabilities, different ages and economic statuses, families, and the broader society (Gelfgren et al., 2021).

Some governments are turning to digital devices to help solve the situations by communicating directly with the population. In Norway, E-participation enables citizens to influence policy-making through electronic means. The two most used channels include social media and dedicated e-participation platforms such as government websites (Simonofski et al., 2021). Similarly, Yuan et al. (2022) note the role of government websites as administrative tools to improve public service, offer support, and promote public goals. The downside of government digital transformation to help the marginalized and people with disabilities is that it can be used as a tool for political marketing that fails to prioritize citizens (Yuan et al., 2022). In the US, the government is targeting the education sector to support people with disabilities to improve access to educational technologies and reduce digital gaps (Fonseca et al., 2020). The approach is multi-disciplinary and meant to deploy technological ecosystems that support online training, teacher and student training, and policies for government and academic leaders to define and manage uncertain scenarios (Fonseca et al., 2020). This approach can be adopted for the general public to connect those with disabilities, a support system, and policy-makers through government facilitation. The likely outcomes are universal access to data to manage the situation, new technologies and associated data, augmented and virtual reality, stealth assessments, technology-supported collaboration, and user engagement and interactions (Fonseca et al., 2020).

The major research gap that this study aims to fill when it comes to communication involves the non-disabled to provide their sentiments. Some studies focus only on people with disabilities and this could be because of the topic of study. However, this study is focusing on enhancing communication between people with disabilities and the non-disabled hence their employment.

2. Methodology
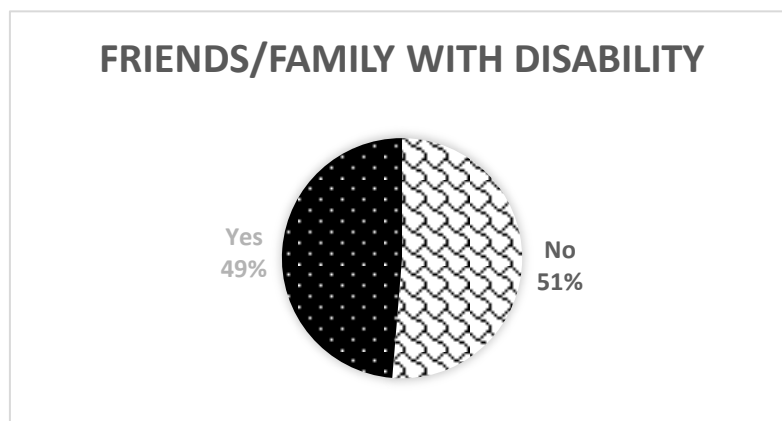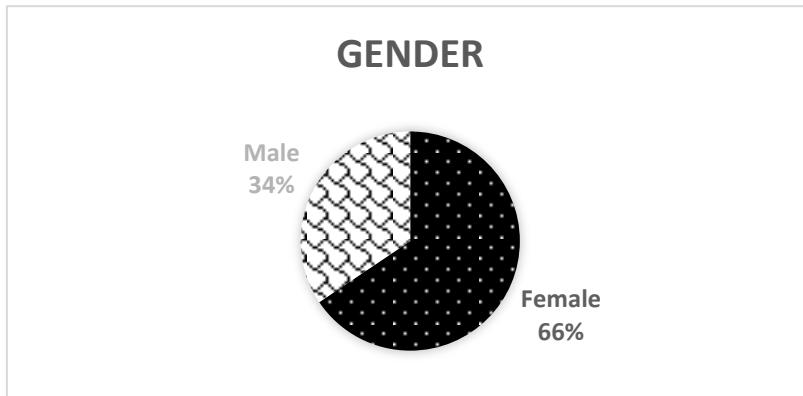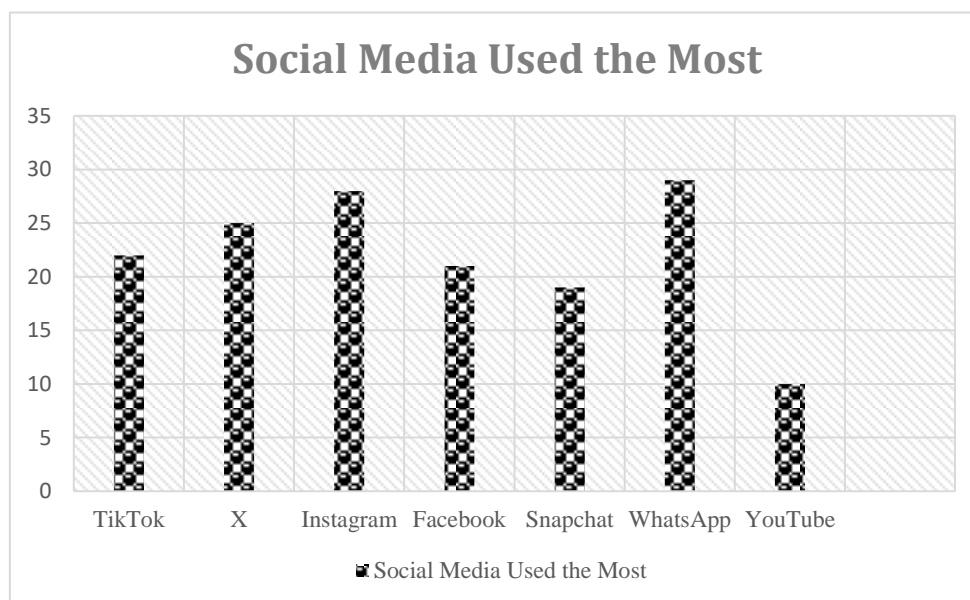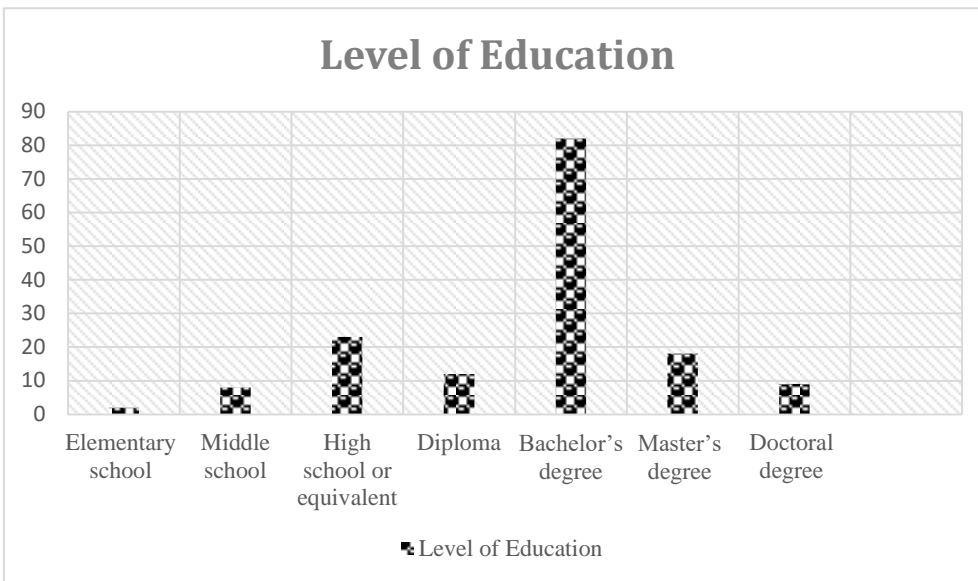
The study employed quantitative statistics that were possible through a survey that 154 individuals successfully did. The survey targeted people across different provinces of Saudi Arabia. The study engaged the general public, considered

adults 18 years and above.

2.1 Participants

Below are pie charts and bar graphs representing the participants' different demographic attributes such as gender, disability status, level of education, and age. One apparent limitation is the discrepancy in some variables where certain variables, such as gender and disability status, were higher than others. It was assumed that such discrepancies would influence the statistical result associated with them. However, some variables were almost balanced out, such as friends and family with disability and social media used the most.

GENDER

Male
34%

Female
66%

DISABILITY STATUS

Disabled
5%

Non-
disabled
95%

FRIENDS/FAMILY WITH DISABILITY

Yes
49%

No
51%

Age Groups

Level of Education

Social Media Used the Most
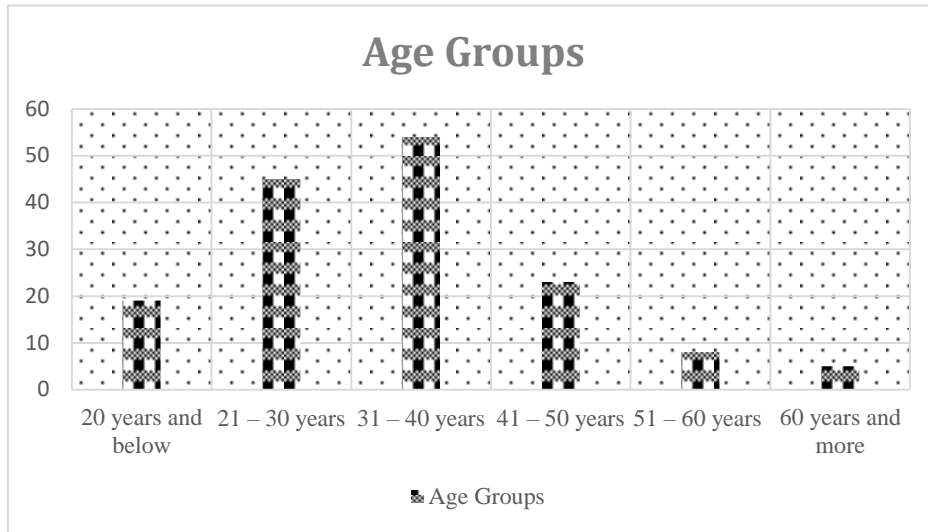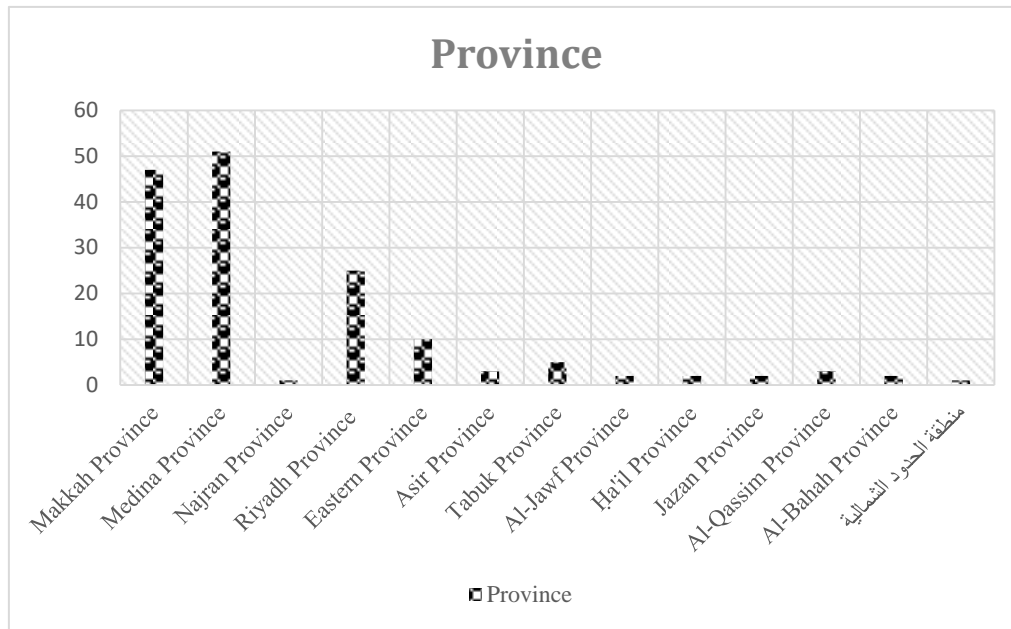
Below is a summary of all the variables and their numbers and totals.

Table 3. Variables.

Variable	Attribute		Total
Gender	Male		53
	Female		101
		N	154
Disability Status	Non-Disabled		146
	Disabled		8
		N	154
Family/Friends with Disability	Yes		75
	No		79
		N	154
Age Group	20 years and below		19
	21 – 30 years		45
	31 – 40 years		54
	41 – 50 years		23
	51 – 60 years		8
	60 years and more		5
		N	154
Level of Education	Elementary school		2
	Middle school		8
	High school or equivalent		23
	Diploma		12
	Bachelor's degree		82
	Master's degree		18
	Doctoral Degree		9
		N	154
Social Media Most Used	TikTok		22
	X		25
	Instagram		28
	Facebook		21
	Snapchat		19
	WhatsApp		29
	YouTube		10
		N	154
Region	Makkah province		47
	Medina province		51
	Najran province		1
	Riyadh province		25

Eastern Province	10	
Asir province	3	
Tabuk province	5	
Al-Jawf province	2	
Ḥa'il Province	2	
Jazan Province	2	
Al-Qassim Province	3	
Al-Bahah Province	2	
Northern Borders Province	1	
	N	154

2.2 Data Collection Tool and Procedure

A Likert scale-type (ordinal) survey was used to collect the self-reported data. The questionnaire titled 'Social Media Disability Communication" (see appendix) was selected because it contains specific areas that the study sought to analyze, including social media as a tool, user attitude, and communication for non-disabled and people with disabilities. The survey was distributed online after prospective participants were identified via social media. The study's goal was communicated before the survey was issued, and their privacy and confidentiality were guaranteed. Due to availability, the questionnaire was distributed intermittently between 1st November 2023 and 17th November 2023 between 7 a.m. and 10 p.m.

2.3 Sampling Size and Procedure

The study applied stratified sampling to divide the general population into subcategories based on specific populations required for the study. Targeting the general population would yield the needed results; hence, gender, age groups, and disability were considered. The online survey focused on individuals from different provinces of Saudi Arabia to have a variety of responses based on different backgrounds; however, some provinces (mostly cities) had more respondents than others, as shown in the participant section. It was assumed that having participants with varying demographic attributes, including different educational backgrounds, family members, or friends with a disability, would influence the results. The general public also contains individuals who use social media; fortunately, all the respondents who were successfully surveyed had a preferred social media platform. This was made possible through a pre-screening that was done before the survey was distributed.

3. Results

3.1 Descriptive Statistics

A descriptive study was done for some questionnaire items based on the study topic. These items measure communication, bias, sensitivity to disability, and accessibility. Item 4 specifically measures accessibility between the non-disabled and persons with disability. These items divulged the strengths and weaknesses of different responses.

Table 4. Summary of survey items

Code	Statements	Mean	Mode	Median	Standard deviation	Variance
Q1	I have never come across a physically disabled person on social media.	2.96	3	3	1.352	1.829
Q4	I can communicate with a potential friend with a disability on social media.	4.42	5	5	0.920	0.846
Q6	I am part of a disability group or forum on social media.	2.66	2	2	1.178	1.389
Q7	I send friend request to anyone regardless of their disability status.	4.33	5	5	1.022	1.046
Q8	I overlook postings of people with disabilities because I feel they do not affect me.	2.12	1	2	1.182	1.398

For instance, Q4 and Q7 where that pertain to favourable attitudes towards people with disabilities on social media had strong responses. The rest had weak responses, namely Q1, Q6, and Q8.

3.2 Inferential Statistics

Since the study was also testing a hypothesis, inferential statistics was employed. Five areas linked to the statements were measured. These topics include social media usage by people with disabilities (Q1), lack of bias (Q7), social media bias (Q8), social media empowerment (Q6), and inclusive communication (Q8) (see *Table 3*).

A t-test for two independent means was used due to the nature of the variables, i.e. gender (male vs. female), disability status (disabled vs. non-disabled), and family and friends with disability (yes vs. no). However, those variables with more than two variables, such as age, social media platforms, and level of education, were divided into two. For example, the different age groups were divided into two (40 years and below vs. 41 years and more), level of education (diploma and below vs. bachelor's and above), and social media platforms (visual vs. text). In the case of dividing social media into visual vs. text, it is because all the social media platforms noted fell in either of the categories. For instance, TikTok, YouTube, Instagram, and Snapchat are mostly visual since they are about video and picture sharing. X, Facebook, and WhatsApp are primarily about texting and chatting with others. While testing the two-tailed hypothesis, the Cronbach alpha was set at 0.05.

Table 5. Selected statements of the item to be measured in inferential analysis

Measure	Item	Statement
Social media usage by people with disabilities	Q1	I have never come across a physically disabled person on social media.
Social media lack of bias	Q7	I send friend request to anyone regardless of their disability status.
Social media bias/discrimination	Q8	I overlook postings of people with disabilities because I feel they do not affect me.
Social media opportunities/empowering	Q6	I am part of a disability group or forum on social media.
Inclusive communication	Q4	I can communicate with a potential friend with a disability on social media.

3.2.1 Social media usage by people with disabilities

	Degree of Freedom	t-Value	p-Value
Gender Males vs. Females N = 154	152	-1.375	.170
Disability Status Non-Disabled vs. Disabled N = 154	152	0.720	.472
Level of Education (Diploma and Below Vs. Bachelors and Above) N = 154	152	-0.393	.694
Social Media Most Used (Visual vs. Text) N = 154	152	2.558	.011
Age Young (40 years and below) vs. Old (41 years and above) N = 154	152	0.505	.614

Significant mean difference was identified for age but not for gender, disability status, level of education, and social media most used.

3.2.2 Social Media Lack of Bias

	Degree of Freedom	t-Value	p-Value
Gender Males vs. Females N = 154	152	-0.587	.557
Disability Status Non-Disabled vs. Disabled N = 154	152	2.773	.006
Level of Education (Diploma and Below Vs. Bachelors and Above) N = 154	152	-1.347	.179
Social Media Most Used (Visual vs. Text) N = 154	152	-0.98	.328
Age Young (40 years and below) vs. Old (41 years and above) N = 154	152	-0.2	.841

A significant mean difference was identified for disability status but not for gender, level of education, social media most used, or age.

3.2.3 Social Media Bias

	Degree of Freedom	t-Value	p-Value
Gender Males vs. Females N = 154	152	1.265	.207
Disability Status Non-Disabled vs. Disabled N = 154	152	0.593	.544
Level of Education (Diploma and Below Vs. Bachelors and Above) N = 154	152	1.465	.144
Social Media Most Used (Visual vs. Text) N = 154	152	2.606	.010
Age Young (40 years and below) vs. Old (41 years and above) N = 154	152	0.78	.436

A significant mean difference was identified for the social media most used but not for gender, disability status, level of education, and age.

3.2.4 Social media empowering

	Degree of Freedom	t-Value	p-Value
Gender Males vs. Females N = 154	152	-0.014	.988
Disability Status Non-Disabled vs. Disabled N = 154	152	-1.453	.148
Level of Education (Diploma and Below Vs. Bachelors and Above) N = 154	152	0.931	.353
Social Media Most Used (Visual vs. Text) N = 154	152	0.189	.850
Age Young (40 years and below) vs. Old (41 years and above) N = 154	152	-0.832	.406

No significant mean differences were identified for gender, disability status, and level of education, social media most used, and age.

3.2.5 Inclusive Communication

	Degree of Freedom	t-Value	p-Value
Gender Males vs. Females N = 154	152	-0.160	.872
Disability Status Non-Disabled vs. Disabled N = 154	152	3.398	.000
Level of Education (Diploma and Below Vs. Bachelors and Above) N = 154	152	-0.519	.604
Social Media Most Used (Visual vs. Text) N = 154	152	0.029	.976
Age Young (40 years and below) vs. Old (41 years and above) N = 154	152	-0.421	.674

A significant mean difference was identified for disability status but not for gender, level of education, social media most used, or age.

Generally, the results of the inferential statistics support the hypothesis that social media helps to enhance social access and interactions between non-disabled and disabled except for some variables in the four items measured in social media usage, social media lack of bias, social media bias, and inclusive communication as discussed below. The item of social media opportunities and empowerment had no significant mean difference identified for all five variables measured.

4. Discussion

The findings show that social media can enhance social access between the non-disabled and people with disabilities in the Saudi Arabia context. This section, therefore, addresses the practical implications of the research in terms of policy changes and platform enhancements. It is important to discuss how social media can be adapted and improved to promote inclusivity and what the findings mean for different stakeholders such as policy-makers, social media companies, advocacy groups, and other users. This is crucial because According to the World Health Organization, at least one billion people (15%) of the global population, experience some type of disability and this percentage increases when one considers short-term and situational disabilities (as cited by Ferri et al., 2022). The same organization notes that about 34% of the global population has a visual or hearing impairment making it difficult for them to consume visual and audio content (as cited by Ferri et al., 2022). Usually, accessibility is mandated by law, and countries such as the US and Canada have laws that guarantee this, namely the Americans with Disabilities Act (ADA) and the Accessibility for Ontarians with Disabilities Act (AODA) (Packin, 2021). These laws require websites and digital content to be accessible to persons with disabilities (Packin, 2021).

Another finding shows that people with disabilities do not experience bias on social media since they receive friend requests from people with disabilities and those without disabilities. It would then mean that the majority of the non-disabled do send their friend request regardless of disability status. A possible explanation for this is empathy by those without disabilities, which is almost an issue of morals and ethics (Teng, 2023). Therefore, social media can enhance networking and help create friendships. The main question remains whether the interaction can be sustained owning to social media accessible features, especially for those with visual and hearing impairment. Throughout the paper, it is clear that the onus is on all stakeholders including the non-disabled to improve accessibility of social media for all. First, social media companies should enable all users – non-disabled and those with varying disabilities – to be able to communicate with ease. Once the companies provide these features, all users should prioritize using them. Social media companies should provide inclusive designs that cater to diverse user needs when creating and sharing content (Kaur & Saukko, 2022). Also, social media companies should make users aware of the existence of enabling features on their support pages or through regular videos and posts (Kaur & Saukko, 2022). Thus, there is a need for sensitization in this regard so that the non-disabled can prioritize the use of accessible features to accommodate those with disabilities. For instance, there is a proposed framework named social media accessibility framework (SMAF) that includes guidelines for account owners who are non-disabled to assess the accessibility of their accounts (Saran et al., 2023). This framework was tested and evaluated using volunteers with hearing and visual impairments and those without disabilities from the X platform (Saran et al., 2023). The framework was later modified based on the evaluation findings and the final version produced. The findings show a strong improvement in the accessibility of tweets when the guidelines are followed during the creation of tweets (Saran et al., 2023). SMAF can be applied to other media platforms.

As mentioned in the literature review, a multi-disciplinary approach that includes stakeholders such as the non-disabled, people with disabilities, social media companies, advocacy groups, and the government can be useful for innovating technologies that address user interfaces for those with disabilities. It was earlier mentioned that one of the challenges faced by companies is integrating technologies and services that meet daily routines and a lack of analysis of the degree of disability suffered by people in terms of age and gender (Manzoor & Vimarlund, 2018). A multi-disciplinary approach that involves stakeholders would be able to discuss and consider all matters of use, do follow-ups on created technologies, and provide solutions for uncertainties. Botelho (2021) notes that for many years, people with blindness couldn't access computer interfaces when mainframes and minicomputers were prevalent. It was only after microcomputers and personal computers became available that blind access to computers became routine (Botelho, 2021). This shows a failure in stakeholder participation leading to late developments and inventions. However, in meeting human rights for all, governments and other relevant stakeholders must plan for the development of digital technologies that support communication between the non-disabled and those with disabilities. This would be useful in the education sector and marketplace (Kim & Zhu, 2020).

Social media companies can promote accessibility by integrating considerations into their content planning and publishing routines (Teng, 2023). The strategy can include team training members involved in content creation and management on accessibility best practices and relevant tools (Teng, 2023). This will equip users to create inclusive content from the beginning. Second is content creation that uses clear and concise language, the addition of alt text descriptions to images, and the use of automatic captioning features for videos. Third, is the regular review of the features that incorporates accessibility checks into the content review process (Teng, 2023). Social media companies and users can guarantee their content reaches a wider audience and supports the varied needs of a more inclusive social media community.

Saudi Arabia policymakers and disability agencies can formulate laws and policies that champion and safeguard the rights of people with disabilities on available social media platforms. Besides formulating enabling laws, Saudi Arabia

policymakers should sensitize the public about the rights of people with disabilities on social media, create laws that support inclusive communication even on social media platforms, and implement existing and new laws on the same. Lawmakers can promote best practices on social media platforms that empower all users. Expanding accessibility increases the audience and strengthens communication efforts. Therefore, all stakeholders should spotlight accessibility and prioritize it first in the development of social media content, features, and platforms to contribute to an inclusive digital space, where everyone can connect and participate.

Disability agencies can assist in ensuring social media accessibility by collecting information, sharing information, giving a voice, and debating about the matter to raise societal awareness (Mammadova & Ahmadov, 2017). The agencies should negotiate digital media and the expectations articulated about the media and their applications for various disability groups. For this to happen, the agencies should be aware of the different needs related to different types of disabilities and this means collecting data, analyzing the data, and presenting the findings in a way that can address the issues of accessing social media. Therefore, advocacy groups should ensure relevancy by negotiating online activities that promote issues of those with disabilities, advocate for inclusion, and balance potential and difficulties through information (Gelfgren et al., 2021). Advocacy groups in Saudi Arabia can promote digital disability inclusion by collaborating with other stakeholders, advocating for the digital rights of those with disabilities, and providing data that makes it easier to assist those with disabilities (Kim & Zhu, 2020). In the case of data collection, the advocacy group can create local disability service organizations that collect data from the grassroots to highlight types of disabilities and the demographical groups affected (Kim & Zhu, 2020). Moreover, advocacy groups can create purpose-driven campaigns aimed at raising awareness, pooling funds, and compelling government policy-making bodies to act in areas of gap (Gelfgren et al., 2021). Social media-enabled advocacy engagements can generate policy inputs and improve digital gaps on a scale that conventional policy communication framework cannot highlighting the role of social media in advocacy (Ondiek & Onyango, 2023).

Fazil et al. (2024) found that social media platforms serve as valuable tools for fostering intercultural understanding, communication, and knowledge transfer. The government, which is the main facilitator in most countries, can be used to support communication among people with disabilities through financial and human resources. However, for this to be achieved in social media, the government has to collaborate with governments. Unfortunately, major social media platforms are found in developed countries and they tend to be privately-owned limiting the role of government in influencing their ideas (Yuan et al., 2022). Governments can provide incentives to social media companies to improve the digital use or user interface of people with disabilities as well as provide favorable regulations that facilitate the companies (Yuan et al., 2022). This way the government will be promoting citizen agency through stakeholder collaboration. Ultimately, the government (facilitating stakeholder), social media companies, advocacy groups, people with disabilities, and those without disabilities can assist in improving communication on social media. Each group can play a role be it campaigning, sensitizing the masses, providing resources, creating conducive regulations, collecting data, or giving incentives.

5. Conclusion and Limitations

It can be concluded that social media promotes communication between people with disabilities and non-disabled. However, this can be further enhanced through active collaboration by all relevant stakeholders to create features that improve the quality of communication for those with disabilities. This is necessary in keeping with the human rights of all citizens. The issues of inclusivity and access are critical because they make easy communication possible.

This study has shown that the non-disabled are open to sending friend requests to anyone irrespective of disability status, as well as being open to communicating with prospective friends who would have a disability. Therefore, inclusivity as far as forming relationships and reducing discrimination are concerned is not an issue. The main issue of inclusivity that remains is the availability of digital resources and social media that are easy to use in terms of user interface for those with disabilities. This is tied to accessibility since social media and digital features tend to be inaccessible. This diminishes the quality of communication between people with disabilities and the non-disabled online. There is a need for a multi-disciplinary approach to tackling the digital communication gaps experienced by those with disabilities. By doing so, this can enhance the communication between those with disabilities and those without disabilities. Policy-makers have to be involved since they can create a favorable environment for social media companies to innovate. The policies can touch on the economics of business, availability of raw materials, patenting, and fair competition. All initiatives to promote communication between people with disabilities and those without should be underpinned by human rights. The policies, laws, and innovations should align with both international and national human rights frameworks.

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Authors' contributions

The author was solely responsible for all aspects of this research, including the study design, data collection and analysis, and manuscript preparation.

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Appendix

Please rate how much you agree or disagree with the following sentence:						
Item	Statement	Strongly Agree (5)	Agree (4)	Neither Agree nor Disagree (3)	Disagree (2)	Strongly Disagree (1)
1.	I have never come across a physically disabled person on social media.					
2.	I believe that disability can be mental.					
3.	I cannot tell a person with a mental disorder through their posting.					
4.	I can communicate with a potential friend with a disability on social media.					
5.	I have little disregard whether someone is disabled or not.					
6.	I am part of a disability group or forum on social media.					
7.	I send friend request to anyone regardless of their disability status.					
8.	I overlook postings of people with disabilities because I feel they do not affect me.					
9.	I tend to project myself in a manner with which people would want to be associated.					
10.	I feel uncomfortable and cancel friendships when I see a physical disability.					