

The Implications of Social Media on Communication Within the d/Deaf Community

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Introduction

The emergence of social media and its integration into everyday life has affected countless individuals, as well as our society at large. Social media has changed both the way people communicate directly with each other and the way we see communication in a more broad sense. Usage of social media has grown steadily through recent years. It has become so popular that in 2018, 72% of Americans were regularly using some type of social media (Pew Research Center Study, 2018). This is a significant majority of our society. It may also be likely that there are additional individuals not included in this percentage that have some familiarity with social media, even if not on a regular basis. That statistic becomes even more compelling when considering that in 2008, just ten years earlier, only 27% of Americans were using social media (Pew Research Center Study, 2018). This trend represents a 167% increase.

Generally, teens and young adults adopted social media first. However, as social media usage and engagement has grown, so has its representation of the more general population. Today, both men and women use social media at about the same rate. There is no significant difference between the numbers of white, black, and hispanic individuals using social media. There are slight usage gaps that vary depending on education, income, and age (Pew Research Center Study, 2018). However, even with these gaps, the current social media population is more representative of the actual U.S. population than it has ever been. A population on social media which is similar to the actual U.S. population means that it is used by those with disabilities, including individuals who are deaf. In fact, social media has been especially significant in this community because Deaf adults were among the first to adopt two-way electronic communication.

Because d/Deaf¹ people do not have the physical ability to hear, they have faced significant barriers when attempting to communicate with hearing people. Many of those barriers still exist, the most obvious being that they do not share a common language. However, social media offers an opportunity for the two groups to communicate through a shared text-based language. Although extensive research exists on social media and how it has changed life in various aspects, including the way in which people communicate, there is comparatively little research that applies those concepts specifically to the Deaf community.

Because the Deaf community has had significant challenges relating to their ability to communicate with others, it is important to examine how this new means of communication has had implications for them specifically. Indeed, it may be more important to study social media and its various reaches within groups that have historically faced various communication barriers than within groups which have not had communication barriers to the extent that it affects their day-to-day life. Although the Deaf community has received other technological advances aimed at making the communication process easier in the past, such as pagers and teletypewriters (TTYs), social media has perhaps been more successful than any previous efforts to aid communication. It is a medium which is easily accessible virtually anywhere thanks to smartphones, tablets, and other handheld electronic devices. It is equally accessible to hearing people and d/Deaf people, and both groups can use it easily. It provides a place for both groups to communicate in a shared language (English).

¹ When referring to individuals who cannot hear, a lowercase d is generally used to mean the physical condition of a hearing impairment (deaf), while the capital D refers specifically to those who classify themselves within the subsequent community and culture (Deaf). Therefore, there is a significant difference when referring to a “deaf” individual and a “Deaf” individual. For the Deaf individual who identifies as part of the Deaf community, there is a connotation of an embrace of American Sign Language (ASL)

While social media has provided important benefits to the Deaf community, it cannot be considered a completely successful aid to their communication until it allows for easy use of American Sign Language (ASL) in more of its space. This paper will address these issues specifically within the United States, although some examples mentioned do include research from other countries as well. When speaking about how social media has affected communication within the Deaf community, it is worthwhile to examine three separate groups. The first is d/Deaf people. It is important to note that while this study will place all d/Deaf people in the same group, they are extremely diverse and can in no way be represented as having the same thoughts, opinions, life experiences, etc. The second group is hearing people who have little to no knowledge of the Deaf community or ASL. The third is hearing people who have an understanding of Deaf culture and a background in ASL. There are many people who fit into this last category, including English/ASL interpreters, ASL students, children of Deaf adults (CODAs), siblings of Deaf adults (SODAs), etc. It is important to understand that generally when the Deaf community refers to a hearing person or hearing people, this does not include individuals within the third group just mentioned, although they are physically able to hear. It is a description used for those in the second group who have little to no exposure to the Deaf community or ASL. For this reason, the three groups will be referred to in this paper as d/Deaf, hearing, and d/Deaf advocates. It is possible that the effects of social media on Deaf/Deaf communication and Deaf/hearing communication vary, or are both positive and negative. Possible remedies that would help make the social media world even more beneficial to the way d/Deaf people communicate will also be suggested.

This thesis will include demonstrations of how social media has helped those within the Deaf community, including contributing to improved mental health, support, and quality of life. An initial assessment indicates that social media is a benefit since it enables a common mode of communication between d/Deaf and hearing parties in the form of written English. This allows for more frequent and beneficial conversations between the two groups. A comparison of the motivations for d/Deaf and hearing people to use social media will also be introduced. These ideas will be explored within the first half of the paper.

The second half of the paper will examine some of the challenges that social media causes for d/Deaf people, especially regarding their ability to communicate. Because social media can be more representative of visual forms of communication than other communication methods, the participation of d/Deaf individuals in social media may sometimes be taken for granted. There may be an assumption that since there is so much visual communication readily available online, this is a completely satisfactory means of communication for the d/Deaf community, with little thought of their preference for ASL. The importance of ASL will also be examined, including the ability of the d/Deaf community to have both access to their preferred language and an easy way of communicating in that language in social media interactions. To begin, it is beneficial to understand the extent to which social media is used by the general population.

Social Media and its Benefits for the Deaf Community

Daily social media use among adults has increased from an average of almost three hours a day in 2008 to over six hours a day in 2018 (Ortiz-Ospina, 2019). For many, it has become a significant part of everyday life. Users post updates to share small details about their day with

their friends. People consult online ratings in social media apps to decide at which restaurants to eat. News articles are read through social media sites. People even use social media to find dating opportunities. These are just a few examples. There is no definite agreement as to whether the effects of social media are more positive or negative, although both types of effects certainly exist (Brown, 2018). On one hand, certain indirect health benefits have been linked to using social media, encompassing categories such as identity, flexibility, structure, narration, and adaptation (Wiederhold, 2017). In contrast, professionals within the United States have experienced a decrease in control over their work because of social media, which led to higher difficulty finding balance between work and home (Jiang, Luo, & Kulemeka, 2017). This is just a miniscule representation of the positive and negative effects that social media can have on individuals.

Social media has many different definitions, and can encompass various parameters, depending on who you ask. Anderson uses Merriam-Webster's definition, which is "forms of electronic communication (such as websites for social networking and microblogging) through which users create online communities to share information, ideas, personal messages, and other content (such as videos)" (2017). That same definition will be adopted in this paper. Some of the most popular social networking sites in the United States are Facebook, Instagram, Twitter, and YouTube. The majority of my references to social media will include one or multiple of these sites, as they fit within the established definition here. While these specific sites will be the focus, it is worth noting that the points made may certainly apply to other sites as well. The collection of these services and programs that make up social media have had an effect on the mental health of the online users.

Mental Health and Support Systems

Social media has been linked to a myriad of negative consequences, including cyberbullying, breaches of privacy, and time wastage (Akram, 2018). With such serious and impactful ramifications, it is no wonder that social media may sometimes be looked at through a lens of criticism. However, social media has certainly provided positive consequences as well. An important observed benefit of participation in social media sites, specifically for the d/Deaf, is improved mental health (Arndt and Parker, 2016). This comes from a sense of community and belonging, which d/Deaf people are frequently able to find online. They can become a part of groups and forums specifically targeted to help d/Deaf individuals deal with their hearing loss and all that comes with it. Although support from online groups is not exclusive to the Deaf community, it may be that they are more motivated to use social media for that support than the general public. Indeed, Arndt and Parker (2016) also found that hearing-impaired individuals (all deaf since birth) were more motivated than hearing individuals in the same age groups to use the Internet.

Before social media platforms provided this sense of support to the d/Deaf population, the main source of support available to these individuals was through local Deaf clubs. These clubs were the first places where they were often able to feel a sense of community, relatability, and belonging (Callis, 2017). Deaf clubs and organizations became quite popular throughout the United States during the 20th century, and some continue to modern day. One example of this is the National Association of the Deaf. These Deaf clubs were (and to some extent, are) helpful for d/Deaf individuals for many reasons. They provide a place for d/Deaf people to express frustrations directly related to living with hearing loss, they provide social connections, and

facilitate common interests, among many other benefits. Yet there are certain disadvantages to Deaf clubs as well. One of the greatest of these being that they normally have meetings and activities at specific and limited locations and times. If d/Deaf people want to be included in the group, they must take steps to ensure that their schedule allows for it.

This is where one of the greatest benefits of support through social media for the d/Deaf individual comes in. When connected with Deaf groups and other forms of support online, all that is needed is Internet access and a computer, laptop, or other device that allows Internet connection. d/Deaf people are able to participate in these groups as consistently as they choose. Furthermore, they can turn to these groups specifically in the moments that they are in the most need of support, which could include very early or late hours. The chances that someone will be available to take in their concerns and provide emotional support or advice are higher than if they were only able to rely on a physical group. This is especially the case when considering that individuals from various locations and time zones are likely to be present in online d/Deaf groups.

In addition, social media can be used by d/Deaf people to get involved in spreading information about the rights they want (Pierre, 2019). Before social media, the tendency among many d/Deaf people was to meet up and use each other as social support and have a chance to interact face-to-face in the clubs just mentioned (Padden, 2007). These clubs allowed d/Deaf people the chance to discuss life as a d/Deaf person with other people who were going through similar experiences. Now, instead of simply venting and having a place to understand each other, social media offers opportunities to take those frustrations to the hearing world and make more effective steps toward change. For example, Troy Commerson, a Deaf business owner, says that

he uses social media “for social networking, sharing ideas, self-promotion, and planting ideological seeds for social change” (Gingiss, 2018).

Interestingly, Facebook launched a new corporate mission statement in 2017, which is: “To give people the power to build community and bring the world closer together” (Chaykowski, 2017). The success of this goal is seen in d/Deaf groups on Facebook, and can be applied to the communities of d/Deaf populations present on other social media sites as well. One direct application of “bring[ing] the world closer together” is the ability of d/Deaf people and hearing people to communicate directly. Hearing people have the opportunity to take an interest in the Deaf community when it is readily accessible online. Hypothetically, social media may even be the medium which could spark that interest when they see a video of a Deaf person signing. In addition to mental health benefits, social media brings benefits to life satisfaction and a higher quality of life for those within the Deaf community

Quality of Life and Social Support

Gerich and Fellingner (2011) further emphasize the importance of the presence of social media for the Deaf community. They noted that the size of an individual’s social network has a direct influence on the quality of life of d/Deaf individuals. Specifically, the larger the d/Deaf person’s network, the higher their overall quality of life. Furthermore, they observed that a person’s network size correlates directly to their level of happiness if they are d/Deaf. Interestingly, for hearing participants, the size of their online social networks had no correlation to their quality of life whatsoever (Gerich and Fellingner, 2011). This evidence suggests that those within the Deaf community may have a higher need or want for social support online. This could be because social support within the Deaf community is not as readily available in everyday

situations and relationships as it is for hearing people. Parfitt (2018) observed something similar when noting that social media is especially helpful in creating a sense of community for d/Deaf teens. She states that although one perceived negative of social media for teens in general is that it can lead to isolation, d/Deaf teens are already at a risk of isolation because of their disability. She goes on to say that social media can be used as a tool to pull them from that isolation. This is an interesting claim because she is saying that the negative effect of social media is something that already existed before, and that social media is actually the solution to that problem. Perhaps this is because social media is frequently used by d/Deaf teens to find opportunities for face-to-face interaction.

Online Connection vs. Face-to-Face Connection

Another significant benefit of social media for d/Deaf people is its ability to facilitate and spark real-life events such as parties, casual get-togethers, rallies, etc. For example, after a Deaf Facebook group was created in Poland, conversation turned to a local television station and frustration over the station's lack of captions (Ellis, 2017). The implementation of caption is an important service, obviously making it easier for d/Deaf viewers to understand the message. The members of this Facebook group decided to organize a rally. They met outside the television station to protest the lack of captions on the station's programs (Ellis, 2017). This was the first instance on that particular Facebook group of using the group to plan and initiate an event where group members had face-to-face contact. It is likely that this event would not have happened without the existence of that particular Facebook group.

This Polish example may present a partial description as to why large online social networks contribute to higher quality of life for d/Deaf individuals, while the same is not true for

hearing individuals. It is possible that the aims and goals of social media use are what constitute the varied effects in life quality. Generally speaking, it seems that the motivations for social media use vary between d/Deaf populations and hearing populations. High amounts of social media use in hearing populations are frequently linked to a decline of real-life social interaction and increased loneliness. Conversely, d/Deaf people often use social media, such as Deaf Facebook groups, to plan get-togethers and other face-to-face encounters, such as in the Polish example. This difference of social media tendencies between d/Deaf and hearing people could account for social media outlets having more positive effects for the d/Deaf than for the hearing. (Again, this is speaking in a *general* sense, since social media affects each individual so differently.) This is one area which lacks research necessary to determine if such is actually the case. There exists a plethora of research indicating that face-to-face communication is beneficial because it offers more information than any other type of communication (Nardi & Whittaker, 2002). Therefore, whether or not social media use contributes to *avoiding* these encounters or *creating* these encounters corresponds to whether the effects of a person's social media use can be seen as more negative or positive. In either case, it is at least a medium which has created an easy way for d/Deaf and hearing people to communicate with each other.

Easier Communication Between d/Deaf and Hearing

Pierre (2019) points out that social media has been instrumental in helping d/Deaf people in two ways: integrating into the hearing world and reaching out to other d/Deaf people. More hearing individuals are communicating via written words through social media, which enables d/Deaf people to understand and contribute to the conversation more easily. Before the widespread use of so much written communication, d/Deaf people would have to accept either

being left out of many conversations or relying on somebody else to catch them up and explain what was said and what happened. As both hearing and d/Deaf individuals become braver about interacting with each other, benefits will include better relationships with their peers and a more enriched sense of self (Leigh, 1999). Many people find it easier to approach strangers online than in person. One of the positive consequences of less intimidating online interaction is that people could be more likely to engage in conversation than they would be if they only had the option of face-to-face communication. This trend is increasingly true as the audience becomes younger. Half of teens prefer to communicate via online methods, rather than engaging in face-to-face conversation (Peacock & Sanghani, 2014). This means that social media could make it more likely that d/Deaf and hearing people will have conversations with each other and learn more about a culture different than their own.

The ease of communication that social media platforms offer to d/Deaf individuals is especially significant when considering the roadblocks to communication d/Deaf people have faced in the past. A couple of examples include language barriers with the hearing population and the inability to reap the benefits that the original telephone offered to hearing society, such as immediate contact with family and friends who are not in close proximity. Because of these roadblocks, technological advancements have always been of particular interest to the Deaf community. One significant turning point was the emergence of the teletypewriter (TTY). The TTY was invented by a deaf scientist, Robert Weitbrecht, in the 1960s (Lang, 2000). This was a device similar to a keyboard that aided d/Deaf people in their telephone calls. There was a small screen where they could see the written message of the person on the other line and a full keyboard where they could type out their response. However, the hindrance of the TTY was that

d/Deaf people who used it could only use it to communicate with individuals who also owned a TTY (Maiorana-Basas, 2014). For this reason, the TTY did virtually nothing to improve communication between d/Deaf and hearing individuals.

Cell phones were also an important advance, specifically because the short message service (SMS) feature which they enabled meant that d/Deaf people could communicate with their family and loved ones just as easily as hearing people could (Power, 2007). While TTYs were only owned by d/Deaf people and d/Deaf advocates, huge numbers of people outside the Deaf community owned cell phones, which meant that all three groups could communicate with each other. Cell phones and SMS are also convenient because you can take them virtually anywhere, as opposed to the TTY which basically had to stay in one place.²

Social media followed the advances of TTY, cell phones, and SMS messaging. The advances that came with social media as a means of communication for the d/Deaf are distinct from any of the previous technologies, however (Gerich & Fellingner, 2011). Other advances offered improved means of communication between d/Deaf individuals and d/Deaf advocates. The Internet, and social media specifically, changed the game because it was just as appealing and accessible to hearing people. They were already using it for themselves. This meant that d/Deaf-hearing communication saw advances as well, instead of just d/Deaf-d/Deaf communication or d/Deaf-d/Deaf advocate communication. d/Deaf people were mainly silent contributors to society until significant advances in technology emerged, including social media (Callis, 2017). Although the trend had been for d/Deaf people to mostly remain in their own

² d/Deaf people were some of the first to use two-way pagers, which were a precursor to the cell phone. This was significant because it placed them on equal ground with hearing people to be able to contact friends, family, coworkers, etc. As the technology evolved into cell phones, d/Deaf people lost that equal footing as the preference shifted toward voice calls. Today we see another shift toward text-based communication, including social media.

circles and be content with communication within that sphere, social media meant that not only could they now effectively communicate with their hearing counterparts, but they could actually be the ones starting and leading discussions (Gingiss, 2018). They were able to take a less passive role, and it was both easy and comfortable for hearing individuals to engage in such conversations because it took place through social media, which was a medium they had already begun to adopt and be comfortable with.

One aspect of social media that seems to be unique to previous communication in society is that so much of it is much more conducive to visual language than traditional communication methods have been. Some examples of this are graphic image files (GIFs), memes, videos, pictures, and other forms of visual communication, which have become rampant within the social media world. These types of communication are easier for d/Deaf people to understand and enjoy than spoken communication, for obvious reasons.³ With these visual communication styles having such a prevalent space in online communication, d/Deaf people are able to join in the conversations in posts and threads. Cummings, Sproull, and Kiesler (2002) define a “thread” as a situation “in which one person posts a question and several people reply to it”, (p. 79) and comment sections. In addition to being able to participate in these conversations, they are also able to initiate them with confidence that both d/Deaf and hearing individuals will be able to contribute to their content. This has become the case with the rise of Web 2.0.

Web 2.0 and Read/Write Culture

One term that has become significant when speaking about social media and online communication is Web 2.0, which refers to the shift that has taken place in communication

³ Although visual forms of communication are generally easier for d/Deaf people to understand, the reliance that they place on English and their references to pop culture, to which d/Deaf people still have relatively less access, makes them problematic in some ways.

through the Internet (Matthews, 2010). When the Internet first emerged, its main components were e-mail and other forms of written communication. As the Internet evolved, it became an environment where the users did not just consume messages and media, but were significantly more involved in the content of what was created and shared online. The audience went from being a passive audience to actual contributors. Another well-known term to describe this idea is Read Only vs. Read/Write.

As the name implies, Read Only applies to online content that can only be consumed. In contrast, Read/Write accounts for online content which is not just consumed, but can be modified. Thus, Web 2.0 and Read/Write encompass the same ideas of a shift in online content. As the Internet became available for more and more contributors, it has come to be not only a technological advance, but a social advance as well (Leighton, Berners-Lee, & Clark, 2013). Social interactions between contributors can be created and observed, all while they may be physically far from each other. Content creators want their online material to be seen by others and interacted with (Leighton et al., 2013). This demonstrates that social media is drawing people in not just to consume information and become more knowledgeable on certain topics, but to become part of the enormous online community which has formed. The shift described includes a new focus on visual communication, described in the previous paragraph.

More of Matthews' findings will be further expounded upon, acknowledging that he seems to be the only author who comments on Web 2.0 and its implications specifically within the Deaf community. This is a subject which needs additional research and contributors. Matthews (2010) goes on to describe a study where a filmmaking class was offered in Australia to Deaf students. The researchers wanted to observe whether or not the students would work

social media into their process. They noted that while one boy searched YouTube for clips he could use, many of the clips he watched included audio and no captions, but this did not appear to hinder his enjoyment or comprehension of the videos. This is a perfect example of how Web 2.0 is geared toward visual messages, and how that facilitates easier communication to d/Deaf populations. Although visual messages can be enhanced by audio, it is not generally required for the main message. Some examples are comedy clips, action scenes, miming, etc.

Matthews (2010) states that the nature of content within Web 2.0 facilitates a breaking down of barriers between d/Deaf and hearing parties. It is important to note that this is not always the case. Indeed, sometimes it may actually contribute to a separation between d/Deaf and hearing groups. So much of the visual communication seen in GIFs, memes, pictures, etc. refers to topics or ongoing conversations within pop culture, which could appeal more to hearing users. Although this is also true of other types of communication (such as text-based communication), these visual messages are harder to ignore. It is easy to scroll past written messages quickly enough that you do not see the content. It is not as easy to scroll past a moving GIF with bright colors or a meme featuring a funny scene from a movie or TV show (Gillett, 2014). Because those messages can demand the Internet user's attention, usually before they even realize they are reacting to it, they can contribute to an increased sense of isolation or being on the outside of a joke. However, Matthews is still accurate in saying that the line is dissolving because there is at least less separation than there was before Web 2.0. We may have more progress to make in this regard, but it seems that we are currently in that process.

For so much of history, d/Deaf people were disregarded and ignored by hearing people because they were seen as so different (Callis, 2017). There is a plethora of literature that

outlines the oppression of the d/Deaf in the U.S. (as well as other countries) by the hands of hearing people. Those within the hearing population have historically damaged the ability of d/Deaf people to communicate by pushing for oralism, a method that forces speech only and completely eliminates any use of signed language (Hajee, et al. 2017).⁴ As oralism spread, the number of schools for the d/Deaf in the U.S. that used ASL went from 26 to 0 in a span of 40 years (Lane, et al. 1996). The Deaf community advocated fiercely for the use of ASL and Deaf teachers, but their efforts were unsuccessful (Lane, et al. 1996). Although some change began to take place before the Internet and social media, those mediums exponentially increased the ability of d/Deaf people to speak up for themselves, especially as the Read/Write culture took over. For so long, they needed to rely on d/Deaf advocates to be their bridge to the hearing world, or else had to accept hearing people with no knowledge of their culture making assumptions about them, with little ability to combat those beliefs. Social media and Read/Write culture means that they are able to defend their own culture and have a method of doing so which hearing people will listen to because it is done through a medium which they use in their own lives, too. It also enables them to find their own place within hearing culture.

Entering the Hearing World

Social media is one way in which d/Deaf individuals are able to access the hearing world and enter it on their own terms. This concept has been seen as more apps and programs are available to the Deaf community. One example is Actiview. Actiview is a cell phone app which allows disabled people, such as those with vision and hearing impairments, to participate in movies. The app offers a variety of services, such as audio descriptions of scenes, translation into

⁴ Alexander Graham Bell, inventor of the telephone, is one of the most well-known proponents of oralism and opponents of ASL, despite both his wife and mother being deaf.

other languages (including ASL), and enhanced audio (Coldewey, 2017). This app is pertinent because a large amount of social media content involves the participants talking about current movies and television shows. Although d/Deaf people have access to social media, they are often still left out of certain aspects of social media, such as those just mentioned because consuming the media that is the topic of conversation can present such a challenge. Programs like Actiview are paving the way for d/Deaf people to feel more included and in-the-know, including in their online conversations. Rather than ignoring posts, threads, and conversations about the latest movie, they can experience it for themselves and then contribute to the conversation. There is a two-way relationship between social media and apps like Actiview, because social media can be used to spread awareness and use of the app.

The revolution of the Internet, and social media by extension, has brought up issues of accessibility for disabled groups because many companies do not take steps to make their online content accessible (Ellis, 2011). When d/Deaf people observe this kind of behavior online (certainly by individuals, but especially by companies) it tells them that their needs are not important. Features that make content more accessible for the d/Deaf community (such as subtitles, and video-enabled pages) should be present from the beginning stages of websites and other online atmospheres. When those measures are taken later, it comes across as the company adhering to regulations, such as the Americans With Disabilities Act (ADA), to ensure they don't receive corrective action or fines, rather than actually caring about the experience of the d/Deaf person.

A more ideal situation would be one where the languages and cultures of both d/Deaf and hearing groups are more fully blended. This is not just a pleasant idea, but an environment that

has a historical basis in our country. On Martha's Vineyard from the 17th to early 20th century, everyone on the island (hearing and deaf) used sign language to communicate because of the high proportion of deaf people on the island (Ellis, 2011). One of Ellis' inferences is that "For deaf people the barrier to full participation is not their inability to hear but rather the lack of common mode of communication with the hearing community." This lack of a common mode of communication is diminished through social media, since d/Deaf and hearing users can implement written English as the shared communication mode. This obviously differs from the environment on Martha's Vineyard where everyone used sign language to communicate, but it illustrates the same principle. The disability of the d/Deaf has more to do with socially normed communication barriers than with the physical condition of not being able to hear. Perhaps that physical condition is the cause and the inability to communicate is the effect, and it may be that the effect is more relevant than the cause. Although it has been demonstrated that social media has brought positive effects to communication within the d/Deaf community, it is vital to understand the ways in which it falls short in aiding that communication. The first step to comprehending some of the negative sides of social media for d/Deaf communication with both hearing and d/Deaf advocate groups is an examination of ASL as a language.

ASL Grammar and Language Preference

As explained, social media has benefited the Deaf community in a myriad of ways, including increased support and ease of communication between d/Deaf and hearing parties. However, it would not be accurate to say that it has successfully fulfilled all of their needs. This is because of a factor that should be painfully obvious, although often is not. Apart from the visual communication aspects of social media, the remainder of online communication is

virtually all geared toward written English in the United States. This presents a problem because while most d/Deaf people use written English daily, it is almost never the preferred language of most d/Deaf people, especially for those who are born d/Deaf.

A common misconception about American Sign Language is that it is a visual form of English. Many who are unfamiliar with the language assume that it is comprised of signs which imitate or represent English words and phrases. In reality, this could not be further from the truth. ASL is its own distinct language with its own grammar and structure (Guimarães & Fenandes, 2018). It is completely separate from English and every other language, including other signed languages. Handshape, palm orientation, movement, and location of the sign all contribute to the grammar of ASL. Also included in grammatical makeup of a sign is the use of facial expressions, including raised eyebrows, size of the eyes, head moving forward or backward, etc. (Keating & Mirus, 2003). These grammatical structures which are vital to ASL make it apparent that it is a completely different language from English, as none of those grammatical factors are present in English whatsoever.

As with any other two languages being compared to each other, most ideas have no direct translation from English to ASL. Interpretations between the two languages are quite simply an attempt to best identify a thought within one language and convert that thought into the other language using different words and phrases than those used in the original message. While most common languages used today have both a spoken and written form, no written form of ASL exists because it is a visual language. Written English is not the text version of ASL. Therefore,

ASL is the native language of most Deaf individuals⁵, and English (especially written English) is a foreign language which can be extremely difficult to learn.

This presents a problem because social media's enormous use of text-based communication means that any time the d/Deaf are using written language to communicate online, they are using a language that is not their preferred or native language. The ability of d/Deaf individuals to participate online and benefit from that participation requires a high level of written skills (Ellis & Kent, 2017). Kožuh, Hintermair, and Debevc (2016) add that "Written or spoken language for many [d/Deaf] is their second language, which may have an impact on their ways of using and behaviours related to social networking sites" (p. 295). It is possible that the hearing population may tend to take for granted how difficult this is. It would be the same as if a hearing person were required to write all their contributions on social media in a language other than their native language - a language that they never use except when they are required to read or write. While it is true that the ability of the d/Deaf to communicate in written English online is progress in some regards because both d/Deaf and hearing have access to the shared writing system, perhaps there is room for a deeper comprehension of just how significant an undertaking this is for the d/Deaf. When d/Deaf individuals communicate on a regular basis in a foreign language, many would likely appreciate acknowledgement of their efforts. Unfortunately, these acknowledgements are not always present currently. The current belief which seems to sometimes persist online is that d/Deaf people are (or should be) fluent in written English (Fels, Richards, Hardman, & Lee, 2006).

⁵ Many deaf individuals have at least some sort of familiarity with ASL as well.

d/Deaf people may be limited by the Internet because the majority of pages are presented in a language other than their native language, which can subsequently mean that they are limited in employment, social, work, and educational opportunities (Fels, et al, 2006). Having access to the web and understanding its content is vital in the 21st century because so much of our world happens online now. It is a major way in which a significant part of our society stays up-to-date with what is happening in the lives of their family and friends. News consumption and information about current events happens online. Most companies have websites which provide important information about who they are and what they offer. Many applications for jobs and schools are now offered exclusively online. It would be difficult for any individual who does not use and understand the Internet, social media, and the dominant language in that environment to have the same knowledge and opportunities as someone who does. The issue described here demonstrates that it is not only a lack of their preferred language on social sites that affects the d/Deaf (although that is a significant disadvantage), but the dominance of text-based English online translates into disadvantages in essentially every other aspect of their lives as well.

The preference of many d/Deaf people to be able to use their native language of ASL rather than written English is seen by observing the specific sites that they use. Guimarães and Fenandes (2018) found that most d/Deaf participants listed YouTube as the most important social media site, while Twitter was seen to be comparatively unpopular. Glide and Marco Polo are additional examples of apps that d/Deaf people like, because they rely mostly on video. Since YouTube focuses on videos and Twitter is geared toward text, the popularity of YouTube within the d/Deaf community supports this paper's claim that social media with a visual component facilitates a more attractive social interaction because it need not occur in their second language.

(One likely reason that YouTube was the preference of most d/Deaf individuals is because they could watch videos in ASL, rather than reading English. Any time a social media user who identifies ASL as their native language can watch a video in that language, it is going to be more comfortable for them, require less concentrated effort, and can be counted as progress toward a thriving, self-identified d/Deaf community.

As has been discussed, when considering social media within the d/Deaf community, this study must acknowledge that while the d/Deaf can sometimes be forced to use a language they do not prefer in d/Deaf-hearing communication, it is important that this medium still provides a communication method between both communities. An example that shows the benefits of shared communication, while simultaneously illustrating the problems of using a language not quite natural to one of the parties, was identified by Pierre (2019). His observation was that social media has contributed to the existence of more dating relationships where one member is d/Deaf and the other is hearing because so many platforms are based on written conversations, which they can both use. However, it was found that this could also cause miscommunication for these couples because d/Deaf people rely so heavily on facial expressions and body language to interpret meaning of messages. This example demonstrates how social media takes away part of the grammar that d/Deaf people rely on. Facial expressions, body orientation, movement, etc. are all aspects included in the grammar of ASL.⁶ When they are altered, the meaning of the message is also altered. When they are absent altogether, d/Deaf people are forced to work off an incomplete message. With this consideration, it is not surprising that so much miscommunication takes place. This concept is by no means exclusive to dating relationships, but applies to any

⁶ Emojis, or small digital icons used to indicate an idea or emotion, are a common mode of communication on social media and other forms of messaging. Because they make use of facial expressions, which is an important grammatical aspect of ASL, they can frequently be interpreted differently by d/Deaf and hearing readers.

conversation between d/Deaf and hearing parties where written English is the method of communication. While miscommunication provides one obstacle in d/Deaf-hearing communication, another barrier that must be explored is the idea of audism, as will be demonstrated.

Audism

“Audism” is a term which is very well known within the Deaf community, but virtually unknown outside of it. Tom Humphries created the term in 1977 after realizing that there was no word in the English language referring to discrimination against Deaf people based on their inability to hear (Humphries, 2001). He defines audism as, “The notion that one is superior based on one’s ability to hear or behave in the manner of one who hears (p. 1)”. Audism is just as real as any other type of discrimination. It is still prevalent today and can be observed in social media interactions when d/Deaf individuals are belittled for their poor written skills, judged for their life decisions, disregarded because of their background, or receive a plethora of other behaviors typical of a prejudiced mindset. Examples of audism in online d/Deaf-hearing conversations will be explored further.

Cyberbullying and Discrimination

Although social media has benefited society by allowing quick, easy communication with virtually anyone, this reality has its downfalls as well. Social media is sometimes known as a place where people go to conduct bullying, harassment, aggression, and other acts of violence (Patton, et. al, 2014). This can certainly apply in instances when d/Deaf and hearing individuals or groups are engaged in online communication. These are instances where audism can sometimes have a presence.

d/Deaf youth are at a higher risk of being a victim of cyberbullying than hearing youth (Bauman & Pero, 2011). Cyberbullying is perhaps one of the most negative effects linked with social media, especially when considering that it could mean that young people with disabilities are at an even higher risk of bullying than they were before the Internet and social media. This includes young people within the d/Deaf population. Audism may be used as a fuel to continue instances of cyberbullying against d/Deaf youth. However, d/Deaf youth and teens are not the only victims of cyberbullying. Deaf soccer player Daniel Ailey was mocked by spectators at one game because of the voice he used to alert teammates of his presence (Swinbourne, 2012). The mocking became so intense that the game was temporarily halted and police were called to the scene (Swinbourne, 2013). John Griffin, CEO of the U.K.'s biggest taxi company, later saw a video of the incident. Griffin stated that instead of stopping the fans of the opposing team from mocking Ailey's voice, the police should have "demanded that he [Ailey] discontinue making noises that could be misinterpreted by members of the crowd" (Swinbourne, 2013). Griffin also compared Ailey's voice to the grunting of female tennis players (Swinbourne, 2012). This is an example of how social media can create a larger pool of potential bullies, as Griffin was not even physically present at the game.

Along with cyberbullying, social media may present more opportunities for general discrimination against the d/Deaf population as well. For example, actor Chris Pratt posted a video to his Instagram promoting *Guardians of the Galaxy, Vol. 2*, telling people that in order to enjoy the post, they would need to turn up the volume (Shepherd, 2017). Many members of the Deaf community found this offensive because they rely on subtitles in so many situations. This example is especially poignant because the discrimination was unintentional. Shepherd describes

Pratt's apology, part of which was in ASL. In his apology Pratt said that he realized he had unintentionally hurt d/Deaf and hearing-impaired viewers of his post. He then encouraged Instagram to offer the option to automatically caption videos, mentioning how lacking they are in this area (Shepherd, 2017). This is an important example because it shows the prevalence of discrimination against the d/Deaf on social media platforms, but also shows that the individual involved took it as a learning opportunity and promoted services which could hopefully prevent further discrimination. While it may be somewhat easy to distinguish audism as a factor in cyberbullying and other harmful online behavior, it is important to explore whether it is present in more casual online conversations as well.

Online Conversations Between d/Deaf and Hearing

Social media is an interesting place to go to observe trends in d/Deaf-d/Deaf communication, d/Deaf-d/Deaf advocate communication, and d/Deaf-hearing communication. As is inherent with conversations between anyone on social media platforms, conversations between these three particular groups can cover an innumerable range of topics. Politics, religion, and other serious subjects may be discussed. It also offers a place to discuss likes and interests, such as music and movies.

Many a conversation has been sparked through social media platforms when a hearing actor or actress (frequently well-known) is given the role of a d/Deaf character for a movie or television series. One example is *The Silence*, a movie which starred a hearing actress playing a Deaf girl (Cassidy, 2018). Much of the Deaf community feels that those roles should be given specifically to d/Deaf actors and actresses, while the hearing population tends to say that the job of actors is to fill a role as someone much different than themselves, which justifies the actor's

representation of a d/Deaf person (Saunders, 2016). d/Deaf people see the hearing perspective in this matter as a form of audism because the hearing stance is seen as a statement that d/Deaf people do not have the skills required to act, or that those involved with the movie do not want to interact with d/Deaf people directly or have to communicate through interpreters. Whatever the case may be, this is an issue that has been important to the Deaf community for decades. However, it was not until social media became widespread that these conversations began happening within d/Deaf-hearing situations. Until that point, it was mostly a situation where d/Deaf people would express their frustration to each other or occasionally they would form protest marches, but for the most part, their view did not gain much traction outside of the Deaf community (Voices, 1973).

Putting the differences of opinion aside, it seems that the behavior which exists in these conversations on social media can sometimes exhibit a high amount of judgment and assumptions, especially coming from the hearing side. As Saunders (2016) explains, the hearing point of view in online forums “often [targets] the Deaf community as lacking in knowledge and understanding” (p. 88). Many times, this is because the d/Deaf person may have lower writing skills than the hearing person, which goes back to the issue of d/Deaf people sometimes not having an option to communicate in their preferred language online. The hurtful comments, frequently directed toward d/Deaf people or the Deaf community at large, could point to audism in action in today’s social media world. Audism, like any kind of discrimination, inherently bears the trait of someone making negative assumptions about a person or people who belong to a culture or group that they know little to nothing about. Such is the case in conversations when

the hearing side automatically disregards the other point of view simply because it is coming from a d/Deaf person or group.

Social networks, although helpful, can still present problems for d/Deaf participants because of the attitudinal barriers held by other participants of social media (Arndt & Parker, 2016). Although social media opens opportunities for hearing people to learn more about Deaf culture and communicate with d/Deaf people, it may be that it is not happening because of preconceived thoughts and notions about the Deaf community. More research needs to be done in this area to determine whether or not hearing people use social media as a means to learn more about Deaf culture, especially if they have never come in contact with that culture before. If such is the case, it will also be important to note the different levels at which this takes place and which sources they go to in order to learn more about Deaf culture.

The attitudinal barriers mentioned in the previous paragraph are present even in some of the research for this paper. While discussing the benefits that the Internet has brought to emotional support for d/Deaf people, Barak and Sadovsky (2008) mention specifically that “a therapist who uses sign language is not necessary” because the hypothesized d/Deaf client and therapist can communicate exclusively online. This seems like a bold assumption, as the authors do not give native language or language preference any consideration.

Along with audism, another contributor to the judgmental stereotypes that the hearing population often holds for d/Deaf individuals and Deaf culture could be the online disinhibition effect. For example, most people have imaginary conversations in their head, representative of things they may wish to say in their real-life relationships (Suler, 2004). This tendency can translate to online conversations because when the person you are talking to is not visible, the

situation is more in line with those “imaginary conversations” (Suler, 2004). This is known as the disinhibition effect. More research is necessary to determine the specific consequences of social media on various social subcultures. However, this paper theorizes that this effect could partly account for instances when d/Deaf individuals’ intelligence may be questioned or insulted, their culture may be belittled, or their life decisions may be mocked, among many similar behaviors. The disinhibition effect could account for the hearing person directing hurtful comments to a d/Deaf person online, failing to consider the effects of these comments because they are not looking at the profile in front of them as an actual human being.

Face-to-face interactions have a higher social cost and tend to be more effective (Bohns, 2017). It is the view of this paper that in situations when the disinhibition effect is at play, the effectiveness of communication between different subcultures is negatively altered. They would probably be more willing to listen to the d/Deaf person’s point of view. (Obviously this can be applied vice versa, where a d/Deaf person is making judgmental comments toward a hearing person, but the point is that the hearing population fails to realize the disadvantaged position the d/Deaf person occupies in the interaction.) If the hearing population understood the relationship of d/Deaf people to writing, they may, perhaps, exercise more sensitivity in their online communication with the d/Deaf. Now that we understand some of the issues social media causes to communication for the d/Deaf, it is vital to consider how social media could be even more of an asset within that community than it currently is.

Solutions

If the amount of discrimination against d/Deaf people throughout social media platforms were able to be diminished or eradicated, this would be one step in making social media a more

complete benefit to d/Deaf people and their communication with both hearing groups and d/Deaf advocate groups. As more websites allow for video from content creators and contributors, d/Deaf individuals will be able to use their native language of ASL online more often. As a result, they will not be ignored or put down because of their lack of English skills as frequently as they currently are.

Although some forms of social media currently allow for d/Deaf people to use ASL through video, there are many facets which do not. One such area that could be especially helpful is the addition of the option to use video as comments responding to something else. Let us use Facebook as an example here. When posting a Facebook update, a d/Deaf person is able to choose a video option, and could therefore express their update in ASL. However, if their d/Deaf or d/Deaf advocate friends and family members want to use ASL in comments responding to the status, they do not have the option to easily do so. The same can be said for commenting on Instagram. If d/Deaf people are able to participate in all types of social media without needing to rely on a second language to do so, it seems that this would be more beneficial to their communication.

Because audism is a form of discrimination, the methods which have been used to fight other types of discrimination (racism, sexism, ageism, etc.) can be helpful. One of the most important steps in combating racism, for example, is recognizing one's own preconceived ideas and prejudices (O'Neal, 2017). You cannot reduce or eliminate discriminatory thoughts and ideas when you do not even recognize their presence. The same is true in the fight against audism. Social media can be used to bring light to issues where audism may be present, especially when the hearing population does not recognize that audism. Nyle DiMarco, a Deaf

model and actor, uses his celebrity status to bring awareness to Deaf issues (Williams, 2019). He partnered with Apple to initiate the “Everyone Can Code” program at the California School for the Deaf (Shea, 2018). Marlee Matlin, Oscar-winning Deaf actress, used her Twitter account to support more accurate captioning requirements and was a big part of the reason those requirements passed (Fisher, 2014). As movies and TV shows include more d/Deaf actors and participants, they will be able to spread awareness about d/Deaf issues from a firsthand perspective and reduce audism in everyday situations.

Regarding the issue of d/Deaf youth being at an increased risk of cyberbullying because of social media, it is beneficial to examine proposed solutions that already exist to combat cyberbullying as a whole. One law professor comments that the most important remedies to cyberbullying are threefold: education, improved technology, and law reform (Palfrey, 2009). Palfrey notes that young people themselves are the biggest help because they contribute to creating social norms (para. 10). Education is especially worth noting, as he sees it as the most important of the three. Educating young people about the risks and consequences of cyberbullying can hopefully put them in a position where they do not want to be involved in such a harmful behavior, or even want to fight against it. This idea can be applied specifically to the d/Deaf community. As d/Deaf youth and teens are taught directly about cyberbullying, they will be given power to influence their peers (both hearing and d/Deaf). Social media can even be the means of spreading that education. The hope is that this influence can create a perspective shift so that online language and behavior that is classified as bullying is not accepted within the social norm.

Technology and social media go hand-in-hand. One example is improved cameras and recording devices. Most smartphones include cameras which can capture both pictures and videos. On the same smartphone, those pictures and videos can then be shared to Facebook, Instagram, Twitter, YouTube, and other social media platforms. This technology and social media partnership can be used to show accurate representations of various aspects of life for a d/Deaf person. Let us use cochlear implants as an example. Saunders (2016) warns of the danger of the popularity of online videos depicting cochlear implants as a miracle or complete cure of a child's deafness. These types of videos typically receive hundreds of thousands of views while, "videos (and blogs/vlogs) which feature people giving testimonials on how their implant failed to meet expectations; how a botched implantation surgery ruined facial nerves; or a child throwing a tantrum because she does not want to wear her implant, on the other hand, barely garner hundreds of views" (p. 6).⁷ The more that technology is used to capture real moments of the d/Deaf experience and shared through social media, the more likely it will be for hearing people with no background of ASL or Deaf culture to have a better understanding of those experiences.

Another solution that would contribute to social media being an even more positive influence for communication between d/Deaf, hearing, and d/Deaf advocate individuals and groups is further research on the implications of social media for the d/Deaf specifically. Although there are some studies and research available, it cannot be considered sufficient. When considering ASL specifically, research done exclusively in the United States will be especially helpful. There are a multitude of specific areas that need more research behind them. Among

⁷ Videos that depict children wearing a cochlear implant for the first time and depicting the idea that they are magically cured without showing any of the negative effects of cochlear implants are often referred to within the Deaf community as "disability porn".

these are: how varied social media tendencies are among d/Deaf users and hearing users; the implications of Web 2.0 within the Deaf community; whether hearing demographics with no background of Deaf culture use social media to learn more about Deaf culture and ASL, and to what extent; and cyberbullying among d/Deaf youth and adults within the United States.

Conclusion

The more that sign language is used *and seen* online, the more valid it will become to hearing individuals who have little to no knowledge of sign language and/or the Deaf community. This goes way beyond the casual, entertaining nature of social media. Social media is often used to bring awareness to social causes. The d/Deaf see that opportunity in educating others about the importance of sign language through online mediums. (Even when they are not saying that outright, but simply using sign language as their mode of communication online.) Social media is a tool which allows those messages of awareness to be spread more quickly and efficiently than ever before. This paper's view is that as ASL is observed more frequently by hearing people on social media, the more they will be able to see it as a language that is just as effective for communication as any of the languages with which they may be familiar.

As described, social media has had numerous effects for the Deaf community, both positive and negative. Social media has brought the d/Deaf population access to support, mental health and well-being, a platform to advocate for causes which are important to them, and the ability to converse with hearing individuals online. It has also brought tension because of a lack of access to their preferred language, interpreting messages without the full grammar they rely on, and exposure to the hearing community's assumptions which can amplify hurtful comments directed toward them. In light of the complex issues which arise from social media, it is

important to consider how social media has affected the Deaf community, specifically regarding whether it has been beneficial or detrimental to relationships in d/Deaf-d/Deaf situations, d/Deaf-hearing situations, and d/Deaf-d/Deaf advocate situations. Although social media has been beneficial in some ways by improving communication for those within the d/Deaf community, the online implementation of ASL by d/Deaf users and exposure to ASL for hearing users will escalate its effectiveness by increasing understanding and creating an even smoother process for communication.

REFERENCES

- Akram, W. & Kumar, R. (2018). A Study on Positive and Negative Effects of Social Media on Society. *International Journal of Computer Sciences and Engineering, Volume 5, Issue 10* (pp. 347-354).
- Anderson, N. (2017). What is social media, why should health professionals care and how does one engage effectively? *Swiss Sports & Exercise Medicine, Volume 66, Issue 4* (pp. 14-19).
- Arndt, Katrina & Parker, Amy. (2016). Perceptions of Social Networks by Adults Who Are Deafblind. *American Annals of the Deaf, Volume 161, Issue 3* (pp. 369-383).
- Barak, Azy & Sadosky, Yael. (2008). Internet use and personal empowerment of hearing-impaired adolescents. *Including the Special Issue: Internet Empowerment, Computers in Human Behavior, Volume 24, Issue 5* (pp. 1802 - 1815).
- Bauman, Sheri & Pero, Heather. (2011). Bullying and Cyberbullying Among Deaf Students and Their Hearing Peers: An Exploratory Study. *Journal of Deaf Studies and Deaf Education, Volume 16, Issue 2* (pp. 236-253).
- Bohns, Vanessa K. (2017). A Face-to-Face Request is 34 Times More Successful Than an Email. *Harvard Business Review*. Retrieved from <https://hbr.org/2017/04/a-face-to-face-request-is-34-times-more-successful-than-an-email>
- Brown, Jessica. (2018). Is social media bad for you? The evidence and the unknowns. *BBC News*. Retrieved from <https://www.bbc.com/future/article/20180104-is-social-media-bad-for-you-the-evidence-and-the-unknowns>.

- Callis, Lydia. (2017). Hearing the Voice of the Deaf Community. *The Huffington Post*. Retrieved from <https://www.signlanguagenyc.com/hearing-the-voice-of-the-deaf-community/>
- Cassidy, Elizabeth. (2018). Director John Leonetti Criticized by Deaf Community for Upcoming Horror Film ‘The Silence’. *The Mighty*. Retrieved from <https://themighty.com/2018/09/john-leonetti-the-silence-deaf-community-outrage-nyle-di-marco-marlee-matlin/>
- Chaykowski, Kathleen. (2017). Mark Zuckerberg Gives Facebook A New Mission. *Forbes Magazine*. Retrieved from <https://www.forbes.com/sites/kathleenchaykowski/2017/06/22/mark-zuckerberg-gives-facebook-a-new-mission/#413c994b1343>
- Coldewey, Devin. (2017). Actiview aims to streamline movie accessibility for millions of hearing and vision impaired. *Techcrunch*. Retrieved from <https://techcrunch.com/2017/06/13/actiview-aims-to-streamline-movie-accessibility-for-millions-of-hearing-and-vision-impaired/>
- Cummings, Jonathan N.; Sproull, Lee; & Kiesler, Sara B. (2002). Beyond Hearing: Where Real-World and Online Support Meet. *Group Dynamics, Volume 6, Issue 1* (pp. 78-88).
- Ellis, Kate & Kent, Mike. (2011). *Disability and New Media*. New York, NY: Routledge.
- Fels, Deborah I.; Richards, Jan; Hardman, Jim; & Lee, Daniel G. (2006). Sign Language Web Pages. *American Annals of the Deaf, Volume 151, Issue 4* (pp. 423-433).
- Fisher, Luchina. (2014). How Marlee Matlin Helped Force Streaming Video Closed Captions Into Digital Age. *ABC News*. Retrieved from

<https://abcnews.go.com/Entertainment/marlee-matlin-helped-force-streaming-video-close-d-captions/story?id=23503281>

Gerich, Joachim & Fellingner, Johannes. (2011). Effects of Social Networks on the Quality of Life in an Elder and Middle-Aged Deaf Community Sample. *The Journal of Deaf Studies and Deaf Education, Volume 17, Issue 1* (pp. 102-115).

Gillett, Rachel. (2014). Why We're More Likely to Remember Content With Images and Video. *Fast Company*. Retrieved from <https://www.fastcompany.com/3035856/why-were-more-likely-to-remember-content-with-images-and-video-infogr>.

Gingiss, Dan. (2018). How Social Media Became a Game-Changer for the Deaf Community. *Social Media Today*. Retrieved from <https://www.socialmediatoday.com/news/how-social-media-became-a-game-changer-for-the-deaf-community/514223/>

Guimarães, Cayley & Fenandes, Sueli. (2018). The New Agora: Social Media as a Vector for Sign Language as a Language of Culture, Identity and Inclusion of the Deaf. Presented at the Proceedings of the 51st Hawaii International Conference on System Sciences. Retrieved from <https://scholarspace.manoa.hawaii.edu/bitstream/10125/50156/paper0269.pdf>

Hajee, Mohd Aqil; Vaidya, Shruti; & Hajee, Atiya. (2017). Oralism is the huge, entirely avoidable barrier that Deaf people are forced to face. *Medium*. Retrieved from <https://medium.com/skin-stories/oralism-is-the-huge-entirely-avoidable-barrier-that-deaf-people-are-forced-to-face-91e0421e533b>

- Humphries, Tom. (2001). The Making of a Word: Audism. CLC2001 Readings. Retrieved from <http://jjelley1.workflow.arts.ac.uk/artefact/file/download.php?file=1747574&view=165258>.
- Jiang, Hua; Luo, Yi; & Kulemeka, Owen. (2017). Strategic Social Media Use in Public Relations: Professionals' Perceived Social Media Impact , Leadership Behaviors, and Work-Life Conflict, *International Journal of Strategic Communication, Volume 11, Issue 1* (pp. 18-41).
- Keating, Elizabeth & Mirus, Gene. (2003). American Sign Language in Virtual Space: Interactions Between Deaf Users of Computer-Mediated Video Communication and the Impact of Technology on Language Practices. *Language in Society, Volume 32, Issue 5* (pp. 693-714).
- Kim, Yonghwan; Hsu, Shih-Hsien; de Zuniga, Homero Gil. (2013). Influence of Social Media Use on Discussion Network Heterogeneity and Civic Engagement: The Moderating Role of Personality Traits. *Journal of Communication, Volume 63, Issue 3* (pp. 498-515).
- Kožuh, Ines; Hintermair, Manfred; & Debevc, Matjaž. (2016). Community Building Among Deaf and Hard of Hearing People by Using Written Language on Social Networking Sites. *Computers in Human Behavior, Volume 65* (pp. 295-307).
- Lane, Harlan; Hoffmeister, Robert; & Bahan, Ben. (1996). *A Journey Into the DEAF-WORLD*. San Diego, California: DawnSignPress.
- Lang H. G. (2000). *A phone of our own: The deaf insurrection against Ma Bell*. Washington, DC: Gallaudet University Press.

- Leigh, I. W. (1999). Inclusive education and personal development. *Journal of Deaf Studies and Deaf Education, Volume 4* (pp. 236–245).
- Maiorana-Basas, Michella & Pagliaro, Claudia M. (2014). Technology Use Among Adults Who Are Deaf and Hard of Hearing: A National Survey. *The Journal of Deaf Studies and Deaf Education, Volume 19, Issue 3* (pp. 400-410).
- Matthews, N.; Young, S.; Parker, D.; & Napier, J. (2010). Looking across the hearing line? Exploring young deaf people's use of Web 2.0. *M/C Journal, Volume 13, Issue 3*.
- Moreman, Shane. (2018). Deaf Queer world-making: A thick intersectional analysis of the mediated cultural body. *Journal of International and Intercultural Communication, Volume 11, Issue 3* (pp. 216-232).
- Nardi, Bonnie & Whittaker, Steve. (2002). The Place of Face-to-Face Communication in Distributed Work. In Hinds & Kiesler (Eds.), *Distributed Work* (83-112). Massachusetts Institute of Technology.
- O'Neal, Lonnae. (2017). Ibram Kendi, one of the nation's leading scholars of racism, says education and love are not the answer. *The Undeclared Magazine*. Retrieved from <https://theundefeated.com/features/ibram-kendi-leading-scholar-of-racism-says-education-and-love-are-not-the-answer/>
- Ortiz-Ospina, Esteban. (2019). The rise of social media. *Our World in Data*. Retrieved from <https://ourworldindata.org/rise-of-social-media>.
- Padden, Carol. (2007). The Decline of Deaf Clubs in the United States: A Treatise on the Problem of Place. In D. Bauman (Ed.) *Sightings: Explorations in Deaf Studies*. Minneapolis: University of Minnesota Press.

Palfrey, John. (2009). Palfrey: Searching for solutions to cyberbullying. *Harvard Law Today*.

Retrieved from

<https://today.law.harvard.edu/palfrey-searching-for-solutions-to-cyberbullying/>

Parfitt, Ellie. (2018). How social media is changing the lives of deaf teens. *HearingLikeMe*.

Retrieved from

<https://www.hearinglikeme.com/how-social-media-is-changing-the-lives-of-deaf-teens/>

Patton, Desmond Upton; Hong, Jun Sung; Ranney, Megan; Patel, Sadiq; Kelley, Caitlin;

Eschmann, Rob; & Washington, Tyreasa. (2014). Social media as a vector for youth violence: A review of the literature. *Computers in Human Behavior, Volume 35* (pp. 548-553).

Peacock, Louisa & Sanghani, Radhika. (2014). Teenagers 'more confident talking to each other

via smartphones than face-to-face' - study. *The Telegraph*. Retrieved from

<https://www.telegraph.co.uk/women/mother-tongue/10793984/Teenagers-more-confident-talking-to-each-other-via-smartphones-than-face-to-face-study.html>

Pew Research Center Study. (2019). Social Media Fact Sheet. *Pew Research Center*. Retrieved

from <https://www.pewresearch.org/internet/fact-sheet/social-media/>

Pew Research Center Study. (2018). Social Media Use in 2018: Demographics and Statistics.

Pew Research Center. Retrieved from

<https://www.pewresearch.org/internet/2018/03/01/social-media-use-in-2018/>

Pierre, Tania. (2019). How Social Media Empowers and Connects People - D/deaf and Hearing.

Retrieved from

<https://deafunity.org/article-interview/how-social-media-empowers-and-connects-people-deaf-and-hearing/>

- Power, D.; Power, M. R. (2008). *Communication and culture: Signing deaf people online in Europe*. Paper presented at the European Communication Conference, European Communication Research and Education Association, Barcelona, Spain.
- Power, M.R.; Power, Des; & Horstmanshof, Louise. (2007). Deaf People Communicating via SMS, TTY, Relay Service, Fax, and Computers in Australia. *The Journal of Deaf Studies and Deaf Education, Volume 12, Issue 1* (pp. 80-92).
- Ridings, Catherine M.; Gefen, David; & Arinze, Bay. (2002). Some antecedents and effects of trust in virtual communities. *Journal of Strategic Information Systems, Volume 11, Issues 3-4* (pp. 271-295).
- Saunders, K. Crom. (2016). A Double-Edged Sword: Social Media as a Tool of Online Disinhibition Regarding American Sign Language and Deaf Cultural Experience Marginalization, and as a Tool of Cultural and Linguistic Exposure. *Social Media + Society, Volume 2* (pp. 87-96).
- Schneider, Erin; Kozak, L. Viola; Santiago, Roberto; & Stephen, Anika. (2012). The Effects of Electronic Communication on American Sign Language. *Sign Language Studies*. Retrieved from <https://muse.jhu.edu/article/477383>.
- Scott, Geraldine. (2019). Norfolk deaf blogger battling for more subtitled cinema screenings. *Eastern Daily Press*. Retrieved from <https://www.edp24.co.uk/news/health/wymondham-deaf-blogger-ellie-parfitt-in-subtitled-cinema-battle-1-6108549>

- Shea, Ryan. (2018). Tim Cook and Nyle DiMarco Team Up for Something Wonderful. *Instinct Magazine*. Retrieved from <https://instinctmagazine.com/tim-cook-and-nyle-dimarco-team-up-for-something-wonderful/>
- Shepherd, Ken. (2017). Chris Pratt apologizes for posting video some deaf people found offensive. *The Washington Times*. Retrieved from <https://www.washingtontimes.com/news/2017/may/5/chris-pratt-apologizes-for-posting-video-that-some/>
- Shoham, S.; Heber, M. (2012). Characteristics of a virtual community for individuals who are d/Deaf and hard of hearing. *American Annals of the Deaf, Volume 157, Issue 3* (pp. 251-263).
- Suler, John. (2004). The Online Disinhibition Effect. *CyberPsychology & Behavior, Volume 7, Issue 3* (pp. 321-326).
- Swinbourne, Charlie. (2013). Deaf footballer Daniel Ailey says abuse he experiences is ‘the same as racism’. *The Guardian*. Retrieved from <https://www.theguardian.com/society/2013/feb/26/deaf-footballer-daniel-ailey-abuse>
- Swinbourne, Charlie. (2012). Deaf voices are natural, so why are they mocked? *The Guardian*. Retrieved from <https://www.theguardian.com/commentisfree/2012/nov/11/deaf-voices-mocked>
- Swinbourne, Charlie. (2016). Why Facebook has become so important to the sign language community. *BBC News*. Retrieved from <https://www.bbc.com/news/disability-35103292>.

Valentine, Gill & Skelton, Tracey. (2008). Changing Spaces: The Role of the Internet in Shaping Deaf Geographies. *Social & Cultural Geography, Volume 9, Issue 5* (pp. 469-485).

Voices. Directed by Kevin Billington, Hemdale Film Corporation, 1973.

Wanshel, Elyse. (2019). Jameela Jamil Turns Down Role, Says a ‘Brilliant Deaf Woman’ Should Get It Instead. *The Huffington Post*. Retrieved from

https://www.huffpost.com/entry/jameela-jamil-turns-down-role-says-a-brilliant-deaf-woman-should-get-it-instead_n_5c422716e4b0a8dbe1713af4.

Wiederhold, Brenda. (2017). Beyond direct benefits: Indirect health benefits of social media use. *Cyberpsychology, Behavior, and Social Networking, Volume 20, Issue 1* (pp. 1-2).

Williams, Maxwell. (2019). How Model, Actor, and Deaf Activist Nyle DiMarco Plans to Use His Platform. *L'Officiel USA Magazine*. Retrieved from

<https://www.lofficielusa.com/men/deaf-model-nyle-dimarco-digital-issue-2019>