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Politics and Media Among the Deaf and Hard of Hearing

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Dedication

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Abstract

This study investigated the civic engagement, political participation, and choice of news media of the deaf and hard of hearing (DHH) community at the National Technical Institute for the Deaf (NTID) in Rochester, New York. Socialization factors that contribute to civic engagement and political participation were examined and contrasted with a hearing sample of students at Rochester Institute of Technology. The Activity Orientation Scale combined with the Political Media Gratification Scale were used to measure the likelihood of political engagement among the DHH and understand their media viewing habits. Socialization factors affect where DHH individuals get their news, what media are used, and who they trust regarding political news and information. The Deaf community is bilingual, often using written and sometimes spoken English and American Sign Language (ASL) to communicate. Credibility of news sources among DHH and hearing communities may differ due to use of closed captioning and ASL. Rich media theory is used to explain how political news and information can be better tailored for the DHH. Additional factors such as political party affiliation, social media engagement, and consumption of news media are examined to understand how the DHH population is politically involved and how it may differ from a hearing community.

Keywords: deaf, hard of hearing, political socialization, civic engagement, news media
Politics and Media Among the Deaf and Hard of Hearing

Four out of every 1000 people in the United States are functionally deaf and 22 out of every 1000 people have some sort of difficulty hearing (Gallaudet, 2011). This equates to approximately 48 million people within the United States (Center for Hearing and Communication, n.d.). While the majority of the population is not deaf, the deaf make up a large voter base and subset of the American population. Within Rochester, New York, there is a university dedicated to the higher education of the deaf and hard of hearing (DHH). The National Technical Institute for the Deaf (NTID) has approximately 1,182 current students for the 2018 to 2019 school year, and over 8,800 alumni since its opening in 1965 (NTID, n.d.). These numbers demonstrate that there is a large DHH community in the western part of New York State pursuing higher education. Students from every region within the United States attend NTID (NTID, n.d.). This makes the community a hub for socialization, civic engagement, and political participation. The political activism and orientation of this community and the DHH community in general is inadequately studied. On the other hand, deafness and the stereotypes that are presented within the media about deafness are well researched within the field of communication (Avon, 2006; Ellcensor, 2012; Foss, 2014; Worrell, 2018). The struggle with the catch-up role of captioning has also been studied, but the political effects on captioning is not well understood (Ellis, Kent, Locke, & Latter, 2017; Engelmann, 2012; Hunt, 2011). To better understand the DHH community, its political engagement should be investigated.

Of Americans who identify as disabled, 71% said it really mattered who won the 2016 presidential election, while only 59% of non-disabled people said that it really mattered (Bailik, 2017). DHH individuals do care about politics and would like to be engaged, but their engagement is different due to accessibility and technological challenges. With television
struggling to keep up with technological advancement, certain populations have been disadvantaged (Ellis, et al., 2017; Rogers, 1995). Additionally, Pew Research found that 23% of Americans with a disability do not go online (Bailik, 2017). NTID students are required to use the Internet for school-related functions, thus demonstrating adaptability. NTID students come from a variety of different backgrounds, often meeting other DHH individuals for the first time in their lives. At the beginning of college, these students are able to socialize and participate within their community more than they may have before due to the shared language of American Sign Language (ASL) and English. Communication is no longer dreaded by this bilingual population; the community speaks both English and ASL, but their language preferences vary. The DHH community positions itself as a strong socializing factor for many individuals. Due to the ease of communication with peers who also understand ASL, many DHH students opt to get their opinions from their college peers and deaf community rather than their parents or family members. This leads to estrangement within their own family, especially if there is a large language barrier. This is not uncommon because most deaf people are born to hearing parents (Roots, 1999).

The activity orientation scale (AOS) and the political media gratification scale have not been used to measure the political engagement of the DHH community. Understanding the way DHH people consume news information can shed light and how to better reach this community politically. A news source cannot be deemed as credible if it is not understood by a population. The time delay in captions pose a hindrance to using the television or other online videos as a news source (Romero-Fresco, 2016). With the increase use of audio-visual media, the Internet is not a completely accessible medium for the DHH population (Rogers, 1999).
There is the lack of statistical and reliable information about DHH people. Casual links are commonly made but there are no data to back up many of these claims (Harris, 1995). Studies have been conducted to determine the best way to educate DHH children, to analyze the Deaf President Now movement at Gallaudet University, and examine the portrayal of the DHH within media (Foss, 2014; Kensicki, 2001; Musengi & Dakwa 2010). Studies related to the socialization of those people are intertwined with the importance of the Deaf community (Roots, 1999). Few studies have actually looked at DHH socialization outside of the Deaf community or contrasted this population’s socialization with a hearing one. In electoral polling, deafness is grouped into a larger category of disability. There are almost no statistically valid surveys that measured how DHH individuals feel about politics, news accessibility, news credibility, or how socialization may be facilitated within a hearing environment.

It comes as no surprise that there are barriers to accessing political information. To participate in phone polling, a DHH person may use a video phone or a caption call phone. Many opt to not use the voice feature of a phone at all. On the flip side, texting can be useful for emergency communicative alerts (Ecker, 2008). For those who do use the phone, speaking with strangers may be frustrating and even infuriating. Contacting legislators and representatives for meetings necessitates the use of an interpreter, which may not be easily arranged. Communication does not come naturally, but it is something that has to be worked towards and requires effort. These simple facts demonstrate that there is a transformative way that the DHH community access and participates in the political sphere.

**Literature Review**

Deaf and Hard of Hearing (DHH) people constitute a small category within the larger population. Much research has focused on exploring isolation, portrayal, subtitles, and the way
this community communicates (Rogers, 1998). The community has a significant problem with its ability to interact with media as technology tries to keep pace with accessibility services (Yoshida, 2008). Not being able to hear television or radio broadcasts has an isolating effect. DHH individuals are isolated because they cannot easily employ or understand everyday technologies such as radio and television. Assistive devices must be used to accommodate existing technology or alternative media must be sought. Media technologies are often not created with DHH people in mind, and they often play a catch-up role with accessibility (Rogers, 1998). The media limit what media deaf people can access to obtain information about the world around them (Avon, 2006). DHH viewers are only able to understand television news with the use of accurate captions. This may limit the amount of political information and other news information that can be easily accessed. This study examines the relationship between civic engagement, political participation, and choice of news media of the deaf and hard of hearing (DHH) community at the National Technical Institute for the Deaf (NTID).

**Linguistic Minority, and d/Deafness**

For this study, individuals who are hard of hearing are described as people who have a mild to moderate hearing loss. Individuals who cannot detect a sound at an amplitude of 20 decibels in a frequency range of 20 to 20,000 vibrations per second are hard of hearing, or HH. (US Legal, 2016). Many DHH people reject the use of assistive hearing technology, rather viewing their hearing loss as a culture instead of a disability (Rose, Booth-Butterfield, & Booth-Butterfield, 1995). Due to the use of ASL, DHH individuals have united to form a culture based upon their difference in hearing. “The attachment to identity for the Deaf Community is fundamentally rooted in both language and community culture” (Glenn-Smith, 2017, p. 5). Deaf individuals within the Deaf culture are referred to with a capital “D.” This identifies the culture
that has its roots intertwined with ASL. “By definition, therefore, the hard of hearing person wishes
to remain as active a participant in hearing society as possible, and to this end utilizes lip reading
and technical aids rather than Sign” (Roots, 1999, p. 3). While pointing out the difference
between hard of hearing and deaf people, Roots (1999) argues for distinguishing between signing
Deaf and oral Deaf, pointing out the differences in the way that they communicate and socialize
among themselves and with the hearing community. Deaf signers are more likely to be
completely encultured within the Deaf community. They often have opinions that are at odds
with their hearing families, unlike oral Deaf people.

Language

Some HH individuals identify as Deaf. This is frequently the case if the individual cannot
hear without assistive devices such as hearing aids. DHH individuals use ASL (Rose et al.,
1995). Just because individuals are DHH does not mean that they know American Sign
Language. Being DHH does not mean that individuals can or cannot speak English; the DHH
population is diverse. ASL is a hallmark characteristic of the Deaf culture (Avon, 2006). There
are many misconceptions about language use among DHH people. Some individuals exclusively
speak in ASL while others exclusively use oral English. Other individuals may use both
languages (Rose et al., 1995). The use of ASL is part of Deaf culture, capital D, where ASL is a
uniting factor (Avon, 2006). For this study, the use of ASL and oral English will be categorized
and studied to identify how language use may affect the consumption of and communication
about politics.

Existing research examines the Deaf culture, sign language, and the general limitations of
being DHH (Avon 2006; Musengi & Dakwa, 2010; Rose et al., 1995). Musengi and Dakwa
(2010) similarly assert that deafness does not limit individuals’ language use if they are
communicated to correctly; many benefits ensue from the use of ASL in education and other facets of life. Effective communication reduces any limitations in language use. The authors further report that deaf individuals do not exclusively use ASL. A common misunderstanding is that the cognitive load of understanding sign language is lower than the cognitive load of understanding oral, spoken English (Avon, 2006). If the DHH person only receives a broken or partial message from the sender, the entire scope of the conversation is limited. ASL is in itself a separate language, very different from American English. Users of ASL often feel united in its use and identify within a cultural cohort that views itself as members of a cultural minority.

Adopters of the cultural minority group often reject the term “disabled.”

Profoundly deaf individuals who attend residential schools refer to themselves as Deaf, where the use of the upper-case marks membership in a culture defined primarily using ASL as a primary language. Lower-case deaf denotes the psychological condition of being unable to hear. (Rose et al., 1995, p. 157)

It is important to note that the use of hearing aids is not universal to the identity.

**The Medical and Social Model**

Social, social pathological, and medical models can be used to view those who are DHH. The social pathological model frames people who have disabilities as disadvantaged and in need of economic support (Worrell, 2018). This model completely neglects the Deaf culture and states that being DHH constrains one to a disability and the issues that come with being disabled. The medical model treats disability in the same way it would any other physical disability, such as a broken arm. The medical model is focused on managing an illness or disability after a diagnosis is made by a medical doctor. This model views deafness as a disability and not a linguistic cultural minority. Many television shows show d/Deafness as a medical disability in the light of
the medical model and present hearing aids and cochlear implants as cures for deafness (Foss, 2014). “The medical model views deafness as non-perfect hearing leading to non-functional development, a problem which should be fixed. Successful assimilation into the dominant hearing society is the primary aim of the medical model” (Mouvet et al., 2013, p. 2). The social model argues, in reaction to the dominant medical model, that being DHH is a cultural trait. These individuals are only limited if the society does not provide adequate accommodations, or if the building or objects in the world are constructed in a way that do not allow for equal participation.

**Education**

There has been a fair amount of research regarding the way that d/Deaf children communicate and the benefit sign language has for young DHH children. These studies reveal the difficulty this cohort has in using verbal language to obtain information (Musengi & Dakwa, 2010). Children who are deaf often have no problem communicating among themselves but find difficulty in communicating needs. Audio visual media, the radio, and social media use verbal linguistic means to communicate information to their users. While many deaf people prefer to communicate through ASL, videos for educational content and mainstream schools must adapt to the needs of DHH individuals. There has been little research on the way that DHH people prefer to communicate among themselves through social media. In-person communication among DHH individuals usually entails the use of ASL (Musengi & Dakwa, 2010). DHH individuals prefer to communicate on text platforms such as instant messengers like AIM or iChat, texting on a cellphone, are using the instant messenger of the social media site like Facebook. Deaf individuals often text much more than their hearing counterparts (Cuculick, 2014). In social media, the greatest divide between hearing and deaf populations is regarding the use of videos.
If a video is not captioned, the DHH individual may not understand the video and therefore be isolated (Debevc, Milošević, & Kožuh, 2015). This leads to political and social isolation of the DHH community on social media, which may affect their world views, and subsequently isolate the community. This is consistent with Rogers (1998) study, in which he claims that the Internet is becoming less accessible to the DHH community.

Research has been conducted on Deaf children and their use of language to facilitate the next generation of learning. Within the realm of DHH research, studies have been explored which would be the optimal language for DHH communication, ASL or American English. Some DHH individuals are bilingual and speak both languages. Others elect to only use ASL, and many have not undergone any voice training. While studies have shown that DHH children benefit from the use of ASL, many opt to use a combination of both languages depending on whom they are communicating with (Musengi & Dakwa, 2010). While studies on DHH children allude to the optimal language for education, limited research has investigated how the use of a CI or hearing aid effects media or language use. While it is unlikely that a completely deaf individual may solely speak out loud, oral HH individuals may prefer speech.

The basic deprivation of profound congenital deafness is not the deprivation of sound; it is the deprivation of language. The child who is deaf cannot communicate clearly about his/her own needs, thoughts and experiences. On the other hand, his parents, teachers, and friends cannot easily communicate with him. (Musengi & Dakwa, 2010, p. 47)

The present study seeks to understand the barriers of relying on a verbal language to obtain information.

Social media may also be used within the classrooms of DHH individuals to promote education. Ecker (2008) pointed out that DHH individuals use text and instant messenger more
than the hearing population ($t = 3.754, \text{df} = 88, p < .001$) and e-mail ($t = 4.405, \text{df} = 88, p < .001$) than their hearing counterparts (Ecker, 2008). Along with Ecker’s (2008) study on the NTID population, Cuculick (2014) studied the use of Facebook among DHH college students. About half of Deaf students graduate at a 4th grade reading and writing level (Traxler, 2000). There are many DHH individuals who perform far above that level. Many deaf people have to learn sign language and English, which in turn makes them bimodal.

It is bimodalism which provides the real challenge to their ability to function in the dominant society, because to a great extend it determines their ability to communicate within that society. In turn, their ability to communicate within the dominant society is a powerful influence upon their ability and desire to integrate into it. (Roots, 1999, p. 4)

This low literacy level is largely attributed to the improper socialization of the deaf population into a hearing one, forcing them to hear when they cannot (Roots, 1999). Cuculick (2014) found that Facebook use within DHH education can be useful for information sharing, community participation, and community support. The majority of students within the study used Facebook to post on other people’s walls and post photos of themselves. Participants were asked about what they read about on Facebook. “Reading about friends, school homework or classes, and news or current events were the most popular reading topics for the participants” (Cuculick, 2014, p. 81). This study provides support for DHH’s use of social media as a news obtaining platform. Learning the English language is very difficult when it is not heard. “One mother of a deaf child describes a challenge eyes comparable to learning to speak Japanese from within a soundproof glass booth” (Donlick, 1993, p. 3). The task is almost impossible to many.

Captions
Some media platforms neglect DHH individuals. This is due to accessibility concerns and the presumption that the individual will not be able to understand the content on the medium. The Internet was once seen as an accessible medium for DHH people, but accessibility is declining due to the lack of closed captioning and increased use of audiovisual media (Rogers, 1998). Previously, the Internet was seen as an accessible medium because of its largely text-based platform. There were a few audiovisual media features on the Internet. Now, it is very likely to see videos integrated on Instagram and the use of YouTube has continued to grow. This study seeks to understand the effects of accessibility on the DHH community and how DHH politics are shaped as a result.

People’s political views are shaped by what information is available to them. If major news outlets do not have adequate captioning, they are rendered inaccessible, obviating the likelihood of their use. The use of a particular media may influence a large sector of DHH individuals seeking news. To make content on the Internet more accessible to people who cannot hear audio clearly, captions accurately depicting what is being said should be provided. The provision of these captions would ensure that the Internet continues to be an accessible medium for political and news information. While policy amendment approaches have sought to address the captioning problem on various television programs, television and its captioning practices have not been compliant (Ellis et al., 2017). Video streaming services often launch without captioning, rendering them inaccessible. Policy has mandated that video services be made accessible with the addition of captioning, thus playing a catch-up role in providing services (Ellis et al., 2017). This was noticed in 2009 when Netflix aired the Wizard of Oz for free without captions. It resulted in an uproar by the National Association of the Deaf (NAD) (Ellcessor, 2012).
Although captions make information in video content accessible to DHH individuals (Rogers, 1998), subtitles are not always accurate, and their quality is often compromised. If subtitles are accurate, they might be slow and lag behind the visual content on the screen. Only 5% of programs on TV in Australia are said to have excellent, acceptable subtitles (Romero-Fresco, 2016). While captions are extremely important to the understanding of messages, they are often neglected in violation of civil rights laws (Ellcessor, 2012; Ellis et al., 2017). The quality of captions affects accessibility, possibly creating barriers for DHH people seeking information from media outlets.

Captions are deemed as an accessibility feature and are treated as such. Only 23% of captions within the United Kingdom have met an acceptable accuracy rate which is set at 98% by the model presented in Romero-Fresco’s (2016) study. While that study took place in the United Kingdom, the lack of acceptable captioning is apparent in the United States. Additionally, the study demonstrates the difficulty that DHH individuals have when watching live programs, especially when accurate subtitles are not provided. Editing errors and problems with speaker identification make up approximately 60% of all errors (Romero-Fresco, 2016). Other errors that may hinder the understanding of closed captioning are delays, fast speech rates, recognition errors, reductions, inaccurate corrections, and respeaker or stenographer misunderstandings. Often, the latency exceeds the three-second acceptable delay, creating difficulty for HH viewers who attempt to listen and read the captions at the same time. This study will focus on accessibility to media; therefore, understanding how subtitles are used in media is important. Captioning facilitates the understanding of audio content on visual platforms. When subtitles do not accurately reflect what is being said, dissonance can result.
The lack of captions within Voice on Demand (VOD) services has also been reported in Australia (Ellis et al., 2017). With approximately 13% of the Australian population having some sort of hearing loss (Australian Bureau of Statistics, 2010) accessibility laws should address the needs of this population, but they often do not. Historically, technology has lagged behind with captioning, only providing an expensive, external teletext system to provide captions. While social movements have called upon producers and VOD services to provide better and more frequent captioning, these demands are often overlooked and responded to with the phrase “We’re working on it” (Ellis et al., 2017).

There's also a debate about edited standard and verbatim captions. It is argued that verbatim captions are too long and cumbersome to read if there is a lot of dialogue and the speaker is speaking quickly. Szarkowska, Krejtz, Klyszejko, and Wieczorek (2011) studied the reading differences among deaf, hearing, and hard of hearing viewers. The study reported an HH viewer who rejected captions that were not verbatim simply because someone else would have difficulty reading them.

A significant two-way interaction showed, however, that deaf participants dwelled on verbatim captions significantly longer than hearing participants, but no longer than hard of hearing viewers. All in all, the analysis of dwell times suggests that edited captions were relatively the easiest to process for all groups of viewers. They also gave viewers ample time not only to read the captions but to watch the image. (Szarkowska et al., 2011, p. 372)

In contrast, captions that are not verbatim may cause confusion for HH viewers who attempt to read captions and listen to the audio.

**Captioning and Civil Rights**
Other studies have focused on understanding the civil rights laws advocacy for captioning (Ellcessor, 2012). Captioning’s implementation has been reactive rather than proactive. For example, Netflix’s content was only 80% captioned by the year 2011. In 2009, to DHH individuals’ dismay, Netflix attempted to explain its reactionary approach to providing access services and why its content was not captioned (Hunt, 2011). Captioning not only provides access to news content that is on live television, but to the dialogue of movies and pre-recorded television shows. Since the content in recorded television shows is not live, captions can be edited, timed, and perfected before the content is presented. The lack of captioning may be a reason that DHH individuals are reluctant to use television or other audiovisual media that do not provide accurate captioning for news. If a news program is known to have accurate and good captions, it is more likely to be watched. There is difficulty with live news, because the captions are only as accurate as the person creating them can manage. Typing dialogue between people is a strenuous task, and information is easily left out when the captionist falls behind.

**Portrayal in the Media**

The political portrayal of DHH individuals is not commonly found in the media. In Kensicki’s (2001) study, the framing of the “Deaf President Now!” (DPN) movement was examined. Gallaudet University had a hearing president, so Gallaudet students sought to replace the current president with a Deaf one. The frames used within Kensicki’s 2001 study described the movement as affective conduct, internal unification, external support, and justifiable action. This study examined how the media were used as a tool for DHH people. The rhetoric of the DPN movement pushed for a wider understanding of the Deaf culture at Gallaudet University, arguing that a culture must be understood before its rhetoric can be (Stern, 2018).
The construction of the Deaf identity has also been examined. Deaf mute, social awkwardness, and disability work are reoccurring themes in Foss’s (2014) study of DHH characters in television shows and movies. Deaf characters using ASL were made to look incompetent, often contrasting these individuals with smarter hearing counterparts (Foss, 2014). ASL is often shown as a partial language, rendering it not as useful as a spoken language. The study also founded that deaf people presented in the media needed a cure; the supposed cure for being deaf was a cochlear implant (CI; Foss, 2014). Because DHH people are portrayed as disabled in media, much of the dialogue promotes the idea that a cure is possible. This is misleading, as many DHH individuals embrace deafness as a culture, accepting the fact that they are a linguistic minority. The use of a CI is not necessary if the person has partial or some hearing. Claiming that individuals who are DHH need a CI implant completely neglects the population who are HH. These individuals often use hearing aid technology and not CIs. A common misconception is that ASL does not contribute to popular culture. ASL influences popular culture contrary to the false claims that it does not (Avon, 2006).

Worrell (2018) examined the television program Switched at Birth. One of the main characters is deaf and uses ASL. Worrell points out how the show is often praised in mainstream media for using ASL and respectfully demonstrating Deaf culture. The study examined how the characters influenced the participant's identity. It found that the show portrayed deafness in a “slightly positive” way. “Additionally, open-ended questions found respondents feeling that the media’s overall portrayal of characters that are DHH affects how they feel about themselves both positively and negatively” (Worrell, 2018, p. 67). The media influence how individuals with disabilities are perceived, often reinforcing negative stereotypes. These stereotypes lead to real-life stigmatization, eventually affecting the individual’s sense of self (Worrell, 2018). This is one
of the few studies that has focused on an actual deaf person playing a deaf person in character. Worrell’s research exposes the inaccuracies that are portrayed in media. Without participation by people who are DHH, it is extremely difficult to create an accurate portrayal. Without accessibility features and a clear understanding, these inaccuracies can influence policy and promote political misinformation.

In describing film excerpts, DHH participants were more descriptive in comparison to their hearing counterparts (Darrow, 2006). DHH individuals often personalize events and display sympathetic tendencies towards movie portrayal (Darrow, 2006). This empathy could cross over to media understanding and content creation on social media. DHH individuals may have an increased sense of smell and sight, causing them to interpret the world around them differently from a hearing person. Reading rather than hearing the news may change the way it is interpreted. Additionally, accessibility may affect content that DHH individuals create on social media. Unfortunately, DHH individuals are often misrepresented in media (Foss, 2014). The negative portrayal of the group within the media may discourage individuals from participating or conversing. Foss (2014) examines the episode “Fashion of the Christ” (2005) in the show *Weeds*, the buffoonish character Uncle Andy applauds his nephew for his interest in a d/Deaf teenager, stating, “It took me years to learn that slightly defective chicks are the way to go” (Foss, 2014, p. 437). Frequent inaccurate and discriminatory comments about DHH individuals are made within the media. Additionally, the representation of DHH characters are usually portrayed by hearing actors who often have little to no idea about the true nature of what it is like to be DHH. “Some programs portray deaf people as believed to be vulnerable or incapable, ‘wild savages’ and ‘disabled’ and in need of a cure, exemplifying the pathological model in which deafness is perceived as a disability” (Foss, 2014, p. 437). While some individuals may identify
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with the disability model, the media completely ignores and neglects Deafness as a culture. Hearing directors and actors, as they are not a part of the Deaf culture, are not able to accurately portray the dynamics of this cultural cohort.

Deaf individuals’ understanding of music within movie portrayals has been studied. Darrow (2006) examined the different experiences and difference between Deaf and hearing communities with music from short film excerpts. The study found that DHH students were apt to give twice as many descriptive statements as compared to their hearing counterparts. Deaf subjects were also more likely to personalize events and be more sensitive to pity and sympathy when portrayed in the movies. Darrow’s 2006 study exemplifies that not hearing something may alter the portrayal of an event. When an event is portrayed in an alternative light, it may be viewed from a more jaded perspective by the audience. Understanding the audiovisual media may alter how it is consumed. If the audience is hearing impaired, the understanding and perception may be different than it would be for a hearing individual. Music incites the audience to feel; music can alter the audience’s mood (Konblock, 2003). Without sound, the experience of a movie can be altered. This is reflected in the participant's expression of their experience within Darrow’s 2006 study. DHH individuals interpreted the video content in a more imaginative, original way.

Emergency News and the Federal Communications Commission

Rarely do media show ASL in a live program; it is usually seen in emergency broadcasts. For emergency television broadcasts, completely deaf individuals rely on either ASL or the captions to understand the programming. HH individuals who partially rely on sound may use lip reading to assist their understanding. The FCC mandated that emergency broadcasts include captioning and ASL. The Rehabilitation Act of 1973 requires that federal agency funding cannot
be used for a service if it is not accessible. All electronic technologies that receive federal funds must include of captioning. Title 2 of the Americans with Disabilities Act (1990) notes that state and local governments must ensure that communication technologies are fully accessible to people with disabilities. Section 255 of the Act requires that telecommunications products and services must be accessible to people with disabilities, including emergency alerts on cell phones for people who are DHH and may not hear them otherwise. The 21st Century Communications and Video Accessibility Act (2010) established that accessibility for emergency information that is being broadcast on television must be streamed to the Internet for computers and cell phones. The Robert T. Stafford Disaster Relief and Emergency Assistance Act requires that information disseminated by the Federal Emergency Management Agency (FEMA) must be accessible to populations with limited English proficiency, individuals with disabilities, and individuals with special needs. These laws demonstrate that there is a necessity for alternate forms of communication media within times of disaster. This not only assists the DHH population, but others as well. Issues such as captioning delay, an untrained interpreter, or an interpreter who is not being included in the camera frame are all problems that are still faced in emergency broadcasting (NAD, Position Statement on Accessible Emergency Management for Deaf and Hard of Hearing People, 2016).

Roger’s (1998) reports that several DHH individuals burned to death in the 1970 California wild fires because radios, loudspeakers, and television announcements did not provide visual information about the threat. These unnecessary deaths could have been prevented had the media provided visual cues about the emergency and steps that individuals could have taken to prevent harm. There is still a linguistic barrier that prevents DHH people from obtaining live information about emergency broadcasts. Although there are various government reports about
the way in which deaf people may obtain better information in emergency situations, there is still very little peer-reviewed research on the matter of emergency preparedness (Engelman, 2012). Emergency texts, closed captioned news, visual displays on the television, and an interpreter would all assist DHH individuals to quickly and accurately obtain emergency response information. Ecker (2008) reports that an alerting system tested in the Netherlands was extremely useful for alerting registered Deaf users. Ecker’s study was conducted at the Rochester Institute of Technology (RIT), the university that is affiliated with NTID, where this study took place. Additionally, visual alerts in public places and homes, such as flashing lights on fire alarms, serve as a necessary visual for those who cannot hear an alarm. This may cause problems for those who are asleep when the alarm begins. Vibrations are also helpful for those who cannot hear. Deaf alarm clocks offer a vibrating feature with a small extension from the unit that can be placed under the mattress of the individual. Instead of a sound alerting the individual, there is a strong vibration that does not stop until the alarm clock is turned off. Connecting this device to emergency alert systems may be helpful in preventing tragedies.

Cochlear Implants and Hearing Aids

Little research has been done on CIs and hearing aids in the field of Communication. Some have focused on CIs and the guilt that some parents have after getting or not getting CIs for their children (Schultz, 2000). For one to receive a CI, they must undergo surgery. The Deaf community is often split on the use of this technology, arguing that it may take away from their culture, a culture that is heavily dependent on being a linguistic minority that uses ASL. While the use of CI technology does not give individuals perfect hearing, the technology alters sound waves within the brain, allowing the user to hear. This technology uses electrodes in the cochlea to send electrical signals about sound waves to the brain. The use of a CI often goes hand in hand
with the pathological model, encouraging deaf individuals to assimilate into the hearing world (Foss, 2014). The CI technology has become more popular since 2010 (Mauldin, 2012). This has led to the misrepresentation of CIs in media, displaying them as a cure for DHH individuals (Foss, 2014). There are almost no communication studies on hearing aids; much of the emphasis has been placed on profoundly deaf individuals and CIs. Hearing aids require that the user have some or partial hearing. No surgery is required–only a fitting ear mold and an appropriate hearing aid model, adjusted by the wearer’s audiologist. “CIs were seen as a threat to a specific linguistic and cultural tradition and many utilized identity politics and diversity arguments characteristic of other new social movements” (Mauldin, 2012, p. 2). Policy has determined the youngest age an individual can obtain a CI for their child, but policy has not required a language to be taught to DHH individuals. The National Institute of Health (NIH) suggests that children 18 months and older who are deaf obtain a CI to help with learning language and literacy skills (NIH, 2018).

Politics of the Deaf and Hard of Hearing

The education of DHH individuals and accessibility concerns have been explored within the court ruling Board of Education v. Rowley (1982). Justice William H. Rehnquist, with a 6-3 majority, ruled that the State of New York did not have to provide an interpreter for a deaf student, Amy Rowley. It was argued that Rowley did not understand half of what was being said within the classroom and therefore was not obtaining an equal education. The DHH’s dependence on the National Association of the Deaf (NAD) is apparent, for it is often the only political advocate for the deaf (Malzkuhn, 1988). Groups comply with policy changes and standards if it benefits them. A public school that receives funds for disabled children is more inclined to admit such children due to there being a fiscal policy incentive (Malzkuhn, 1988).
Politics have also presented language barriers for users of ASL. The current political participation system is poorly designed for avid users of ASL (Turner, Napier, Skinner & Wheatley, 2017). Deaf individuals often feel a disconnect between mainstream politics and their own because accessibility to participation is not equal. Public debates are not always comprehensible unless an interpreter, real-time captioning, or both are provided. Fortunately, the spread of the Internet has fostered an online participatory culture, creating a new type of public sphere (Turner et al., 2017). These democratic participatory technologies are not fully functional yet, and still present a language barrier. Increased efficiency to promote political engagement technologies would increase accessibility for the DHH.

**Civic Engagement and Socialization of the Deaf and Hard of Hearing**

The majority culture that a person is exposed to can influence their socialization into politics. Family, friends, teachers, religious influences, organizations, clubs, and other aspects all play a role on the adoption of a political stance or ideology (Austin & Nelson, 1993). Bandura (1986) pointed to the importance of personal, environmental, behavioral, and social characteristics that influence others, as well as our personal behavior and disposition. The groups we are socialized into influence what we believe about the world around us. If no new ideas are introduced to a group, the group may develop a similar set of beliefs that remain unchallenged. DHH students arrive at NTID with a variety of backgrounds in their first year and begin to socialize with each other, sharing ideas and beliefs. They are also socialized to existing beliefs within the community. Being new to this community may make them more likely to be influenced about political or other news events and happenings. If ideas cannot be understood, they will not be influential. Therefore, understanding how ideas are spread and how DHH students are socialized becomes extremely important regarding the DHH community.
Accordingly, political socialization is defined as a process by which individuals obtain relevant knowledge, skills, and dispositions that enable them to function competently in the socio-political structure. Important effects to investigate thus include the adolescent's knowledge, efficacy (perceived skills), and values related to politics.

If the mass media serve as a bridge between the micro-social environment, such as the home, and the larger society, then effects of family communication on media use patterns should then contribute to the child's knowledge, perceived skills, and dispositions.

(Austin & Nelson, 1993, p. 2)

Roots (1999) has also defined socialization, borrowing the definition of Adler and Harrington (1970), “Socialization is the process of learning socially relevant behaviors in order that the individual may function within a given society or social group” (Adler & Harrington, 1970, p. 2).

Even among those who can hear, civic engagement within the United States has been on the decline (Putnam, 1995), concurrent with an increasing number of young activists participating in online activities. This somewhat modern way of political discourse has become the new way to be civically engaged (Warren & Wicks, 2011). However, it is arguable that the Internet does not provide the same window of opportunity for engagement. In 2008, the voter turnout for people under 30 increased, with approximately 62% of the population showing up at the polls (Warren & Wicks, 2011). Academics, peer influences, media, family, and literature all provide varying influences over individuals and push them towards civic engagement, with the provision of opportunities and information. This leads to the influence of microsystems, ecological communities where children and adults directly interact. Microsystems have a large degree of influence over individuals, often shaping their goals (Warren & Wicks, 2011). The
Deaf community at NTID, while often integrated with the hearing population of RIT, serves as an extremely large and influential microsystem for the students who attend this institution. It is important to note that NTID is one of the nine colleges that are a part of RIT. Students who are registered under the NTID name who prefer a more mainstream education can attend classes with assistive support services such as C-PRINT, interpreting, and notetaking. While NTID is situated near the dormitory and main dining hall section of the campus, DHH students often gather in the common areas of the NTID college, socializing before, in-between, and after classes. This open public space, also known as the Shumway Dining Commons, provides an opportunity for students to socialize and share information about their engagement and political beliefs. At the Commons, the majority of the students use ASL. Additionally, there are various campus groups that are characterized as on-campus clubs. These clubs provide gateway opportunities for students to become engaged with each other and within the greater Rochester community and neighboring suburbs.

Youth is easily influenced by its peers and adults around them who may be communicating about politics. This leads to a socialization process from peer and family networks (Lee, Shah, & McLeod, 2013). Socialization often leads to civic engagement, and civic engagement demonstrates a passion and understanding for the cause at hand. While civic engagement is often strongly correlated with political involvement, it does not necessitate a political goal. Engagement is for furthering of a public good.

Television can provide access to political information. It has been argued that television provides access to information for the American public and serves as a cultural arm of society (Austin & Nelson, 1993). Relying on the captions that this outlet provides can drastically affect
the information obtained because captions can change the meaning of a given message (Romero-Fresco, 2016).

There are still significant barriers in accessing many aspects of the policy-making process for people with disabilities. Historically, the disabled population has been isolated from the mainstream policy-making arm of society, and this includes lobbying and voting. Lack of access prevents them from full civic and social participation (Harris, Owen, & De Ruiter, 2012). Funding is needed for adaptive technology to make it more accessible for disabled voters who wish to engage within political communities. People with disabilities are often unable to afford the technologies, rendering them as less of an influence in political action (Harris et al., 2012).

There are additional frustrations with keeping up to date with the newest technology; all technology is eventually obsolete over a period of time. Technology has positioned itself as a gateway role in allowing people with disabilities to interact and communicate with the government. This technology is used to advocate for changes within the community. The DHH community is often dependent on technologies such as video relay services (VRS), texting, social media applications, video phones, and closed captioning.

Also affecting the communication process of political socialization is communication competence (Lee et. al, 2013). It can shape the nature of a conversation and highlight the process of civic engagement development. Competence also encompasses media use. This may affect interpersonal communication, participation in public affairs, and engagement. The DHH community uses both ASL and spoken English, online writing is often in English. It is also possible to transmit videos in ASL if both the sender and receiver have adequate knowledge and skill. The DHH community uses various languages, since many of them are bilingual. There is little socioeconomic data on DHH individuals for the Flemish Parliament; the same is true for the
United States (DeClerck, 2017). “Sociodemographic data on deaf/sign language community members are not readily available, which is a challenge for developing initiatives that aim to be representative” (DeClerck, 2017, p. 4). If the way a community communicates is not known, and social economic data are not available, it is extremely difficult to make policies that will benefit that population. While participation may be a solution, the DHH population has difficulty participating due to language barriers.

Children with politically active parents are more likely to be politically active themselves (Corning & Meyers, 2002). Deaf children who have deaf parents are more likely to be social leaders (Roots, 1999). For example, in the DPN protests, the main Deaf leaders all had Deaf parents. Deaf children who come from Deaf parents are more likely to be socially engaged within their communities and lead political protests (Roots, 1999). This may be because they have someone on which to base their social understanding and emulate basic behaviors. Much of deaf political socialization is among the field of communication and understanding their community. DHH people who use English instead of ASL are more likely to engage in their community and participate in politics in the hearing community. The DPN movement, CI debate, and language debate are prime examples of political engagement involving the DHH population.

**Media Richness Theory**

The media richness theory (MRT) was proposed by Daft and Lengel in 1986. The theory assesses a communication medium’s level of richness. Richness is characterized by social clues and transmission of gestures and body language. These cues allow the receiver to better understand the message of the sender. The theory also provides a framework to describe how well a communication medium is able to reproduce information. Information can easily be distorted or lost and even omitted if the medium is not appropriate for the type of
communication. For example, an email or a letter can be re-read or checked to validate its contents. While a phone call can be recorded, it is a very different type of communication. Phone calls cannot reproduce visual or social cues. There are no gestures transmitted when two people speak on a phone. In the case of a video call such as modern-day face timing, video chatting, or even a video conference, the two people can see and hear each other. The medium of video communication is very similar to in-person communication.

The MRT also theorizes that richer media are more effective for transmitting communication. Daft and Lengel (1986) created four ways to determine the richness of a medium. First is the medium's capacity for immediate feedback. If the sender is allowed to immediately respond to any questions that the receiver might have, such as in face-to-face communication, the medium is richer. Second, the number of cues and channels available for the transmission of information increases the richness of the medium. Third, the language variety also increases the richness. “Media of low richness process fewer cues and restrict feedback, and are less appropriate for resolving equivocal issues” (Daft & Lengel, 1986, p.7). Fourth, the degree to which the intent is focused on the recipient subsequently increases the richness. The last point notes the importance of personalization in mass communication.

Communication transactions that can overcome different frames of reference or clarify ambiguous issues to change understanding in a timely manner are considered rich. Communications that require a long time to enable understanding or that cannot overcome different perspectives are lower in richness. In a sense, richness pertains to the learning capacity of a communication. (Daft & Lengel, 1986, p. 7)

Rich media are personal and involve face-to-face contact between managers, while media of lower richness levels are impersonal communication channels such as forms, procedures, or
databases. The richest medium is face-to-face communication, followed by video conferencing and then the telephone. “In order of decreasing richness, the media classifications are (1) face to face, (2) telephone, (3) personal documents such as letters or memos, (4) impersonal written documents, and (5) numeric documents” (Daft & Lengel, 1986, p. 7). The theory points towards the importance of the effects of media use. Media that are less rich are two-way radios and written documents, such as email messages. The leaner media are unaddressed documents such as bulk mail and posters. Unaddressed documents are seen as less effective because they are not personalized. Personalization coupled with gestures enriches the transmission of communication information.

The MRT had been used to study communication of managers in the workforce and for public relations specialists (Kelleher, 2001). It has also been used to understand why people in power within the workforce use a particular medium. Situational factors, symbolic use, and ambiguity have all played a role in choosing a medium for communication within the workforce (Trevino, Lengel, & Daft, 1987). For students who prefer face-to-face interaction for academic courses, MRT has been used to understand satisfaction of professors who taught online courses (Cole, 2016). Also, the MRT has been used to understand computer-assisted instruction in the education of undergraduate students (Timmerman & Kruepke, 2006). As of this date, this theory has not been used on a DHH population.

**Research Questions**

This study seeks to understand the following questions:

RQ 1: Where do DHH people get their news?

RQ 2: Do DHH and hearing people differ in their assessment of the credibility of politicians on television?
RQ 3: Are there differences between the Deaf and HH in news consumption?
RQ 4: Is there a relationship between political party (or ideology) and media?
RQ 5: How frequently do DHH individuals consume news media?
RQ 6: How civically engaged are DHH individuals?

Method

To measure the political socialization and civic engagement of the DHH, the Political Media Gratifications Scale (PMGS) and Activity Orientation Scale (AOS) questions were used. The PMGS had a total of 15 questions while the AOS scale had a total of 35 questions. Demographic questions were added along with questions about the participant’s hearing status. Once these questions were drafted, they were entered into Qualtrics, the official survey site used by RIT researchers. The questions were sent to the Institutional Review Board (IRB) for approval. After the survey was approved, posters were put up around the RIT and NTID campus. Students could simply scan a QR code that would link them to the survey. The researchers never physically saw any of the participants; they were not identifiable. Emails were also sent out to some students in the College of Liberal Arts (COLA) and NTID campus, encouraging them to take the survey. The survey opened on Monday March 25th, 2019 and continued to collect data until Saturday April 20th, 2019.

Identification of Data Sources

A combination of random and snowball sampling was employed to obtain a larger number and greater variety of respondents. Participants were asked to report their age, level of education, and whether they identified as hearing, hard of hearing, or deaf. Because the NTID faculty is often part of the NTID community, the survey was left open to faculty or staff
members. To ensure anonymity, there was no identification of the participants. The two existing scales had acceptable validity and reliability.

**Scales**

The PMGS was originally crafted by Blumer and McQuail in 1969. It was modified by McLeod and Becker in 1974 to measure an American audience rather than the British one for which the scale was first designed. Heavily rooted in the uses and gratifications approach, the scale was originally formulated to investigate the role of television in the 1964 British general election. Eleven reasons for watching television broadcasts and nine reasons for avoiding political broadcast were crafted by Blumer and McQuail (1969). This was later modified to eight questions for television gratifications and seven questions for television avoidance by McLeod and Becker (1974). This study took place within the United States, so it was logical to use the McLeod and Becker (1974) scale.

The scale is divided into two parts. The first has a series of eight questions to assess television gratifications. The second has seven questions to evaluate television avoidances. Each of these questions employs a 3-point Likert scale, where the survey taker responds to a statement. “For each statement on the list, please tell whether it applies to you a lot, a little, or not at all” (McLeod & Becker, 1974, p. 144). The gratifications sought from viewing political television broadcasting are grouped into three dimensions. The first dimension consists of political reasons that correlate with reinforcement and vote guidance on the PMGS scale. This is also correlated with question four on the gratifications sought part of the scale. The second dimension is surveillance that correlates with keeping up with issues on the PMGS scale. This correlates a question one, two, and three on the gratification sought part of the scale. The third dimension is excitement that correlates with understanding which party will win. This directly
relates to question six and seven of the gratifications part of the scale. Three categories measure media avoidances: partisanship, relaxation, and alienation.

The scale has been modified to suit various other contexts within the political sphere. McLeod and associates (1982) modified the scale again to measure gratifications obtained. The 3-point Likert response options were changed to helpful, somewhat helpful, and not at all helpful. The scale has also been used to measure newspaper reading behaviors (Becker, 1979), political campaign stability (Garramone, 1984), and political rally attendance (Sanders & Kaid, 1981). The scale has been useful in predicting and understanding political behaviors related to the news media,

While the younger voters are more likely to use television to help them make up their minds and to use it for ammunition in arguments than are older voters, the two groups are found to be striking similar on almost all other measures. (McLeod & Becker, 1974, p. 153)

Other findings within this study include voter behaviors. Older voters’ decisions were predicted by their original motivations for viewing television. Respondents who used television for ammunition were more likely to be politically active (McLeod & Becker, 1973). This scale provides a valid framework for understanding the difference between the hearing and the DHH community.

The AOS is the second scale this study used to measure civic engagement and political activism. Corning and Myers (2002) designed this scale to understand the development of activism. Activism is not completely separate from taking part in political activities. Social activism and political action are intertwined, “…activist orientation is defined as an individual’s developed, relatively stable, yet changeable orientation to engage in various collective, social-
political, problem-solving behaviors spanning a range from low-risk, passive, and institutionalized acts to high-risk, active, and unconventional behaviors” (Corning & Myers, 2002, p. 704). If a population’s activist activities are understood, it will be easier to determine the political socialization, likelihood of voting, and overall attitude towards politics of a community. The scale has 35 questions. For each of the questions, the respondent answers the question “How likely is it that you will engage in this activity in the future?” (Corning & Myers, 2002). The responses range from Extremely Unlikely (0), Unlikely (1), Likely (2), to Extremely Likely (3). The questions vary in behaviors from displaying a bumper sticker with a political message to donating money to a candidate, and blocking access to a building with one's body.

Corning and Myers (2002) also state why it is important to understand activist behaviors. “Second, an important purpose of and activism orientation scale is to predict an individual's future engagement in activists’ behaviors.” (Corning & Myers, 2002, p. 705). While political socialization is not synonymous with activism, the two often go hand in hand. If a person feels strongly about an aspect of politics (e.g., disability rights), that individual is more likely to write to a Congressional representative, engage in a protest, create a campaign sign, and even vote. Someone who is not engaged and does not feel strongly about politics may only listen to what is happening about a subject on television or read news on an app and not feel inclined to take part in a local political demonstration. The use of the AOS scale is summarized as following.

In summary, the intent of the present studies was to develop and validate a measure of an individual's willingness to engage in social action that would (a) be informed by the research base on social activism and the measurement of social attitudes; (b) be applicable across activists causes, social movements, and political ideologies; and (c) show evidence of is psychometric quality via its reliability with various samples,
relationship to variables hypothesized to be related as well as unrelated to activist orientation, and ability to discriminate among groups more and less inclined to engage in activism. (Corning & Meyers, 2002, p. 707)

Jordan (2011) used the AOS scale to determine whether quality of life played a role in activism and the lives of people living with disabilities. The study found that people with disabilities are more likely to be politically engaged in nontraditional ways, unlike their nondisabled counterparts. Individuals with higher levels of education are also more likely to vote in comparison to those who are less educated. Although deafness is not considered a disability to many within the community, and calling it such is controversial, many people outside of the community do view it as a disability. The disabled community also has a lower education rate, but this does not apply to the NTID community because it is dedicated to the higher education of the DHH.

Results

For the study, a total of 221 survey responses were collected. There were four participants who did not consent to the study. If consent was not obtained, the survey closed out and did not allow the participant to continue. The survey respondents were predominantly Caucasian (75.84%), 7.84% identified as African American, 7.84% as Asian or Pacific Islander, 5.06% as Hispanic or Latino, and 3.37% as Other. No participants identified as Native American or American Indian. The average age of the respondents was 24 years old. There were more female participants (55%) than male participants (41%). Additionally, 3.93% of the participants identified as “Other” when asked to identify their gender. The majority of the participants had some college (38.20%), followed by a bachelor’s degree (24.16%), master’s degree (16.29%), associate’s degree (10.67%), high school degree or equivalent (8.43%), doctorate (1.69%), and
0.56% had less than a high school diploma. The various education levels reflect the diversity of RIT and NTID. When asked to identify political party ideology, the respondents could choose Republican, Democrat, or Independent. The survey limited respondents to three options. The majority responded with Democrat (48.31%) followed by a response of Independent (41.01%). Only 10.67% of respondents identified as Republican. Only three political party identifications were given to participants due to the dominance of the two-party system within the United States. This is a limitation of the survey, but it was done purposefully.

Survey respondents were also asked to identify what language that they prefer to use when communicating. Individuals who identified as deaf preferred to use a combination of English and American Sign Language (63.16%), followed by the use of ASL only (31.58%), and English only (5.26%). The hard of hearing population most frequently preferred to communicate in English (65.00%), followed by English and ASL (30.00%), and ASL only (5%). While deaf and hard of hearing people are often grouped together, there is a difference in the way that the DHH communicate. It is important to distinguish between the deaf and the hard of hearing sample for language use. Hard of hearing individuals are often grouped together with deaf individuals in research about language use. The data demonstrated that hard of hearing individuals prefer to speak in English. A combination of English in ASL was the second preference for the hard of hearing population, but the first preference for the deaf population. Future studies could focus on the difference between the hard of hearing and deaf in language use. Hard of hearing individuals would benefit from research that distinguishes them instead of being grouped together with the deaf. The hard of hearing tend to be bilingual, immersing themselves in both the Deaf culture, using ASL, and the hearing culture, using English. The duality of this immersion should be studied.
The first research question asked “Where do DHH people get their news?” The DHH sample noted that they are most likely to obtain news information from Facebook (46.15%). Independent searches were the second most frequent way to obtain news information (28.21%), followed by Twitter (10.26%), word of mouth (7.69%), Instagram (5.13%), and Reddit (2.56%). None of the DHH respondents answered Snapchat or print magazines as their primary source for obtaining news. In contrast, the hearing sample reported using independent searches most frequently (31.21%), followed by Facebook (19.86%), Twitter (14.89%), word of mouth (12.77%), Reddit (9.22%), Instagram (5.67%), print magazines (4.96%), and Snapchat (1.42%). Differences between the DHH sample and the hearing sample groups were not statistically significant. The results signify the predominance of news information access on social media and the Internet among all three populations. Facebook displays photographs, text, and videos, which classify it as a richer media, falling in line with the MRT. Snapchat has audio visual media that does not have captions, putting it in an unpopular position with the DHH. The use of Snapchat and ASL among the deaf in everyday communication is a large gap of unexplored research.

The second research question asked “Do DHH and hearing people differ in their assessment of the credibility of politicians on television?” Using the Kruskal-Wallis test to analyze the television avoidances questions of the Political Media Gratifications scale, no significant difference regarding the perceived credibility of politicians on television ($H = .252, df = 2, p = .882$) was found. This question did not ask the frequency of which individuals watch television, which could play a role in the perceived trustworthiness. The PMGS questioned avoidances and reasons for watching the television. The DHH and hearing sample view politicians on television in a similar way, but this does not include frequency of television use.
Research question three asked “Are there differences between the DHH in news consumption?” Differences were found between the hearing sample and the deaf sample regarding the frequency with which they check the news. Using the Kruskal-Wallis Test, hearing respondents were significantly more likely to check the news than deaf respondents ($H = 7.22, df = 2, p = .027$); however, no significant differences were found between hearing and HOH respondents ($H = 868, df = 1, p = .352$). Differences between HOH and deaf respondents approached significance ($H = 5.41, df = 2, p = .06$). Deaf respondents may check the news less frequently due to barriers such as videos, ASL access, difficulty in understanding, and captioning issues. Hearing respondents were more likely to check the news, but they were just as likely as the DHH to be engaged in politics. Without barriers to access information, the hearing may be inclined to access news more frequently. The hard of hearing checked the news more frequently than deaf, but not as frequently as the hearing. The hard of hearing may experience barriers to news information using partial hearing in combination with accessibility features.

Regarding media, Facebook was the most popular (40.00%), followed by Twitter (18.46%). YouTube and Reddit tied at (13.85%), Google+ at (10.77%), and LinkedIn and Pinterest tied at (1.54%). The hearing sample differed slightly with the use of social media for news. The most popular social media used among the hearing population was Facebook (31.40%), followed by YouTube (25.21%), Twitter (18.18%), Reddit (11.98%), LinkedIn (4.13%), and Pinterest (0.83%). The hearing sample was more likely to use YouTube while the DHH sample was more likely to use Twitter. This finding may be due to the lack of captioning in many news videos on YouTube, alluding to a difficulty in understanding the platform. LinkedIn and Pinterest both proved to be quite unpopular among both samples for obtaining news information.
The fourth research question asked “Is there a relationship between political party (or ideology) and media?” The relationship was tested using the Kruskal-Wallis test. Although nonsignificant \((H = 4.82, df = 2, p = .09)\), a subsequent Chi Square test revealed the relationship approached significance \((x = 5.69, df = 2, p = .058)\). The DHH sample was more likely to run independent searches. Respondents were also asked about their party ideology. DHH respondents were more likely to label themselves as Independent (48.72%), followed by Democratic (38.46%), and Republicans (12.82%). In contrast, the Democratic Party was the most popular party among the hearing sample with 50.35% identifying as such. This is followed by those who identified as independent (39.72%) and Republican (9.93%). It should be noted that the sample took place in upstate New York. New York is currently a left-leaning, or Democratic state. The sample also found that the DHH population was more likely to politically identify with the independent or Democratic political parties.

Research question five asked “How frequently do DHH individuals consume news media?” Differences were found between the hearing sample and the deaf sample regarding the frequency with which they check the news. Using the Kruskal-Wallis test it found that the hard of hearing consume news more frequently than the hearing sample, while the Deaf infrequently checked the news. The hearing sample most frequently consumed news on the Internet once a day (77.30%), followed by once a week (18.44%), and once a month (2.84%). Once a year and not at all were tied at (0.71%). None of the hearing sample (0.00%) stated once a semester. The hard of hearing sample most frequently consumed news once a day (85.00%) followed by once a week (15.00%). None of the hard of hearing respondents answered once a month, once a semester, once a year, or not at all. Among the deaf sample, the most frequent response was once a day (47.37%), followed by once a week (36.84%), once a month (10.53%), and not at all
(5.26%). None of the deaf respondents noted once a semester or once a year. The percentages for the grouped DHH sample are once a day (66.67%), once a week (25.64%), once a month (5.13%), and not at all (2.56%).

To measure research question six “How civically engaged are DHH individuals?” the Activity Orientation Scale was used. Using the Kruskal-Wallace test, no difference between the DHH and hearing sample were found regarding civic engagement ($H = 1.83, df = 2, p = .401$). While the individual parts of the scale were not analyzed question for question, the scale revealed that the two groups were quite similar. The National Technical Institute for the Deaf provides opportunities for the DHH individuals to be civically engaged alongside their hearing peers at Rochester Institute of Technology. Future research on a DHH sample that does not attend NTID might differ in civic engagement. The high civic engagement of this DHH sample may be due to the participatory culture of NTID, and ease in obtaining accessibility services such as captioning and ASL interpreters for political meetings and community events on campus.

Research question seven asked “Is civic engagement related to news consumption?” No significant differences were found between the way DHH and hearing individuals civically engage in relation to news consumption ($U = 1920, Z = -1.24, p = .215$). Other factors related to civic engagement can be explored in future research. Sampling a DHH population that is not connected to NTID may generate different results due to the high engagement of many NTID students and faculty.

**Discussion**

This study used two scales along with demographic data and questions about news consumption to understand the civic engagement and political socialization among the DHH community at NTID. Additional data from the hearing respondents was used to provide a
contrast to the DHH sample. This information demonstrated that the civic engagement among DHH individuals is quite similar to that of hearing individuals. The DHH sample accessed news similarly to the hearing sample, and they also perceived the credibility of politicians on television similarly. While there are very minor differences in the way news is obtained and the way television is perceived, there are no significant differences between the DHH and the hearing.

While similar media are used to obtain this information, the hard of hearing consume political media information more frequently than hearing and deaf people. The deaf were the least likely to frequently consume news. Future research should explore the frequency of deaf news consumption. The relationship between party ideology and the media approached significance. Particular media platforms may sway opinions in a particular political direction. If individuals feel limited as to what media they can use because of their hearing status, this may affect the ideology of the group, swaying them politically. Future research can explore party identification affiliation within the deaf community. This research can be used to better orient messages and ideas towards this community. Interestingly, the hard of hearing participants displayed more frequent news use than either the deaf or hearing sample. Hard of hearing individuals are in an interesting position. They must tend to the hearing world and are often partially integrated within the deaf community; this may hold true for deaf individuals who prefer using English over ASL. This population is likely to be bilingual, feeling a stronger sense of urgency to keep up to date with the hearing political world and Deaf community politics.

Limitations

There are some limitations of the study that should be addressed. The survey attracted more hearing participants than DHH participants. The sample size did provide a reasonable
amount of data, but one limitation is the low count of 39 DHH participants. A second limitation is the question about party ideology. Democratic, Republican, and Independent were the only options for this question. A response where participants could fill in the blank would more accurately represent the sample size. This may have limited participants who do not fall into either of these three categories. Additionally, more media choices could have been added to some of the opening questions in the survey, such as podcasting. The focus of the study was on the PMGS and AOS which had pre-made questions. The scales serve as a strength rather than a limitation.

Conclusion

The DHH population is a difficult one to study, with various means and methods of demonstrating communication abilities. Within a cohesive group, the methods of communicating political information and demonstrating civic engagement differs. The DHH population must adapt to a hearing society in order to consume politics and political information. Fortunately, the Internet has made much of this information accessible and easier to use. Many videos and audio media are still rendered useless without captions or other accessibility features. Motivations to the frequency of news consumption and the reasons for consumption may differ among this population. Future research can draw upon more communicative patterns and political understanding of the DHH.
References


Glenn-Smith, S. (2017). The use of social media as a conduit to promote social justice in the deaf community, as a cultural and linguistic minority, through the visual language of American Sign Language: A movement against audism. (Doctoral thesis) Nova Southeastern University, Fort Lauderdale, Florida.


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Appendix A:

Survey

Q1 Informed consent: You are invited to join a research study that seeks to understand the use of news and political media consumption. You will be asked to complete a short survey that should take approximately 5 to 10 minutes. You may stop participating at any time without penalty.

**Risks:** There are no anticipated risks from completing this study.

**Benefits:** This study will result in a better understanding of the use of media in news and politics. **Confidentiality:** Your name will not be associated with the data obtained from this study and will not be published. Every effort will be made to keep your responses and other personal information confidential. Information regarding the study will be stored on a computer protected in accordance with the information security policy at Rochester Institute of Technology. [https://www.rit.edu/security/content/plain-english-guide-information-security-policy](https://www.rit.edu/security/content/plain-english-guide-information-security-policy)

**Rights as a Research Participant:** Participation in this study is voluntary. You do not have to participate and you may leave the study at any time. Deciding not to participate or deciding to leave during the study will not result in any penalty or loss of benefits, nor will it will harm your relationship to the individuals conducting the study or RIT. If you decide to leave the study, simply exit the survey website.

**Contact Information:** You may contact the investigator at ccd7830@rit.edu if you have questions or concerns. The RIT counseling and psychological services are available and can be contacted through this website. [https://www.rit.edu/studentaffairs/counseling/](https://www.rit.edu/studentaffairs/counseling/)

- [ ] I consent
- [ ] I do not consent

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The first set of questions ask about your news consumption. Please select the answer that best demonstrates the way you consume news.
Q2 Where do you most frequently learn about news?

- Twitter
- Instagram
- Facebook
- Snapchat
- Print Magazine
- Independent Searches
- Reddit
- Word of mouth

Q3 What is your preferred medium for news? Check all that apply

- Newspapers
- Magazines
- Television newscasts
- Radio newscasts
- Social media
- Internet
- Word of mouth
Q4 If you checked social media, what sites do you access for news? Check all that apply

☐ Facebook
☐ Google+
☐ Twitter
☐ YouTube
☐ LinkedIn
☐ Pinterest
☐ Reddit

Q5 On which social media do you consume news? Check all that apply

☐ Twitter
☐ Instagram
☐ Facebook
☐ Snapchat
☐ None
Q6 How often do you consume news on the web?

- Once a day
- Once a week
- Once a month
- Once a semester
- Once a year
- Not at all

Q7 What is your preferred method of communicating?

- English
- American Sign Language
- English and American Sign Language

Q8 Instructions: Please respond to the following questions by circling how likely it is that you will engage in each of the following activities in the future. Choose from: "Extremely Unlikely," "Unlikely," "Likely," or "Extremely Likely."
<table>
<thead>
<tr>
<th>Activity</th>
<th>Extremely Unlikely</th>
<th>Unlikely</th>
<th>Likely</th>
<th>Extremely Likely</th>
</tr>
</thead>
<tbody>
<tr>
<td>Display a poster or bumper sticker with a political message?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Invite a friend to attend a meeting of a political organization or event?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Purchase a poster, t-shirt, etc. that endorses a political point of view?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Serve as an officer in a political organization?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Engage in a political activity in which you knew you will be arrested?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Attend an informational meeting of a political group?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Organize a political event (e.g. talk, support group, march)?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Give a lecture or talk about a social or political issue?</td>
<td>○</td>
<td>○</td>
<td>○</td>
<td>○</td>
</tr>
<tr>
<td>Activity</td>
<td>Yes</td>
<td>No</td>
<td>Don't know</td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-----</td>
<td>----</td>
<td>------------</td>
<td>---</td>
</tr>
<tr>
<td>Go out of your way to collect information on a social or political issue?</td>
<td>☐</td>
<td>☑</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>Campaign door-to-door for a political candidate?</td>
<td>☐</td>
<td>☑</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>Present facts to contest another person’s social or political statement?</td>
<td>☐</td>
<td>☑</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>Donate money to a political candidate</td>
<td>☐</td>
<td>☑</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>Vote in a non-presidential federal, state, or local election?</td>
<td>☐</td>
<td>☑</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>Engage in a physical confrontation at a political rally?</td>
<td>☐</td>
<td>☑</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>Send a letter or e-mail expressing a political opinion to the editor of a periodical or television show?</td>
<td>☐</td>
<td>☑</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>Engage in a political activity in which you feared that some of your possessions would be damaged?</td>
<td>☐</td>
<td>☑</td>
<td>☑</td>
<td>☐</td>
</tr>
<tr>
<td>Activity</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
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<td>----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engage in an illegal act as part of a political protest?</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Confront jokes, statements, or innuendoes that opposed a particular group’s cause?</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Boycott a product for political reasons?</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Distribute information representing a particular social or political group’s cause?</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engage in a political activity in which you suspect there would be a confrontation with the police or possible arrest?</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Send a letter or email about a political issue to a public official?</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attend a talk on a particular group’s social or political concerns?</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Attend a political organization's regular planning meeting?</td>
<td></td>
<td>0</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>1</td>
<td>2</td>
<td>3</td>
<td>4</td>
</tr>
<tr>
<td>--------------------------------------------------------------------------</td>
<td>---</td>
<td>---</td>
<td>---</td>
<td>---</td>
</tr>
<tr>
<td>Sign a petition for a political cause?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Encourage a friend to join a political organization?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Try to change a friend's or acquaintance's mind about a social or political issue?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Block access to a building or public area with your body?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Donate money to a political organization?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Try to change a relative's mind about a social or political issue?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Wear a t-shirt or button with a political message?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Keep track of the views of members of Congress regarding an issue important to you?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Activity</td>
<td>Yes</td>
<td>No</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-------------------------------------------------------------------------</td>
<td>-----</td>
<td>----</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Participate in discussion groups designed to discuss issues or solutions of a particular social or political group?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Campaign by phone for a political candidate?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Engage in any political activity in which you fear for your personal safety?</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Q9 Instructions: Here is a list of statements that different people have made when asked why they watch television shows that feature political candidates. For each statement on the list, please tell whether it applies to you *a lot*, *a little*, or *not at all*.

<table>
<thead>
<tr>
<th>Statement</th>
<th>A lot</th>
<th>A little</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>To judge what political leaders are like.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>To see what a candidate would do if elected.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>To keep up with the main issues of the day.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>To help make up my mind how to vote in an election.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>To use as ammunition in arguments with others.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>To judge who is likely to win an election</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>To enjoy the excitement of an election race.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
<tr>
<td>To remind me of my candidate's strong points.</td>
<td>☐</td>
<td>☐</td>
<td>☐</td>
</tr>
</tbody>
</table>
Q10 *Instructions*: here is a list of statements that different people have given for avoiding television shows that feature political candidates. For each statement on the list, please tell whether it applies to you *a lot, a little, or not at all*.

<table>
<thead>
<tr>
<th>Statement</th>
<th>A lot</th>
<th>A little</th>
<th>Not at all</th>
</tr>
</thead>
<tbody>
<tr>
<td>Because I am not much interested in politics.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Because my mind is already made up.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Because I prefer to relax when watching television.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Because you can't always trust what politicians tell you on television.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Because some candidates talk down to the audience.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Because some candidates talk over one’s head.</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Because they hardly ever have anything to say.</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

The next set of questions will ask you about your basic demographic data. Please select the answer that best applies to you.
Q11 Which of the following do you consider yourself?

- Hearing
- Hard of Hearing
- Deaf

Q12 Which best describes you?

- White
- Black or African American
- Native American or American Indian
- Hispanic or Latino
- Asian or Pacific Islander
- Other
Q13 What is your gender?

- Male
- Female
- Other

Q14 What is the highest level of education that you have completed?

- Less than a high school diploma
- High school degree or equivalent
- Some college
- Associate's degree (e.g. AS)
- Bachelor’s degree (e.g. BA, BS)
- Masters degree (e.g. MA, MS, MeD)
- Doctorate (e.g. PhD, EdD)

Q15 What is your age?

_______________________________________________

Q16 Do you consider yourself a Republican, a Democrat, or an Independent?

- Republican
- Democrat
- Independent

End of Block: Default Question Block
Appendix B:
Posters

Poster 1

Political Activism
How are you engaged?
Take 10-15 Minutes to fill out this survey! Scan the QR code or access it online.

https://rit.az1.qualtrics.com/jfe/form/SV_es1kwoilC3W4I5r

If you have any questions about this research project, email the ccd7830@rit.edu.
Deaf Politics

How can politics be more accessible?

Take 10-15 Minutes to fill out this survey! Scan the QR code or access it online.

https://rit.az1.qualtrics.com/jfe/form/SV_es1kwoilC3W4l5r

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