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SOCIAL MEDIA USE AND INDIVIDUALS WITH COMPLEX COMMUNICATION NEEDS WHO USE ALTERNATIVE AND AUGMENTATIVE COMMUNICATION

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ABSTRACT

This study looked at how individuals who use AAC are using social media. 8 participants who use AAC gave their Facebook logs to the researchers and were analyzed and coded based on Caron’s engagement framework in 5 categories: watching, sharing, commenting, producing and curating. The social media behaviors of the individuals who use AAC were then compared to the behaviors of individuals who do not use AAC. The purpose of this study is to learn what skills we need to be teaching individuals who use AAC, in order to be able to fully participate on Facebook, and social media in general.
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Introduction

Social media is defined as “a group of internet-based applications that build on the ideological and technical foundations of Web 2.0, and that allow the creation and exchange of user-generated content” (Kaplan and Haenlin, 2010 p. 61) It is a platform where anyone can share anything, at any point in time. Over the past few years, social media has become increasingly easy to access, whether it be on a cell phone, computer, tablet, or now even a watch. Because of this accessibility, 7 in 10 Americans are utilizing social media in one way or another (Pew Research Center, 2019). Since 2005, there has been a dramatic increase in social media use, specifically with young adults and adults. In 2005, 7% of the age group 18-29 were using social media, and 6% of the age group 30-49 were using social media. In 2019, 90% of the age group 18-29 were using social media, and 82% of the age group 30-49 were using social media. While the jump was not quite as dramatic in the next two groups, there was still a change from 4%-69% of people ages 50-64 using social media, and 3%-40% for ages 65+. (Pew Research Center, 2019). Social media exists through a variety of different platforms including: Facebook, Pinterest, Instagram, LinkedIn, Twitter, Snapchat, YouTube, WhatsApp and Reddit. After YouTube, Facebook is ranked the second most used social media platform.

Social media serves a variety of different functions, depending on what one chooses to use it for. It can be used to keep current on events, network with others, or share content with others. A big reason that people use social media is to keep up with friends’ lives, and to connect with new people (Pew Research Center, 2019). This can be especially important for individuals who are unable to communicate verbally, or face other limitations when dealing with face-to-face social interactions. Having the ability to communicate and maintain a social presence, despite factors that might otherwise hinder these social interactions, is extremely important for maintaining an active role in society – especially based on how much of the population utilizes social media. While social media can be used by individuals with and
without disabilities, social media poses benefits and challenges that may be unique for individuals with disabilities.

**Individuals who use AAC**

Approximately 1.3 percent of Americans have limited or no speech and benefit from the use of augmentative and alternative communication (AAC). AAC includes communication methods used to supplement or replace speech or writing for those with impairments in the production of spoken or written language and consists of many different types of technology, ranging from no technology methods like gestures and signs, to high technology methods like speech-generating devices (Beukelman & Mirenda, 2013). AAC allows these individuals to still connect with the rest of society, and breaks down barriers that come along with lack of self-expression.

Without being literate, individuals who use AAC are dependent on providers to predict and update vocabulary in their AAC systems – guessing at what the individual needs or wants to say. An additional challenge to many available AAC systems is the lack of access to mainstream technologies that could be used for communication – like email, phone, and social media. “People who use AAC are a marginalized population who might benefit from a greater understanding of how social media might be used in emancipatory and participatory action research, and in relation to on-line self-promotion and self-advocacy” (Greenhow & Robelia, 2009). Being properly taught how to use AAC, and then be able to use that to access social media, has great promise and potential to maximize the quality of life for individuals who use AAC.

**Benefits of social media use by individuals who use AAC.** Caron and Light conducted a series of focus groups with individuals with cerebral palsy and ALS in regards to personal experiences of using Facebook and communicating with AAC. In the first study with adolescents with cerebral palsy, Caron and Light (2016) found that the adolescents saw social media beneficial for connecting to others, supporting participation, increased inclusion in social communities, reduced isolation, and increased social network, and increased self-representation and confidence. Similarly, the studies with older
individuals with both cerebral palsy and ALS also found that Facebook was good for keeping up with friends and family, contacting old friends, making new friends, and creating connections to report information. Some differences occurred for older individuals including use of social media to support employment, managing care, and independence. With individuals with ALS, many of the benefits that they shared were related to expanding personal networks and being able to connect with individuals who are in similar situations. One participant reported, “…like many of us, I have emotional lability, which sometimes is quickly triggered to create inappropriate outburst of laughing or crying. For those who understand, no explanation is necessary, for those who don’t, no explanation is possible. Social media allows those emotional outbursts with no external discomfort. We can share in a place of understanding…” (Caron & Light, 2015). Although many of the benefits discussed previously can likely be shared by individuals without disabilities, one common theme of a social media benefit that is unique to individuals who use AAC is being able to take their time composing a message, without the feeling of discomfort, that they may feel during a wait time in a face-to-face interaction. A participant reported “I can’t keep up [in person], because I’m typing my words [on my AAC device] and when I’m finished, another subject has come up! It makes me feel like I just better listen than join [the conversation]. On social media I can be in on everything and I feel that I’m in the loop contributing [to the conversation]!” (Caron & Light, 2015).

**Challenges of social media use by individuals who use AAC.** While there are certainly many benefits to using AAC with social media, there are also challenges and barriers as well. Referring back to Caron and Light’s study on ALS and social media, physical barriers were a limitation in utilizing AAC for social media use. Gross and fine motor abilities are an important factor in deciding if a certain system will allow the individual to effectively communicate. One of the participants, when facing loss of limb function, was no longer able to use a keyboard, and eventually had to switch to an eye gaze system (Caron & Light, 2015). It can be frustrating to have to switch devices as physical ability is depleting. Another challenge is that there is a lack of direct contact, which creates a disconnect between the
communication partners. There is no reading of facial expressions, body language, or any other direct observations. This forces the communication partner to make conclusions about their partner’s message, based primarily on how they read the message (Caron & Light, 2016). This leads to the next challenge, which is literacy. If the individual who uses AAC does not have reading and writing skills, using social media will be difficult, if not impossible for them to use. Other things like technology supports and learning supports are also barriers in effectively using AAC for social media purposes. Having access to the correct type of technology, and then learning how to use it effectively is a crucial aspect in being able to use social media for maximal benefits.

**Facebook use.** In 2019, 69% of U.S. Americans were using Facebook, with the second highest platform being Instagram, with only 37% of U.S. adults using it. 74% of the U.S. adults that use Facebook report using the site daily, 17% report using the site weekly, and the remaining 9% report using it less often. While Facebook is clearly still being used by most American adults, its popularity remains higher in older age groups, while younger age groups utilize platforms like Instagram and Snapchat much more frequently. While most U.S. Americans, have active Facebook accounts, the younger age groups are not utilizing this platform nearly as much. Despite findings that prove the decline in Facebook use, “Facebook users as a whole are just as active on the site today as they were year ago”, (Pew Research Center, 2019) so there is something to say about the loyalty to the social media site. Facebook, unlike other social media platforms, gives its users the option to engage in a wide variety of activities on the site. Users have the ability to create their own content – whether that be posting personal pictures or videos, updating their status, or writing on others’ pages. Users also have the ability to ‘like’ posts that they agree with, find funny, or just like. They can use this function on pictures, videos, comments, posts, and news articles. Users can use the ‘commenting’ function in a similar way to the ‘liking’, but instead of clicking the button to like, they would comment their thoughts on pictures, videos, other comments, posts, and news articles. On Facebook, users also have access to play certain games, contribute to discussion boards, like and follow certain pages, and privately message their friends. People use Facebook for a variety of
different reasons, whether it be business networking, to keep in touch with family, or just for fun. Aaron Smith from Pew Research asked people about how they are using Facebook and what they like and dislike about it. A reason that was universal across men and women was that they “especially appreciate photos and videos from friends (47% say that’s a major reason they use the site), the ability to share with many people at once (46% cite that as a major reason), updates from others (39% cite that), and humorous content (39%). Other aspects of Facebook-such as keeping up with news, or receiving support from the people in one’s network appeal to a more audience of users” (Pew Research Center). There is something for everyone on Facebook, and that is why it still remains a top social media platform.

**Engagement Framework**

In 2016, adapted from Li (2010), Caron proposed a framework that would be used to examine and analyze the behaviors that were exhibited on social media, applying these behaviors to individuals who use AAC. This framework consisted of 5 main categories: watching, sharing, commenting, producing and curating. Watching is defined as “consuming and absorbing content…engagement behavior is at its lowest and the interaction between others in minimal”. An example of this would be reading a blog post, or listening to a podcast. Sharing is defined as “distributing information and material” which requires a medium level of engagement. An example of this would be sharing a friend’s post to their wall. Commenting is defined as “responding to others’ content and contributing ideas” which also requires a medium level or engagement. Examples of this are ‘liking’ a comment/post, or rating a product. Producing is defined as “creating and publishing own material to connect, express be recognized” (Caron, 2016 p. 503). This requires a high level of engagement. Examples of this include creating and publishing own blogs, posts, videos, or music. Finally, curating is defined as “running and managing content” which also requires a high level of engagement. An example of this include managing a discussion board or support group (Caron, 2016). All of the behaviors have the potential to support connection and
communication in an offline context, yet we currently do not have an understanding of how individuals with disabilities, specifically those who use AAC, use social media.

Although there is research that supports the benefits and challenges to AAC, no research currently uses observational methods. All research uses interviews or focus groups to gather first-hand accounts, as to personal opinions and experiences. “Observations can make the researcher see the bigger picture of set, and help you identify sub groups and common behavior. Observations help you pinpoint important targets to be identified in research” (Oun & Bach, 2014). Due to the limited research on this topic as well as the importance of social media for individuals who use AAC, the current study aimed at use of observational data, of 3 months of Facebook data, to observe trends in behaviors across participants within the context of online engagement.

**Current Study**

This current study aimed to look at the Facebook use of 8 individuals. Their behaviors were observed over a three-month period of time, categorized, and then analyzed by using the engagement framework (Caron, 2016).
Method

Research Design

Qualitative research is used in education by examining “the relationships that people have to themselves (their psychological understanding); to one another (anthropological and sociological perspectives); to the objects, systems and artifacts they create (the built environment); to the particular culture in which they are embedded; to other cultures; and to the natural environment that encompasses culture” (Schaefer, 1998 p. 22). In a broader sense, qualitative research aims to “collect in great details the understanding of the human behavior, and the result that led to such particular behavior…the qualitative research method examines and answers questions of how, where, what, when, and why a person would act in a certain way toward a specific matter.” (Oun & Bach, 2014 p.253). Qualitative research allows us to explore topics that not been researched much, and thoroughly examines the explanation of certain situations. “As qualitative research supports exploration of new or underresearched areas in order to attempt to understand the unique interactions and experiences that occur within a particular situation” (Caron, & Light 2016).

Qualitative research design was selected for a number of reasons. This research design allows the researchers to observe the participants in this experiment through observation in a natural environment. This is done in the least invasive way possible, as behaviors would change as a result of direct observation. By collecting Facebook logs for data, we were able to eliminate the chance of observer bias. Additionally, we were able to increase the sample size using qualitative research because we did not need to directly observe them, therefore, the participants live in different locations all over the United States, and Canada, as well. By obtaining a more widespread demographic, it allowed for a much more representative sample.
Observations are a very common method used in qualitative research, as “observations can make the researcher see the bigger picture of set, and help you identify sub groups and common behavior” (Kozleski, 2014 p. 255). By using indirect observation, the participant’s behavior will likely not change, because they don’t experience anyone directly observing them. Observations work best for this research study because we can identify certain behaviors and patterns of the participants by observing their activity on Facebook, without an observer bias. The activity logs were sent to the researchers after 3 months of natural Facebook participation, and the online observations were used to find certain patterns. There was no interaction between the researchers and the participants during this time.

**Participants**

The participants, individuals who used Augmentative and Alternative Communication with complex communication needs, were recruited through Facebook. There were specific inclusion criteria to be eligible for this study. The participants needed to be able to use an AAC system, be able to read and write as screened through an email to a researcher, be a member on Facebook, and be able to use Facebook independently.

The 4 participants range in ages from 20 years old to 58 years old. There are 2 males and 2 females. All of the participants reported that they taught themselves how to use Facebook, one of them reporting that “it’s pretty simple”. They all use different AAC devices, including Accent 1500, a low tech alphabet board, and a voice synthesizer, all resulting in different means of access. The main form of social media being used among the participants was Facebook, and all of the participants reported being on Facebook for an estimated 2 hours per day. The range of Facebook friends was from 300-500 friends. See Table 1 for a summary.

**Table 1. Participant Demographics**

<table>
<thead>
<tr>
<th>Participants</th>
<th>AD</th>
<th>JB</th>
<th>AA</th>
<th>KC</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>DNR</td>
<td>20</td>
<td>58</td>
<td>27</td>
</tr>
<tr>
<td>Gender</td>
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<td>female</td>
<td>male</td>
<td>male</td>
</tr>
<tr>
<td>---------------</td>
<td>--------</td>
<td>--------</td>
<td>------</td>
<td>------</td>
</tr>
<tr>
<td>AAC System</td>
<td>DNR</td>
<td>Accent 1500</td>
<td>Low tech communication board with alphabet, numbers and phrases</td>
<td>Voice synthesizer</td>
</tr>
<tr>
<td>Means of Access</td>
<td>DNR</td>
<td>Touch Enter</td>
<td>Index finger</td>
<td>Letter/word scanner</td>
</tr>
<tr>
<td>Number of hours spent on Facebook</td>
<td>DNR</td>
<td>2</td>
<td>2</td>
<td>2</td>
</tr>
<tr>
<td>Number of Facebook Friends</td>
<td>DNR</td>
<td>480</td>
<td>300</td>
<td>500</td>
</tr>
<tr>
<td>How did they learn to use Facebook</td>
<td>DNR</td>
<td>Self-taught</td>
<td>Self-taught</td>
<td>Self-taught</td>
</tr>
</tbody>
</table>

Note: DNR = did not report

**Materials**

No materials were provided for this study. The participants were instructed to use Facebook as the normally do. As will be described in the procedures section, the materials used to collect data were use of the Facebook activity log feature.

**Procedures**

Participants were told to scroll through their Facebook home page for 3 months, create a PDF file of their activity log, and share the activity log with the researcher. After the log was obtained, a research assistant de-identified the log, removed personally relevant information, and then the logs were analyzed by the research team.

**Measures**
The apriori coding scheme was developed prior to the beginning of the study, in order to assess common themes in the data. The engagement framework model is used in the learning context of social media. “The nature of social media inherently provides a context for interaction with people within a meaningful task, supporting central ideas of engagement theory (Caron, 2016).” The Caron Engagement Framework explains that by using meaningful, relatable tasks, participation will increase. Apriori code allows researchers to have more accuracy in their research. When using an apriori template “it involved scrutiny of the text, through reading, and re-reading of the research question. This process allowed the initial five codes to develop and the terms that initially emerged as being significant (Blair, 2015).

Coding

Each log was coded by an engagement researcher, and coded for a number of photos posted, posts they were tagged in, etc. Interrelated reliability was performed by another member of research team by 20% posts per participants.
Results

The results section will be broken down into the social media engagement framework for individuals who use AAC (Caron, 2016), including: watching, sharing, commenting, producing and curating. Results will be presented with totals across 8 participants, as well as individual analysis of the 4 participants.

Watching

Watching behaviors are defined as “consuming and absorbing,” “low engagement” and “passive participation with regular visits to a site but with seldom posting, commenting, or sharing.” (Caron, 2016 p. 501). These behaviors included: viewing timelines, lurking, or reading content. Although these behaviors were not able to be observed from the Facebook logs, all participants reported they spend an average of 2 hours a day on Facebook. All participants were asked how frequently they felt they exhibited the “watching” behavior as defined above. Participant 1 reported they felt they “often” exhibited watching behaviors. Participant 2 reported they exhibited this behavior for “1 hour daily”. Participant 3 responded to the question with “I think that people share too much information on Facebook.”

Sharing

Sharing behaviors are defined as “distributing information and material and involves a medium level of engagement behavior, with some interaction with others.” (Caron, 2016 p. 502). These behaviors included sharing a post, sharing via Pinterest, sharing results of a game played, sharing a trending topic, sharing a memory, sharing a location and connecting Facebook to a third-party app like Spotify or Instagram, and setting it up to automatically share whenever a participant listened to a song or posted a picture. A total of 2,006 sharing behaviors was observed across all 8 participants, with the most sharing behavior of 803, and the least sharing behavior of 72. See Figure 1 for a summary.
Participant 1. Over the course of the 3 months that this study took place, JB exhibited 116 sharing behaviors. JB shared a post 45 times and shared a memory 49 times. JB shared location 2 times. JB connected the third-party app Instagram, so that whenever the participant shared a photo, it would automatically post to Facebook. JB posted to Instagram 20 times. JB did not connect to any third-party music apps, share via Pinterest, share game results, share petitions, share trending topics, or share subscriptions to a group.

Participant 2. AA demonstrated sharing behaviors 403 times during this study. AA shared a post 279 times, and shared a memory 4 times. AA played a game and shared the results 3 times. This participant connected their Facebook account to a third-party music app, that shared AA was listening to a song 117 times. AA did not share via Pinterest, share game results, share petitions, share trending topics, share location, share subscriptions to groups, or share memories.

Participant 3. KC exhibited sharing behaviors 789 times. KC connected Facebook to Spotify, so that every time a song was listened to, it automatically shared on Facebook. KC listened to a song on
Spotify 780 times, and updated a playlist on Spotify 9 times. KC did not exhibit any other sharing behaviors.

**Participant 4.** AD demonstrated sharing behaviors 270 times. AD shared a post 62 times and shared a memory 38 times. AD connected the third-party app Instagram, so that whenever the participant shared a photo, it would automatically post to Facebook. AD posted to Instagram 162 times. AD posted results from a game 5 times and shared a trending topic 3 times. AD did not connect to a third-party music app, share via Pinterest, share a petition, share music, share location, or share a subscription to a group. See Figure 2 for summary.

**Figure 2 Sharing Results on 4 Participants Analyzed**

![Sharing Results on 4 Participants Analyzed](image)

**Commenting**

Commenting behaviors are defined as “responding to others’ content and contributing ideas, with a medium level of engagement”. This behavior can range on a “wide continuum from less demanding
tasks such as ‘liking’ to more complex tasks such as contributing responses to others’ messages.” (Caron, 2016 p. 502). These behaviors included: commenting on a post, replying to a comment, commenting on a photo/video, adding a new friend, liking a page, liking a status/post, liking a photo/video, reacting to a post/photo, liking a comment, reviewing a page, liking a product, responding to an event, tagging in a photo/post, or being tagged in a photo/post. A total of 8,422 commenting behaviors occurred among all 8 participants. The participant with the highest commenting behavior, demonstrated this 3,085 times. The participant with the lowest commenting behavior demonstrated this just 84 times. See figure 3 for summary.

**Figure 3 Commenting Results of all 8 participants**
Participant 1. JB exhibited commenting behaviors 3,085 times. JB exhibited the commenting function 46 times. JB was tagged in a post/photo 88 times. JB needed to accept the tag in order for the post or photo to be shared to the participant’s Facebook profile page. JB utilized the liking/reaction function 2,910 times. JB responded to an event 3 times, and added a friend 38 times. JB did not like any comments.

Participant 2. AA demonstrated commenting behaviors 1,305 times. AA used the commenting function 451 times. AA was tagged in a post/photo 16 times. AA needed to accept the tag in order for the post or photo to be shared to the participant’s Facebook profile page. AA used the liking function 826 times. AA and added a friend 12 times. AA did not respond to any events.

Participant 3. KC demonstrated commenting behaviors 84 times. KC used the commenting function 18 times. KC used the liking/reaction function 52 times. KC initiated a tag in a photo 1 time. KC was tagged in a post/photo 13 times. KC needed to accept the tag in order for the post or photo to be shared to the participant’s Facebook profile page. KC and added a friend 1 time. KC did not comment on pictures or videos, like any comments, or respond to any events.

Participant 4. AD exhibited commenting behaviors 688 times. AD utilized the commenting function 118 times. AD used the liking/reacting function 491 times. AD was tagged in a post/photo 35 times. AD needed to accept the tag in order for the post or photo to be shared to the participant’s Facebook profile page. AD liked a product one time, responded to an event 10 times, and added a friend 38 times. AD did not like any comments. See Figure 4 for summary.
Producing behaviors are defined as “creating and publishing your own material” and requires an “increase in linguistic, strategic, and operational demands” (Caron, 2016). These behaviors include: updating a status, posting a picture/video, posting a wall post, adding a feeling or updating a biography section of their profile. A total of 1,123 producing behaviors were demonstrated across all 8 participants, with the highest producing behaviors of 394 and the lowest producing behaviors of 40. See Figure 5 for summary.
Participant 1. JB exhibited producing behaviors 128 times during this study. JB updated a status 13 times. JB posted a picture or video 91 times, which was the most frequent producing behavior this participant used. JB posted a wall post just 2 times, posted in a group 8 times, and added a feeling to their page 14 times. JB did not update the about me or biography section at all.

Participant 2. AA exhibited producing behaviors 241 times. AA updated a status 122 times, which was the most frequent producing behavior this participant used. AA posted a picture or video 19 times, and posted a wall post 100 times. AA did not post in any groups, did not update about me or biography section, and did not add a feeling to the page.

Participant 3. KC demonstrated producing behaviors 63 times. KC updated a status 11 times, posted a picture or video 15 times and posted a wall post 2 times. KC updated the about me or biography section 35 times, which was the most frequent producing behavior that this participant used.

Participant 4. AD demonstrated producing behaviors 58 times. AD updated a status 23 times and posted a picture or video 7 times. AD posted a wall post 25 times, which was the most frequent producing
behavior this participant used. AD posted in a group 2 times and added a feeling to their profile 1 time. AD did not update the about me or biography section at all. See Figure 6 for summary.

**Figure 6 Producing Results of 4 Participants Analyzed**

![Bar chart showing the number of actions taken by participants.](image)

**Curating**

Curating behaviors are defined as “running and managing content” where “engagement behavior is at its highest, and the interaction between others is frequent” (Caron, 2016 p. 503). None of the 8 participants demonstrated any curating behaviors.

**Non-AAC using Participants**

Individuals who did not use AAC were recruited to compare 3 months of Facebook use to see their engagement behaviors. These 8 participants only exhibited 2 of the 11 sharing behaviors, and only exhibited 17 sharing behaviors overall. Commenting behaviors were exhibited the most by this group of participants of all 5 categories. Collectively, these participants used commenting behaviors 2,031 times, with a relatively even distribution across the 8 participants. The ‘liking’ function was used 680 times, and
the ‘commenting’ function was used 265 times. A function that many of the participants exhibited was tagging other friends in “memes”, which was categorized as initiating a tag in post, which occurred 110 times. These participants were also tagged in many “memes” or posts, which occurred 211 times. The non-AAC using participants demonstrated producing behaviors 105 times. The two main ways that participants showed this producing behavior was by posting a picture or video, which occurred 59 times, and posting in a group, which occurred 36 times. No participants exhibited curating behaviors.
Discussion

The above findings represent the results of 8 individuals who use AAC. Findings support that social media can be used by individuals who use AAC to support maintaining friendships, maintaining social presence, and building connections. More specifically, the most used behavior on Facebook was commenting. These findings are consistent with 8 individuals who do not use AAC, who use social media the most to comment, as well. The discussion will be organized in a similar manner to the results.

Watching

Although watching can’t be observed, all individuals reported they spend approximately 2 hours per day on Facebook. This is consistent with findings from Pew Researchers, which reported that of adults who use Facebook, 74% of adults visit the site daily, while only 17% visit the site weekly, and only 9% visit the site less often than that (Pew Research Center, 2019).

Sharing

Sharing is defined as “distributing information and material and involves a medium level of engagement behavior, with some interaction with others” (Caron, 2016). Sharing was the second most frequent behavior observed among the participants. Overall, across the 8 participants, the highest sharing activity was sharing music, being an extremely high behavior, taking up 49% of total sharing behaviors. However, it is important to note, that this behavior was only exhibited by 2 of the 8 participants, with one of the participants exhibiting this behavior as their main behavior, which occurred 789 times. The second most frequent behavior, which was exhibited by 7 of the 8 participants was sharing a post, which accounted for 25% of the sharing behaviors. Of the 4 participants further analyzed, their most frequent sharing behavior varied. JB’s most frequent activity was sharing a memory, AA’s was sharing a post, KC’s was listening to music, and AD’s was sharing a picture via Instagram.

Disregarding sharing music as the most frequent behavior (since it was mainly exhibited by 1 participant), sharing a post was probably the most frequent behavior because it is a relatively easy way to
share content that they agree with, or find interesting, without involving the high level of engagement that would be required in writing those same thoughts themselves. This is a way to maintain their social presence on Facebook, as well as create an opportunity for discussion, where their friends and family can like and comment, and allow the chance for social interaction. “The operational demands at the level of sharing are reduced in comparison to engagement that requires content generation, for all individuals. This is particularly advantageous for individuals who use AAC, as rate of communication and overall operational barriers often limit participation in communication exchanges” (Caron & Light, 2015). The passivity that is allowed during sharing behaviors is a huge advantage that makes involvement in social media easier and more doable for these individuals.

The New York Times conducted a study on “why we share on Facebook” and found 5 large contributing factors of why people choose to share. These factors included bringing entertaining content to their friends, defining themselves and their interests, growing and nourishing relationships, self-fulfillment, and getting the word out about causes they care about (Brett, 2011). These factors are consistent with reasons individuals who use AAC choose to use social media, including maintaining relationships, increasing interactions, and raising awareness about important causes.

Commenting

Commenting is defined as “responding to others’ content and contributing ideas, with a medium level of engagement” (Caron, 2016). Commenting was the most frequent behavior observed among the 8 participants. Overall, across the 8 participants, the most frequent behavior was liking a status or post. Of the 4 participants further analyzed, JB, AA, and KC all had liking a status or post as their most frequent behavior, and AD’s most frequent behavior was reacting to a post.

As discussed by Caron, commenting behaviors range across a wide continuum. There are some tasks that involve a higher level of engagement, while some of the tasks involve a pretty low level of engagement. The less demanding tasks include “liking, favoriting, or rating” (Caron, 2016). These require a click of a button, and do not require actual generation of any content. The ‘liking’ function was utilized
the most among the commenting behaviors, because it does not require much engagement, but still allows these individuals to feel involved in a social interaction. In Caron’s study on individuals with CP who use AAC and social media, one participant said, “sometimes even just hitting “Like” feels like enough to just remind people ‘Hey, I’m here and involved” (Caron & Light, 2016), and other individuals felt the same way. While there may be some other behaviors that can be difficult for individuals who use AAC, the ‘liking’ function, is relatively easy to use, while still giving these individuals the interaction they are looking for. Additionally, a study done in the Norwegian School of Economics, showed that when one person likes a post or update, their friends or more likely to like that post or update as well, which in way can promote social closeness, and the feeling of sharing mutual thoughts and ideas with other individuals (Egebark, 2011).

While the ‘liking’ function was used significantly more than the ‘commenting’ function, the commenting function was still used for a variety of functions by these participants, with about 19% of the behaviors including the ‘commenting’ function. While the ‘commenting’ behaviors and ‘liking’ behaviors were exhibited in similar amounts between individuals who use AAC and individuals who do not, it is interesting to note one difference between the 2 groups. Individuals who do not use AAC tended to tag each other in comments and memes, which occurred 110 times, and were tagged in comments and memes themselves, 211 times. This seems to be a social trend, that the individuals who use AAC are not exhibiting. These individuals may not be exhibiting this behavior because of the high engagement level that it requires, since one has to initially read the post, understand it, think of a reason why they want to tag someone in it, and then actually comment on the post, and tag an individual, which requires a lot of complex skills. This could also not be occurring as a result of simply just needing to be taught that this is a social trend that is occurring, and showing them how they can do it, and become involved in it.

**Producing and Curating**

Producing and curating are higher level skills that are defined as “creating and publishing your own material” and “running and managing content” (Caron, 2016). These require strong literacy skills, as
well as social skills to navigate and control multiple conversations. Across the 8 participants, producing was the 3rd most frequent group of behaviors exhibited, probably because of the more demanding skills required. Overall, across the 8 participants posting a wall post was the most frequent behavior, with posting a picture or video and updating a status were tied for the second most frequent behavior. Of the 4 participants further analyzed, the most frequent producing behavior varied. JB’s most frequent behavior was posting a picture or video, AA’s was updating a status, KC’s was updating a bio, and AD’s was posting a wall post. No curating behaviors occurred. In order for an individual to produce or curate, they need to be a strong communicator, and have the necessary tools to be able to communicate in these higher skill level tasks. There is a need for these individuals to have strong communicative competence across a range of communication environments, including social media (Caron & Light, 2016). In order to participate in producing and curating, the individual needs to have strong operational skills and strategic competence. Operational skills are required in order to navigate throughout the site. When sites make updates or changes, this increases operational demands, because the individuals have to relearn how to navigate the site (Caron & Light, 2016). Strategic competence is necessary to overcome difficulties when communication breakdowns occur, and know how to move on from them (Celce-Murcia, Dornyei & Thurell, 1995).

Clinical Implications

Social media use is widespread and is an important part of remaining active in society, and according to the research, show that social media use has significant benefits for those who use AAC. By understanding the positive impact of social media, and why it is necessary, SLPs can begin to implement social media training into their clinical sessions. From this study, we know what behaviors are being engaged in the most, and which behaviors are being engaged in the least. We have found that these individuals are not engaging in any curating behaviors, and few producing behaviors, compared to the commenting and liking behaviors. Since these require the highest level of engagement, we can target the skills that they need to work on in order for them to participate in these higher level behaviors. In therapy,
we can give these individuals practice opportunities to create and manage their own discussion boards, as well as giving them opportunities to practice how to post statuses, pictures, videos, and wall posts.

Additionally, the SLP can identify social trends that are being exhibited on social media, and show the client what they are, and how to do them, so they can be involved and not miss out on a social opportunity. For example, by identifying that tagging others in comments and memes is currently a social trend, the SLP can find pages that post these memes that the individual can ‘like’. Together, they can work on literacy skills if necessary in order to understand the photo, and learn how to decide who to tag in the photo, based on appropriateness, and then how to do the actual tagging. Once the skills are identified that need to be learned, the SLP can target them, and increase their social media use.

Communication is more than just face to face interaction, and the goal of communication competence is to be able to “communicate across a range of communication environments and partners, including social media” (Caron & Light, 2016 p.1). Not everyone is going to communicate in the same way, and we need to move beyond the idea that face to face communication is the best way to communicate, instead, focus on the strengths of individuals and decide what their best modality of communication would be. By teaching the right operational skills and strategic competencies in order to use social media, this could allow these individuals to be successful communicators on social media.
Conclusion

Social media is an online platform that allows individuals to communicate with each other, and share information, ideas, personal messages, and other content. This study analyzed the behaviors exhibited on Facebook by 8 individuals who use AAC. Using the categories from Caron’s engagement framework, the results showed that most frequent behavior was commenting, followed by sharing, then producing. Curating was not utilized at all, and requires the highest level of engagement. These individuals tended to demonstrate behaviors that required lower levels of engagement like ‘liking’ and ‘sharing’. More research needs to be conducted in this area in order to get a better understanding of how to improve this form of communication for individuals who use AAC. All individuals communicate in a multimodal way – this included face to face communication, as well as communication online. It is important that everyone have access and the knowledge to participate in this form of communication, if they choose.
References


Academic Vita of

Allison Lebovitz

EDUCATION

The Pennsylvania State University  
University Park, Pennsylvania  
Bachelor of Science, Communication Sciences and Disorders  
The College of Health and Human Development  
• Schreyer Honors College  
• Minor in Spanish

IES Language and Area Studies Madrid  
• 16 credits

PROFESSIONAL HISTORY

AAC Literacy Lab  
Lab Assistant  
August 2018- December 2018

• Coordinated materials and program AAC devices alongside other undergraduate and graduate students

Undergraduate Teaching Assistant  
CSD 230 Intro to Audiology  
August 2018- December 2018

• Held office hours to assist students regarding content and assignments, and helped students resolve issues  
• Assisted professor in proctoring exams, grading assignments and distributing and alphabetizing exams

SKILLS

Spanish  
Advanced  
• Minor in Spanish  
• Studied abroad in Madrid instructed in Spanish by native speakers

Competency in Augmentative and Alternative Communication  
Proficient

EXTRACURRICULAR ACTIVITIES

Phi Eta Sigma Honor Society  
January 2017-Present
Health and Human Development Honor Society  August 2018- May 2020

NSSLHA  August 2016- May 2020
Member

- Attends informational meetings; participates in community service such as nursing home visits and blood drives

Mid-State Literacy Council  August 2017-December 2017
Tutor

- Tutored multiple English Language Learners to work on developing and improving proficiency in English through reading, speaking, and writing activities

Hillel  January 2018- May 2018
Campus Engagement Intern

- Encouraged other Jewish students to attend Hillel events by educating them and discussing Jewish experiences
- Coordinated and hosted Jewish learning events for other students, and led discussion

Alpha Omicron Pi  August 2016- May 2020
Sorority Member

- Attends meetings, discusses important changes in the chapter
- Fundraises for THON, the largest student run dance marathon for pediatric cancer and Strike out Arthritis, our national philanthropy
- Completes volunteer hours offered by sorority

Sorority Recruitment Group Leader  January 2018

- Organized different groups during the recruitment process, contributed as a key leader in the member selection process and matched members of the sorority to potential new members