Emotional Effects of Extended Breaks on Elementary Students in School Speech Therapy Programs

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ABSTRACT

With the COVID-19 pandemic drastically affecting everyone across the United States and the rest of the world, people of all ages have experienced, and continue to experience, a wide variety of social and emotional challenges. Unforeseen closures have subsequently affected people's lives, across the globe. Many of these people rely on school, work, and a variety of other special programs for academic, financial, psychological, and emotional support. With a lack of these support systems, many are left feeling lost and falling behind.

Language delays are seen in 1.9 to 2.3 percent of children between the ages of two and seven years. (McLaughlin, 2011). With that being said, school speech therapy programs are essential to the success and development of students across the country; especially in cases where private speech therapy is not feasible. Although these programs have proven to be both necessary and important, very limited research has been done on the emotional effects of the specific methods in use.

Research Question

My research question asked how extended breaks disproportionately affect elementary students in school speech therapy programs.

Purpose

By focusing specifically on the emotional effects of school speech therapy on students, rather than all things under the broad "special education" umbrella, I had hoped to gather accurate and specific data with little-to-no confounding variables.

Schools, especially public schools, offer a wide variety of special education services including, but not limited to gifted education, full-time special needs education, English Language Learners (ELL) services, and speech therapy. Moreover, because each service addresses different needs and is structured differently, it would have been impossible to prevent potential confounding variables if my research question was any broader.

As previously stated, my study was meant to identify how extended breaks disproportionately affect speech therapy students on an emotional and psychological level, with the ultimate goal of pinpointing strategies that Speech-Language Pathologists (SLPs) and schools can implement to better provide for their students in a healthy and positive environment.

Speech and Language Impairment

According to *KidsHealth from Nemours*, children who require speech therapy likely suffer from an underlying speech or language disorder. "A speech disorder refers to a problem with making sounds" and can include articulation disorders, fluency disorders, and resonance or voice disorders. "A language disorder refers to a problem understanding or

putting words together to communicate ideas" and can include receptive disorders, expressive disorders, or cognitive-communication disorders. (Hartnett, 2019)

The "American Speech-Language-Hearing Association (ASHA)," states that indicators a student may have an underlying speech or language disorder include, but are not limited to having trouble with literacy, social or cognitive communication, and speech sounds. Additionally, "Orange County Public Schools" further describes communicative symptoms that suggest that a student may have a language disorder. These language impairments include issues with phonology, morphology, syntax, semantics, and/or pragmatics.

Speech Services in United States' Schools

Some of the first speech correction classes were introduced to United States' schools at the same time that free schooling was first implemented. Since then, the programs have expanded to offer a wider range of services. The American public school speech therapy and special education programs have evolved in stages to the comprehensive, multifaceted department it is today. (Duchan, 2010)

Today, speech therapy plays an essential role in fostering the oral development of students with speech impediments and language delays which, as a result, allows for a higher retention rate in primary school and beyond. According to *ASHA* "the better [a student's] communication skills, the better [they] will do in school."

Without sufficient communication abilities, students are likely to have difficulty reading, writing, spelling, identifying social signals, and taking tests. These struggles, as a result, create a more stressful and unproductive learning environment for the student. Speech services in schools work to presumptively address these possible struggles by using lessons and strategies that foster (verbal or non-verbal) dialogue.

Speech-Language Pathologists

A Speech-Language Pathologist or SLP is most commonly known for addressing speech issues in children. In addition to their speech-related responsibilities, SLPs are also trained to work with students who possess a variety of learning disabilities. Some of these learning disabilities include but are not limited to dyslexia, auditory processing disorder, and autism spectrum disorder. While SLP's individually utilize their own strategies and classroom structure, they are each on the same mission: to improve a child's performance in their primary classroom(s).

Some of the principal duties of an SLP include aiding students in boosting phonological awareness skills, utilizing language, understanding inferences, building vocabulary, improving reading comprehension, and enhancing social skills. SLPs must also evaluate students who are suspected of having a possible speech or language disorder. (Kelly, 2020)

Emotional Effects of Speech and Language Disorders

Studies have shown that people with both Social Anxiety Disorder and Childhood-Onset Fluency Disorder (more commonly known as "a stutter") exhibit abnormalities in dopamine production. These abnormalities are similar to what is seen in people with Parkinson's disease.

This particular study gave me specific insight into how students with language and speech disorders may experience heightened anxiety when responding to questions, especially, in an online learning environment. Although research is still being conducted on the emotional effects speech and language disorders can have on people, the study also provides data proving that people with both Social Anxiety Disorder and Childhood-Onset Fluency Disorder greatly benefit from therapy. (Heuser Hearing Institute, 2020) This data reinforces the fact that accessible speech therapy is both beneficial and essential.

Emotional Effects of Distance Learning

A study on college masters' students looked into the importance of interaction in the effectiveness of online learning, specifically focusing on the connection between emotional intelligence, social bond, and interaction. The study found, not only that, emotion, cognition, and behavior are interdependent, but also that students who have a higher level of emotional intelligence also have a greater degree of social bonding in online learning. (Han & Johnson, 2012) In other words, students who are more emotionally and socially aware tend to perform better when participating in online learning.

Virtual Speech Therapy Services

Speech telepractice has proved to be a cost-efficient solution to the recruitment and retainment of SLPs, especially in rural schools and areas. The introduction of speech telepractice into rural Oklahoma schools found that the success of the teletherapy was significantly dependent on the skill level of the SLPs and their willingness to adapt to an online setting. It also noted that students were receptive to what was taught when the material was taught in an organized and engaging manner. Ultimately, the implementation of speech telepractice was a comprehensive, cost-effective solution for schools that have difficulty retaining SLPs. (Fordicey, 2006)

Additionally, ASHA endorses online teletherapy, so long as the quality of the service is equal to the in-person speech therapy alternative. ASHA believes that teletherapy is an extremely useful tool in rural and remote areas and, in a lot of ways, a practice that better engages students. Because students tend to be computer savvy, many of them prefer working with technology. Moreover, teletherapy also makes speech therapy more time-efficient. By eliminating the travel time for SLPs, sessions are easier to reschedule when they are conducted over a virtual platform. (Shah, 2011)

Finally, with modern-day technological advancements, studies have shown that educational applications can be integrated into speech therapy lessons and better promote learning goals. Educational applications are perfect for students with varying cognitive abilities because smartphones and tablets are easy to navigate and can be reorganized to make them more user-friendly. (Javadi, Ghazvini, & Dianat, 2017)

Gap in Research

Although there have been various studies done on the learning deficits students face as a result of extended breaks, there is nearly no information on the emotional effects that extended breaks may have on a student in school speech therapy. Furthermore, my research is working to specifically evaluate the setbacks that students experience, from an emotional perspective. By identifying potential emotional obstacles, SLPs and schools can apply the data gathered to better speech therapy programs in schools. Additionally, with the recent influx of studies conducted on the effectiveness of speech games and telepractice, it is crucial to consider the emotional well-being of students.

Hypothesis

Considering the significant learning deficits that students experience as a result of extended breaks, I hypothesized that students in speech therapy would also experience significant emotional setbacks. I also theorized that students in speech therapy would be disproportionately affected by extended breaks, in comparison to students who are not in speech therapy at school, because they are more reliant on school and the services it provides.

Assumptions

I anticipated some difficulties recruiting students to complete my survey due to the COVID-19 pandemic. While I had hoped to be able to survey kids through specific schools in the United States, because of COVID-19 protocol I instead had to find participants through social media. From there, I assumed that parents/guardians would be more reluctant to let their children participate because they could not be completely sure of who I was. Nevertheless, I did believe that the study would still yield affirmative results.

Methods

I collected my data by surveying elementary school students. In total, I had two surveys for two different testing groups. "Group A" consisted of students who did not receive special education services in school and "Group B" consisted of students who did receive speech therapy services in school. All of the students who participated in the survey were located in the United States and partook in the study with a parent or guardian's permission.

I developed my own survey questions for several reasons: I wanted to ensure that the questions directly pertained to my research question and the participants' experiences. I also took various measures to guarantee that the survey was inclusive and accommodating. All of the questions being asked were "finish the statement" style and extremely direct and straightforward. Additionally, each question was multiple choice, and the potential responses were offered in both word and picture format, in order to accommodate students who were unable to read. Finally, my survey advised that an informed parent or guardian work with the participant in understanding the questions, bearing in mind that some students would be too young to fully process what the survey was trying to evaluate.

I ultimately chose to conduct a survey due to the lack of data that related to what I was studying. The best way to confirm that my data points were both valuable and relevant was to formulate my own, specific survey questions. I developed my survey questions by considering significant changes that occur as a result of extended breaks such as, but not limited to the first and last days of school.

Survey Formulation

Each survey consisted of two sections: the parent/guardian consent form and the survey response form, both of which were IRB approved. The consent form was initially sent to those interested and outlined all that the actual survey would entail. The consent form also indicated that the participants' names, grades, and counties would all be kept anonymous. On the consent form parents and guardians were also directed to indicate whether their student received speech therapy in school (for group assignment purposes).

Once the parent or guardian completed the survey consent form, I then sent the survey response form. This form included instructions for how to complete the survey and the questions that pertained to my study. I developed my survey questions by brainstorming what common changes occur in the transition from traditional school to a break and then from a break back to traditional school. The survey questions are outlined in Figure 1.

School makes me feel…
No school makes me feel…
The first day of school makes me feel…
The last day of school makes me feel…
Summer break makes me feel…
Online school makes me feel…
Talking to my friends at school makes me feel…
Talking to my friends in online school makes me feel…
Talking to me teacher(s) at school makes me feel…
Talking to me teacher(s) in online school makes me feel…
Answering questions at school makes me feel…
Answering questions in online school makes me feel…
My teacher(s) make me feel…
Speech class makes me feel…
No speech class makes me feel…
The first day of speech class makes me feel…
The last day of speech class makes me feel…
Online speech class makes me feel…
Talking to my speech teachers at school makes me feel…
Talking to my speech teachers in online school makes my feel…
My speech teacher(s) make me feel…

Figure 1. Survey Questions.

The questions highlighted in yellow were listed on both Group A and Group B's survey, while the questions highlighted in blue were specific to Group B's. While my survey questions are also applicable to shorter breaks off of school such as Thanksgiving, winter, or spring break, I specifically formulated the questions with distance learning and summer break in mind.

Each of the survey questions could have been answered in six different ways. The possible answer choices, listed on a scale from most positive to most negative were:
1. Excited
2. Happy
3. Neutral
4. Scared
5. Sad
6. Angry

Participant Recruitment

Facebook proved to be an extremely useful resource during the participant recruitment process. I joined a total of five Facebook groups in which I posted information about what I was doing and the link to the parent and guardian consent form. The names of the Facebook groups were as follows:
1. Parents of Children with Speech and Language Delays
2. Parent Support for Online Learning
3. Distance Learning for Special Education
4. Remote Learning – Teachers and Parents – Elementary School
5. Self-Contained Special Education and Distance Education

Each Facebook group's audience consisted of more than one thousand members who directly pertained to my research focus.

In addition to consistently posting my survey information in the Facebook groups, I also reached out to active members of each of the groups via direct message. This way, I was able to answer any questions they had and strongly urge them to participate in my study.

Further Outreach

While the majority of my survey responses came from my activity in the previously mentioned Facebook groups, I also contact schools and SLPs in my area asking that they pass the survey information along. This method was not nearly as effective considering that many SLPs had to get approval from their schools and that the schools had to get approval from their county.

As a final resort, I contacted parents I knew, directly, asking that their student complete the survey and that they forward the information to any other parents they believed would be willing to partake in my study.

Results

A compilation of the most popular responses for each question, from each survey group is seen in Figure 2.

QUESTIONS	RESPONSES	
	No Speech Therapy	Speech Therapy
School makes me feel…	Happy	Excited
No school makes me feel…	Excited/Sad	Neutral
The first day of school makes me feel…	Excited	Excited
The last day of school makes me feel…	Excited	Happy
Summer break makes me feel…	Excited	Happy
Online school makes me feel…	Angry/Neutral	Neutral
Talking to my friends at school makes me feel…	Happy	Excited
Talking to my friends in online school makes me feel…	Neutral	Neutral
Talking to me teacher(s) at school makes me feel…	Happy	Happy
Talking to me teacher(s) in online school makes me feel…	Happy	Neutral
Answering questions at school makes me feel…	Happy	Excited
Answering questions in online school makes me feel…	Neutral	Neutral
My teacher(s) make me feel…	Happy	Excited
Speech class makes me feel…		Excited
No speech class makes me feel…		Neutral
The first day of speech class makes me feel…		Excited
The last day of speech class makes me feel…		Happy
Online speech class makes me feel…		Neutral
Talking to my speech teachers at school makes me feel…		Happy
Talking to my speech teachers in online school makes my feel…		Neutral
My speech teacher(s) make me feel…		Excited

Figure 2. Most Popular Survey Responses.

Similar to what is seen in Figure 1, the questions highlighted in yellow are those seen on both Group A and Group B's survey and the questions highlighted in blue are specific to Group B's. In terms of the responses, the adjective listed was the most commonly selected answer to each question. (If more than one adjective is listed, two answer choices tied in the number of responses). The green word color indicates a "positive response," the orange word color indicates a "neutral response," and the red word color indicates a "negative response." Finally, the responses that are highlighted in gray are ones that were similar among both survey groups (both positive responses, both neutral responses, or both negative responses).

Based solely on Figure 2 I was able to identify that Group A and Group B had relatively similar, most common responses to questions that were listed on both groups' surveys. I also determined that participants in Group A were more willing to respond with a negative emotion, whereas participants in Group B more commonly responded with a positive or neutral response. Lastly, I found that the two areas where the most common responses were different between Groups A and B were both related to changes in the traditional school structure.

In addition to compiling the most common survey responses, I also divided the questions into three groups,

1. Questions related to traditional (in-person) schooling
2. Questions related to breaks from school
3. Questions related to distance learning (online schooling)

The survey responses into three groups,

1. Positive responses (excited and happy)
2. Neutral responses (neutral)
3. Negative responses (scared, sad, and angry)

And the type of schooling into three groups:

1. Speech therapy students in a speech therapy setting
2. Speech therapy students in a classroom setting
3. Non-speech therapy students in a classroom setting

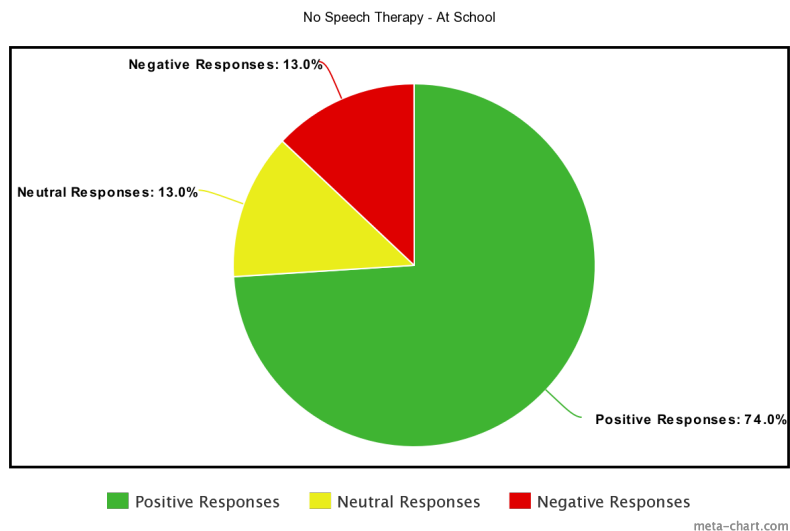Figures 3, 4, and 5 all illustrate the survey responses related to in-person schooling.

Figure 3. Group A Responses Pertaining to a Traditional Classroom Setting.

Figure 3 looks at students from Group A and how they responded to questions related to the traditional classroom setting. For the most, part students responded positively with equal amounts of neutral and negative responses.
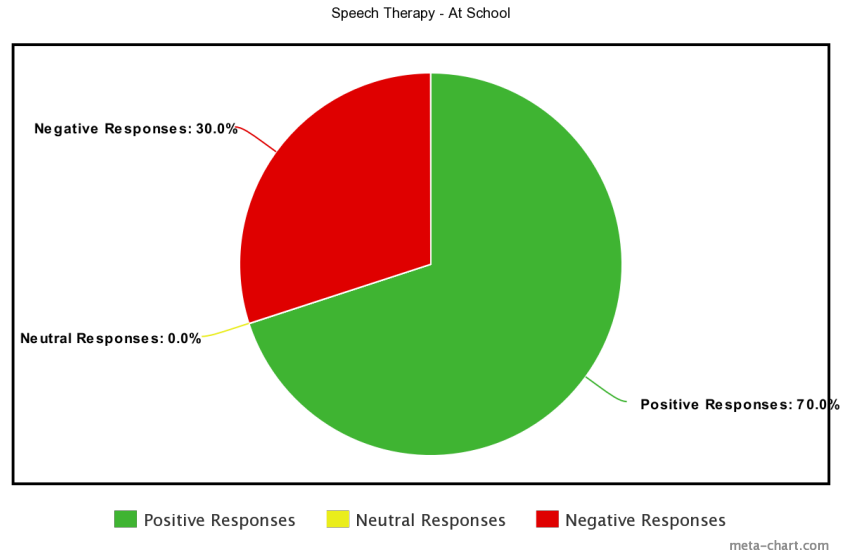
Speech Therapy - At School

Figure 4. Group B Responses Pertaining to a Traditional Classroom Setting.

Figure 4 analyzes the responses from students in Group B, concerning how they feel about traditional schooling in the classroom setting. In this category, students only responded with positive or negative emotions.
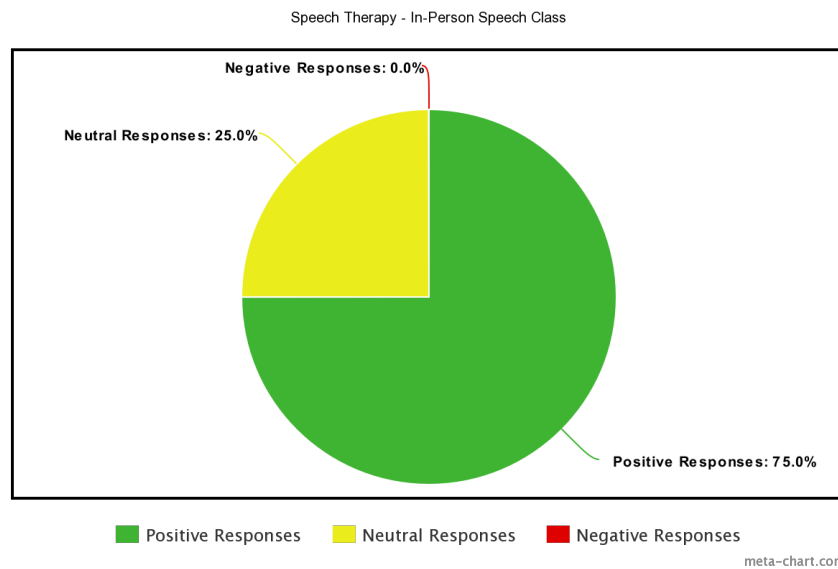
Speech Therapy - In-Person Speech Class

Figure 5. Group B Responses Pertaining to a Speech Therapy Setting.

Figure 5 looks at the responses from students in Group B, in relation to how they feel about traditional schooling in the speech therapy setting. Here, students only responded with positive or neutral responses.

After analyzing both Figures 4 and 5, I determined that students who do receive speech therapy in school tend to respond more positively when speaking about in-person lessons in the speech therapy setting as opposed to in-person lessons in the general classroom setting which may be indicative of the students' comfort level in a speech therapy setting as opposed to a classroom setting. Figures 6, 7, and 8 all illustrate the survey responses in relation to breaks from school.
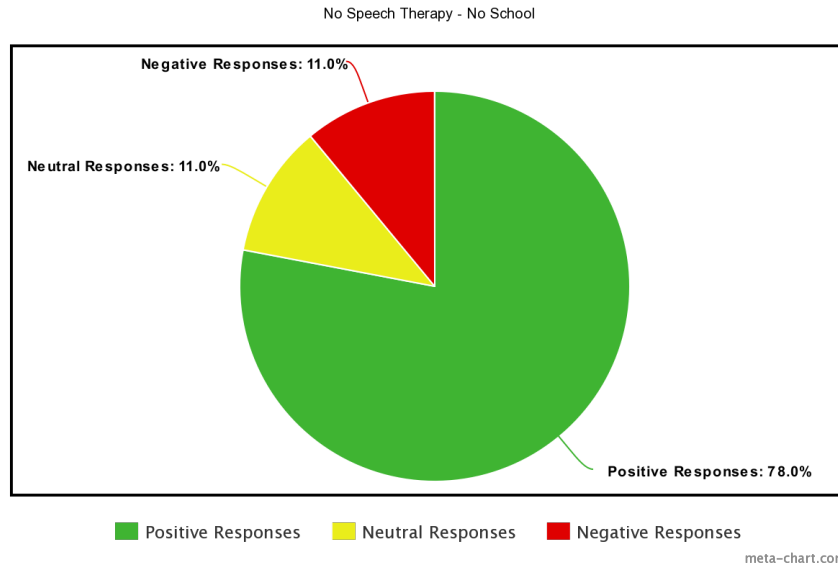
No Speech Therapy - No School

Figure 6. Group A Responses Pertaining to Breaks from School.

Figure 6 looks at students from group A and how they feel about breaks from school. Similar to Figure 3, responses are mostly positive with equal amounts of neutral and negative responses.
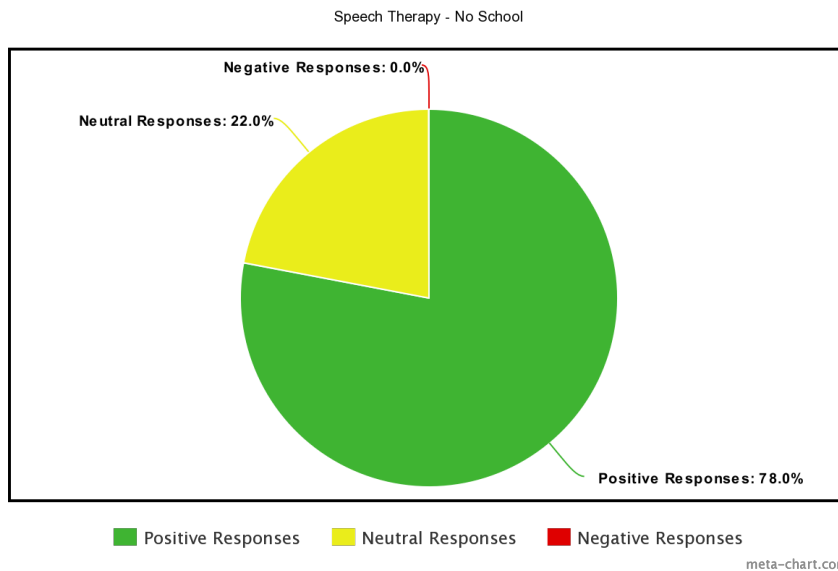
Speech Therapy - No School

Figure 7. Group B Responses Pertaining to Breaks from a Traditional Classroom.

Figure 7 looks at how students from Group B feel about breaks from their traditional classroom. All students in this group responded with either positive or neutral responses.
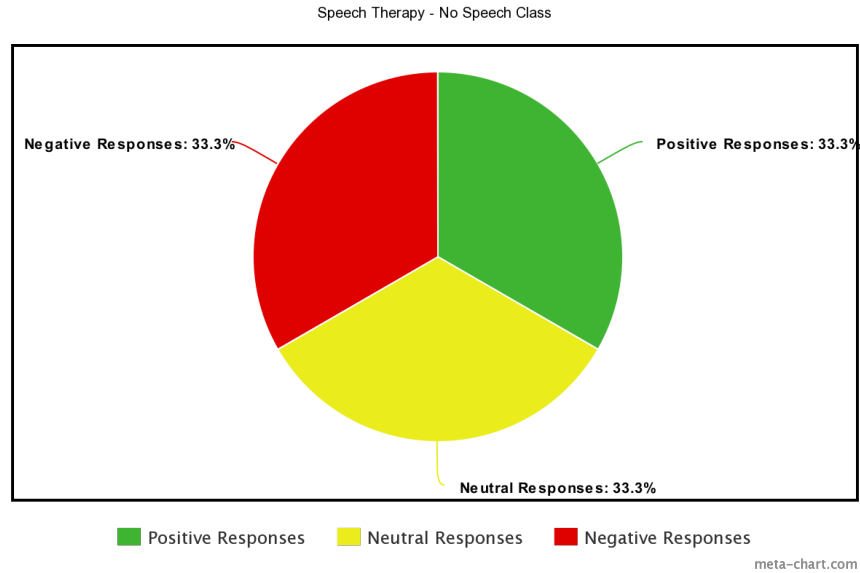
Speech Therapy - No Speech Class

Figure 8. Group A Responses Pertaining to Breaks from Speech Therapy.

Figure 8 evaluates how students from Group B feel about breaks from the speech therapy setting. Here, the majority of responses were either neutral or negative.

       The data illustrated in Figures 8 and 9 reinforce the idea that students in speech therapy are more comfortable and generally feel more positive in a speech therapy setting. Whereas students who do not receive speech therapy in school tend to have similar responses regardless of what the questions are asking. Finally, Figures 9, 10, and 11 all illustrate how students feel about online, distance learning.
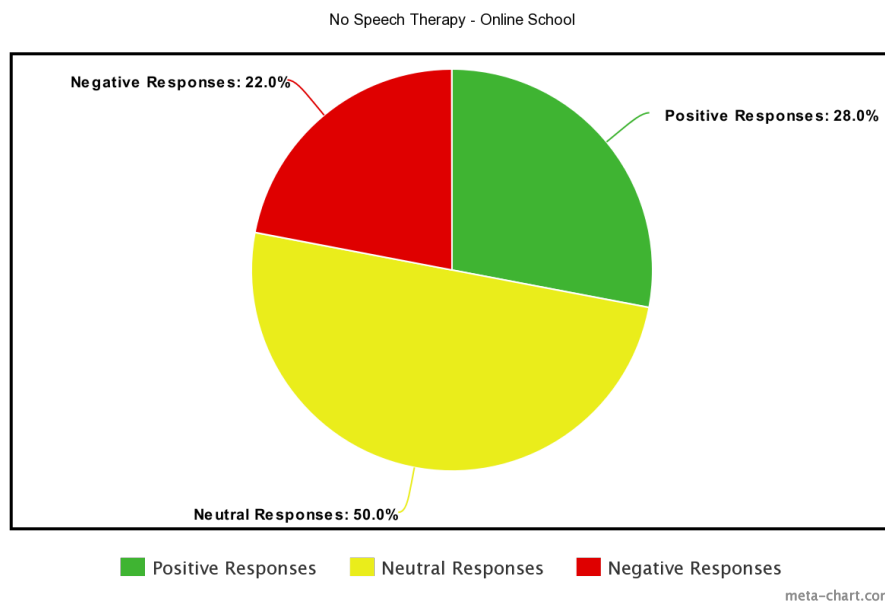
No Speech Therapy - Online School

Figure 9. Group A Responses Pertaining to Online Learning.

Figure 9 represents how students from Group A feel about online learning. Most of the responses were either negative or neutral, with limited positive responses.
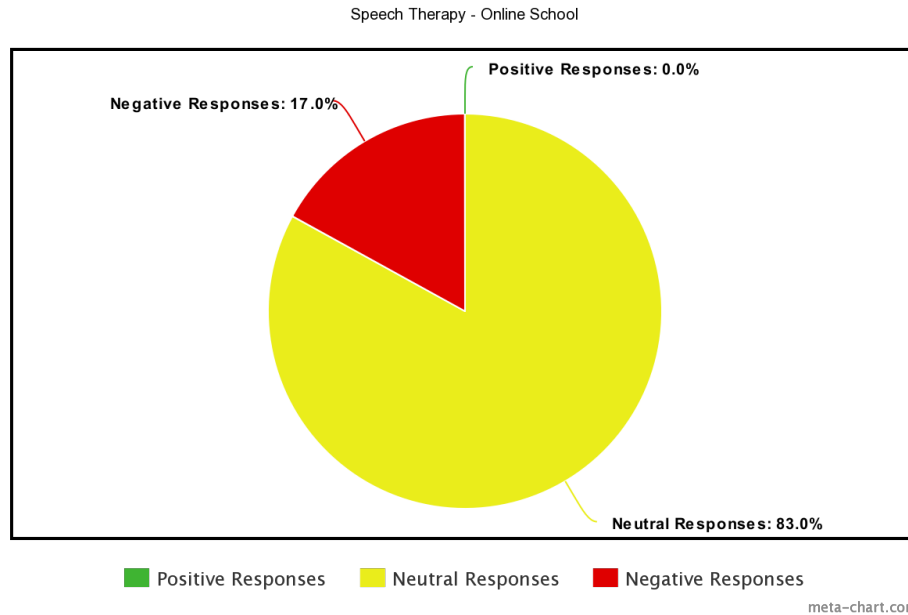
Speech Therapy - Online School

Figure 10. Group B Responses Pertaining to Online Learning in their Traditional Class.

Figure 10 looks at how students from Group B feel about their general class being online. All students responded with neutral or negative responses.
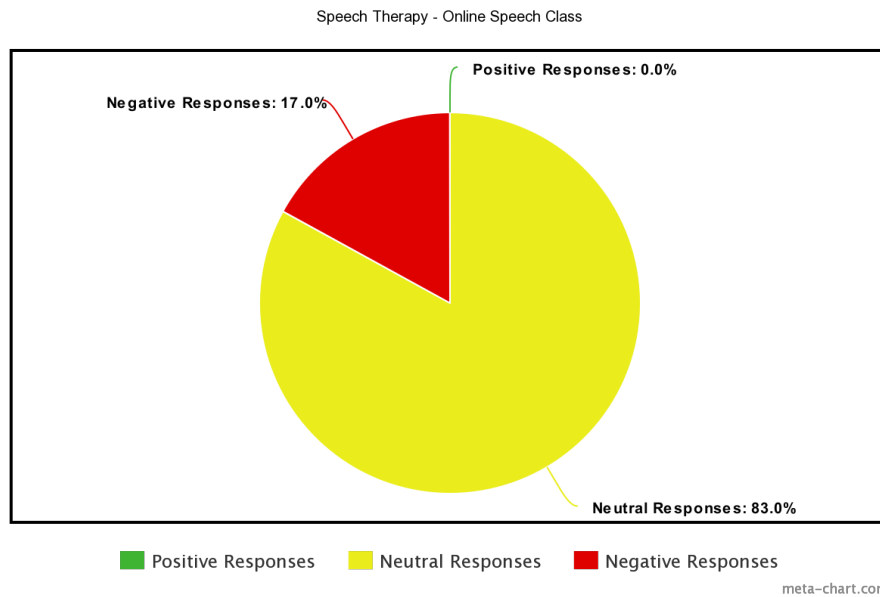
Speech Therapy - Online Speech Class

Figure 11. Group B Responses Pertaining to Online Speech Therapy.

Figure 11 evaluates how students from Group B feel about their speech therapy being held online. All students responded with neutral or negative responses.

Figures 9, 10, and 11 all show a drastic, negative shift from previous categories. From Figures 9, 10, and 11 I was able to verify that most students have been negatively impacted, emotionally, as a result of distance learning and that students in speech therapy may be impacted to a greater extent.

After condensing and considering all of the data, I most notably discovered that Group B was generally in agreement, more than that of Group A, as to how they felt about each question presented and that Group A had more

consistent responses across all three question categories. To further elaborate, in Figures 10 and 11, 83% of students from Group B were in agreement, responding with "neutral." These percentages were greater than any of those listed in the charts that pertained to Group A.

Conclusion

My results ultimately suggested that my hypothesis was partially correct. Students do seem to be emotionally affected by extended breaks from school but, I do not have enough evidence to indicate that students who receive speech therapy in school are disproportionately affected. That being said, I can affirmatively say that students in school speech therapy programs possess different emotional needs than their equal counterparts.

Although Figure 2 displayed that the most popular responses amongst Group A and B were similar, Figures 4, 5, 7, and 8 made it exceedingly apparent that the traditional classroom setting negatively impacts the well-being of students who receive speech therapy in school. This is not a result that I had initially anticipated but is something that schools should address in order to create a healthier and more inclusive learning environment for all students.

Limitations

Changes that came as a result of the COVID-19 pandemic are predominately what caused the unexpected limitations I faced. Firstly, with more survey responses I believe I would have been able to formulate a more solid and affirmatory conclusion. While I had initially hoped for between 50 and 75 responses, I was only able to secure 20. Of those 20 responses, more participants were in Group A than in Group B. As a result of this, I was unable to conclude whether or not students in speech therapy were disproportionately affected by extended breaks in comparison to students who are not in speech therapy. Also due to my difficulty obtaining responses, I cannot generalize my conclusion to the entire United States. I can only say that my results are true for the southeast region of the United States because the entirety of my responses came from states in this region.

Moving on from the number of responses, I had also initially hoped to conduct in-person interviews with students in elementary school. I, soon after, realized that interviews would not be feasible due to current circumstances and decided to solely rely on a survey. If interviews were possible, I believe I could have gathered information that was more personal and detailed. These possible data points may have yielded knowledge that I was unable to consider because I chose to only conduct a survey.

School procedure and student confidentiality protocol hindered my research as well. Ideally, I would have liked to study the emotional effects of extended breaks on students relative to the learning setbacks they face. I would have been able to assess these potential connections between emotional well-being and learning deficits if I had access to student benchmark information. I attempted to attain benchmark data from SLPs that work at schools in the Central Florida area but was ultimately not able to gain access because of strict, school board protocol.

Future Research

In correspondence to what I stated in the limitations section, if I were to continue with further research, I would unquestionably conduct interviews on students who do and do not receive speech therapy in school. I would also work with an expert advisor, like an SLP, with access to educational journals and benchmark information. By taking these additional steps, I believe that I would be able to formulate a more confirmatory conclusion regarding how emotional well-being is linked to academic performance, especially pertaining to students in school speech therapy.

Next Steps

Based on the results and conclusion I assembled, I have developed a series of steps that schools could take to ensure that the emotional needs of students in speech therapy are met in a positive and effective manner. To begin with, I recommend that schools implement a speech service summer program that students can opt into. Similar to how some public schools offer summer schooling for students who fall behind throughout the year, I believe that schools should offer a comparable program where students can continue their speech therapy lessons over the course of extended breaks.

If a school does not have the personnel, resources, or space to implement a program like this, I then recommend that the school consider the deployment of speech telepractice for students who would like to participate. Speech telepractice may be a viable alternative for schools that are lacking resources because it requires less personnel, fewer funds, and less time. (Fordicey, 2006)

To address the negative emotions that some students in speech therapy feel when in the traditional classroom setting, I recommend that schools consider utilizing puppetry and storytelling, more often, in the classroom. Studies have shown that storytelling and puppetry not only benefit pronunciation but also helps students develop a greater confidence in participating in class and answering questions. Through the employment of strategies like this one, not only are students in speech therapy actively working to better their speaking skills but they may also feel more confident and comfortable in class. (Beltkiewicz, 2013)

Finally, as a presumptive measure, I recommend that schools integrate the use of technology and mobile applications into the speech therapy curriculum if they have not already. It has been proven that educational applications aid in the cognitive development of students with learning disabilities. Researchers state that this is a direct result of the user-friendly interface that smartphones and tablets have. (Javadi, Ghazvini, Dianat, 2017) In addition to the cognitive benefits that mobile applications have, the integration of technology is also imperative so that students are comfortable navigating a technology-centered environment. This way, in the case of another unforeseen event like that of the COVID-19 pandemic, students will be more comfortable with the transition from in-person learning to speech teletherapy.

Final Remarks

I believe that the entirety of my research study has been extremely insightful, especially considering the unique times we are in. The way in which I approached my question, looked at the commonly studied realm of extended breaks from school and speech therapy from a distinctive perspective that has not necessarily been studied before.

I believe that the results and conclusion I gathered have laid a substantial foundation for continued research that could better the education system for students in speech therapy for good.

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