

# Teletherapy vs. Face-to-face in Articulation Disorders

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## ABSTRACT

The rise of technological advancements has increased in the medical field which allowed many health professions to provide therapy sessions online (teletherapy). Coronavirus impacted the medical fields in the nation closing most facilities. For example, the majority of speech-language pathologists were affected and transitioned their therapy sessions to fully online. This is referred to as teletherapy or telepractice. As a result of switching to a virtual format, clients were not able to receive tactile cues or in-person therapy. This raises the question of the efficacy of teletherapy and its effectiveness in improving articulation in clients with speech disorders. The ability to communicate and to be understood is very important in everyday living. Finding the treatment method that works best for children struggling with articulation disorders and/or speech difficulties would succeed in remediating the errors in a shorter time span. Therefore, it is important to research which treatment method face-to-face or teletherapy works best for children with speech sound disorders. A mixed-method review was conducted by collecting secondary data using three online surveys and findings from online articles and websites. Two certified speech-language pathologists, three parents/guardians, and twenty-one speech-language pathologists who treat clients' different populations and specialties answered online surveys based on their experience with teletherapy and in-person speech therapy.

## INTRODUCTION

Speech-Language pathologists (SLPs) work with children and adults to prevent, assess, diagnose, and treat speech, language, social and cognitive-communication, and swallowing disorders. When a person has difficulty producing speech sounds correctly, fluently, or has problems with resonance is generally described as having a speech disorder (Speech-Language Pathologists). Speech therapists will do what it takes to reach their goals for their clients. SLPs provide face-to-face and teletherapy (online) sessions for their clients to get the treatment needed in the hope to attain successful outcomes and goals.

Covid-19 impacted many of our medical fields in the nation shutting down the majority of our important facilities. Over the years the rise of technological advancements has increased which allowed many to provide therapy sessions online. For example, the majority of speech therapists were affected by having to transition their therapy sessions to fully online, which is also referred to as teletherapy or telepractice. Since speech therapists had to transition remotely, their clients and client's guardians struggled with not being able to have face-to-face speech therapy. Switching to teletherapy, some clients struggle with not being able to experience in-person tactile demonstration. Some people work better remotely while others cannot. Clients, such as like children with articulation disorders are impacted by not being able to get face-to-face therapy to better their speech. This is critical because speech is particularly important to our daily living abilities. This study will discuss whether if children in the ages 4-6 with articulation disorders are treated better with teletherapy or face-to-face therapy.

The purpose of this study is to investigate which treatment method works best for children with articulation disorders that are between 4 to 6 years old.

## STUDY AIMS

The reason for conducting this study is to determine what treatment method works best for children with articulation disorders between 4-6 years old, teletherapy or face-to-face speech therapy. The coronavirus impacted many speech pathologists and clients face-to-face therapy sessions, causing SLPs and clients to transition to online therapy sessions. The goal in this study is to provide SLPs who work with pediatrics, SLPs in general (working in different populations or specialties), parents/guardians, and lastly clients some knowledge of which treatment method that works effectively. The hypothesis of this study is face-to-face would be the best-effective treatment method for children with articulation disorders because of the tactile physical cues given in an in-person therapy session.

## METHODS

A mixed methods approach was administered in this study. A mixed method study is a study that involves both studies of qualitative and quantitative data such as surveys, interviews, and observations. A qualitative study is data collected through open-ended, analysis of pictures, figures and tables, and personal interpretation. In a quantitative study it involves the process of collecting, analyzing, interpreting, and writing the results of a study. The data for the qualitative part in this study was taken from the surveys asking open-ended questions to parents and SLPs about their experiences with teletherapy and face-to-face. The data from the qualitative part was used in calculating the percentages from the surveys from the multiple-choice questions.

### Participants

Three surveys were used in this study, Parent/guardian(s), SLPs, and SLPs plus survey. All the participants in the survey were anonymous. The reason of three surveys was to have three different perspectives and more information about the topic. Surveys were distributed through the internet on social media platforms, while some were given through personal email. In the beginning of each survey, it briefly explains to the participants about what will be asked and was given the option to proceed and participate. The following surveys were not distributed in any order.

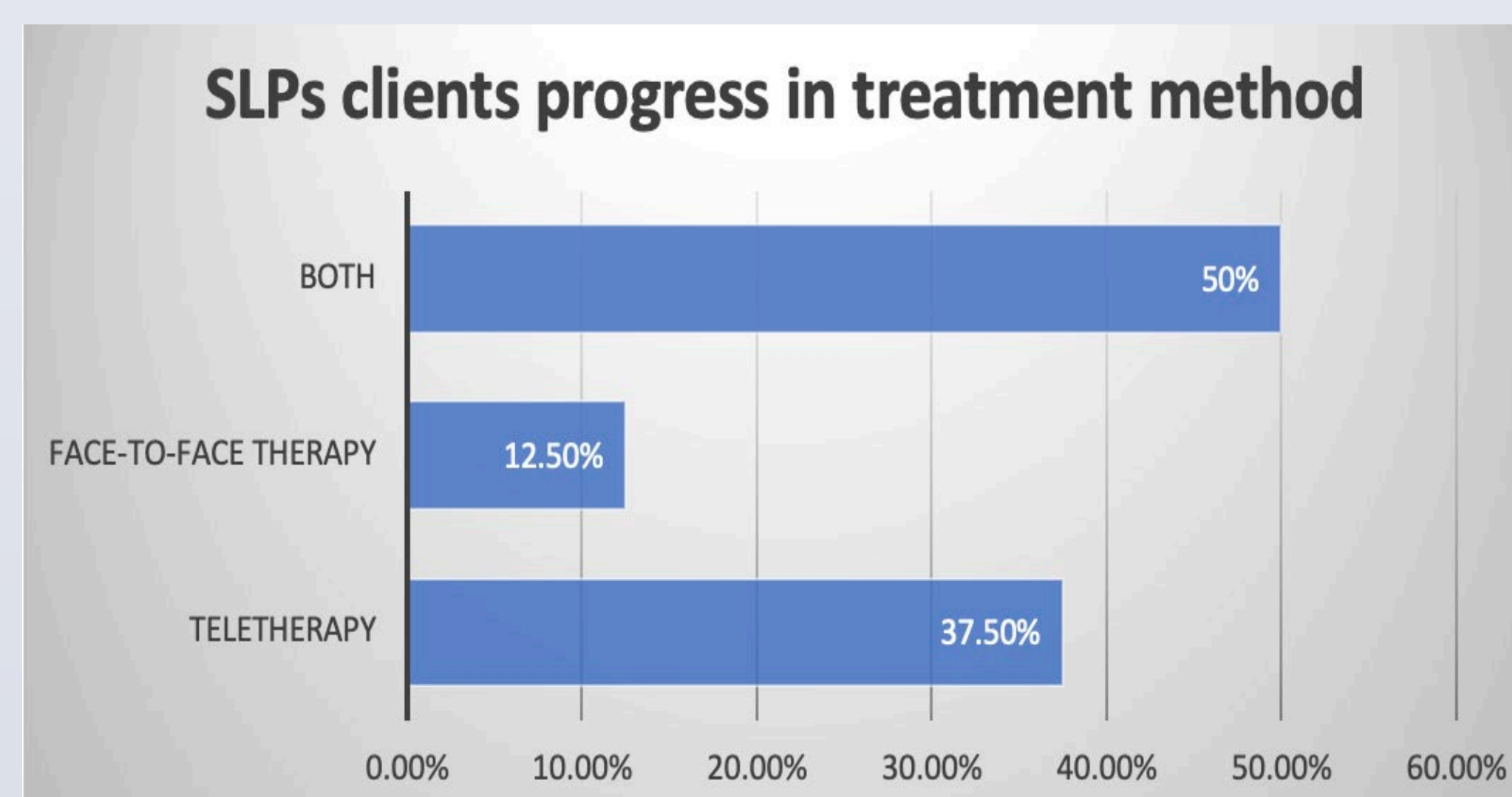
The SLP survey that was only issued to two speech-language pathologists that treated 4 clients each (total of 8 clients) with articulation disorders between the 4-6 years old. The survey asks the two SLPs about which treatment method each client made progress in teletherapy, in-person, or both. There was a total of 9 questions 2 open-ended and 7 multiple choice and lasted no longer than 2 minutes.

The parent/guardian(s) survey is for parents/guardians who have or had a child between the ages 4-6 years old with an articulation disorder. This survey questioned the parents and child's experience in teletherapy and in-person sessions. The survey had 7 questions, 6 yes or no questions and 1 open-ended, and lasted no longer than a minute.

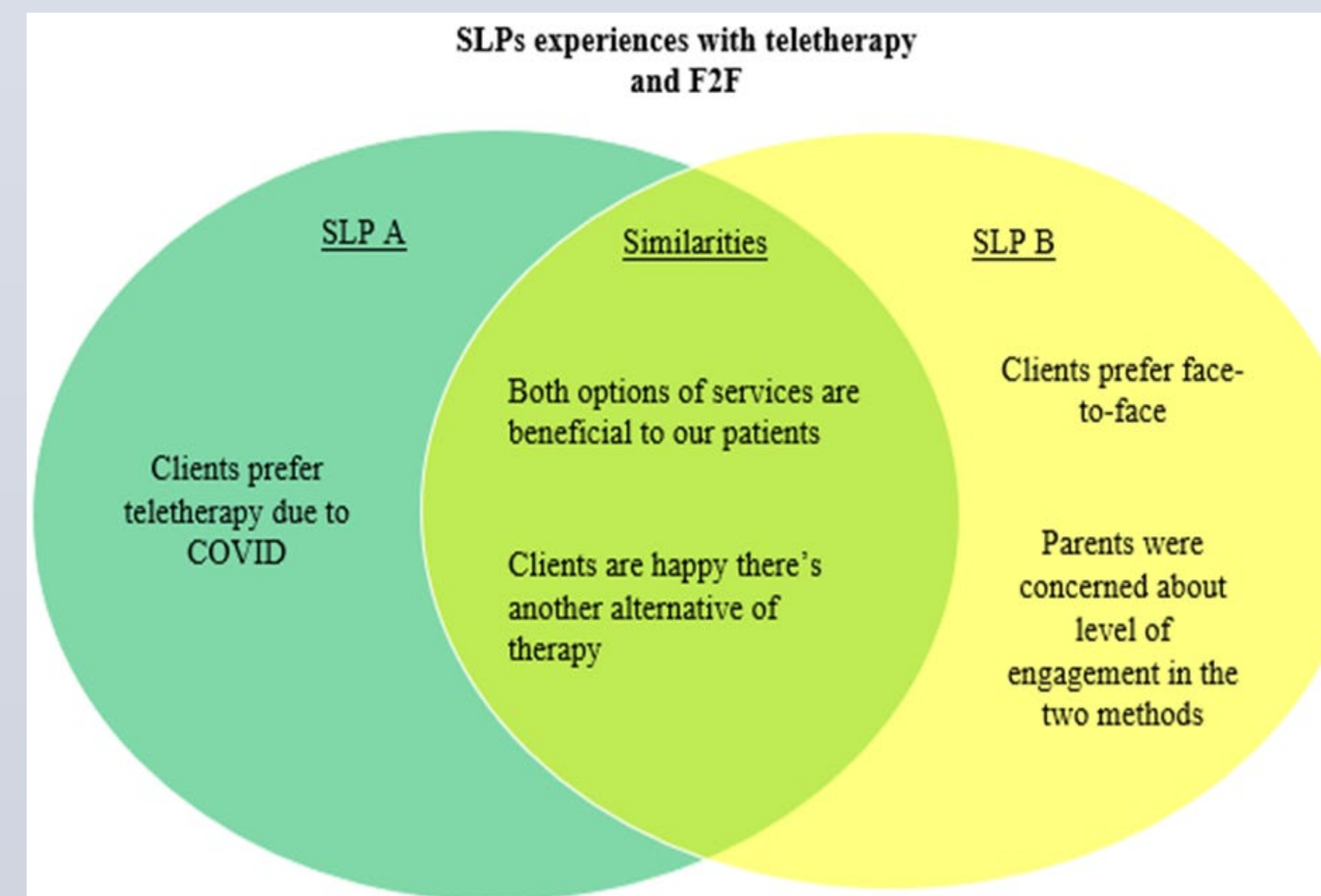
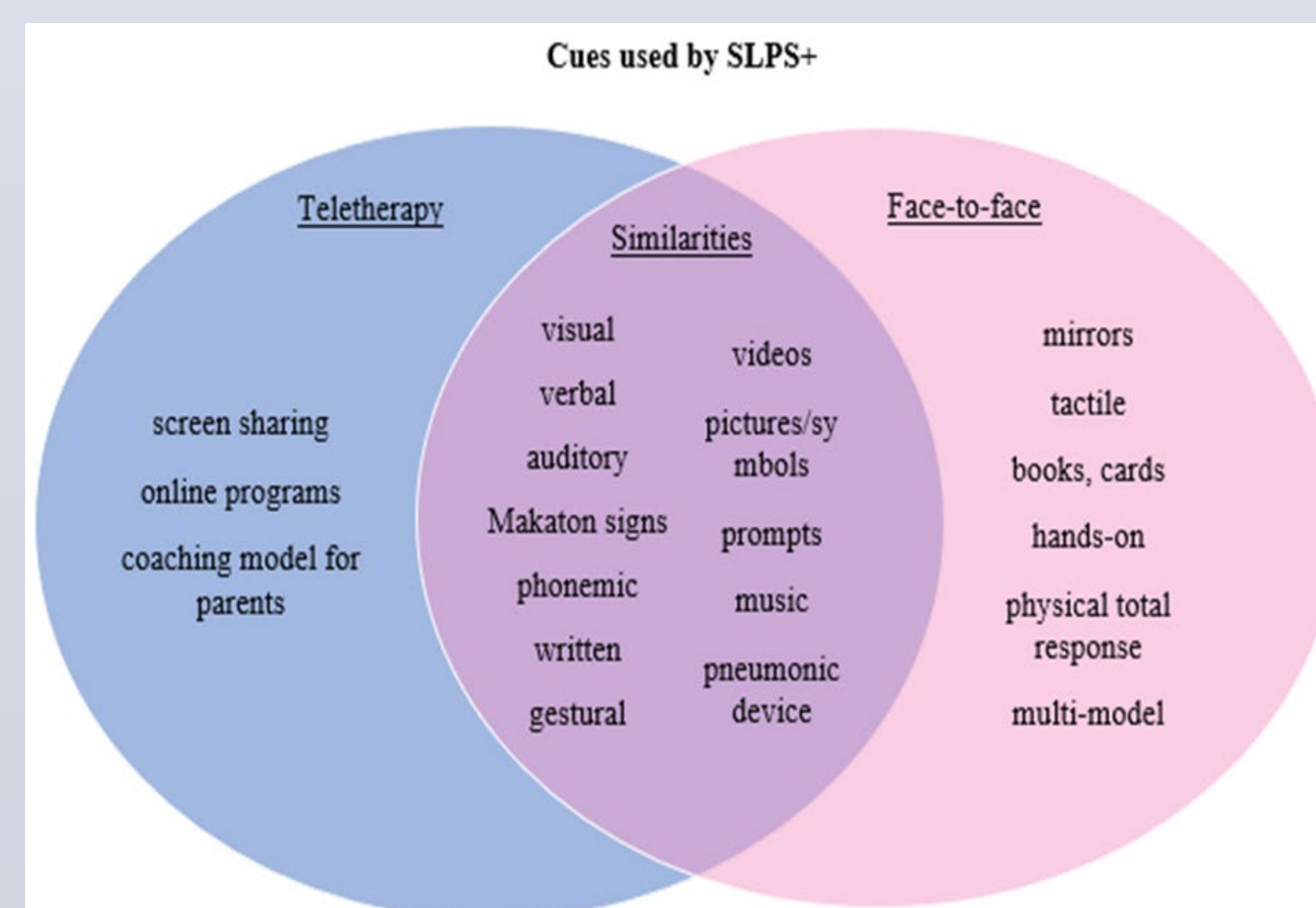
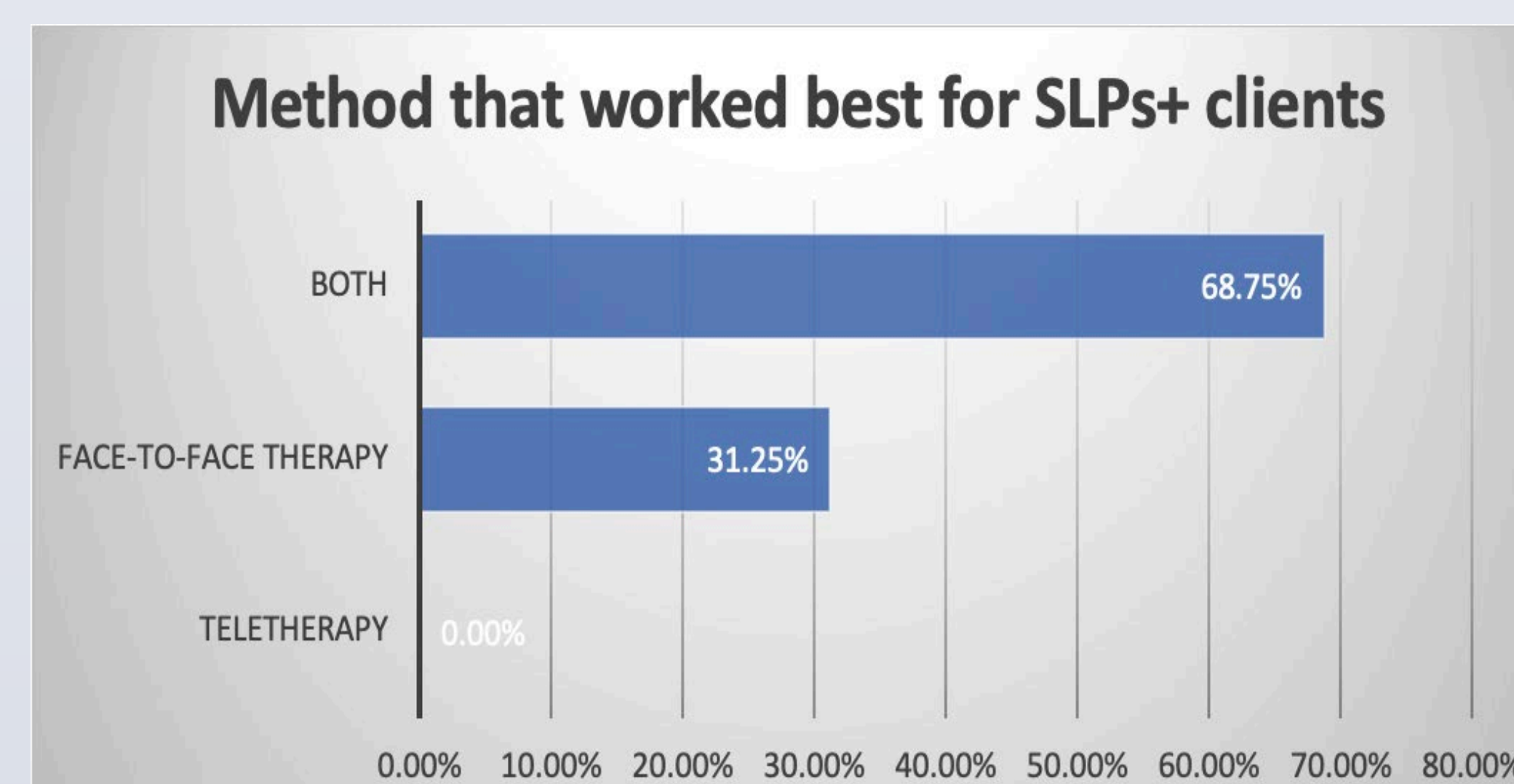
The last survey was the SLPs+ survey which is for speech-language pathologists in general that specialize in different types of disorders, work with pediatrics, and had experience with teletherapy and in-person treating sessions. The survey asked the SLPs about their experiences and their clients progress with the two treatment methods. There was a total of 6 questions, 3 open-ended and 3 multiple choice and lasted no longer than 2 minutes.

## RESULTS

SLPs Survey Results



SLPs+ Survey Results



SLPs+ Parent/guardian Quotations

Theme	Associated Quotations
<b>Preferences of Clients &amp; Parents</b>	"Clients prefer face-to-face more." "Some clients prefer teletherapy due to the risks of COVID-19." "When surveyed, 97% of clients prefer in-person sessions rather than virtual."
<b>SLPs+</b>	"I prefer in-person due to building rapport and bonding with the client."
<b>Preferences</b>	"Face-to-face is best. I had success with an 8 <sup>th</sup> grader with articulation disorders and was socially awkward virtually." "I prefer in-person sessions." "Both methods work great." "Face-to-face is more appropriate for clients who need tactile cues and attention." "Preparing for teletherapy sessions is easier." "Teletherapy is a great alternative that's better rather than no therapy at all." "I learned new methods for my client's needs during the pandemic with teletherapy." "Preferred hierarchy is in-person (pre-covid), video visits, and in-person (post-covid)"
<b>Technological Difficulties</b>	"Follow-up phone conferences were made to parents, teachers, administrators, and clients about technology difficulties." "When devices were readily available, sessions were effective." "Technology would have its mishaps and cause therapy sessions to be ineffective and take longer." "Technology issues can be difficult for therapy, like glitches and difficulty hearing." "Outcomes of teletherapy and in-person are exactly the same."
<b>SLPs+ Teletherapy Pros</b>	"Teletherapy is easy to move onto the next sessions." "Teletherapy is a great alternative that's better rather than no therapy at all." "I learned new methods for my client's needs during the pandemic with teletherapy." "Most clients are experienced with online therapy because they attend online school which is very helpful." "With low budget, it's easier to create online materials." "Preparing for teletherapy sessions is easier." "Teletherapy has been pleasantly surprising with me and my client." "With teletherapy there are better attendance and reviews."
<b>SLPs+ Face-to-face Pros</b>	"Face-to-face is best. I had success with an 8 <sup>th</sup> grader with articulation disorders and was socially awkward virtually." "Face-to-face is more appropriate for clients who need tactile cues and attention." "Outcomes of teletherapy and in-person are exactly the same." "Patients seen in-person now are those who need manual therapy and there's physical demonstration." "Preferred hierarchy in order is in-person (pre-covid), video visits, and in-person (post-covid)." "I prefer in-person sessions."

## CONCLUSIONS

This study attempts to determine what therapy method, teletherapy or face-to-face speech therapy worked the best for children between the ages of four to six years old with articulation disorders. The SLP's survey results indicated the hypothesis was invalid. The overall results in the qualitative study showed that the majority of the SLPs, parents, and SLPs+ preferred a face-to-face. Teletherapy remains another great alternative, and there do exist pros and cons with teletherapy. In the quantitative study, the SLPs survey showed 50% out of the eight clients indicated there was better treatment in both therapy methods, teletherapy, and face-to-face. In the parent/guardian survey, the participants preferred face-to-face therapy for their child because of the satisfaction they experienced with it. Also, many parents commented on factors that could've been a problem with teletherapy sessions not working for their child. In the SLP's+ survey, common cues like verbal and visual were used in both therapy methods which indicated how both worked best, however, 43% of them said it depends on the client when it comes to the therapy method used. The findings from qualitative and quantitative findings proved that both work just as effectively. All in all, depending on a client's behavioral attitude, a speech-language pathologist's treatment that's given, and the parent's teachings will truly determine the progress shown in the client and the therapy method.

## REFERENCES

American Speech-Language-Hearing Association. (n.d.). Speech Sound Disorders: Articulation and Phonology. <https://www.asha.org/practice-portal/clinical-topics/articulation-and-phonology/collapse-6>.

American Speech-Language-Hearing Association. (n.d.). *Speech-Language Pathologists*. Job Description and Career Information. <https://www.asha.org/Students/Speech-Language-Pathologists/>.

Creswell, J. W., & Creswell, J. D. (2018). *Research design: Qualitative, quantitative, and mixed methods approaches*. SAGE Publications, Inc.

Crowell, S. (2020, October 15). *10 Tips for Completing Speech and Language Assessments Via Telepractice*. StacyCrouse. <https://www.stacycrouse.com/post/10-tips-for-completing-speech-and-language-assessments-via-telepractice>.

Freckmann, A., Hines, M., & Lincoln, M. (2017). *Clinicians' perspectives of therapeutic alliance in face-to-face and telepractice speech-language pathology sessions*. Taylor & Francis. <https://www.tandfonline.com/doi/full/10.1080/17549057.2017.1392547?src=recsys>.

Goode, H., & Shinkle, E. (2020, September 8). *What is Teletherapy? (A Helpful and Definitive Guide)*. Global Teletherapy | Online Speech Therapy & More. <https://globalteletherapy.com/what-is-teletherapy/>.

Kester, E. (2020, June 12). *Conducting Student Speech-Language Evaluations Via Telepractice*. @ASHA. <https://leader.pubs.asha.org/doi/10.1044/leader.SCM.25062020.36/full/>.

Mead, E. (2021, May 20). *What is Teletherapy: The Benefits of Online Therapy and the Best Software to Use*. PositivePsychology.com. <https://positivepsychology.com/teletherapy/>.

*Online Speech Therapy for Schools: Remote Speech Therapy*. Global Teletherapy | Online Speech Therapy & More. (2021, May 27). [https://globalteletherapy.com/online-speech-therapy/?utm\\_term=online%2Bspeech%2Btherapy&utm\\_campaign=Online%2Bspeech%2Btherapy&utm\\_source=adwords&utm\\_medium=ppc&hsa\\_acc=2409055300&hsa\\_cam=13287433397&hsa\\_grp=126491029361&hsa\\_ad=5245339163&hsa\\_src=g&hsa\\_tgt=kwid-302869022603&hsa\\_kw=online%2Bspeech%2Btherapy&hsa\\_mt=c&hsa\\_net=adwords&hsa\\_ver=3&gclid=Cj0KCQjw4yGBHwARIsACGAcv7eUQwydIUQ\\_hRoF0VHxHemoT7qvVeSD1fjZd2cnipajUduvZV4aAtt-EALw\\_wcB](https://globalteletherapy.com/online-speech-therapy/?utm_term=online%2Bspeech%2Btherapy&utm_campaign=Online%2Bspeech%2Btherapy&utm_source=adwords&utm_medium=ppc&hsa_acc=2409055300&hsa_cam=13287433397&hsa_grp=126491029361&hsa_ad=5245339163&hsa_src=g&hsa_tgt=kwid-302869022603&hsa_kw=online%2Bspeech%2Btherapy&hsa_mt=c&hsa_net=adwords&hsa_ver=3&gclid=Cj0KCQjw4yGBHwARIsACGAcv7eUQwydIUQ_hRoF0VHxHemoT7qvVeSD1fjZd2cnipajUduvZV4aAtt-EALw_wcB).

*The Pros and Cons of Online Speech Therapy for Kids*. Kid Safe. (2021, May 24). <https://www.safesearchkids.com/the-pros-and-cons-of-online-speech-therapy-for-kids/#.YOyzrehKJLU>.

VocoVision. (2020, June 19). *Online Therapy vs Face to Face*. VocoVision. <https://www.vocovision.com/blog/online-therapy-vs-face-to-face/>.

VocoVision. (2021, February 1). *The Pros and Cons of Teletherapy*. VocoVision. <https://www.vocovision.com/blog/the-pros-and-cons-of-teletherapy/>.

Wales, D., Skimmer, L., & Hayman, M. (2017, June 29). *The Efficacy of Telehealth-Delivered Speech and Language Intervention for Primary School-Age Children: A Systematic Review*. International journal of telehealth. <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC546562/>.