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A Comparative Look at How Professionals Perceive Social Communication Intervention for School-aged Children

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Abstract

This study examined how different practitioners, such as speech therapists, occupational therapists, teachers, and psychologists, integrate social communication goals into their daily sessions when working with school-aged children. An online survey was sent out to practitioners in Midwestern cities in the United States to assess their opinions on implementation, execution, and usage of social communication in therapy or class sessions. The survey also outlined the six principles of social communication as described by Fujiki and Brinton (2000), and asked the participants to rank these principles in how challenging they are to implement into their sessions. The purpose of this study was to ultimately observe how frequently different practitioners use social communication intervention when working with school-aged children, along with understanding any facilitators and barriers to acting in accordance with the principles from Fujiki and Brinton's study. The results of this study demonstrated the desires practitioners have to utilize more collaborative and interactive interventions when working with children with social communication challenges, along with the necessity for more resources and time to be dedicated to this particular field.

A Comparative Look at How Professionals Perceive Social Communication Intervention for School-aged Children

Introduction

Social communication is a complex set of behaviors broadly defined as "the intersection of language and social behaviors observed during peer interactions" (Timler et al., 2005, p. 171). This includes the verbal and nonverbal behaviors children display as they approach peers, maintain conversations, and resolve conflicts during peer interactions. A variety of allied health professionals and educators may be involved in helping children with disabilities work on social communication goals. In 2009, Fujiki and Brinton released six principles that practitioners should consider when planning intervention for social communication skills, such as the ability to generalize, the ability to simultaneously treat other goals, and the ability to collaborate with other professionals. The purpose of this study is to explore different practitioners' perceptions of Fujiki and Brinton's guiding principles in their daily practice, along with gaining a better understanding of how different practitioners integrate social communication goals into their daily sessions. The goals of this study are to identify:

- how frequently different practitioners use social communication intervention when working with school-aged children,
- any facilitators and barriers to acting in accordance with the principles from Fujiki and Brinton (2009), and
- any differences in viewpoints across practitioners.

Due to the wide array of perspectives, opinions, training, and resources available, it is likely that the practitioners in this study will all have different ideas surrounding social communication intervention. These practitioners include, but are not limited to, speech language pathologists, occupational therapists, teachers, psychologists, and intervention specialists.

Social communication intervention is complex and requires a variety of components in order to positively benefit the child. Brinton and Fujiki (2009) devised a list of principles to maximize effectiveness of social communication treatment. The first principle describes how language must be adjusted to accommodate the individual child, and presented in a way that the child can fully understand. The second principle describes how social communication intervention should help the child understand the different contexts to which it can be applied, such as different social situations at school, home, or extracurricular activities. The third principle describes how facilitating social communication requires time, effort, and consistency. The fourth principle outlines how intervention should be embedded into existing contexts which are important to the child. The fifth principle describes how language and social skills can be facilitated simultaneously within the same treatment program. Finally, the last principle outlines how teamwork is vital for clinical success. These six principles will be a guiding component of the proposed study.

While the six principles of social communication intervention outlined by Brinton and Fujiki seem feasible on paper, social communication goals can be complex and tricky for practitioners to work on. Typically, a speech-language pathologist (SLP) works with a child on meeting their social communication goals. According to the American Speech-Language-Hearing Association (ASHA), there are three main goals of social communication from an SLP lens: using language, changing language, and following rules. Using language involves different dimensions of conversation, such as greeting, informing, requesting, or commenting. Changing language involves changing tone of voice depending on the listener, or altering a conversation based on the context. Finally, following rules involves taking turns, staying on topic, using facial expression, and maintaining eye contact. ASHA

recommends that SLPs and parents work on social communication skills with their young children through role play, use of visual cues, and asking questions throughout the day. An SLP would likely adhere to principle five from Brinton and Fujiki's research most naturally, as it focuses on the importance of simultaneously developing language and social skills.

ABA therapists, or applied behavior analysts, utilize a scientific approach based on principles of behavior in order to alter socially significant behaviors through the use of individualized and practical interventions (Yu et al., 2020). An ABA therapist would likely observe social communication challenges through a lens which focuses on how these deficits impact a childs' social skills, such as the ability to maintain a conversation with a teacher or make a friend. They would likely incorporate social stories, social scripts and comic strip conversations into their intervention. A common practice is the use of "hidden curriculum," which is a method of teaching unspoken social rules and cues that the child may struggle with ("What is Applied Behavior Analysis?" n.d).

An occupational therapist helps a client improve their ability to perform daily occupations (Hammond, 2004). For a school-aged child with autism, their daily occupations include going to school, socializing with peers, and participating in hobbies. While there are many opportunities to incorporate social communication while working on these skills, the lack of a clearly defined model of social communication that is consistent with common methods of occupational therapy can make this difficult (Doble & Magill-Evans, 1992). Since occupational therapists focus on developing a child's abilities to adhere to their daily occupations, they are likely easily able to follow principle two and four of Brinton and Fujiki (2009), as they highlight the importance of intervention that is generalizable to other contexts and capable of being embedded into a child's existing contexts.

A psychologist who works with school-aged children may help a child with social communication skills by designing opportunities in the classroom to address social skill problems by helping students learn to take turns, interact with others, and make friends *(*"Encyclopedia of Psychology," n.d*)*. Psychologists also may use peer-mediated prompting, social skill practice, or social stories (Day, 2011). Since a psychologist would most likely focus on functional social skills with a child, they would most likely be able to easily follow a variety of Brinton and Fujiki's research into their intervention.

Finally, educators play a fascinating role in social communication intervention for their students who require social communication support. Due to the number of students most school-aged teachers are in charge of, a teacher may aid students with autism, for example, in social communication skills by modeling, giving implicit directions, providing supported group work, and providing structured activities or lunch break (Honeybourne, 2018). Also, teachers may include role play, visual support, and social stories into their weekly curriculum ("Social Skills for Autistic Children," n.d). Similar to psychologists, educators can easily incorporate a variety of aspects of Brinton and Fujiki's guidelines into their intervention; the issue is the lack of individualized time and amount of students they oftentimes are in charge of teaching at a time.

The six main principles of Brinton and Fujiki (2009) are all seemingly simple to incorporate into various different therapeutic sessions, as it appears simple and manageable to use age-appropriate language, adjust a session to the child's individual social context, maintain consistent and effortful intervention, embed existing contexts and language development into the session, and rely on teamwork and collaboration, but there are many circumstances that could make it extremely difficult to meet these main principles.

There is minimal published research examining how different professionals feel they are able to support their clients in their social communication skills, especially when considering how different professionals are able to collaborate and work towards their client's goals. Silveira-Zaldivar and Curtis (2019) observed the barriers that elementary educators are faced with when providing intervention for their students who require social communication support. The researchers collected both qualitative and quantitative data from 33 participants who were all involved in a large school districts inclusion program. The results demonstrated that the top six barriers for social communication support that the participants dealt with were lack of time, training, support, prioritization, materials and general staff mindset. The current study builds upon these results by analyzing which practitioners deal with different barriers along with understanding the gap between research and clinical practice.

Another study observed how different allied health professionals (AHPs) provided intervention for children for school-aged children (Paynter et al., 2018). The study surveyed a variety of AHPs and found that 68 SLPs work with clients on communication, compared to the 16 OTs, 26 psychologists, and 18 behavior analysts who used communication intervention specifically with their clients diagnosed with autism. These results demonstrate that SLPs clearly spend the most time working on communication, but the study fails to specifically address social communication. This study reveals that all AHPs focus on communication to some degree, no matter what their profession is, but it lacks consideration of how AHPs collaborate on these goals and if this impacts their treatment. The current study will build upon the study done by Paynter and others by observing how professionals are able to collaborate on therapy goals and if they feel this is successful or not.

Method

Recruitment

A mixed methods (qualitative and quantitative) survey was used to gather information from practitioners, including speech-language pathologists, applied behavior analysts, occupational therapists, psychologists and educators. The survey was sent out via email, and was created using the Butler University Qualtrics software and drawn from Fujuki and Brinton's (2009) Intervention Principles for Social Communication Skills, published in the *Handbook of Child Language Disorders.* Recruitment for this study was done by emailing school staff lists, therapy clinics, enrichment and tutoring centers, counseling and psychological services, and non-profit organizations that work with children. The investigators sent recruitment emails to professionals living in Midwestern cities and suburbs of the United States, and all participants received a reminder email a week after they were originally sent the survey. The email was sent with a brief description of the survey and the link. The first page of the survey requested the participants to read the consent form and sign their name; they were unable to continue with it unless they completed this step.

Participants

In total, 102 people responded to the survey, although varying numbers of participants filled out each survey response. Thirty-eight percent of the participants were speech language pathologists, 18% were occupational therapists, 17% were teachers, 10% were psychologists, 2% were ABA therapists, and 15% identified as 'other.' Those who identified as' other' described their careers as: paraprofessionals, school counselors, developmental therapists, board certified behavior analysts, clinical and school social workers, and direct care supervisors.

Survey

The survey took 5-10 minutes for the participants to complete. The survey was divided into four categories as follows:

- introductory category: analyzed the professionals' experience and the demographics of their clients to determine if they are fit for the study,
- frequency category: observed how often the professional utilizes social communication intervention, and how often they incorporate aspects of social communication intervention into other therapy activities,
- principle ranking: asked the professional to rank Fujiki and Brinton's (2009) principles of social communication intervention from *easiest* to integrate into practice to *most difficult* to integrate into practice. This category also requested reasoning for why the participant chose the principles they did. These principles summarized are as follows:
    - principle 1: The language of the intervention is easily understood by the child. The language of the instruction is accessible and easily incorporated into the child's behavioral repertoire,
    - principle 2: The intervention allows the child to apply what they learn to other applicable contexts in their life. The intervention is designed so the children understand the limitless impact of social communication,
    - principle 3: The intervention is consistent, thorough, and takes place over a reasonable duration of time. The intervention utilizes a significant commitment of clinical resources,
    - principle 4: The intervention can be embedded into the child's existing contexts and lifestyle. The intervention is catered to the child's learning needs. For

example, the intervention could take place in an individualized setting or a group setting, depending on the child's needs,

- principle 5: The intervention simultaneously stimulates the development of language and social skills. For example, the intervention may target social behaviors and literacy,
- principle 6: The intervention is formulated through teamwork and collaboration of a variety of professionals and family members. For example, the professional and teacher collaborate with the child's caretaker and family members to implement treatment

- personal opinion: asked the professional to add any final comments they may have regarding their profession and how social communication intervention is utilized.

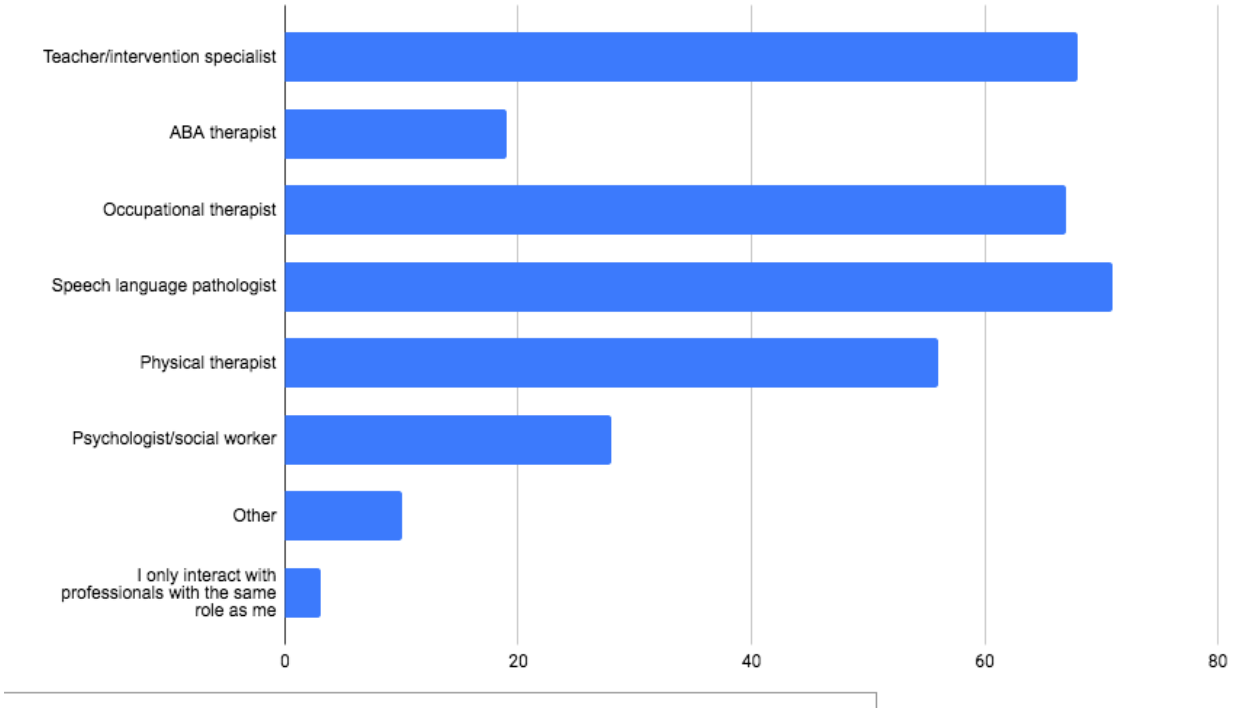
Results

Introductory category

Sixty-nine percent of the participants earned a masters, doctorate, or other graduate degree. Sixty-seven percent of them reported working with children ages 5-10 most frequently, 23% worked with children ages 0-4, and the other 8% was divided between working with clients ages 10-15 and 15-20. Fifty-eight percent of the participants have been at their place of employment for at least the past 4 years. As seen in Figure 1, the respondents interacted the most with other teachers, occupational therapists, speech language pathologists, and/or physical therapists.

Figure 1

Interactions with Other Professionals



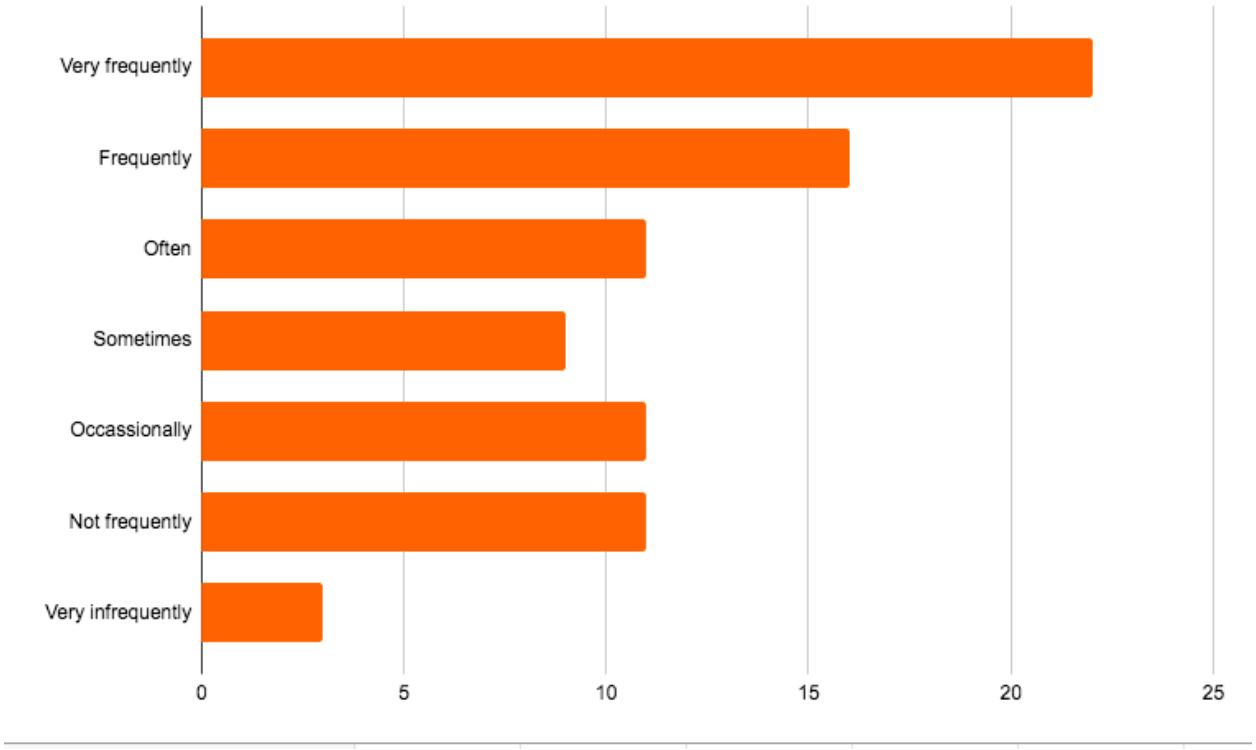
Note. This figure depicts the responses of participants (n=83) when asked to check the box of which professional they interact with at least once a week.

Frequency category

When looking at the frequency of which the participants see goals related to social communication therapy, the most common response was "very frequently" (see Figure 2). Of the 22 participants who answered this way, six were occupational therapists, five were speech therapists, five were teachers/intervention specialists, two were psychologists, and five identified as "other."

Figure 2

Social Communication Goals

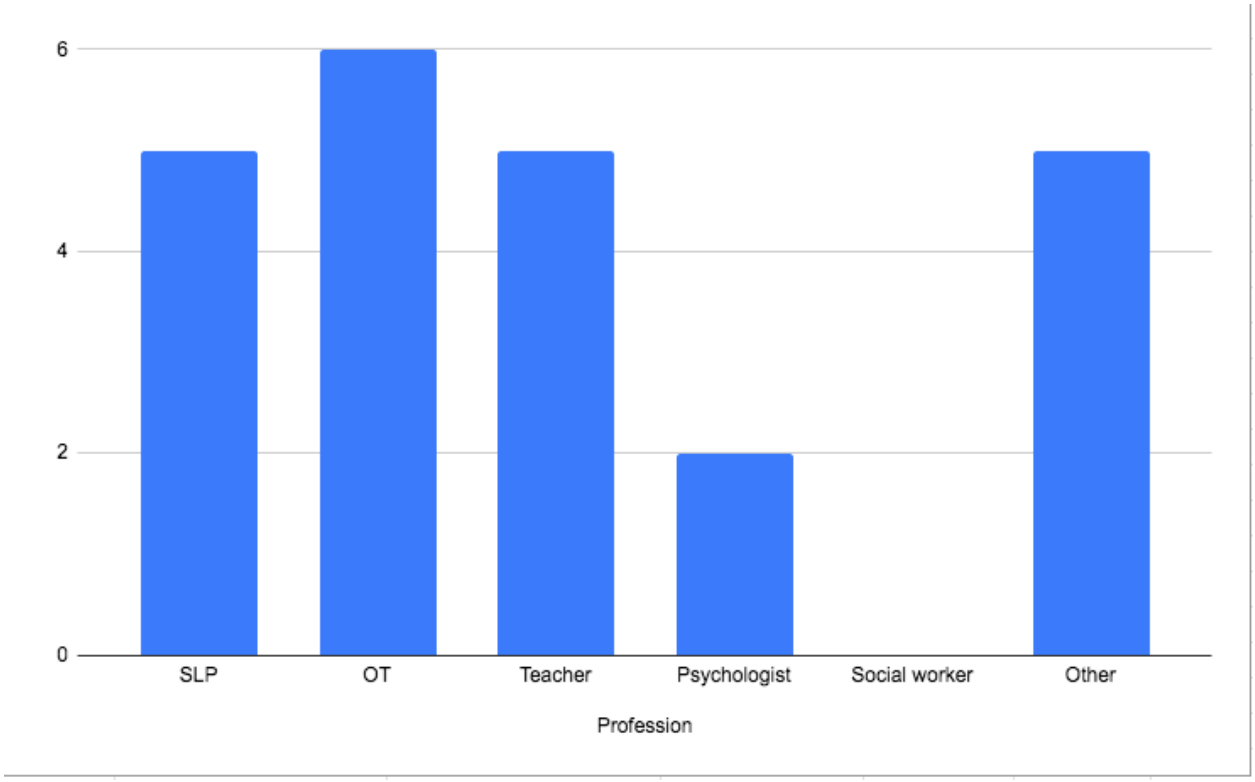


Note. This figure depicts the responses of participants (n=83) when asked how often they see goals related to social communication in their clients IEPs/504 plans, or how often parents/guardians request they work with the child on goals related to social communication.

Next, the results of the response "I work with children on social communication goals very frequently" were analyzed based upon the career of the respondents who answered this way. These results indicate that many different careers focus on social communication goals, and demonstrate a need for different professionals to interact and collaborate in order to best help their clients.

Figure 3

Professions of Participants who see Social Communication Goals Very Frequently

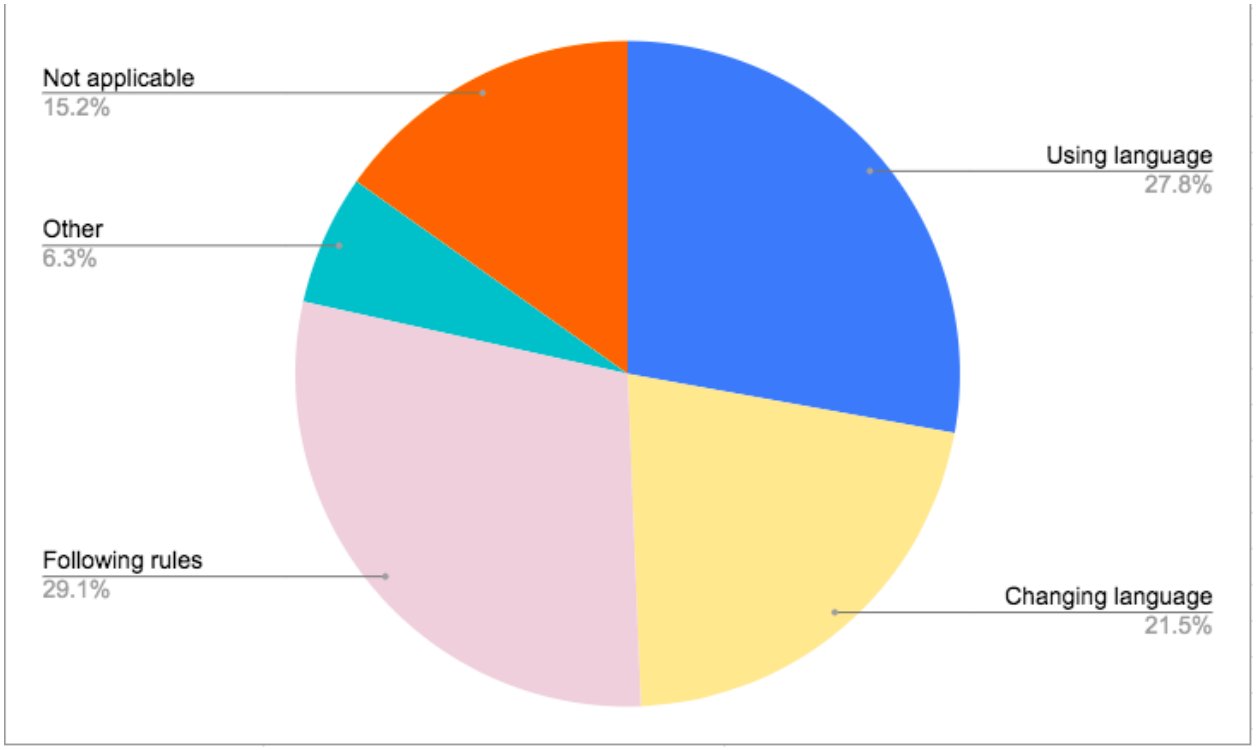


Note. This figure depicts the professions of the participants (n=18) who responded that they very frequently see social communication goals in their job.

Next, all participants were asked to describe the social communication goals they see with their clients. The responses were classified into the three categories of social communication, as designed by the American Speech-Language-Hearing Association (ASHA): using language, changing language, and following rules. A category was created for the non-applicable responses, along with an "other" category. Responses that included more than one answer were divided up appropriately. Figure 4 shows that the social communication goals seen by all practitioners vary fairly equally across the three categories of social communication, and one category does not drastically stick out as more popular than the others.

Figure 4

Social Communication Goals

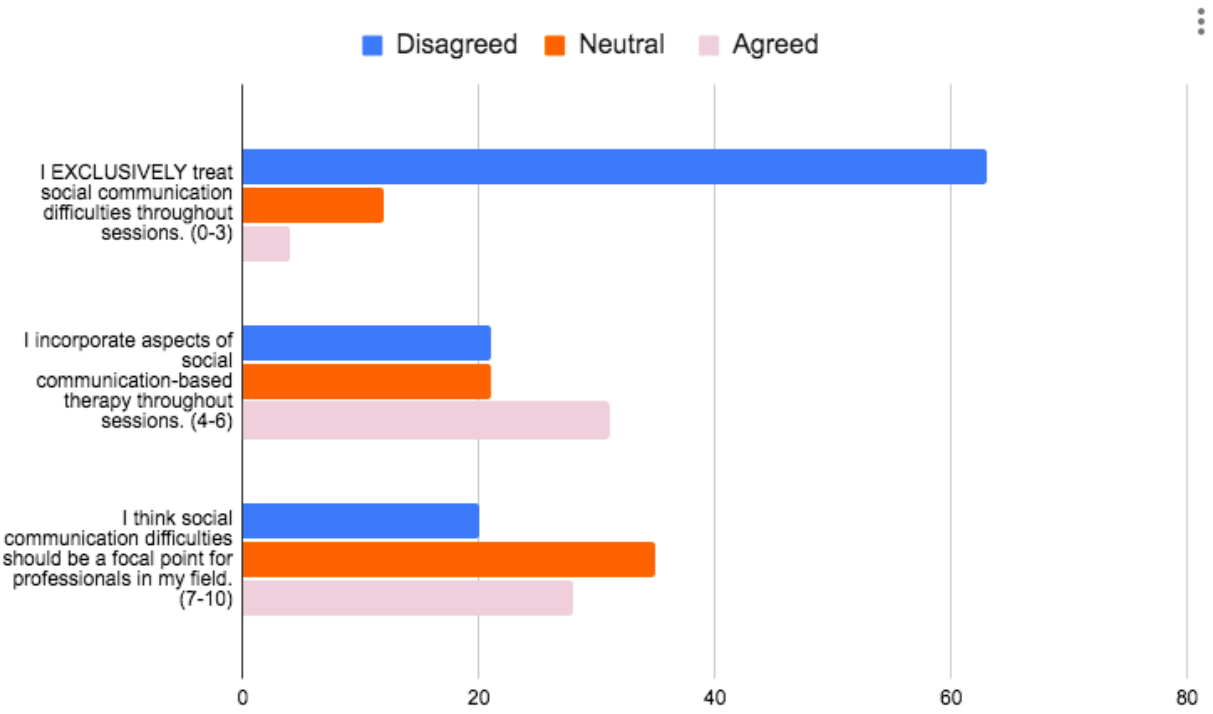


Note. This figure categorizes the responses from participants (n=79) when asked to describe the social communication goals they see in their position.

The final component of the frequency category observed more in-depth how often the participants work with clients on social communication goals. These responses, which were gathered on a scale of zero to ten (zero being they strongly disagreed with the statement and ten being they strongly agreed), and the responses were combined into three categories: disagree (responses 0-3), neutral (4-6), and agreed (7-10). Figure 5 shows that of the 73 participants answering this question, 63 disagreed with the statement that they 'exclusively treat social communication difficulties throughout sessions,' but 35 participants said they agreed with the statement that 'social communication should be a focal point for professionals within their field.'

Figure 5

Social Communication Opinions



Note. This figure depicts the level of agreement the participants (n=73) expressed when asked about the frequency of which they see social communication goals, and how they feel they should be incorporated into their field.

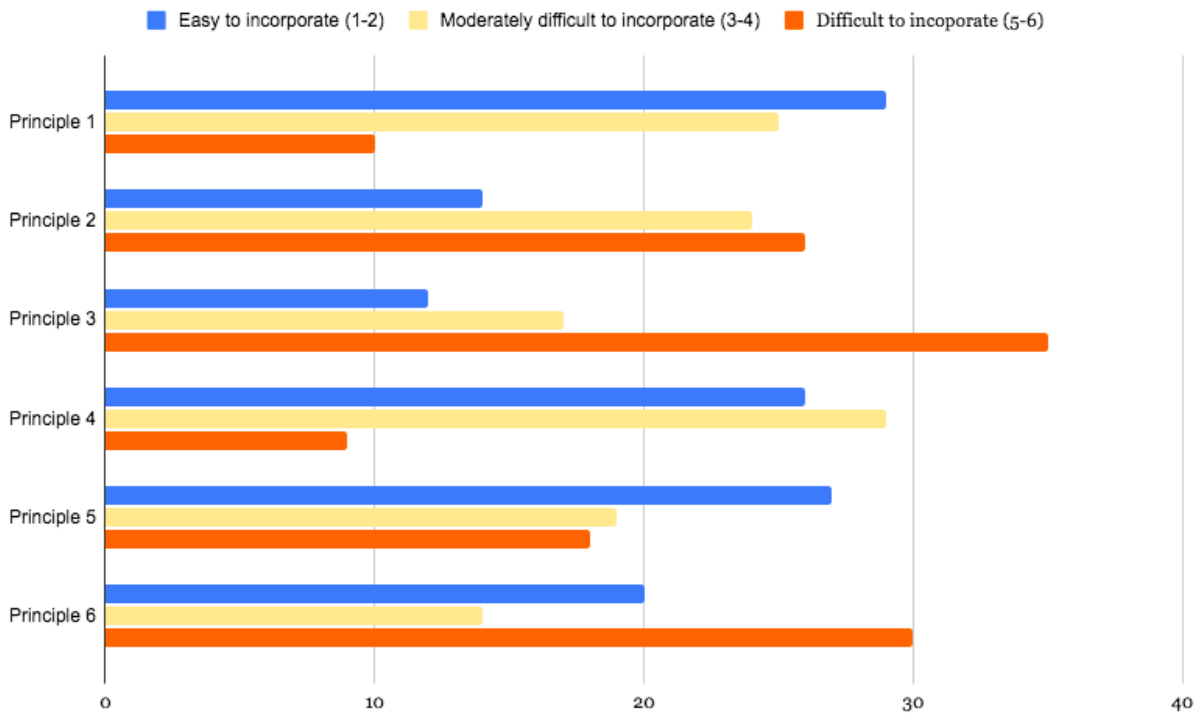
Principle category

Participants were asked to observe the six principles of social communication intervention outlined by Brinton and Fujiki (2009) and rank the principles on a scale of 1-6 how easy or challenging they are to implement. The answers were analyzed and combined into three categories: 1-2 (easy to incorporate), 3-4 (moderately difficult to incorporate), 5-6 (difficult to incorporate). The six principles can be found above in the methods section of this study. As can be seen in Figure 6, answers varied greatly, but the three most difficult to incorporate principles

were principles two, three, and six. Twenty-nine of the 64 participants said that Principle One was the easiest to implement, and only 10 participants said that principle is difficult to implement.

Figure 6

Ranking of Principles from Fujiki and Brinton



Note: This graph depicts how easy or challenging it is for the participants (n=64) to incorporate the principles of social communication intervention into their sessions or classes.

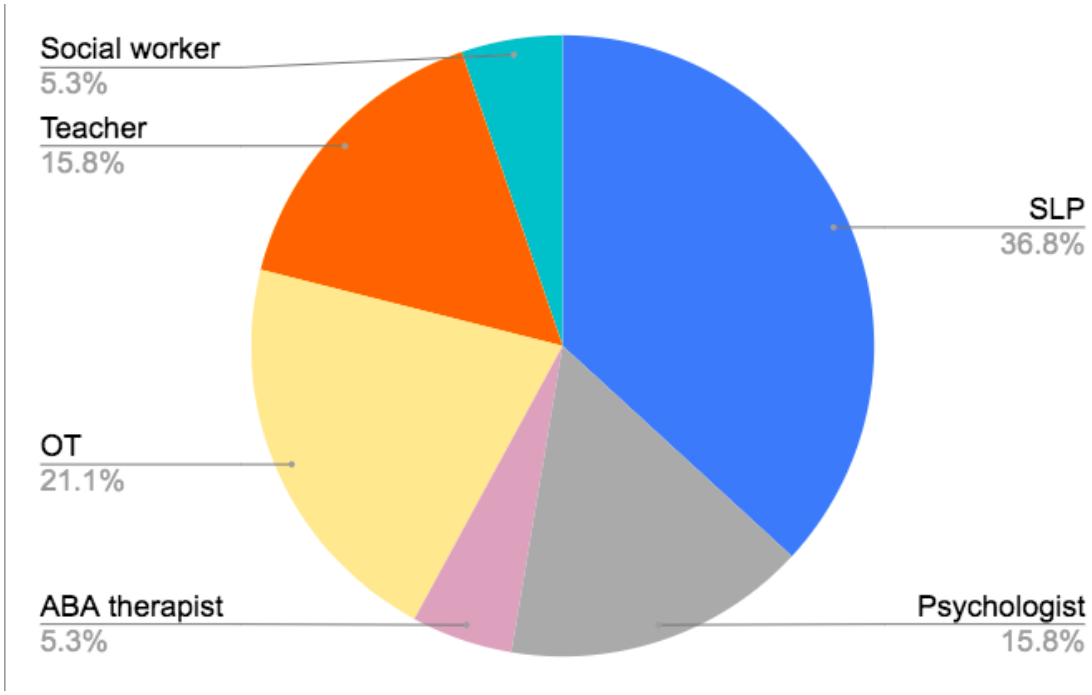
One of the most valuable principles listed was Principle Six, which states that collaboration and communication between a child's intervention team and family is vital to social communication success. However, this principle was one of the most difficult to implement according to the survey. When asked why this principle was most difficult, common responses were as follows:

- “While I believe collaboration is one of the most important principles listed, it's also one of the most difficult to implement. In my experiences so far this year, it can be hard to get a hold of parents and encourage them to implement strategies. Intervention specialists I work with are busy or burnt out, and it's hard to add one more thing to their plate.”
- “It is difficult to meet and collaborate as a team.”
- “Collaboration across environments can be challenging due to time constraints, ease of access for communication, continuity in program implementation across professionals”

Figure 7 shows that the participants who ranked principle six as the most difficult to implement vary greatly based upon their profession; not one particular profession seemed to view collaboration as a greater issue than other professions.

Figure 7

Ranked Principle Six as Most Difficult to Implement



Note: This graph depicts the positions of the participants (n=13) who ranked principle six as the most difficult to implement.

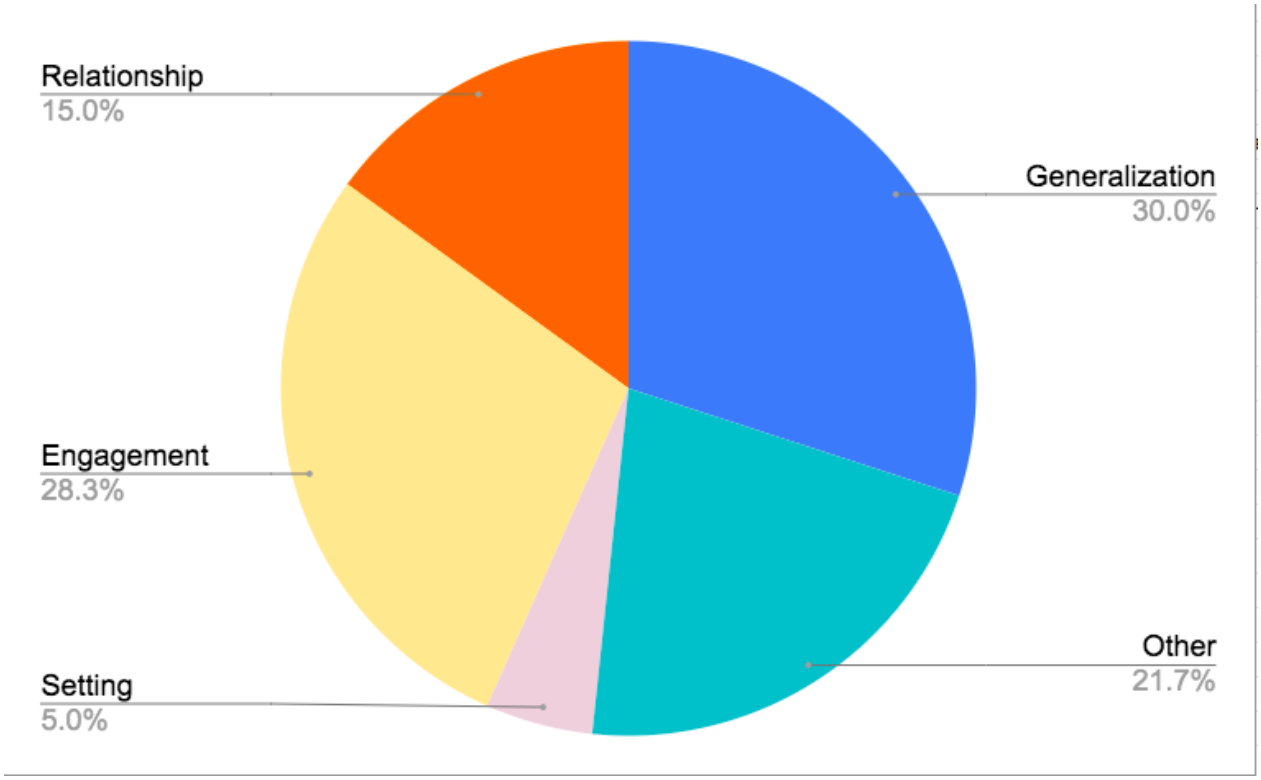
When asked if there was another principle they would like to add to the list of six principles outlined by Briton and Fujuki, 85% of the participants responded with 'N/A' or 'none.' The participants that responded discussed ideas such as focusing on relationship building, maintaining attainable goals, and making sure intervention is led by the child.

Elaboration/conclusion category

This category asked the participants, in their opinion, the most important aspect of social communication. The responses were analyzed and placed into the following categories: engagement (child's interest levels, engaging activities, fun), generalization (ability for the child to use the skills learned in other contexts), relationship (between professional and child), setting (the intervention occurs in a natural, play-based setting), and other. Figure 8 reveals that the most important aspects of social communication vary greatly among the participants, but the largest quantity of answers fell into the generalization category. Interestingly, the principles from Brinton and Fujiki that relate most to generalization, Principles Two and Three, were ranked as two of the most difficult to implement.

Figure 8

Most Important Aspects of Social Communication

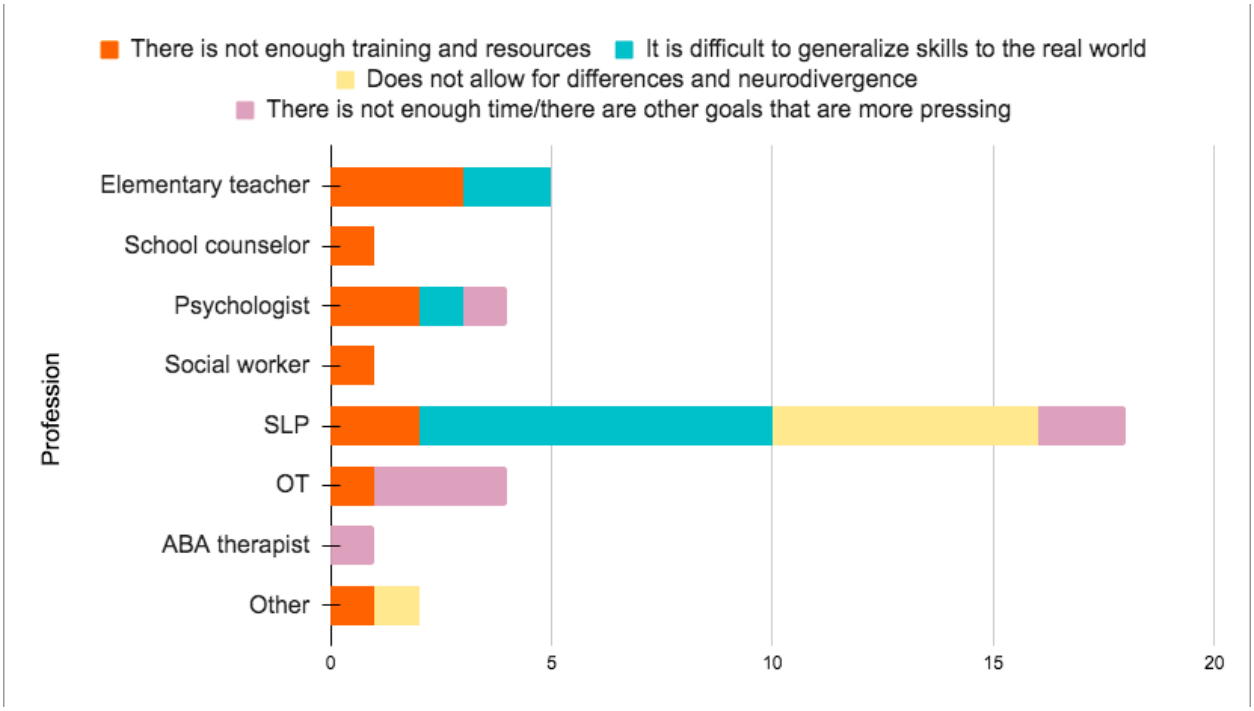


Note: This figure shows the participants' (n=60) responses when asked what they feel is the most important aspect of social communication.

The final question of the survey asked the participants what the largest flaw of their field is. The results of this question were analyzed and categorized into four general sections: there is not enough training and resources, it is difficult to generalize skills to the real world, it does not allow for differences and neurodivergence, and there is not enough time/there are other goals that are more pressing. For this particular question, responses were gathered from five elementary teachers, one school counselor, four psychologists, one social worker, 18 speech language pathologists, four occupational therapists, one ABA therapist, and two professionals that identified as ‘other. Figure 9 demonstrates that the participants have similar ideas about the flaws of their profession, regardless of what their profession may be.

Figure 9

Flaws in Social Communication



Note: This graph depicts the categories that were most frequently brought up for the largest flaw in the participants (n=36) fields compared to their positions.

Discussion

Based upon the results, a variety of conclusions can be drawn about social communication goals and the perceptions different professions have of how to incorporate these goals into the work they do with school-aged children.

Firstly, the results of this study demonstrate that social communication is embedded into the sessions and lessons of a variety of professionals, and one single profession does not appear to be the brunt of these goals. Most participants agreed that they do NOT exclusively treat social communication goals in their field, but many felt that they incorporate aspects of social communication goals into their sessions or they feel it should be a focal point of their field

(figure 5). This raises questions about how different fields can take their own expertise to form a collaborative effort to work towards these goals. A clear example of this can be seen in the responses of four participants when asked what social communication goals they see frequently:

- "X will participate in a turn-taking interaction 3x with 2 verbal prompts in 4/5 opportunities." (occupational therapist)
- "The goals are for students with deficits in social communication, such as students on the spectrum. The focus is on teaching strategies to engage reciprocal communication through modeling, puppet play, video modeling, and social stories." (intervention specialist)
- "Conversational turn taking, social stories" (speech language pathologist)
- "peer social interactions; participating in a group setting with peers; turn taking; back and forth verbal exchanges; requesting and sharing materials with peers" (teacher)

All of these goals fall into the same category of 'following rules' of communication. These examples demonstrate how a variety of practitioners can use their own expertise to work towards a common goal for a child; an SLP may focus on conversational turn taking, while an intervention specialist may focus more on modeling conversations through play. It is evident that not one profession is capable of knowing all the idiosyncrasies involved with social communication, and the ability to collaborate with different fields would provide clients with a more well rounded, cohesive intervention.

Next, it is evident that practitioners are faced with challenges such as a lack of consistency, resources, and education. The most challenging principle to implement was Principle Three, which describes the need for intervention to be consistent, take place over a reasonable period of time, and use a variety of resources (Figure 6). Many participants in the

current study mentioned that they lack resources and time when it comes to reaching social communication goals. Some common responses when asked what is the largest challenge of social communication in their profession as as follows:

- “Tends to fall on the back burner.”
- “Being in a low income school students will come in and they haven't had the documentation or the background help to get the support in place that is needed.”
- “There is a lack of consistency in the implementation of the intervention, lack of staff, interventions can be punitive in nature, and interventions are not based on evidence-based practices.

When asked what the largest flaw in the way their field handles social communication goals, responses describing the lack of training and resources came up in the following fields: teachers, counselors, psychologists, social workers, SLPs, OTs, and ’other.’ Similarly, when psychologists, OTs, SLPs, and ABA therapists all described how they feel there is not enough time to work on these particular goals (figure 9). It is evident that a lack of time and resources is a common belief. The majority of the participants work in wealthy suburbs in the Midwestern region of the United States. This leads to questions surrounding the resources and access in clinics and classrooms in rural areas or intercity regions. If practitioners in well-off areas with steady jobs (58% of participants have held the same job position for the past four years) feel as though they do not have the sufficient resources and time, what are other practitioners saying? It is evident that the lack of resources and time causes a barrier to practitioners' ability to follow all six principles of Fujiki and Brintons findings.

Finally, the results of this study lead to the conclusion that many different practitioners, regardless of their field, share similar perspectives, beliefs, and goals regarding the future of

social communication intervention. A common thread throughout the entire study was the desire participants have for further communication and collaboration. The participants represented over eight different professional fields, but yet they all responded with agreement for many parts of the survey. 78.4% of the responses when asked what the social communication goals they see most fell into one of three categories: using language, changing language, and following rules (figure four). It is evident that the goals of every profession are similar, but yet many mentioned the lack of communication and collaboration.

Future Considerations

Additional studies could be conducted in order to understand the length of time different professionals spend on social communication goals. Also, this study raises questions regarding what collaboration looks like. Many participants mentioned how they collaborate and work with a variety of other professions outside of their own on a weekly basis, but a constant theme throughout the study was the desire for more collaboration and co-intervention. Also, many participants mentioned how they do not feel as though they have enough time to work with students on these goals, so it would be fascinating to see how different practitioners quantity "not enough time." Another question this study raises is how social communication intervention varies depending on the region of the country, so a further study could compare answers of different practitioners based upon where they practice. Finally, it would be interesting to analyze how social communication intervention has developed and changed over the past decades.

Conclusion

Overall, this study provides interesting intel in the perspectives of a variety of practitioners. It highlights the desires of practitioners to strive for collaboration across fields, and should be considered when developing new therapy clinics and schools. Also, it provides

information for professors surrounding the necessity to place more emphasis on co-treatment and social communication in their graduate course; the study demonstrates a need to focus more on collaborative efforts between practitioners. This study also provides parents of children with social communication challenges with an understanding of the importance of teamwork between them and their childs' therapists and teacher. Many respondents mentioned the importance of patience, difficulties generalizing skills outside of the classroom, and the necessity of working with parents and guardians, so the study acts as an important reminder for parents. Finally, this study should guide future practitioners when creating intervention plans for their clients. It should encourage practitioners, regardless of their profession, to consider all aspects of social communication, and figure out which aspects may be better worked on by another profession.

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