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Stakeholders' Experiences with Shadow Aides in an Inclusive School in Jamaica

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Abstract

Shadow aides (also known as learning assistants or shadow teachers) and the vital role they play in the learning support plan of many inclusive policies and practices is under-researched. This paper explores stakeholders' experiences with and the views they hold of shadow aides in the inclusive classroom in a Caribbean context using a qualitative case study design. Data was collected using interviews, focus group discussions and observations from 27 participants. The key findings suggest that shadow aides are viewed as being one of the driving factors behind successful inclusive education experiences and student outcomes. Parents shared that the work of shadow aides often resulted in either the improvement or regression of their children. Therefore, careful selection and placement of shadow aides along with their training and views are imperative in developing and implementing inclusive practices. Other key findings are also highlighted in this article. Finally, implications and recommendations are discussed.

Keywords: shadow aides, inclusive-education, special needs, Caribbean

Stakeholders' Experiences with Shadow Aides in an Inclusive School in Jamaica

One of the fundamental principles of successful inclusive education outcomes is the provision of support services to help maximize students with special needs (SN) in inclusive classrooms. Majority of the research done on experiences with inclusion focused on principals and teachers (Chan et al., 2020; Orchard, 2023; Yang et al., 2023) which has dampened awareness of the roles shadow aides play in these settings. The role of a shadow aide is to help the children needing to support activities by helping fill in the Gaps in the learning procedure and overall assist the child to create academic and social abilities (Hamid, et al., 2020). Other terms used in recent literature includes 'shadow teacher,' 'shadow teaching,' 'teaching assistant' 'special education assistant' (SEA) 'learning assistant' among others (Ebersold, 2003; Takala et al., 2009; Hamid et al., 2020 & Andersen et al., 2023). For this study, the term 'shadow aide' was used and will be used throughout this article. In the Philippines and Malaysia, shadow aides are referred to as shadow teachers who are home therapists or special education teachers placed with a child with SN in a classroom (Sulaiman et al., 2019). In Canada and the US, shadow aides are certified with some requiring training in special education, but they are not trained teachers. Unlike Maylasia and like Canada, shadow aides in the Jamaican classrooms are not considered trained teachers in special education nor specialists but individuals with minimal training in teaching (Level 1) who support students with special needs learning in the inclusive and special education classrooms.

In this study, the shadow aides work with students with autism and attention deficit hyperactivity disorder, like those in other countries. These shadows may have obtained certificates in other areas or are untrained. Hamid et al. (2020) opine that the role of a shadow teacher is to help children who need support by helping to fill the gaps in the learning procedure and overall assist the child to create academic and social abilities. Despite this crucial role, Takala et al. (2009)

argue that there have been no reasonable guidelines regarding principles for capability and abilities and undertakings and jobs of shadow teachers in inclusive schools. In Jamaica, the roles of shadow aides are not clearly defined in its education system. Hence, public, and private schools are still in the trial-and-error phase of supporting students using shadows aides in the classrooms.

UNICEF (2022) reports that 1 in 10 children worldwide is said to have special needs (SN). This has called for greater emphasis to be placed on how schools will support students' needs in the classroom. The existence of educators with expertise in the process of fostering and learning with special needs has been referred to as an essential component and a weakness of inclusive education in many countries (Mukhlis, 2023). Similar concerns exist in the Caribbean regarding trained professionals to support students with special needs in schools. The literature is sparse regarding the support shadow aides provide and their experiences providing support to students with SN in inclusive classrooms. In the Caribbean, the literature on shadow aides is almost non-existent.

The school in which this study was conducted is a private inclusive school which implemented a shadow aide program 13 years ago. The guidance counsellor is responsible for training and vetting the shadows and subsequently matching them with students. To be employed as a shadow aide at Kan Prep School, shadow aides must be a minimum of 18 years old and obtain a basic level certificate (Level 1) in child development or early childhood education, usually obtained from the Human Employment and Resource Training Trust/Nation Service Training Agency (HEART Trust/NSTA). Heart Trust/NSTA is a leading provider of technical vocational education and training in Jamaica. Training programs offered by HEART Trust/NSTA are usually short-term lasting from 3 months to 1 year. For example, a level one certificate program in child development or early childhood education lasts for 3 to 6 months. Hence, training is basic and minimal. In addition, shadows are required to have at least one year of experience and reside near the school. Shadows are given on-the-job training for one term (3 months) upon employment.

This paper seeks to provide insights into stakeholders' experiences of and with shadow aides in inclusive classroom from a case study conducted at a private school in Jamaica, using 27 participants at the elementary level. Among these participants are shadow aides, principals, teachers, parents, and other stakeholders. Information from this paper may be helpful to policy makers, school leaders, practitioners, and other stakeholders in inclusive education as they reflect on their context and experiences to implement effective programs and practices in the classrooms. It also sought to bridge the gap in literature on shadow aides in the Caribbean.

Shadow Aides in Inclusive Schools

Parents and principals have many misconceptions about shadow teachers (Hamid et.al., 2020). However, time spent with shadow aides was identified as one of the main support structures necessary to implement inclusion successfully (Anderson et al., 2007). They make a significant contribution to the school's work and toward the education of all students (Hamid et al., 2020; Manitoba Education, 2009). While the efficacy of teacher assistant is controversial (Ashbaker & Morgan, 2012; Rutherford, 2011; Sansotti & Sansotti, 2012), the presence of a shadow aides is seen as the most desirable form of support by teachers at the beginning of their career.

Conversely, the reliance on shadow aides appears to be diminished because of additional experience and professional development (Hemmings & Woodcock, 2011). Despite the positive role shadow aides play in inclusive settings in Canada, researchers (Orhard, 2023; Luchtel, 2021) reported several issues related to shortage of shadow aides in schools and rapid turnover which may be attributed to role confusion, increased workload, and shadow aides feeling burn out.

Other issues experienced by shadow aides are a valuation for their work or compensation framework, and lack of security in their jobs which has not been obviously managed in education systems (Jahanzaib et al., 2019; Giangreco et al. 2013). Additionally, Hamid et al. (2020) argued that the planning of shadow teachers has not been led through ideal methods. Furthermore, there have been no reasonable guidelines about principles for capability and abilities and undertakings and jobs of shadow teachers in inclusive schools (Takala et al., 2009). According to Symes and Humphrey (2012), placing a shadow aid in inclusive classrooms to support students with additional needs such as autism has been one conventional way many educational systems meet these student's needs. However, Giangreco et al. (2013) contends that shadow aides are being used in schools to compensate for the lack of human resources to support students with disabilities in inclusive settings, without great consideration for their roles and responsibilities.

Roles of Shadow Aides

Shadow teachers assume a crucial job in inclusive schools. However, Hamid et al (2020) notes that their insight and comprehension of inclusive education fluctuates. They further argued that shadow educators' absence of information and comprehension of inclusive- education makes disappointment satisfactorily perform the vital errands and obligations and thus impacts their presentation. In Pakistan, one issue experienced by shadow teachers is a valuation for their work or compensation framework, which has not been obviously managed (Jahanzaib et al., 2019). While Ebersold (2003) identifies shadow aides as a bridge that connects home and school, Sharma and Salend, (2016) reported that, in addition to supporting teacher-directed instruction and performing a variety of non-instructional roles, shadow aides are shouldering significant instructional, classroom management and socialization roles, making important curricular decisions regarding the education of students with disabilities, and teaching them in separate locations.

Researchers (Kendrick, 2024; Orchard, 2023) argued that despite the challenges shadow aides experience with workload and role clarification, much attention has not been given to their contribution in decision making around students with disabilities in schools. Additionally, Hamid et al (2020) argue that parents and principals have many misconceptions about shadow aides, and time spent with shadow aides was identified as one of the main support structures necessary to implement inclusion successfully (Anderson, Klassens, & Georgiou (2007). Andersen, et.al. (2023) found that with EA support, students in a controlled study were able to stay in regular classrooms throughout compulsory education and follow the same progression as their peers in the control group when they transited to upper secondary education. Studies of beginning and experienced teachers indicate that their greatest concern regarding inclusive education was inadequate resources and a lack of staff (Forlin & Chambers, 2011; Round, Subban, & Sharma, 2015), which involves shadow aides.

For this study, shadow aides are considered a part of the microsystem whom the ecology of inclusive education framework considers as non-teaching staff (Anderson et al., 2014). As Bronfenbrenner's ecological system theory suggests, what happens in the classroom will impact the child's development (Bronfenbrenner, 1976). This means that students with disabilities in the classroom can influence the roles and experiences of shadow aides and the roles they play can also influence the development of these students. Additionally, other variables such as parents, school and government policies also impact how shadow aides support students in the micro system (the inclusive classroom) and what happens in the classroom will also impact the role of the shadow aides in that context.

Page and Ferret (2018) investigated the views and experiences of shadows who support students with autism in inclusive classrooms in two countries: The Cook Islands (CI) and New South Wales, Australia. They found that there were differences in views and experiences noted resulting from cultural and institutional contexts. They argued that these contrasting points indicate a diversity of thinking and positioning in attitudes and practices towards students with autism spectrum disorder (ASD). Such differences they assert, show that one model of working with students cannot be transposed into different contexts; models of working with students with ASD must be contextualized to maximize the successful learning for these students. Recent scholars (Yang et al. 2023; Julian, 2020) recommend that more studies that seek to explore and understand the experiences of EAs are warranted, considering the key role they play in supporting students with disabilities in inclusive schools. This study is therefore very timely and necessary to bridge the gap in literature on shadow aides and provide data from empirical research findings that can be used to inform policies and programming regarding shadow aides in the local and international contexts.

While Ebersold (2003) identifies shadow aides as a bridge that connects home and school, Sharma and Salend, (2016) reported shadow aides do far more than supporting teacher-directed instruction and performing a variety of non-instructional roles. Sharma and Salend opine that shadow aides are shouldering significant instructional, classroom management, socialization roles, and making important curricular decisions regarding the education of students with disabilities and teaching them in separate locations. On the other hand, they ranked instruction to be least important among all their duties. They regard modifying the child's behaviour and improving his/her social skills as their immediate priorities (Ebersold, 2003).

In Pakistan, shadow aides are considered as a side teacher who only help or help the child but the main skill or changing develop with the help of a shadow teachers (Hamid et al., 2020). Dizon (2000), as cited in Manansala and Dizon (2008) proposed five main categories under which shadow teachers carry out their duties. These include curriculum planning, instruction, behaviour management, social skills management, and team working. However, Manansala and Dizon (2008) found that shadow teachers and regular teachers believe that shadow teaching has four objectives: (1) to aid the child to improve his/her academic performance, (2) to help the child improve and modify his/her behaviour and eliminate inappropriate behaviour in class, (3) to teach the child to be independent, and (4) to improve the child's interactions with others. On the other hand, they found that shadow teachers believed that they are important in guiding the child in his/her school activities and tasks, managing the child's behaviour, modifying, and teaching the lessons to the child, and helping the child interact with others and achieve independence.

Overall, the study reveals that shadow aides and regular teachers agree that shadow teaching helps improve the academic performance, psychosocial skills, and independence capabilities of children with special needs. Contrary to Ebersold (2003) findings, shadow aides in Manansala and Dizon's (2008) study believe that their most important responsibility is teamwork with regular teachers, whereas regular teachers think that their most important task is curriculum planning. While shadow aides have also been found by Butt and Lowe (2012) to support teaching and inclusive education along with students' academic, social and behavioral needs, at times they experienced unclear professional roles. In addition, limited communication and opportunities for collaboration, training, supervision, and professional learning were reported as major factors hindering the impact of the work of shadow aides (Butt & Lowe, 2012). While the roles and effectiveness of shadow aides are controversial, Faiz (2020) posits that if shadow teachers (Learning Support Assistant) in inclusive schools are deployed well, the shadow teacher can positively impact students' reading, writing, speaking, listening and peer to peer interactions. In other words, they can be superstars! It is also imperative for schools and education systems to emphasize the importance of establishing clear roles and responsibilities for shadow aides is to ensure that the appropriate guidelines have been followed.

Sulaiman et al. (2019) studied parents' satisfaction with services provided by shadow aides in an inclusive classroom in Malaysia and found that parents were satisfied with the services given by shadow aides. They posit that shadow aides in inclusive classrooms have enabled students with autism to participate in a far greater kaleidoscopic variety of educational experiences with their non-disabled peers than they ever did when taught in separate classrooms. They argued that shadow aides should be highly valued by teachers, parents, administrators, and students themselves. Moreover, they assert that shadow aides have unquestionably eased a teacher's job in an inclusive classroom.

To date, there is no documentation of studies done that involved the examination of shadows in the inclusive classroom in the Caribbean. Hence, data to support or refute findings from previous studies do not exist. This study aims at filling the gap in the literature regarding the experiences with shadows in inclusive classrooms in Jamaica.

Methods

Research Design and Data Collection

This study was conducted using a qualitative case study design involving 27 participants including shadow aides in a private school. Data was collected using semi-structured interviews, observations, and focus group discussion to gain an insight into the experiences of shadows and the experiences of other stakeholders with shadows in the inclusive classrooms.

Participants

Purposive sampling was used to gather authentic, in-depth and a wide range of experiences. In this study, parents of students who work with shadows, teachers who have shadows in their classrooms and students who work with shadows, principal, and other administrations as well as the shadows themselves were interviewed.

Research Questions
The two main research questions that guided the research are:

1. How do stakeholders describe their experiences with shadow aides in the inclusive education practices in the school?

2. How do shadow aides describe their experiences with inclusive education?

Ethical Considerations
Before the study was conducted, access letter was written and given to the school to seek permission to conduct the study. Informed consent and assent letters were given to each participant. Pseudonyms are used to protect the identity of the participants. Additionally, participants were notified of their right to refuse participation and withdraw from the study at any time. Collegial consult, member checking and triangulation were done to add to the trustworthiness of the study.

Data Analysis
Braun and Clarke (2006) six phases of thematic analysis (familiarity with the data, generating initial codes, searching for themes, reviewing themes, defining, and naming themes, producing the report) were used to analyze data. According to Braun and Clarke, thematic analysis is a method for identifying, analyzing, and reporting patterns (themes) within data that minimally organizes and describes your data set in (rich) detail. I was interested in providing a rich thematic description of my entire data set so that the reader gets a sense of the predominant or important themes. As such, an inductive thematic approach was chosen which Braun and Clarke suggested are ideal for representing data from under-researched areas. In other words, my themes are data-driven and are strongly linked to the data themselves (Patton, 1990).

In phase one (1) of the thematic process, I read the transcriptions several times to familiarize myself with the responses from the participants. I recorded my thoughts and feelings about the data and thought-provoking patterns that I noticed in my code book and reflective journal. During phase two I examined each interview transcript and assigned codes using the participants` voices (NVivo codes) as I wanted my themes to be data-driven (Braun &-Clarke, 2006). I documented similar responses across the data set and those that are not common (the outliers). In addition, I highlighted the similarity in responses using colour codes across the soft copy version of the transcriptions and in my codebook, so that I would know what codes are associated with specific responses. As new codes developed, they were added to the master list of codes. To achieve inter-coder reliability, I asked two experts in qualitative research with at least 10 years of coding experience to code samples of the data to see if there are consistencies with the codes.

The third phase involved me categorizing my codes to generate initial themes. I questioned the data to ensure that the themes are reflecting the meaning from the data. I wrestled with this aspect of the process as some themes overlapped and there was a need for my themes to convey important meanings. Hence, I discussed my themes with two of my colleagues who are qualitative experts to obtain feedback.

Results

Findings revealed that shadows in the classroom were a major contributor to the academic success or failures of students with special needs. From the data collected and analyzed, five themes emerged such as benefits of shadows, shadow competence and shadow turnover, shadows experiences, students' experiences with shadows, and role clarification of shadows. The names that I used to report the findings are pseudonyms to protect the participants' identities and their comments.

Benefits of the Shadow Aides

Shadow aides were viewed to be beneficial in the classroom in numerous ways. The principal Mrs. Turnbull communicated that the current inclusive practices are not fully meeting the individual needs of the students, however, since the smooth running of the placements of shadows in the classroom, improvements have been observed. Like Mrs. Turnbull, Mrs. Fry, an inclusive classroom teacher gave credit to the shadow program. Based on her experiences in the inclusive classroom, she believes that there are positive gains from having shadows work with students with special needs if they are compatible with each other (student and shadow). For example, she said, "The shadow program is important and, in my experience, with the right match, it is a very positive action to assist some of our students"

During my observation of three classrooms with shadows working with students, benefits of shadows was noted. For example, Kadian, a shadow was observed working with a student with ADHD in Mrs. Stephenson's classroom. As Sam tried to get out of his seat and look under his desk for something that is a pencil, Kadian could be seen trying to redirect him to pay attention to what was being taught by the teacher. At one point, the student had his head on the table while the teacher was teaching, and Kadian tap the student on the shoulder and pointed to the chalkboard. The student then sat up in his chair and appeared to pay attention for 5 minutes after which he started to play with his eraser [observation field notes, January 18, 2020]. It can be interpreted that shadows in the classroom at Kan Prep School are beneficial to helping students engaged in the classroom especially with attention, focus and completion of assigned tasks.

In addition to the classroom, Shadows were observed with students at recess outside. While the shadow was not in close contact with the student with autism whom she was supervising, she was observed standing observing Aden outside as he played with his bouncing ball parallel to other students. Other students were seen playing soccer in a group of 3, some were playing on the monkey bar while others played tag. At one point, Aden was walking away from the playground towards a big tree to the right of the playground but before he could get close, the shadow called out his name and ran to redirect him back to where the other children were playing. The shadow aide was then seen talking and playing throw with Aden [Observational field notes]. It can be deduced from my observations that shadows are not only beneficial in the classroom but outside of the classroom to monitor social interactions and safety.

Shadow Competence and Shadow Turnover

The ability of shadows to fulfill their responsibilities in the classroom was viewed as a major indicator of success for students. Their competences influenced their retention in the role of working with students with SN in the inclusive classrooms. Mrs. Turnbull, the principal stated

that while the students with special needs in the inclusive classroom learning have improved, the shadows lack enough training. She believes that children's experiences in the classroom are influenced by the training of the shadows, suggesting the significant role the shadows have in the classroom. She affirmed:

> *Now that we have streamlined the whole shadowing process. I think it is a little bit more effective. I still believe, however, that we need to do some more training on these shadows and because that in and of itself will determine the children's experiences in the classroom.*

Parents' experiences with the shadows for their children were "bitter-sweet." They agreed with the principal's view that improvements were evident with the use of shadows with their children in the inclusive classroom, but it was dependent on the competence of the shadow that was placed with their children, as regression in the learning of their children was observed with some shadows. The data also show that shadows have changed at least once since the start of the program, which was in effect only seven (7 months) up to the time of data collection. For example, Melissa, a parent of a child working with a shadow in the school, described her experience saying:

> *He has improved overall but did better with some of the shadows compared to others. He was frustrated with some of the shadows as he felt they were too hard on him. He regressed somewhat with the last shadow.*

Susan, who is a parent, also shared her experiences with shadows and explained why she changed shadows in the past. She shared mixed feelings about the shadows who worked with her child in the inclusive classroom. She expressed great satisfaction with one shadow whom she described as a blessing because she was trained, and she engaged her child in the learning process. Contrastingly, she stated that she had undesirable experiences with another shadow who was not adequately trained and completed the work for her child, she exclaimed!

> *I had a shadow that was not properly trained and that was ineffective. She would do the work for him and was less than effective in monitoring him. I changed shadows and that was such a blessing she was great with him and was very engaging and receptive to find new and engaging ways to get him to participate in school.*

Evidently, shadow aides viewed as a significant contributor to students with SN success and their training plays a vital role to both theirs and the outcomes of the students with whom they work.

Shadows' Experiences in the Classroom

The shadows who worked with children in the inclusive classroom had challenging and fulfilling experiences. For example, Kadian stated that working with students with special needs in the inclusive classroom provided her with the opportunity to advance her knowledge of the primary curriculum, however, managing the child with special needs behavior presented the greatest challenges for her. The need to deal with the behavior of the child quietly without causing any disturbance during the learning process was imperative and made the behavior more difficult to

control. This shows consideration of the shadow in the classroom. In describing her experience working with the students, she exclaimed boldly:

> *The experiences were good and a challenge. So, it was good because you as a shadow in the inclusive classroom could learn and refresh the brain with primary level education to pass on that knowledge to the child who you care for. The challenge was keeping the child you care for under control when the child is boisterous and fidgety. The shadow has to deal with child quietly and effectively without causing a raucous behavior that will disturb the other students in the classroom from learning.*

Challenging experiences with the behavior of students with special needs in the inclusive classroom was reported by another shadow Francine. She shared that it can be quite a challenging task especially when students retaliate against persons in authority. She was conscious of the need to act within the legal parameters when it comes to discipline. She responded firmly:

> *As a shadow teacher, it is quite difficult sometimes when dealing with disciplinary actions for the student with special needs. Student retaliates when he has been spoken to by either me or other persons in authority. And it is a challenge to get student settled and we as persons in authority have to be careful of the actions, we take in disciplining the child for learning.*

In addition, Ms. Jackson, one of the shadows, stated that additional training is needed for them to maximize students learning in the inclusive classroom. She believed that they should be allowed to enhance their knowledge which would better prepare them for meeting the needs of the students with whom they work. When asked what the school can do to support the shadow in the inclusive classroom, Ms. Jackson, a shadow verbalized:

> *Shadows should be given the opportunity to enhance our learning abilities or refreshing our memory to pass on that knowledge to students with special needs. Shadows should be given a syllabus to ensure that we do not get lost in the student's learning progression or daily lessons and activities.*

Like the principal's view on the need for more effective monitoring of students, the shadow believes that they should be given the syllabus of topics being taught to track students' progress. She explained, "It is important that we record student's progression in every single topic that they learn and to know if the student understand/comprehend every lesson taught in the inclusive environment.

Students' Experiences with Shadows

During the focus group discussion with the students with special needs, varied experiences and feelings were shared. John interrupted Sam while he was talking and said, "The only thing is, I feel like I am a baby with someone watching me all day, you know, like a babysitter!" Sam responded "you too? I think I would prefer a tutor to work with me at home." Sam shared that sometimes his shadow helps him to understand the lesson but sometimes he does not. Dan, who has Dyslexia but does not have a shadow, joined in the conversation, and said "I just wished my teacher and mom know that school is hard work! Interestingly, speaking on shadows in the

classroom, the school principal Mrs. Turnbull stated that students working with shadows may feel slighted and different which may affect their self-efficacy. This suggests that while shadows in the classroom are beneficial to some students, there is still room for improvement.

Their experiences with provision of resources were also shared. The suggestion of one of the shadows relating to how the classes are arranged, the quality of lighting, and opportunities for students to move around. Kadian shared that the classroom environment needs to be more conducive to accommodate the diverse needs of students such as organizing small groups using round tables and ensuring that the classroom is not too lit for those students who are unable to learn in brightly lit classrooms. It was also shared that students with special needs seating should be as comfortable as possible and that the physical layout of the inclusive classroom should provide students with the opportunity to move around: Her recommendations are highlighted as follow:

> *I suggest that students especially ones with special needs should collaborate in small groups, for example, organize them around tables or clusters of desks. Create both well-lit and dimly lit areas in the classroom- Some children learn best in bright light, but others do significantly better in low light. Bright light makes some students restless and hyperactive. Try allowing students to sit where they feel most comfortable or try placing fidgety children in low-light areas and listless children in brighter areas. Provide opportunities for children to move around- Most of us have the mistaken impression that children learn best when sitting still, but research now proves that many children need extensive mobility while learning. These children learn significantly more if they move from one area to another as they acquire new information.*

These findings suggest various experiences within the inclusive classroom by shadows and their voices are imperative to achieve greater successes in provision of their support for students with SN.

Role Clarification of Shadows

One striking finding from the data regarding shadows in the classroom was role clarification. Francine expressed the need for clearly defined roles and responsibilities of the shadows which should be shared with the parents. She stated that shadows should not be asked to do anything outside of their job description such as working with children at home. If a shadow chooses to do so, they should be additionally compensated. Francine argued:

> *Outside of the inclusive environment, strict rules should be put in place between the parent and the shadow, why, because if it is that a shadow have to help the student with special needs at his home then the shadow should not be doing anything outside of his job description. A shadow should also get additional pay if she assists a child with special need at his home.*

This shows a gap in establishing and communicating the clear roles and responsibilities of the shadows transparently.

Discussion

Findings from this study supports Page and Ferett (2018) assertion that shadow aides experiences are contextualized, and education systems need to pay attention to the cultural and contextual experiences with and of shadow aides to improve practices. In other words, one size does not fit all in placing and employing shadow aides in inclusive classrooms. Sulaiman et al. (2019) posit that shadow aides in inclusive classrooms have enabled students with autism to participate in a far greater kaleidoscopic of educational experiences with their non-disabled peers than they ever did when taught in separate classrooms. They argued that shadow aides should be highly valued by teachers, parents, administrators, and students themselves. Moreover, they assert that shadow aides have unquestionably eased a teacher's job in an inclusive classroom. A similar finding was evident in this study as teachers in the inclusive classroom found shadows immensely helpful in the classroom. Findings also revealed that shadows work with students with autism and attention deficit hyperactivity disorder (ADHD) at the school had both positive and negative effects on students' learning. Parents of children who used the support of a shadow expressed that their children regressed with some shadows and improved with others. More specifically, one parent, Susan, reported that the shadow completed the work for the student which hindered his understanding of what was being taught. She called the experience a "disaster." This could be explained by unclear roles and responsibilities of shadows that researchers (Hamid et al., 2020; Luchtel, 2021; Orhard, 2023) posit is a major issue with shadow aides.

In addition, this finding is inconsistent with Sulaiman et al. (2019) who studied parents' satisfaction with services provided by shadow aides in an inclusive classroom in Malaysia and found that parents were satisfied with the services given by shadow aides. In their study, parents praised the shadows as helpful and supportive in assisting their children to adapt to the new school environment. This could be based on the level of training of shadows in Malaysia versus the training of shadows at the school in this study. However, similar findings with Sulaiman et al. (2019) study were found, in that, there should be continuous professional development for shadow aides expressed by parents. Therefore, stakeholders interacting with children in the inclusive classroom must be competent and knowledgeable of their roles and how to meet the needs of the students in the inclusive classrooms. Additionally, findings from this study supports Faiz (2022) assertion that if shadow aides are placed well, it can make a positive impact on social and academic growth. A similar assertion was made by one of the teachers in this study who articulated that when there is a good match between shadow aides and students, positive influence was evident in students' learning.

In this study, the shadow teachers ranked instruction to be least important among all their duties. They regard modifying the child's behavior and improving his/her social skills as their immediate priorities. Findings from this study revealed that the shadow aides found managing the behavior of the children they work with most challenging. Despite the challenges faced by the shadows at this school, they support the need for professional development as they articulated that they should be allowed to enhance their own learning so they can pass on the knowledge to the students with special needs. In addition, this finding explains the importance of the National Council for Special Education's (2011) assertion that for successful inclusive education, staff should have access to continuing professional development and support from management and colleagues to equip them with knowledge and expertise in the education of

pupils with SN. Shadows training at the school under study is minimal which may have serious implications for how they assist students with special needs in the inclusive classrooms.

Conclusion and Recommendations

Findings revealed that shadows play a key role in the learning of students with special needs in inclusive classrooms. The training of the shadows is important to successful students' learning outcomes; hence, schools will need to ensure competency and professional development. It is also important for schools to consider the physical placement of shadows as they work with students with SN in the inclusive classroom to prevent the obstruction of learning for other students in the classrooms. Parents should also play a key role in the recruitment of the shadows to ensure transparency in responsibilities and expectations.

Given the direct influence shadow aides have on the learning outcomes of students with special needs and their non-disabled peers in the inclusive classrooms, it is crucial for schools to implement and sustain a strong shadow aide program. To achieve this, the following five key recommendations are advanced:

1. It is recommended that careful thought is given to shadow aides training, and views on inclusive education. Additionally, placement of shadow aides with students should be paramount to achieve "good match" where students with SN and the shadow aides are comfortable with each other. The relationship between shadow aides and the students with whom they work can have positive or negative impact on execution of roles and students learning.

2. Ongoing assessment of shadow aides' experiences and professional development should be paramount to keep them abreast of new and innovative approaches to help support students with SN in the classroom. Professional development to meet the emotional and mental health needs of shadow aides should also be considered. Provision of adequate and appropriate resources such as curriculum guides, learning resources, goals for students among others is also key to helping them fulfil their roles in the classroom.

3. Collaboration among shadow aides, parents, and the classroom teacher should be integral in practices and programs. Sharing of goals for students and expectations of all stakeholders are important to achieve positive experiences and learning outcomes for students. This collaboration is also beneficial as teachers can share the learning outcomes for students in advance so that shadow aides and teachers can prepare their support strategies to assist students.

4. Establish clear policies on roles and responsibilities of shadow aides. This can minimize unrealistic expectations and responsibilities of other stakeholders such as parents.

5. Further research is done on shadow aides in inclusive classrooms at all levels (early childhood, elementary and secondary) using quantitative or mixed methods approaches to gain a wider understanding into their experiences.

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Do Analytical Thinking and Creativity Differ Between Gifted and Non-Gifted Students?

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Abstract

Sternberg's Theory of Successful Intelligence proposes a broader and more comprehensive view of intelligence beyond traditional measures like IQ. The theory consists of three main components: analytical, creative, and practical intelligence. The theory suggests that gifted individuals have more developed analytical, creative, and practical intelligence. This study investigated whether analytical thinking and creativity differ between students with and without giftedness. This study also evaluated the relationships between subscales in the context of identification status. The sample consisted of 12 gifted students (Group A) and 27 non-gifted students (Group B). Data were collected using the Scientific Creativity Test (SCT) and the Analytical Thinking Scale for High School Students (ATSHSS). The data were analyzed using the Kruskal-Wallis test and Spearman's rho coefficients (ρ). The results showed a slight difference in SCT and ATSHSS between groups A and B. However, Group A had a significantly higher mean ATSHSS "knowledge assimilation" subscale score than Group B. Other significances and relationships were discussed, considering the limitations of the study.

Keywords: analytical thinking, creativity, giftedness, Sternberg's Theory of Successful Intelligence

Do Analytical Thinking and Creativity Differ Between Gifted and Non-Gifted Students?

Cognitive capacity is a significant characteristic and psychometric trait that scientists endeavor to elucidate and quantify. Researchers formulated theories and devised intelligence tests to comprehend mental capacity (Terman, 1916). Research has transformed our perspective on intelligence and enabled substantial progress in evaluating cognitive attributes. For example, while initial research emphasized the unidimensional nature of intelligence, contemporary understanding underscores its multidimensional nature (Gardner, 2011; Renzulli, 2016; Sternberg, 2018a).

As perspectives on intelligence have evolved, the recognition of giftedness has also undergone a transformation. Instead of relying solely on intelligence scores from standardized tests, the identification of gifted individuals can now be accomplished using identification models rooted in theoretical frameworks (Heller, 2004; Renzulli, 2016). Highlighting the multidimensional aspect of intelligence, Sternberg (2003, 2018a) formulated the concept of giftedness as the capacity of individuals to adeptly navigate their environment across three distinct dimensions of ability: analytical, creative, and practical. Sternberg et al. (2021) argue that these interrelated dimensions can coexist. Numerous researchers have explored the interconnections among these dimensions (Ansburg & Hill, 2003; DeWyngaert, 2016; Sternberg, 2003) and have deduced that giftedness can manifest in various combinations (Ferrando et al., 2016). The theory, employed

for identification of giftedness as well, is anticipated to differentiate between individuals with gifted and non-gifted attributes, as it posits that giftedness entails excelling at a high level across these dimensions and effectively adapting to the environment. In this context, we consider it crucial for the theory's validity to examine these areas of ability in both gifted and non-gifted students, aiming to ascertain whether a significant distinction exists between the two groups. Specifically, it is imperative to conduct comparisons encompassing sociocultural differences, even though they may not be the theory's primary focus. This study investigated whether Turkish gifted and non-gifted students' analytical thinking and creativity differ.

Literature Review

The current theories of intelligence are based on Spearman's (1904) theory. Spearman (1904) postulated the existence of a general intelligence factor that underlies all forms of mental performance within the framework of overall mental capacity. He introduced the concepts of 'g' and 's' to the realm of scientific discourse within his two-factor theory. According to the theory, "g" stands for general intelligence, while "s" stands for special intelligence. Subsequent theories have built upon the foundation established by this two-factor theory. Researchers have introduced an alternative viewpoint to intelligence, contending that cognitive capacity cannot be solely reliant on a singular measure derived from standardized intelligence tests (Cattell, 1947; Horn, 1965; Guilford, 1956; Renzulli, 1978; Sternberg, 2003, 2018a). Instead, they advocated that a more valid and reliable understanding of an individual's giftedness and performance could be attained by evaluating their cognitive attributes and experiences. In this context, Cattell (1947) highlighted two g-independent dimensions of intelligence: fluid and crystallized intelligence. Horn (1965) further categorized various areas of talent within the framework of these two dimensions. In his Three Rings Theory, Renzulli (1986) stated that giftedness can be evaluated in the context of task commitment, above-average ability, and creativity.

Sternberg (1985, 2018a), the proponent of theories including The Triarchic Theory of Intelligence, The Theory of Successful Intelligence, and WICS (Wisdom, Intelligence, Creativity, and Synthesized), underscored in these theories that intelligence is multi-dimensional. He proposed that there exist three distinct areas of ability that individuals must excel in to achieve success in their lives. According to Sternberg (1985), people who exhibit creative, analytical, and practical abilities can adapt to their environment. Nevertheless, Sternberg (2003) asserted that intelligence encompasses more than just adapting to the environment; it also involves shaping the environment to align with one's needs and, furthermore, discovering an environment that is compatible with one's attributes. Building upon these concepts, Sternberg expanded from the Triarchic Theory of Intelligence to formulate The Theory of Successful Intelligence.

However, Sternberg diverged from treating the Theory of Successful Intelligence as synonymous with 'g' (general intelligence). He linked an individual's capacity for success within the sociocultural context to the three sub-domains of intelligence or types of thinking. These sub-domains are analytical, creative, and practical intelligence.

Analytical Intelligence. Analytical intelligence, or analytical thinking, is commonly associated with critical thinking and is recognized as a higher-order cognitive skill (Sternberg, 2003). In

Sternberg's theory, analytical thinking encompasses abstract concepts (Sternberg & Grigorenko, 2002) and involves tasks such as analyzing, critiquing, judging, evaluating, and applying critical thinking skills. This form of intelligence is often integral to academic achievement and has been linked to the concept of 'g'. Sternberg (2018) affirmed that The Theory of Successful Intelligence evolved over time from the componential sub-theory, which initially constituted the foundation for analytical thinking and was later incorporated into the broader theory.

Creative Intelligence. Guilford's "Structure of Intellect" approach considers creativity as a part of intelligence. Sternberg (2018, 2018a), renowned for the Triarchic Theory and the Theory of Successful Intelligence, has positioned creative intelligence within his framework. However, in more recent times, he has portrayed creative intelligence as not merely a talent but rather an attitude toward life. He asserts that creativity goes beyond innate abilities. A creative attitude can be encapsulated as the ability to acquire valuable ideas at a low cost and then leverage them effectively for significant gains. In Sternberg's view (2018), the majority of individuals might struggle to embrace creativity due to their fear of it. He posits that creativity demands innovative and insightful thinking, qualities that can be hindered by fear. However, Sternberg (2018) claims that creativity can be developed, albeit slightly. Educational practices help people develop creative intelligence. Generating novel ideas and successfully transforming them into practical products are indicators of creativity.

Practical Intelligence. Practical intelligence is characterized by the ability to solve real-life problems in a rational manner and identify suitable application areas for the solutions. Sternberg (2018) defines practical intelligence as common sense acquired through a combination of life experiences. Practical intelligence encompasses utilizing various components of intelligence to adapt to the environment, mold the environment, and judiciously choose the context for effectively framing solutions. People may differ in their ability to balance these components (Sternberg, 2018). Moreover, Sternberg (2018) asserts that individuals anticipate world leaders to demonstrate adeptness in employing these skills effortlessly. Individuals with analytical and creative intelligence possess the capability to identify and assess excellent ideas. However, individuals endowed with practical intelligence also possess the ability to discover suitable areas of application for these ideas (Sak, 2020)

Tacit knowledge is at the heart of practical intelligence. Tacit knowledge is described as the acquisition of a significant portion of knowledge acquired through real-world experiences, often without deliberate conscious intent (Sternberg, 2018). Tacit knowledge, which is not explicitly taught, comprises the information we employ to perform our daily life activities. Therefore, most researchers do not focus on tacit knowledge when measuring practical intelligence. Furthermore, contemporary intelligence tests like the Stanford-Binet 5, WISC-V, or KABC-II do not incorporate subscales or subtests specifically targeting practical intelligence. However, various measurement tools, such as the Alexander Practical Ability Test, are available for assessing practical skills. This study did not assess practical intelligence to increase generalizability.

The Theory of Successful Intelligence acknowledges analytical, creative, and practical abilities as three distinct yet interconnected components of cognitive aptitude. Individuals employ these skills synergistically to attain success in life, leveraging their strengths and addressing their weaknesses (Sternberg, 2018a). Various methods are employed to gather information about

individuals' proficiency levels in these skills and abilities. IQ tests are the most common method. Numerous intelligence tests have been developed to assess individuals' cognitive abilities (Cheng et al, 2022). However, IQ tests evaluate cognitive abilities by gauging memory and analytical thinking while attempting to uncover overarching aptitudes (Sternberg, 2018a). In alignment with the Theory of Successful Intelligence, the Aurora assessment encompasses subtests that measure analytical, practical, and creative thinking. Research shows that Aurora has very high validity and reliability (Cheng et al., 2022). Some studies have demonstrated its validity in predicting academic achievement as well. Mandelman et al. (2016) administered the Aurora-a assessment to 145 middle school students to evaluate the predictive capacity of the Aurora battery for academic achievement. The study indicated that Aurora successfully anticipated overall academic performance one year later. Similar outcomes were observed in the studies conducted by Cheng et al. (2022) and Mourgues et al. (2016).

The Rainbow (2006) and Kaleidoskop (2009) projects were undertaken to assess the predictive efficacy of the Theory of Successful Intelligence for academic achievement (Sternberg, 2006, 2009). The Rainbow project compared the predictive capabilities of a standardized test commonly used for university admissions and a theory-based instrument for forecasting academic performance during the first year of university. The Rainbow project successfully forecasted academic achievement and mitigated ethnic group disparities. The Kaleidoskop project proved to be an effective measurement tool for addressing ethnic group differences.

The Theory of Successful Intelligence was incorporated into the course content with the aim of assisting students in skill development. Research has been undertaken to explore the effectiveness of theory-based instruction (Tok & Sevinç, 2010; Yıldız, 2015). Furthermore, the correlation between skills has been examined across various contexts. DeWyngaert (2016) found no interaction between creative and analytical thinking in predicting reading comprehension. However, he concluded that both creative and analytical thinking contribute significantly to reading comprehension. Ansburg and Hill (2003) reached the conclusion that analytical and creative thinking do not synergize in reading comprehension, which contrasts with Sternberg's perspective (2012). Hence, it becomes imperative to thoroughly investigate these two variables concerning the validity of the Theory of Successful Intelligence.

As of now, Turkish researchers have not explored potential distinctions in analytical and creative intelligence between students identified as gifted and those who are not. Therefore, this study aimed to fill that gap in the literature. Additionally, this study aimed to ascertain whether a correlation exists between analytical and creative intelligence. It is important to examine the significance level of this correlation in the gifted and non-gifted groups. The following are the research hypotheses:

H1: There is a significant difference in analytical and creative intelligence between gifted and non-gifted students.

H2: There is a significant correlation between creative intelligence subscale scores in the gifted group.

H2: There is a significant correlation between analytical intelligence subscale scores in the gifted group.

Methodology

Research Design

This quantitative study adopted a correlational research design, which aims to determine the existence or degree of change between two or more variables (Karasar, 2016).

Participants

The study population consisted of all gifted and non-gifted students. Participants were recruited using convenience sampling. The gifted group (A) consisted of 12 high school students enrolled in a science and art center (SAC) in the Western Black Sea region of Türkiye. The non-gifted group (B) consisted of 27 Anatolian high school students in the Western Black Sea region of Türkiye. Twenty-five participants were women.

Data Collection Tools

All students were briefed on the research purpose and procedure and their rights. Then, each participant filled out a personal information form to elicit information on his/her age, gender, school, etc. Data were collected using the Analytical Thinking Scale for High School Students (ATSHSS) and the Scientific Creativity Test (SCT).

Analytical Thinking Scale for High School Students (ATSHSS). The Analytical Thinking Scale for High School Students (ATSHSS) was developed by Ocak and Park (2020). The instrument consists of 24 items rated on a five-point Likert-type scale. The instrument has four subscales: knowledge assimilation, attention to detail, analysis, and working strategy. The scale has a Cronbach's alpha score of 0.908, indicating high reliability. In this study, the scale was used as a self-assessment scale of analytical thinking.

Scientific Creativity Test (SCT). The Scientific Creativity Test (SCT) was developed by Hu and Adey (2002) based on the Structural Model of Scientific Creativity. The instrument consists of seven items answered in an hour. The first item assesses scientific fluency, flexibility, and originality. The second item evaluates sensitivity toward scientific problems. The third item addresses the ability to develop technical products. The fourth item also focuses on fluency, flexibility, and originality. The fifth item concentrates on scientific problem-solving skills. The sixth item assesses the ability to conduct creative experiments. The seventh item evaluates the ability to design creative scientific products. The test was adapted to Turkish by Deniş & Balım (2012). Authorization was obtained from the authors who developed the scale. All items were adjusted to suit the research objectives of this study. Three experts in gifted education were consulted to ensure the scale's validity.

Data Analysis

The ATSHSS items were coded as 1: Not Applicable to 5: Very Applicable and then grouped as 1-2; negative, 3; neutral, and 4-5; positive. The series average was for the missing data in Items 1, 3, and 6 of the "knowledge assimilation" subscale and Item 2 of the "analysis" subscale.

The Scientific Creativity Test (SCT) was scored based on the scoring criteria developed by Hu and Adey (2002). Items 1 and 4 assessed fluency, flexibility, and originality (creativity subscale). Item 5 evaluated originality, while Item 6 focused on flexibility and originality. Item 7 addressed functionality and originality. In this study, an expert in the field of giftedness performed the assessment. Two-person agreement was not checked. Some responses were included in the "Findings" section.

The data were analyzed using the Statistical Packages for Social Sciences (SPSS for Windows, v.23). Descriptive statistics (means, standard deviations, etc.) were used for analysis. Non-parametric tests were used because the data were not normally distributed. The Kruskal-Wallis test was used to compare the groups. The independent variable was "being gifted," while the dependent variables were creative intelligence (fluency, flexibility, and originality) and analytical intelligence. The sub-dimensions of the two dependent variables were examined based on the identified groups. Given that only one independent variable was employed in this analysis, a Multivariate Analysis of Variance (MANOVA) was deemed more appropriate.

Spearman's rank correlation coefficient (ρ) was computed to determine whether there exists a relationship between the sub-dimensions of the scales, both internally and in relation to the identification.

Results

This study aimed to determine whether creative and analytical intelligence differed between gifted and non-gifted students. Table 1 shows the sociodemographic characteristics. Table 2 shows the mean scale scores.

Table 1
Sociodemographic Characteristics

	f	%
Gifted		
Yes	12	30.8
No	27	69.2
Sex		
Female	25	64.1
Male	14	35.9
Grade Level		
9	7	17.9
10	2	5.1
11	30	76.9
12	0	0

More than a quarter of the participants were gifted (30.8%). More than half of the participants were women (64.1%). Most participants were eleventh graders (76.9%) (Table 1).

Table 2
Scale Scores

	M	*SD*
ATSHSS Subscales		
Knowledge assimilation	26.6	3.61
Attention to detail	12.6	3.35
Analysis	10.8	1.27
Working strategy	9.8	2.13
Total	59.9	7.6
SCT Subscales		
Fluency	16.23	7
Flexibility	15.35	6.15
Originality	16.20	9.50
Total	61.51	25.27

Participants had a total ATSHSS score of 59.9±7.6. They had a mean ATSHSS “knowledge assimilation,” “attention to detail,” “analysis,” and “working strategy” subscale score of 26.6±3.61, 12.6±3.35, 10.8±1.27, and 9.8±2.13, respectively. Participants had a total SCT score of 61.51±25.27. They had a mean SCT "fluency," "flexibility," and "originality" subscale score of 16.23±7, 15.35±6.15, and 16.20±9.50, respectively.

Items 1 and 4 are calculated based on the responses of all participants. Similar answers given by participants were evaluated as 0 points. In this context, Table 3 shows examples of low and high scores according to the frequency of responses.

Table 3
SCT Answers and Scores

Items	*f*	Score
1) Originality (Please write down the different ways in which you can use a glass scientifically)		
Glass	16	0
Marble	1	2
2) Originality (If you could travel on a spaceship and travel to a different planet, what scientific questions would you like to explore?)		
Is there life on the planet?	15	0
What is the average lifespan of the planet??	1	2
3) Originality (What would you do if you could make an ordinary bike more interesting, more useful, and more beautiful?)		
Adding ornaments	10	1
Making it collapsible	2	2
4) Originality (What would happen on Earth if there was no gravitational force?)		
People would be flying through the air.	22	0
We would cling to the earth and spin with it	1	2

The most common answers to Item 1 of the SCT were glasses, eyeglasses, lenses, and screens. These answers were scored 0 points. Answers with high frequency were scored 1 point, while answers with low frequency were scored 2 points.

The Kruskal-Wallis test was used to determine whether there is a significant difference in analytical and creative intelligence scores between gifted and non-gifted participants. Table 4 shows the results.

Table 4
Descriptive Statistics

	Giftedness	*N*	Mean	Mean Rank	Kruskal-Wallis H	*p*
ATSHSS Subscales						
Knowledge assimilation	Yes	12	28	26.04	4.987	.026
	No	27	26	17.31		
Attention to detail	Yes	12	13.58	22.92	1.146	.284
	No	27	12.22	18.70		
Analysis	Yes	12	11.08	22.21	.713	.398
	No	27	10.65	19.02		
Working strategy	Yes	12	10.33	22.46	.837	.360
	No	27	9.51	18.91		
SCT Subscales						
Fluency	Yes	12	16.75	20.13	.002	.964
	No	27	16	19.94		
Flexibility	Yes	12	29.83	20.63	.052	.819
	No	27	28.75	19.72		
Originality	Yes	12	22.58	22.96	1.172	.279
	No	27	18.51	18.69		

The results showed that the gifted group had a significantly higher mean ATSHSS “knowledge assimilation” subscale score than the non-gifted group ($\chi^2 = 4.987$, $p = .026$). However, there was no significant difference in SCT subscale scores between the groups.

Table 6
Correlations (Non-Gifted Group)

	1	2	3	4	5	6	7
ATSHSS Subscales							
Knowledge assimilation							
Attention to detail	.273						
Analysis	.436*	.274					
Working strategy	.130	.441*	.169				
SCT Subscales							
Fluency	-.150	.084	.211	.049			
Flexibility	-.282	-.008	.151	.016	.646**		

Originality	-.217	.112	.005	.162	.615**	.501**

* Correlation is significant at the 0.05 level (two-way). ** Correlation is significant at the 0.01 level (two-way).

Spearman's rho coefficient (ρ) was calculated to investigate whether there was a correlation between scale scores in the non-gifted group (Table 6). There was a moderate correlation between ATSHSS "knowledge assimilation" and "analysis" subscale scores (r = .436, p = .023<.05). There was a moderate correlation between ATSHSS "attention to detail" and "working strategy" subscale scores (r = .441, p = .021<.05). The change in analysis accounts for 19% of the change in analysis, while the change in working strategy accounts for 19% of the change in the attention to detail.

There was a strong correlation between SCT "fluency" and "flexibility" subscale scores (r = .646, p = .000). There was a strong correlation between SCT "fluency" and "originality" subscale scores (r = .615, p = .000). There was a strong correlation between SCT "flexibility" and "originality" subscale scores (r = .501, p = .000). Of the variation in fluency, 41% is explained by flexibility and 37% by originality. Originality accounts for 25% of the change in flexibility.

Table 7
Correlations (Gifted Group)

	1	2	3	4	5	6	7
ATSHSS Subscales							
Knowledge assimilation							
Attention to detail	.379						
Analysis	.331	.202					
Working strategy	.254	.169	.507				
SCT Subscales							
Fluency	.374	.155	.478	.011			
Flexibility	.575	.534	.291	-.111	.718**		
Originality	.340	.416	.250	-.259	.795**	.832**	

* Correlation is significant at the 0.05 level (two-way). ** Correlation is significant at the 0.01 level (two-way).

Spearman's rho coefficient (ρ) was calculated to investigate whether there was a correlation between scale scores in the gifted group (Table 7). There was no significant correlation between ATSHSS subscale scores in the gifted group. However, there was a strong correlation between SCT "fluency" and "flexibility" subscale scores (r = .718, p = .000). There was a strong correlation between SCT "fluency" and "originality" subscale scores (r = .795, p = .000). There was a strong correlation between SCT "flexibility" and "originality" (r = .832, p = .000). Flexibility accounts for 51% of the variation in fluency. Originality accounts for 63% of the variation in fluency. Originality accounts for 69% of the variation in flexibility. The results

showed that the gifted group had more significant correlations between SCT subscale scores than the non-gifted group. However, the non-gifted group had more significant but moderate correlations between ATSHSS subscale scores. Moreover, there was no significant correlation between analytical intelligence and SCT subscale scores in the groups.

Discussion and Conclusion

This study investigated whether there is a significant difference in analytical and creative intelligence between gifted and non-gifted high school students. The findings should be scrutinized carefully as the sample was not normally distributed. The results showed that the gifted group had higher analytical and creative intelligence scores than the non-gifted group. However, the difference was statistically significant only for knowledge assimilation ($\chi^2 = 4.99$, $p = .026$). There was a stronger correlation between SCT subscales in the gifted group than in the non-gifted group. On the other hand, the non-gifted group had more significant correlations between ATSHSS subscales than the gifted group. The results rejected H1. However, the results supported H2. In this context, there was no statistically significant difference between gifted and non-gifted students' analytical and creative intelligence scores. There were significant correlations between SCT subscales in the gifted group. However, there were no significant correlations between ATSHSS subscales in the gifted group. Havigerová et al. (2016) conducted a pilot study investigating the correlation between two sub-dimensions of giftedness and creativity in preschool children. They found a modest correlation between giftedness and verbal and figural creativity.

In addition, there was no correlation between SCT and ATSHSS scores. However, Sternberg (2021) suggested that these two components are interrelated. Researchers have reported different results in relation to this issue. For instance, DeWyngaert (2012) and Ansburg and Hill (2003) contend that analytical and creative thinking do not synergize, whereas Sternberg and Lubart (1995) concur that analytical intelligence holds a significant role in creative thinking processes, serving as a skill that bolsters creative outcomes.

Analytical and creative thinking is a characteristic of gifted students (Bildiren & Fırat, 2020). Theories of giftedness also emphasize creativity (Guilford, 1956; Renzulli, 1978). Research shows that intelligence is important but insufficient for creativity (Karwowski et al., 2016). Guilford (1956), who was among the first to examine the intersection of intelligence and creativity, asserted that the two constructs are unquestionably positively correlated. Research has generally reported modest correlations between intelligence and creativity (r = .10-.30) (Karwowski et al., 2016). Karwowski et al. (2021) conducted a comprehensive meta-analysis encompassing 30 studies that explored the connection between intelligence test scores and creative achievement. They documented a statistically significant relationship between intelligence and creative achievement. However, regarding effect size, there is a small relationship between intelligence and creative achievement (Arkan, 2022). Another viewpoint posits that there exists a directly proportional relationship between intelligence and creativity up to a certain threshold (around 120 IQ), beyond which this relationship diminishes. This is referred to as the threshold theory (Kanlı, 2019). However, the researchers found no significant difference between gifted and non-gifted people.

Analytical thinking in gifted children is generally associated with mathematics. Solving abstract problems and engaging in reasoning are recognized as processes associated with analytical thinking. Cognitive activities and skills (fluent intelligence, executive functions, working memory, spatial problem-solving skills, analytical/causal reasoning, etc.) are associated with analytical thinking (Shearer, 2020). The Cattell-Horn-Carroll theory of intelligence also addresses these skills (Schneider & McGrew, 2018). Therefore, it is possible that these abilities differ significantly in gifted individuals. Furthermore, analytical thinking, often attributed to 'g' (general intelligence), can also be interpreted as the cumulative scores derived from intelligence tests. However, we did not find a statistically significant difference in analytical thinking scores between gifted and non-gifted students. This is because there may also be gifted students in the non-gifted group. The differentiation from the socio-cultural context in which the theory originated may have also influenced this outcome. Researchers should use different scales for analytical thinking to identify differences between gifted and non-gifted students.

In recent years, research on creative thinking has been oriented toward cultivating creative thinking skills in individuals. In those studies, people are administered a pre-test before a development program and a post-test after the program. Studies have revealed that creativity can be enhanced through educational interventions. Creativity in the Theory of Successful Intelligence is often included in research within this framework. Sternberg contended that while students might struggle to apply their intelligence within the classroom, they can successfully utilize it effectively in their everyday lives. From this perspective, the absence of significant differences between the two groups supports the theory. However, accentuating the multidimensionality of intelligence, Sternberg (2003, 2018a) defined giftedness as the capability of individuals to adeptly navigate the environment across three components: analytical, creative, and practical. We found significant differences for the gifted only in the knowledge assimilation subscale of analytical thinking. We also observed higher correlations between SCT subscales in the gifted group than in the non-gifted group. Our findings do not present substantial evidence for distinguishing between gifted and non-gifted students. The fact that the gifted group has higher correlations between SCT subscales may be due to the education they regularly receive at SAC. As stated earlier, programs can help students develop high-order thinking skills. Research on creativity is frequently conducted within SACs (Özalp & Özdemir, 2022; Ünal & Kara, 2022).

Recommendations

As the creativity scale is assessed within the sample context, it becomes crucial for field experts also to evaluate participants' responses. However, in this study, the evaluation of participants' responses was conducted by a single expert. Additionally, it is important to acknowledge that the sample exhibited a non-normal distribution. Researchers should thoroughly scrutinize the findings, considering all these limitations, and undertake diverse studies within this context. In particular, researchers should address Sternberg's WICS theory or the more recent transformational theory of giftedness in larger samples and in different age groups.

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An Exploration of Culturally and Linguistically Diverse Scholars' Doctoral Journey: An Autoethnographic Case Study

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Abstract

The purpose of this autoethnographic multiple case study is to examine the perceptions of culturally and linguistically diverse (CLD) doctoral students, who are also first-generation college (FGC) students. This research seeks to navigate their experiences in a doctoral program focused on special education for culturally and linguistically diverse exceptional (CLDE) learners. This study explores the journeys of three diverse female doctoral scholars including a Hispanic, Native American, and African American student. Our understanding and utilization of cultural capital and community cultural wealth in higher education were considered when analyzing their perceptions. Our perceptions are discussed in relation to social support, financial support, academic support, and overall satisfaction with their doctoral journey. Based on the experiences of each participant in this study, suggestions are provided for doctoral students and graduate faculty in special education programs. Recommendations for research and practice are presented.

Keywords: Culturally and Linguistically Diverse (CLD), Special Education, Doctoral Program, Cultural Capital, Community Cultural Wealth, Student Integration Theory

An Exploration of Culturally and Linguistically Diverse Scholars' Doctoral Journey: An Autoethnographic Case Study

Higher education was once seen as a privilege only for wealthy families, but higher education has witnessed a transformation with the increase of first-generation college students (FGC; Engle & Tinto, 2008). FGC students are defined as students "whose parents did not complete a bachelor's degree" (Higher Education Act of 1965). Schulyler et al. (2021) noted that approximately 56% of all college students are first-generation. From this population, half are considered culturally and linguistically diverse (CLD) students (Engle & Tinto, 2008; Fischer, 2007).

Though there has been an increase in recruiting students from CLD backgrounds into doctoral programs, there is still a shortage of CLD faculty (Ellis, 2001). Thus, there is a mismatch between faculty and CLD students in higher education. This is unlikely to change in the future given the low number of CLD doctoral recipients. In 2019, The National Center for Science and

Engineering Statistics (2020) reported that 4,716 candidates completed a doctoral program in education. Of the 4,716 recipients, 2,474 were White, 628 were Black or African American, 371 were Hispanic or Latinx, 204 were Asian, and 16 were Native American Indian or Alaskan. Specifically, 253 candidates completed a doctoral program in special education. Of the 253 recipients, 162 were White, 23 were Black or African American, 17 were Hispanic or Latin**x**, 10 were Asian, and one was Native American Indian or Alaskan. This demonstrates the need for more diversity in educational doctoral programs, specifically special education. However, few studies have focused on FGC student experiences at the doctoral level (Vasil & McCall, 2018). More research is urgently needed to provide recommendations for increasing diversity in doctoral programs and supporting diverse students to completion.

For CLD doctoral scholars, academic achievement has been strongly linked to the presence of social support (Vasill & McCall, 2018; Washburn-Moses, 2007; Williams, 2000). These social supports varied from peer and faculty interactions on campus to familial support (Nettles et al., 1986). Cultural support is also an important factor to consider. It focuses on sensitivity to cross-cultural differences and the ability to adapt to other cultural beliefs, practices, and norms (Hansen et al., 2000). It requires an introspective awareness of one's own cultural practices and how they influence the thoughts and behaviors of others (Chao et al., 2011). In the learning environment, cultural support is critical to supporting all learners, especially as classrooms become increasingly diverse. Williams (2000) found that students from CLD backgrounds felt supported by their faculty advisors but still did not find many opportunities for involvement in program activities (e.g., research assistantships, social programs). Nonetheless, opportunities for involvement are crucial for publishing research, attending conferences, applying for grants, and making connections in the job market (Vasil & McCall, 2018).

In doctoral programs, socialization is integral for cultivating the essential attributes and perspectives essential for success (Nettles & Millet, 2006; Washburn-Moses, 2007). Notably, Squire and McCann's (2018) investigation of 14 women doctoral students from CLD backgrounds illuminated key factors aiding their navigation, including faculty relationships, peer interactions, and external academic affiliations. Faculty served as a source of inspiration and encouragement, peers facilitated cultural adaptation, and external connections filled gaps when internal support was lacking (Squire & McCann, 2018). A study by Crumb et al. (2020) identified themes such as working-class virtues, self-efficacy, and support systems that enabled participants to persist in their doctoral journey and secure faculty positions. However, CLD doctoral students encounter challenges like racial microaggressions, understated hostility manifesting as derogatory communication and behavior (Sue, 2007) that can lead to feelings of isolation, assimilation pressure, and a hostile environment (Shotton, 2017; Vaishnav, 2021). These subtle hostilities experienced by students from CLD backgrounds encompass institutional racism, micro insults, and microinvalidations, further jeopardizing degree pursuits (Shotton, 2017; Vaishnav, 2021).

While overt racism might be absent, students from CLD backgrounds could still face covert microaggressions and racism targeted at others in their community, perpetuating a discouraging atmosphere (Truong et al., 2016). Women from CLD backgrounds might even experience inadequate mentorship, and unsupported research agendas, undermining their pursuit of doctoral degrees (Truong et al., 2016; Wilder et al., 2013). These microaggressions collectively hinder the

progress of CLD individuals in doctoral programs, limiting both their enrollment and rates of completion (Ellis, 2001).

Positionality Statement

Since the authors are the researchers, they will be referred to as "us/we" throughout the article. Using an ethnographic approach, we utilized our own experiences in order to explore our shared lived experiences. (Creswell, 2007). Doing so allowed us to recall our personal experiences to understand how our perceptions affect the research when shared solely from our own experiences. As former Ph.D. students, we sought to be clear about our positions within the research prior to collecting data and wish to address any potential bias.

To mitigate the potential for bias, we were careful not to make assumptions about one another's experiences and to be prepared to attentively listen as each one of us described our journeys. Although we are all CLD women, and share the same gender, our perceptions are different and reflect perceptions centered through our cultural diversities. We therefore answered interview questions separately, wrote them down on a document and then shared the document with one another after each person had the opportunity to engage in personal reflection. In other words, our experience with and perceptions of the special education Ph.D. program pull from our cultural background and upbringing in varied levels of complexity which we did not wish to compromise, dismiss or ignore. It was important for us as researchers to share our experiences as women from different cultural groups and explain how these unique perceptions shape our views and/or bias. Addressing positionality allowed us to consider our separate experiences in relation to the Ph.D. program and its relevance within the study's context and present the findings with clarity and authenticity.

Theoretical Frameworks

This study utilized two frameworks that aligned with two areas of research: Bourdieu's (1977) Theory of Cultural Capital vs. Yosso's (2005) Community Cultural Wealth, and Tinto's (1993) Student Integration Theory. Cultural capital wealth is defined as the skills and knowledge learned through the social class people have been exposed to. For example, doctoral students whose parents completed a graduate program may have a better understanding of the process and skills needed to thrive in a doctoral program when compared to FGC students. Yosso (2005) defined community cultural wealth as skills and knowledge FGC students gained from their community to compensate for the absence of cultural capital. This includes social, navigational, resistant, and familial capital (Vasil & McCall, 2018). Tinto's (1993) Integration Theory posits that students who integrate academically and socially are more likely to persist until degree completion. Academic integration occurs when students become attached to the intellectual life of the college (e.g., participating in clubs or extracurriculars). Social integration occurs when students create authentic social relationships and connections outside the classroom (e.g., creating study groups with their peers, attending a game, and or going out to dinner).

These theories address how our upbringing influences our preparation for higher education degrees, as well as the impact campus integration can have on student success. Though our background experiences as FGC students did not prepare us directly for higher education degrees (i.e., lack of cultural capital), the interactions and support acquired through our community

provided us with tools to help us succeed (i.e., community cultural wealth (Yosso, 2005). Further support can be found through successful integration into university campuses and academic programs.

Purpose

To address the gaps in the literature, this study had two research objectives. First, we examined the perceptions of CLD FGC students who recently completed doctoral degrees in curriculum and instruction with an emphasis in special education. Next, we compared the challenges encountered by each participant by exploring their understandings of cultural capital in higher education and how it related to their challenges. The research questions were:

- **Research Question 1:** What was our background knowledge of doctoral programs? We use Bourdieu's (1977) theory of cultural capital vs. Yosso's (2005) community cultural wealth to assess responses.

- **Research Question 2:** What experiences were encountered during the doctoral program? Based on experiences, we explore a connection to Tinto's (1993) student integration theory to assess academic and social integration.

- **Research Question 3:** What were the students' perceptions after completing the doctoral program? We reflect on our challenges and successes based on our community cultural wealth (Yosso, 2005) and integration skills (Tinto, 1993).

Methods

Participants

The participants included three diverse, female, doctoral students who attended a large public university in the Southwest United States. We, the researchers and participants completed our PhDs in Curriculum and Instruction for Culturally and Linguistically Diverse Exceptional (CLDE) students. We individually identified as one of the following: Hispanic, African American or Native American (Diné). We identified as FGC students between the ages of 30-44, came from low socio-economic households, and received funding for our doctoral studies under a grant funded by the Office of Special Education Programs (OSEP). We met at the first orientation program meeting and bonded after the following realizations: We were some of the few students from CLD backgrounds in our cohort, FGC students, and mothers. Our motivation for this study stemmed from our desire to share our experiences of being FGC CLD students in a special education doctoral program and also to share information with other FGC students and/or students from CLD backgrounds as they embark on their PhD journey.

Procedures

This research study is an autoethnographic multiple case study. An autoethnography study reflects a personal narrative that extends beyond the individual. It is inherent to a cultural group and refers to a set of beliefs or values shared by a set of individuals (Cooper & Lilyea, 2022). This is an appropriate approach to document personal experiences within a social context or specific culture. Since the research on CLD groups in doctoral studies is rare, an autoethnographic approach from three CLD students in a doctoral studies program provides a

unique perspective in navigating a doctoral program in education (Creswell, 2013).

This research study also utilized a multiple case study. Multiple case study research is a qualitative research method that allows researchers to study multiple perspectives to gain a deeper understanding of a phenomenon. This method can help researchers to capture different perspectives and or explore the richness of the phenomenon being studied.

Rationale for Autoethnography

We selected an autoethnographic approach because it allowed us to describe our experiences as FGC women from CLD backgrounds who completed a special education doctoral program. The autoethnographic approach also allowed each of us to elaborate or emphasize the importance of certain experiences.

Data Collection. For this study, we separately interviewed ourselves by writing down the answers to the open-ended questions. The interview questions in Table 1 consisted of four sections: demographic information, background knowledge at the beginning of the doctoral program, our experiences during the doctoral program, and, upon completing our degrees, our perceptions of the strengths and challenges of the program. Interviews were conducted to gain information about one another's unique experiences as CLD women in a Special Education Ph.D. program. After reflecting privately, we met together to discuss our answers. To start, we copied our individual interview answers onto a shared document. Next we engaged in informal conversations with each other, where we shared our answers to discover common themes. We repeated these steps for each interview question, until we arrived at the five overarching themes discussed below. Self- reflection and active listening through discussions allowed us to identify the highlights and challenges that surfaced throughout the process of seeking a doctoral degree in special education.

Table 1
Interview Questions

Demographics
What is your teaching experience and professional background?
What is your ethnicity?
Do you live in a rural or urban community?
What is the highest education completed by your immediate family?
What was your socioeconomic background growing up?
Expectations before program (Bourdieu's (1977) theory of cultural capital vs. Yosso's (2005) community cultural)
What attracted us to this doctoral program?
How was the application process?
Did you understand the requirements of the doctoral program?
Did you understand the responsibilities of the doctoral program?
Were you aware of any services the university provided for doctoral (or in general) students?
Experiences and Reflection of program (Tinto's (1993) student integration theory)
What were your experiences in the PhD program?

What social support, if any, did you receive?
What academic support, if any, did you receive
What kind of mentor support did you receive?
Did you have opportunities for collaborative research?
Did you feel culturally supported in the program?
Did you receive any additional resources and support based on your diverse background?
What was done well in the program to make you feel supported?
Was there a challenge encountered because of your diverse background? How was it handled?
What do you feel could have been done differently to help you feel more culturally supported?
Were there positives encountered because of your diverse background?
How did you handle being one of the few diverse students in the program?
Did you get involved in any student organizations/activities?
Did you use any student services?
How long did it take you to complete the program? Hindrance or acceleration?
What kind of support did you have from your family?
What was your experience with the other doctoral scholars?
What were your reasons for seeking a PhD? or Why did you want a PhD?

Data Analysis. To conduct the data analysis, the researchers first read aloud the responses submitted to the shared Google Doc. Each researcher listened attentively and subsequently recorded any notable similarities, differences, or significant ideas. Following this, each response was reviewed silently and coded independently, with the meaning of each code being defined during this process. After completing individual coding, the researchers convened to consolidate the individual codes into overarching group codes and identify recurring themes relevant to the study. These themes were then elaborated in detail to accurately represent the experiences reflected in the data. Additionally, multiple perspectives were integrated throughout the research process by ensuring that all decisions were made collectively by all members of the study.

Study Reliability

Reliability of this study was assumed through trustworthiness. Trustworthiness refers to "the degree of trust, or confidence, readers have in the results" (Cypress, 2017, p. 254). Lincoln and Guba (1985) provided four key ideas in the approach to trustworthiness: credibility, transferability, dependability, and confirmability. Credibility was achieved through triangulation of each participant's interview responses. In addition, we did not discuss any potential themes until all interviews were discussed and we proceeded with member checking. Transferability (i.e., the extent to which the results are applicable in other contexts) was established by connecting the findings of this study to previous research. Dependability was supported through peer debriefing (Stahl & King, 2020). We discussed their responses and the emerging themes at length, confirming similar interpretations of the data. Confirmability refers to the aim of reflecting objective reality in the research (Stahl & King, 2020). By establishing credibility and dependability, confirmability of our own lived experiences was supported.

Results

We shared our experiences as three FGC CLD students in our doctoral program. Specifically, we addressed the research questions related to: our expectations and background knowledge before starting the program, our experiences during the program, and our perceptions at the conclusion of the program. Within the data, we identified five overall themes that consisted of: our understanding of the program, cultural connections, peer collaborations, familial support, and mentorships.

Background Stories

Develyn's Story. Growing up in southern California, I was raised in a Christian-centered, middle-class African American family. Despite financial constraints, my parents instilled the values of hard work, good character, and faith in success. I confronted unfamiliar academic demands with determination while understanding that education was my key to better opportunities. After completing my studies, I feel I have illuminated a path for other African American FGC students, providing representation and guidance.

Adriana's Story. Raised in an Arizona border town with a strong Hispanic identity, I grew up in a working-class family. My parents' limited education and demanding jobs, often in agriculture, shaped my early responsibilities as a caretaker for my younger siblings. While academic achievement was valued, my parents' work commitments prevented a hands-on approach to my education, reflecting a Mexican cultural deference to professionals. Despite their belief in the importance of education, I had to independently navigate the college application process, relying on school support. Becoming the first in my family to earn a bachelor's, master's, and doctorate, I drew from my community's cultural wealth to manage college's demands and challenges. Despite challenges during college, the navigational capital I developed from my responsibilities at a young age empowered me to proactively seek guidance and resources.

Candi's Story. I was born on the Navajo Nation and due to my father's military service moved frequently but returned home in time to finish high school. Our parents emphasized the significance of faith, family, hard work, honesty, and education. Being the oldest child, I was encouraged to be the first of my siblings to pursue higher education. Despite not having much assistance, I applied and got accepted to a university, securing scholarships and grants for my bachelor's. Through navigational capital from university staff, I managed finances. Initially feeling academically uncertain, I faced challenges at a predominantly White university but eventually found my footing. Friends and family offered crucial emotional support. Pursuing my Ph. D., I leaned on my past educational experiences and aspirational capital as motivation to advance in the field of education and serve my Indigenous community, particularly children with disabilities.

Background Knowledge of Doctoral Programs

As FGC and CLD scholars, we were motivated to pursue our doctoral degrees in special education to advance our careers and continue to serve our communities. Through orientation, we learned about the program's scholarly expectations that we would need to meet in order to serve and impact our cultural communities. Due to our lack of cultural capital, we were not aware of the intense workload that would accompany our scholarship activities.

Lack of Understanding. Students who possess cultural capital have learned to navigate higher education (Bourdieu, 1977). However, our parents did not possess the knowledge to help us in this way. Though we were appreciative of the grant that we had all received, we did not understand the doctoral admission process enough to differentiate between the requirements of the grant and the admission process. As Adriana stated, "*it was difficult separating the doctoral program from the grant requirements…I did not know specifics of grant and/or additional activities required outside courses.*" In addition, she could not make a connection with the advice faculty members presented during orientation because she "*had no one that had gone through this process.*" Develyn also did not understand the requirements or responsibilities of the doctoral program. While Candi had a basic understanding of the doctoral program requirements from a former PhD student, she "*did not fully understand the responsibilities of the doctoral program*" either. For example, she "*had a hard time understanding the steps for getting Institutional Review Board (IRB) approval*."

To overcome such challenges, we relied on our community cultural wealth. We utilized one another as resources regarding school related issues, relied on the strength we saw exhibited from family members at home and sought out on campus resources such as tutoring and writing centers to help support our academic endeavors. Adriana explained, *"There was a lack of capital wealth so we each had to rely on our community cultural wealth to find success in these spaces."* Despite a lack of cultural capital, our community's cultural wealth allowed us to succeed.

Experiences During Program

We initially bonded over similar cultural factors (i.e., FGC, low socioeconomic households, women from CLD backgrounds). Moreover, the program offered various opportunities for us to connect as scholars throughout the program. These opportunities varied in scope and level of cultural inclusion and provided more/less opportunities based on our research focus.

Improving Cultural Connections/Establishing Bridges. The program itself did not present many opportunities for collaboration with professors of similar cultural backgrounds, except for Candi who was introduced to a Navajo researcher. We would have liked to have had more guest lecturers from CLD backgrounds, a better cultural match of faculty members to students, indigenous research courses and additional cultural support services. We also agreed with Candi, who desired *"to get to know other professionals/experts in [her] field of interests. It would have been helpful to have some of the grant funds set aside for each of us to work with this person and have them be a part of our dissertation committees.*" Nevertheless, being some of the few diverse students, we found comfort in spirituality, family, and cohort friends.

Lack of cultural connections resulted in challenges. Develyn commented, *"I often felt misunderstood or like I was on proving ground with professors. I know for a fact this feeling would have been different if there was a professor on staff with the same background as myself."* Similarly, Candi wrote, *"being told by individuals outside of my program that I was a 'token Native American' and having to understand what it meant in research was confusing to me. It would have been helpful to receive guidance, early on, from a Native American professor in my field of interest."* Develyn also often questioned if she belonged in the program due to her race and status as a FGC student. This idea corroborates the notion of the imposter syndrome that occurs particularly with women from CLD backgrounds who are experiencing higher ranking

opportunities such as pursuing a Ph.D. program (Gardner, 2013). These quotes exemplify the importance of cultural connections and representation within PhD, programs. Although centered on practices for culturally and linguistically diverse learners, the program fell short of cultivating the requisite cultural support for its diverse students. While efforts were evident, including discussions about the value of diversity and inclusion, the program did not fully integrate these aspects as critical components of its student experience. We handled the lack of cultural support by seeking out opportunities to learn more about their topics of interest and relied on family and community support.

Candi wrote, *"I felt I needed to seek out opportunities to learn more about education and research with Indigenous communities. I sought out webinars and online workshops that discussed research in Indigenous communities and decolonizing education. I also made connections with two other Navajo students in a PhD program for special education, who shared information with me about these topics."* Develyn shared her experiences of being the only African American throughout much of her educational background. She explained, *"As an African American woman, I am accustomed to feeling culturally unsupported in education, so this reality was not new. I sought out my own supports and relied on family and community connections."* Develyn was also able to navigate these feelings through her reliance on the social skills she developed from attending predominantly White institutions (PWIs) and from the advice she received from her elder family members who had to endure racism. Adriana's family background provided aspirational and linguistic capital that supported her during the program. She shared, "*As migrants, my parents didn't really have many opportunities. It was common for migrant parents in the Mexican-American community to work in the fields or work in blue collar, minimum wage jobs, thus my parents expected us to finish school and find better opportunities."* Furthermore*, "being bilingual has provided various opportunities in my research field."* These experiences illustrate the ways that we relied on community cultural wealth to persevere.

Our Student Perceptions

We shared overall positive experiences in peer collaboration and familial support, yet varied experiences in mentorship. These different experiences can be attributed to the opportunities provided based on our research interest and faculty support.

Peer Collaboration. We all stated that the cohort structure of the program allowed for communication to take place throughout the duration of the program to ask questions, share frustrations, and celebrate each other's accomplishments. The cohort consisted of seven students initially and six students completed the program. During the cohort orientation all students shared contact information with each other and immediately began a texting group. Adriana stated "*Even though it was mostly an online program, I liked that my peers in the grant and I stayed in constant communication either through email or group messaging. … I felt we worked well together when we were in person and attended conferences together. I liked that we could rely on each other for information so that helped navigating the process although most of the time we were clueless altogether.*" Candi also included "*I feel my cohort members provided a form of academic support because if I had a question or needed to vent, I knew they might be able to help or understand.*"

When we struggled with research and conferences, we used our navigational capital (Vasil &

McCall, 2018) to find peers and/or faculty to collaborate with. We all agreed that there were opportunities for collaborative research with faculty members in the beginning; however, few of us were able to continue with this mentorship. Therefore, the opportunities we all found to be involved in research with colleagues became even more important. When we were unsure of the dissertation process, we also used our navigational and social capital for support by asking questions and preparing one another. We found out about writing services, deadlines, conference proposals, and similar supportive information from each other.

Despite the peer support within the cohort, Develyn felt that *"After a while it felt like everyone started a solo journey, and the communication and support happened less and less. I knew that everyone cared, but in the end, it felt like everyone was distant and just trying to make it to the finish line."* Though we all began as friends within our cohort, over time we formed groups according to shared backgrounds, such as the three of us being FGC students, parents, and CLD woman from lower socioeconomic backgrounds. We all agreed these commonalities were advantages that we could use to support one another as we moved through the doctoral program together. Even during orientation, we did not ask questions because we did not know what to ask. Instead, we used our social capital to build friendships with colleagues who came from CLD backgrounds to support each other. Throughout the program, we relied on each other by staying in constant communication about any questions or emotional support we needed.

Familial Support. When we were ready to give up, we relied on our familial capital (Vasil & McCall, 2018) to continue with the program and meet our goals of becoming professors of special education. Our family provided emotional, spiritual, and physical support. Even though Adriana's family "*did not understand what [she] did in the program (i.e., conferences, research, publications, dissertation, teaching, etc.)*," they were proud of her and showed their support.

We all have children, and our family members took on the roles of babysitting, cooking, or cleaning our home. Candi stated "*I would not have been able to complete this program without my family. I am a single parent and my family has played a huge role in my daughter and I's lives. In some ways I see this degree as a family effort. Many people in my immediate and extended family have assisted in watching my daughter when I have gone to conferences or needed to attend classes in person during the summer. My family would also pick up my daughter or take her where she needed to go if I could not."* Develyn conveyed that her family supported her in similar ways: *"Neither myself or my family understood the time commitments I would be making upon starting the program. But from the start, my husband stepped in and would take care of my sons so that I could have time to study."* Adriana stated, *"I relied on my family, including my husband to take care of my daughters many times throughout the program. For example, my husband would take them to after school activities or my parents would watch my daughters when I would teach in the evenings."* All three of us relied on family members to shoulder some of the parenting responsibilities so that we could successfully navigate the PhD program.

Though all of us reported receiving childcare support from our families, each of us reported feeling guilty because of time spent away from our children. Candi expressed, "*When I started this program, I knew my daughter would almost be a teenager by the time I graduated and that I would miss some time with her. I had many talks with her before I started this program to let her*

know that I would be busier, and she would need to help me out a little bit more. I have cried many times throughout the past four years due to the guilt I have felt. However, she has been very supportive, and I hope our relationship as mother and daughter has been strengthened rather than hurt and that she has learned through my example the importance of education, taking on challenges, and being resilient." Despite the guilt we all felt, our children also became a source of support and inspiration to finish the program.

Our families also provided encouragement when we faced difficulties. Develyn explained that her husband *"encouraged me when I felt like giving up and reminded me to be great when all seemed lost."* She went on to share, *"I am thankful for the support of my husband who selflessly stepped in to help when I wanted to be every place at one time but simply could not. I had to devote myself 100% to my studies."* Candi's family supported her through positive conversations and prayers. She stated, "*When I felt overwhelmed, I remember my mom telling me, 'you can do this' or 'you are stressed now, but just remember it is not forever, it is just for a short period of time.' My dad also gave me spiritual blessings at the beginning of each academic year and as a family we pray for each other."*

Mentorships. Having the program set up as a cohort and collaboration with faculty/mentors were how socialization took place in our program. Every student was assigned a professor with whom to collaborate on a research topic. However, some students felt that the focus of the mentorship was centered solely on publishing research without concern for developing students' foundational skills or socialization into the academic world. This is especially important given our status as FGC students from diverse backgrounds. For example, Develyn explained, "*I was afforded the opportunity to collaborate with one professor, but there was not any buy-in or connection to the research. I was advised to trust the process and get it done because the professors knew that we would need publications.*" Although this research resulted in a presentation at a national conference, it was a missed opportunity for Develyn to socialize with the academic community and become an independent researcher.

Moreover, not all collaborations made it to publication. In some cases, we were set up with writing professors in the beginning, but these projects fell through and we had to find our own opportunities. Adriana explained, "*The first year we were set up with faculty members to collaborate on their research but some of our research was never published and we had to seek other writing opportunities, which was difficult since we were online during most of the program.*" Despite the failed project at the beginning of the program, Adriana eventually had successful publishing experiences. Candi had a positive mentorship experience: "*Our academic advisor shared a writing opportunity with a few of us cohort members and assisted us in successfully publishing an article. She also put us in contact with seasoned faculty who shared information about advocating for special education, publishing, and writing articles. Two of these mentors assisted me in getting an article ready to be published, it was extremely helpful*." As can be seen, mentorship resulted in different outcomes depending on the faculty mentor and the project.

Faculty were also brought in from other institutions to support those of us with special education research interests. According to Adriana, "*Two (visiting) professors who shared my research focus became my mentors in writing/publishing and guidance throughout the doctoral program.*"

This enhanced her navigational capital by providing a blueprint for navigating the academic publishing space. We also relied on the director of the grant and administrative assistant for assistance with important dates, financial support, dissertation preparation, setting up courses, and similar administrative tasks.

Discussion

This study reported the experiences of three FGC and CLD women in their special education doctoral program. These experiences can be analyzed through the lens of two theoretical frameworks: Bourdieu's (1977) Cultural Capital vs. Yosso's (2005) Community Cultural Wealth, and Tinto's (1993) Student Integration Theory in relation to our background knowledge, experiences, and perceptions.

Background Knowledge: Challenges and Solutions

A combination of Bourdieu's (1977) Theory of Cultural Capital and Yosso's (2005) Theory of Community Cultural Wealth explains how we utilized our community cultural wealth to overcome our lack of cultural capital and complete our PhD. Given that our family backgrounds did not include attending college or understanding the needs of a PhD level student, we were not prepared with the knowledge needed to succeed in our doctoral program (RQ1). We did not know what to expect at the start of the program and had many questions about the scholarship and research expectations. In addition, we had concerns about how our school requirements would affect our abilities to continue working our full-time jobs and caring for our families. The three of us applied for doctoral programs with limited knowledge about the course of study, the research requirements, time commitments or levels of intensity that we would need to complete the program. Furthermore, we did not have our families to direct us because they also did not have knowledge or experience regarding any aspects of obtaining a college degree. Cultural capital might have assisted us in preparing for and succeeding in our program (Bourdieu, 1977). This shows that our cultural capital was lacking because we did not have prior exposure to Ph.D. level expectations from those in our social class; however, we used our community cultural wealth to make up for this. We relied on family emotional support. We also connected with cohort classmates and utilized resources on campus, allowing us to integrate into our program successfully (Tinto, 1993). Together, these theories provide a perspective for understanding the doctoral student experience by highlighting the role that students' backgrounds and previous school experiences play in their persistence to complete a doctoral program.

Our experiences aligned with data collected from Crumb et al. (2020) who explained how our working-class virtues, self-efficacy, and the personal and academic supports we sought out helped us persist and succeed in our special education doctoral program. These can be considered our community cultural wealth and implementing such practices helped us have the foundational motivation to succeed. We conceptualized that important tenets of higher educational success were missing and utilized the pillars of our community cultural wealth to excel. This is important because future FGC and CLD students would benefit from knowledge of the community cultural wealth framework to be able to situate themselves as students that belong in institutions of higher learning and are included, welcomed and accepted.

Supportive Experiences and Challenges During the Program

Despite a lack of cultural capital, the interactions and support we received during the program provided us with tools that contributed to our success in the PhD program (RQ 2). While we acknowledge the role that our status as FGC students played in our introduction to the program, we assert that all three of us found support to help us meet the program expectations during the doctoral program. Our program fostered many opportunities and positive experiences we wish to highlight. Some positive experiences focused on family support, socialization, and opportunities to create new extensions of our community cultural capital. Funds were allotted to assist with day care expenses, summer camps, or babysitters. For students traveling with children, housing was provided to ensure that children were able to remain with us. This helped us remain connected to our familial supports and home communities. We also had the opportunity to socialize with other cohort members and publish articles in special education with highly respected researchers in the field. The themes of family support and faculty mentor collaborations permeate the literature as positive attributes of the doctoral experience (Nettles et al., 1986). Nevertheless, there was a missed opportunity to address the importance of cultural diversity and inclusion, another significant theme emphasized in this study.

The lack of cultural capital and cultural support in the program made navigating the PhD program more difficult. Various studies (Vasil & McCall, 2018; Washburn-Moses, 2007; Williams, 2000) found that students from CLD backgrounds were more successful in doctoral programs when surrounded by social support. Our socialization experiences, which stemmed mostly from our peer interactions, support these findings. Social support is a critical area of concern because research and our experiences acknowledge that more diverse socialization opportunities would have helped us succeed as CLD women. However, we were resourceful and utilized the support we had from the socialization provided by the program (i.e., cohort partners, faculty connections, teaching opportunities).

While these interactions provided us with opportunities to learn about the skills needed to graduate from the program and become professors, we acknowledge that a greater emphasis on cultural support would have benefited us immensely. We also relied on the skills learned from home communities (e.g., community capital wealth) to compensate for skills needed in a doctoral program, such as being resourceful, finding a social support group, and perseverance. The reliance on our family support, cohort support, and faculty connections assisted in keeping us persistent and focused. The understanding of Bourdieu's (1977) Cultural Capital, Yosso's (2005) Community Cultural Wealth, and Tinto's (1993) Integration Theory helped us understand the impact of cultural factors as they relate to navigating the world of higher education, or in our case, our Ph.D. program in special education.

Overall Reflection of Our Journey

Overall, we found that peer collaboration, family support, and mentorship opportunities were important to our success (RQ3). Our community cultural wealth played an important role in helping us create personal support to foster our success as FGC students in a special education doctoral program (Yosso, 2005). Though our cultural capital may have been limited, we utilized our community cultural wealth to persevere, graduate with honors and find jobs in our field while maintaining our sense of self. Drawing on Yosso's (2005) previous research, we also

developed navigational capital, which Yosso describes as the skills used to navigate spaces meant to be occupied by a select few. This allowed us to publish and finish the program strong.

The themes expressed show that to succeed in doctoral programs, FGC and CLD women require the support of peers, family and faculty mentors to be successful. This is because these spaces do not usually include many CLD women, and unless doctoral students purposefully create these networks of support and care, success in doctoral programs can be hindered. We were used to navigating the inequities of educational spaces that did not altogether acknowledge our diverse cultural backgrounds prior to college. Therefore, we were able to create the support systems that we needed, but this was not an easy task.

Implications

While our program emphasized cultural and linguistically diverse pedagogy in practice, our experiences as CLD scholars with rich cultural backgrounds gave us ideas to improve student experiences. We present recommendations for PhD programs, faculty, and future students.

To start, there is a need for greater sensitivity and inclusion of the cultural needs of first-generation, CLD graduate students. Many CLD students suffer in silence due to their unpreparedness and lack of familiarity with the expectations of doctoral programs (Jairam & Kahl, 2012). This reality means that institutions of higher learning must become aware of diverse students' needs and provide appropriate support from the start. Program staff should carefully explain student scholarship expectations (e.g., research, publications, conferences, IRB) and provide an overview of the program and a roadmap of the expected course of study. This could include disseminating clear timelines at the beginning of the program and meeting with students to discuss progress towards program expectations regularly throughout the program.

More targeted mentorship could also address this issue, ideally offered by diverse faculty and staff with similar backgrounds to the students. Specifically, students could be encouraged to seek out faculty mentors on their own by providing various opportunities to meet faculty members with similar research interests instead of the program matching students with a select list of professors with whom students may not connect. As a result, CLD students would feel supported and uplifted, rather than marginalized. This could serve as a path to true inclusivity in higher education. Continuing the cohort model also allows students to find emotional and academic support from cohort members who share similar experiences.

Although we understand the limitations of grant funds, this next recommendation would be ideal if funding was available. The second recommendation is to create a program that provides funding for living expenses, so that full-time work is not necessary for the doctoral students. Two of us worked full-time throughout the entirety of the program, limiting time for additional service and research experience outside of course work. One participant was able to resign from her full-time job two years into the doctoral program. This allowed for her to work as a project coordinator on a study and give service to the university, community, and to a national organization. Additional funds could be allotted for doctoral students to work with professors at other universities who could serve as a more diverse pool of mentors.

Another program-level recommendation is that doctoral students are provided with more cultural support that could help them complete their doctoral program. This includes guest lecturers with CLD backgrounds and faculty mentors who are culturally matched to CLD students and have experience working with learners across a spectrum of disabilities to better match a range of research interests in special education. A diverse student body could benefit greatly from more diverse faculty mentors with different areas of research, from different cultural backgrounds, and at different career stages, as well as visiting faculty from a variety of universities. Doctoral programs that prioritize cultural diversity and inclusion amongst the faculty and mentors would bridge the gap for many diverse doctoral scholars. This would provide a sounding board and safe space for CLD scholars to find a place to belong, which seems to be what every student is ultimately searching for. One participant also recommended having classes on Indigenous education and research available for Indigenous doctoral students. Having a greater emphasis on the cultural needs of CLD scholars may ensure their connectedness to the program as well as their success, understanding and ability to meet the program expectations.

Prospective students should inquire about specific program support for CLD FGC students. Upon entering a Ph.D. program, students should use their voice to seek out existing campus resources to more fully integrate into the culture of the university and program (Tinto, 1993). If possible, students should also feel empowered to seek out faculty mentors who share the same cultural background or specific research interest to supplement those provided by the university. Lastly, students should also make use of their community cultural wealth supports (Yosso, 2005). This could include attending religious services or family dinners, as well as relying on their cultural and/or working-class values to persevere through challenges (Crumb et al., 2020). In sum, it is vital that CLD and FGC students find the support they need to thrive in spaces they have earned the right to occupy.

Limitations and Future Research

While an autoethnography is an appropriate approach for the purpose of our study, it is solely based on our individual experiences through a journey as doctoral students from CLD backgrounds. Therefore, the results may not represent all FGC and CLD doctoral students. However, it is important to note that our findings echo previous studies due to the similarity of experiences expressed by CLD scholars (Crumb et al., 2020; Squire & McCann, 2018; Vasil & McCall, 2018). In addition, due to the nature of this approach and lack of confidentiality, honesty and willingness to self-disclose may have been limited. During our discussion of the interview questions, challenges were discussed in more depth compared to the written responses on the question document. At that time, we made the decision to avoid including some of our responses in the paper where one or more of us felt uncomfortable discussing challenges in detail. Although the most important themes were not compromised during this process, additional themes may have been discussed and explored if we remained anonymous.

To address the limitations discussed above, more doctoral students should be invited to participate in future studies solely as participants. Changing the design would allow for confidential surveys and/or questionnaires. Including a wider variety of cultural backgrounds could also help to expand our understanding of the experiences and needs of FGC CLD doctoral students. Future studies can research how to help FCG and CLD students use their community cultural wealth to create environments of belonging and acceptance despite the shortcomings that

may arise because of having little exposure in their family backgrounds. Future research would also benefit from longitudinal research. This could consist of data collection at the beginning of the doctoral program, ending of the program, and early professional career (i.e., assistant professor) to compare how these stages in the career path align with the scholar's experiences in the doctoral program.

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Exploring the Departure Narratives of Special Education Inclusion Teachers in Central Georgia

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Abstract

As more K-12 educators leave their teaching careers, it is unclear why they decide to depart from teaching. Retention is an ongoing problem, particularly with special education inclusion teachers (SEITs). A qualitative narrative analysis was conducted with four SEITs to determine why they departed from their profession. Each participant was interviewed three times to gather relevant data. Results showed five major themes concerning SEIT departure: job choice, preparation, workload, job effectiveness, and job support. The findings indicate the need for more professional development, more experiential practice, less redundant workload, more instructional support, and more mentorships for those in the field.

Keywords: Inclusion, Special Education, Teaching, Narratives, Job Departure, Workload, Burnout

Exploring the Departure Narratives of Special Education Inclusion Teachers in Central Georgia

Since 1975, public schools in the United States have been required to provide a free, appropriate public education to students with special needs through the Education for All Handicapped Children Act (EHA) (Boroson, 2017; U.S Department of Education, 2023a, 2023b). The need for inclusion has only increased since that time. Inclusion is the practice of allowing people to gather across differences (Boroson, 2017; Bryan & Brame, 2019). Individuals who practice inclusion recognize biases and mitigate any marginalization of groups. Inclusive teaching occurs when educators develop and implement strategies to create classroom communities of respect and recognition for everyone to succeed. Special education requires special needs students to receive multiple opportunities to go to mainstream schools as well as having students with disabilities attend while in a general education classroom.

The current classroom dynamic in modern schools encourages students to receive instruction within the least restrictive environment, a concept discussed within the Individuals with Disabilities Education Act (IDEA). IDEA is a reauthorization and evolution of the EHA with the most recent amendment occurring in 2015 through the Every Student Succeeds Act (U.S. Dept. of Education, 2023a, 2023b). The least restrictive environment is one where students with

disabilities can spend time with students, when appropriate, of the same age who do not have disabilities (Wex Definitions Team, 2020). More than 90% of students with disabilities go to mainstream schools for their education. Over half of these same students experience most of their instructional time in a general education classroom (Boroson, 2017; Snyder, de brey, & Dillow, 2016).

Original policies about special education teaching did not always involve inclusion support or access to general education services (Sayeski et al., 2019). Special education is a specially designed instruction that can be implemented outside of a general education setting (Jackson, 2021; Mathews et al., 2023; Sayeski et al., 2019). Inclusion teachers, however, must bridge the gap between special education services and general education services to provide appropriate needs for students (Robinson, 2011). Inclusion teachers are inclusion facilitators, inclusion specialists, support specialists, and supported education consultants (Jackson, 2021). Those who usually fill this role are special education teachers, educators with knowledge of special education, or facilitators with special education backgrounds (Cameron, 1994). Changes in education policies over time have necessitated the need for inclusive practices for all special education teachers, regardless of their specific title or school designation (Mathews et al., 2023). Therefore, any teacher who specially designs inclusive instruction may also be referred to as a special education inclusion teacher (SEIT) within job applications and research (Jackson, 2021; Schanck, 2023). A SEIT works with the general education teacher to provide inclusion services for students with special needs. Their duties include but are not limited to (a) accommodating students according to an individualized education plan (IEP), (b) scheduling meetings about students' needs, (c) modifying instructional activities, (d) creating alternative assessments for students who need them, (e) teaching content to a variety of students and (f) collaborating with students and teachers to facilitate an optimal learning environment (Jackson, 2021; Schanck, 2023). Unfortunately, there are difficulties in terms of retention. Many SEITs leave their jobs because of retirement, the need to escape teaching, or for personal reasons (Cancio et al., 2018). More needs to be known about why SEITs decide to depart from their jobs in order to determine what needs to be done to increase retention. A qualitative narrative analysis study was conducted to determine why some SEITs decide to leave their profession. The following questions guided the study:

(a) What are the experiences of SEITs who have left their profession?

(b) How do SEITs who left their profession perceive their support?

(c) What impact did the SEITs' experiences have on their decision to leave the field?

The results of this study may help stakeholders and school districts determine how to keep, recruit, and motivate SEITs for the long term. Understanding the experiences of others can increase awareness of how the current climate of education needs improvement in terms of instructional support, interventions, and resources as well as explain why people may prefer some professional experiences over others.

Theoretical Framework

Three essential theories help interrelate ideas within the study: multidimensional theory of burnout, human capital theory of occupational choice, and theory of supply and demand. The multidimensional theory of burnout was initially developed in 1981 by Christina Maslach and Susan Jackson (Maslach, 1993). Burnout is defined in their research as a type of psychological syndrome. It is a complex experience of stress within societal relationships (Maslach, 2015). There are three components to burnout: emotional exhaustion, depersonalization, and reduced personal accomplishment (Maslach, 1993, 2015). Emotional exhaustion refers to feelings of significant depletion and overextension of emotional capabilities. Depersonalization is an extremely detached or unfavorable response to others. Reduced personal accomplishment is a decrease in feelings of success and competence in what is done in terms of career and work. Burnout occurs because of problems with professional workload, personal conflicts, relationships, interpersonal skills, confidence, self-efficacy, situational coping, and job opportunities. The complexity of burnout makes it much more difficult to handle than what is expected in terms of job stress. Experiences of burnout can and do happen within the field of education. This model of burnout helps to determine if participants are influenced by it when making job-related decisions.

The human capital theory of occupational choice helps to explain participants' decisions as it particularly relates to income. It is a variation of the human capital theory developed by Becker (1962). According to the human capital theory, humans have skills and experiences valued by society (Shah & Whiteford, 2016). These skills and experiences are referred to as human capital and can accumulate over time through more learning and life experiences. Goldin (2016) states, "Human capital is the stock of productive skills, talents, health, and expertise of the work force" (p. 83). Humans become valuable in the marketplace because of their perceived and actualized human capital. They are more likely to acquire better jobs because of their economic value. One's investment in education can enhance their abilities which, in turn, results in the accumulation of human capital (Kuehn, 2018). The actual abilities related to job competency have to be considered when job decisions are made. If not, an individual is less likely to be successful in terms of income. Growth in human capital can be attributed to a more educated workforce. A greater demand for a specific skillset lends itself to improved educational opportunities. In turn, human capital benefited proportionately to the educational experience of the individual (Goldin, 2016).

The theory of supply and demand, also known as supply and demand, the law of supply and demand, and neoclassical economics, provides insights into professional experiences (Inoua & Smith, 2022; Kroon & Alves, 2023; Montrosse & Young, 2012). Traditional views pertaining to the theory of supply and demand are attributed to such theorists as Adam Smith and Alfred Marshall (O'Connor, 1961). In a capitalist system, there is an invisible yet influential relationship between supply and demand (Inoua & Smith, 2022). Those who work determine the supply of resources; those who set wages and prices determine the demand for those resources (O'Connor, 1961; Twedt, 1973). Prices can be based on labor value, competition, and educational competency (Inoua & Smith, 2022; Kroon & Alves, 2023). Typically, high prices lower demand and low prices increase demand (Twedt, 1973). Although labor value is a critical component to supply and demand, its interactions within the capitalist economy differ from Marxian economics. Marxian labor value puts more emphasis on the amount of actual time

worked and its overall circulation in society (Cameron, 2020; Peach, 2020). Capitalist labor value recognizes that economic price, surplus, and income may not always reflect the amount of time someone works (Inoua & Smith, 2022; Twedt, 1973). Employers help set prices and requirements for working with goods and services, and workers determine the availability of goods, and services, because of the work they do (Inoua & Smith, 2022; Montrosse & Young, 2012). Employers compete with one another and their actions can determine compensation for work (Hafiz & Marinescu, 2023; Inoua & Smith, 2022). Workers compete with one another to determine compensation (Hafiz & Marinescu, 2023). If workers overproduce, the supply is beyond the demand. This tends to make wages and prices fall (Twedt, 1973). If there is too much demand by employers and not enough supply, wages and prices tend to increase until production can offset the increase (Twedt, 1973). Montrosse and Young (2012) elaborated on supply and demand as it applies to special education faculty. They stated there are more positions available than the actual supply of special education faculty who can produce the desired results. The demand for special education teachers is rising (Montrosse & Young, 2012). The demands placed on these special education teachers by their employers is rising and increases the likelihood of departure (Montrosse & Young, 2012). A position becomes attractive according to its compensation package (Hafiz & Marinescu, 2023; MacCarthy, 2010; O'Connor, 1961). An individual is more likely to work at a job having appealing compensation. Such compensation can include income, benefits, work desires, intrinsic motivation, service conditions, and work preferences (Hafiz & Marinescu, 2023; Huefner, 2000; O'Connor, 1961; Peach, 2020). All these factors within the economy must be taken into consideration when looking at the experiences of teachers in the workforce today. Teachers and stakeholders in educational programs are essential in supplying educational services and support to others (Brownell et al., 2005; Jackson, 2021; Thoms, 2015). Leaders and political figures in the field of education help determine the demands, requirements, expectations, standards, and laws concerning the services and support provided (Brownell et al., 2010; Mathews et al., 2023). These interactions with supply and demand take place from day to day. Participants' experiences are evidence of the economic dynamics of the workplace as it pertains to SEITs. (Jackson, 2021; Schanck, 2023).

Methods

A narrative analysis approach was utilized for this study. Narrative analysis involves the collection, analysis, and interpretation of life narratives created from information obtained about participants who have experiences interesting to one or more researchers. The focus is on the "use of stories as data, and more specifically, first-person accounts of experience told in story form" (Merriam, 2002, p. 9). Themes and patterns discussed from the data are based on the narratives. The study was conducted in an urban school district within central Georgia. The population of interest involved SEITs who left the teaching field within the past four years. Purposeful sampling, as recommended by Patton (2009), was used to select the participants. Participant information was obtained from school board briefs created between 2018-2021. From this relevant information, four former SEITs from an urban school district were selected. Essential criteria for selection were (a) the SEITs left the teaching field within the years stipulated; (b) they ranged between the ages of 22 and 30, the age range known for high attrition rates; (c) the resultant pool accounted for experiences of males and females; and (d) the SEITs came from middle or high schools. Two male participants and two female participants were individually interviewed using Seidman's (2019) three-series interview method. Both genders

were used to address historical inconsistencies in results in terms of attrition rates (Schanck, 2023). The grade level for the teachers was important because there tends to be higher levels of stress as teachers increase their workload in middle school and high school (Williams & Dikes, 2015). Each participant was interviewed three times, and each interview session lasted 90 minutes. There were three to seven days between sessions. The focus of the first interview was the general life history of the participant. The purpose of the second interview was to probe into the current situation of the participants as it related to the research questions. The third interview gave participants an opportunity to reflect on how they made meaning from their experiences. Follow-up interview sessions were conducted where each participant could be asked follow-up questions within a fourth session, where applicable. All interviews were tape recorded with the permission of the participants. After the interviews were conducted, the recordings were transcribed using the text editing software Otter AI. The transcripts were uploaded in MAXQDA where the words from the narratives were coded and categorized into themes.

Validity and Reliability

There were several key strategies used to address any threats to validity such as research bias and reactivity. Personal perspectives and possible biases were documented in a memo pertaining to the development of the study. This process helped to document possible influences on the study design and implementation. It served as a reminder of boundaries in terms of what needed to be analyzed and concluded from the interview information. Possible influences concerning the researcher and the interview responses were recorded in reflective field notes and memos (Maxwell, 2013). Field notes were written at the end of each interview. Memos were used before, during, and after the interview process. Interview questions were open-ended to allow for rich description and depth within the participants' responses. The questions were framed in a way so the responses were not categorized as right or wrong. All participant responses were considered acceptable because each came directly from the participant to show their authentic experiences existed without assumptions or undue leading. Quality and coding checks were made during the transcription process at the end of each hour of coding to ensure the information was pertinent to the research questions and the statements were said by the participants. The coding process occurred after each interview. A multi-level coding process recommended by Saldaña (2016) was used during data analysis. The levels were as follows: In Vivo Coding, Pattern Coding, and Codeweaving. Figure 1 summarizes the analysis process.

In Vivo coding involves the derivation of codes from clusters containing three to five sentences (Saldaña, 2016). The coding was based on language used by the participants during their interviews. Codes were listed in a text editing page and grouped into different life events to create a biological summary. The summarization done within this first cycle of coding informed Pattern Coding. Within the second cycle, categories were created from the codes showing meaningful units, patterns, and themes found within the data. The last level of coding, Codeweaving, was used to place important keycode information into narratives. This narrative format gave more clarification and certainty with the responses, thus allowing for the research questions to be sufficiently answered. Reliability was mainly addressed using member checks where participants could review resulting transcripts in order to verify the consistency of their responses. Member checking verified the participants' agreement as to how they are portrayed within results and established more credibility to the research process (Maxwell, 2013).

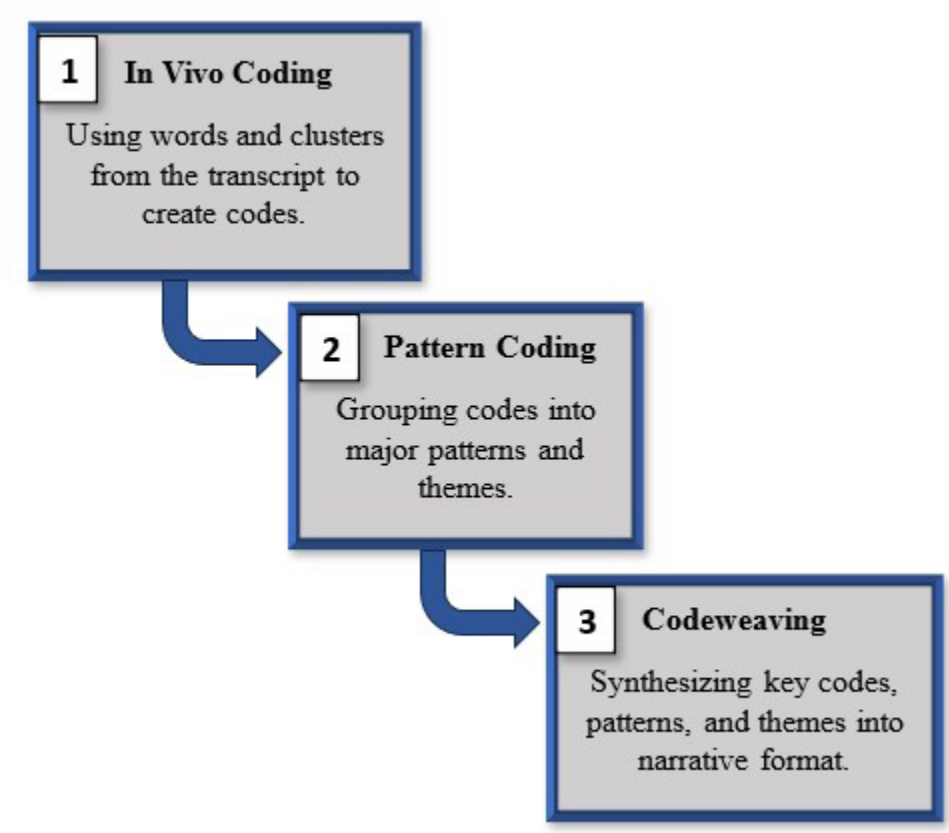

Figure 1: Data Analysis: Essential Steps

Results

Lengthy narratives were developed for each interviewee (Schanck, 2023). Snapshot narratives for the results are included here to give an idea of the experiences discovered within the interviews. Each participant had their own story concerning their experiences. Table 1 matches direct quotes from each participant to support the five themes identified from an analysis of the transcripts. Those themes included Job Choice, Preparation, Workload, Job Effectiveness, and Job Support.

Table 1
Participants #1-4

Themes	Darcy	John	Lucy	Connor
Job Choice	There was not any reason for me to decide to teach. It was something that I had just fallen	I did not have any intention of going into teaching. It was something that I just picked to	I was a paraprofessional before I became a teacher. I never intended to become a	My mom was a paraprofessional, but that was not why I went into teaching. I did not have a

	into. No one in my family was ever a teacher	major in when I got to college. I took a job teaching because my wife was in school, and we needed an income.	teacher for any reason. Being a paraprofessional was just a job close to my home. Someone told me that I should go through an alternative certification method to teach because I was good at it, so I did.	reason for choosing to teach. It was something that just happened.
Preparation	I thought my university courses were ineffective in preparing me to enter the field of teaching.	I thought my college courses were ineffective in preparing me for the classroom. There was nothing they could teach to prepare me for the situations I would face.	University courses could have been more effective in preparing me to teach. I was not prepared for my first year.	I learned very little from the courses that helped me in my first year. The only classes that were helpful were more of the hands-on ones that had us lesson planning.
Workload	Progress monitoring, IEP writing, lesson planning, behavior monitoring, and daily meetings all contributed to an environment that was not conducive to teaching. My work would have to be taken home.	Monitoring behaviors took up a large chunk of time. When I was not monitoring behaviors, I was writing IEPs, collecting data on goals, and conferencing with parents. It was all too much.	Teaching the students was not the issue. The mounds of paperwork were the problem. The administration cared more about getting their paperwork deadlines completed than the quality	All the required paperwork was too much and took away from teaching the students. Work was done at home, and I would come in early.

			instruction given to the students.	
Job Effectiveness	I felt my teaching effectiveness lessened over three years because of the constant micromanaging and an unmanageable workload of documentation and paperwork.	I could not do my job effectively because I felt like I needed to be given more support. Policies kept changing, and the amount of paperwork stayed the same. I could not provide for my students the way I thought they needed.	I felt like my hands were tired. I worked on deadlines for Central Office during the instructional time because they had to get done. This took away from the most critical aspect of my job: teaching.	The progress monitoring, IEP maintenance, and other forms of documentation prevented my kids from getting the education they needed. So, I felt less effective than necessary for the job.
Job Support	I was micromanaged, told I needed to improve without constructive feedback, and received poor scores on my teacher evaluation without any support. I relied on help from other teachers.	I felt little support from the administration. They made my job more difficult and took little regard for my safety when I was injured trying to restrain a student.	The administration provided little support. I mainly stopped interacting with the administration after asking for help with a student. He told me he needed to return to class since he was a special education student. He did not want to know why I needed help.	I had to depend on other teachers for help. I was required to learn new programs and hold IEP meetings quickly in my first year. When I had questions or needed help, the administration was nowhere to be found. Veteran teachers had my back and assisted me tremendously.

Note: Themes derived from data analysis of participants

Participant 1

Darcy had no problem finding a job as a SEIT because it basically fell into her lap. No interview process was needed. She was hired at the middle school where she completed her student teaching and worked as a paraprofessional. She was a SEIT for three years. At first, it was very welcoming, and she felt like she received beneficial advice and orientation about her job. Within the first year, though, she felt overwhelmed with her duties to the point where she cried at home daily about them. Teacher support and guidance decreased over time to the point where all she wanted to do each day was to just survive. She had to facilitate family engagement, complete breakfast duty in the mornings and afternoons, help with carpool duty, co-teach reading and math for four periods, plan additional intervention time, attend content planning meetings, and address IEPs. There was so much work to the point it was affecting her personal life as a mom and wife. She could not spend as much time with her family as she would have liked and her students were not receiving the proper attention and engagement needed because of all she had to do for them. Constant pressure from her assistant principal to improve, as well as a heavy workload, were the deciding factors in her decision to leave. She collaborated well with her fellow teachers during school time, but she felt ongoing exhaustion from what she was required to do. Lack of time, unrealistic expectations, and lack of support were barriers for what she needed as a professional.

Participant 2

John completed all the college requirements and experiences necessary to be a special education teacher. Unfortunately, his interest in the job disappeared. He suddenly realized the interest was no longer there and he needed a new direction. Moving to Central Georgia with his wife, the need for a stable income did not change. Unable to find a job, John had to apply to a high school for a special education teaching position. Hired on the spot, he taught 9th-grade English and a reading intervention class for one year. Daily exhaustion persisted with his position as a SEIT. Monitoring the halls, co-teaching, implementing IEPs, executing behavior plans, collaborating with general education teachers, attending professional development seminars, differentiating instruction, meeting with parents when needed, and using de-escalation techniques with disruptive students to the point of personal injury encompassed his duties. Administrators would make time-consuming and defeating decisions rendering their job more difficult. The amount of required paperwork, new administrative policies for the job, and a lack of support contributed to his decision to depart his job as a SEIT. The beginning of the school year would have been fine for John, but observed as morale declined because all teachers noted their questions went unanswered. Lack of time, unrealistic expectations, and lack of support were barriers for what he needed to do as a professional.

Participant 3

Lucy had a degree in education and in sports medicine. Lucy did not have a strong desire to teach, but she needed the income to support her children. After moving to central Georgia, she applied for a job in special education as a middle school paraprofessional. Immediately after her job interview, Lucy was hired for the position. Once having completed an alternative certification program, Lucy was quickly assigned to a SEIT position, without an interview, teaching grades 6-8. Her duties included meeting with general education teachers to create lesson plans, writing distance learning plans, maintaining service logs, writing and amending IEPs, maintaining behavior plans, administrating standardized tests, and attending professional development meetings. She enjoyed building great relationships with the students and other

teachers but lacked the support from central office staff and administrators. Because of demeaning responses to her IEP meetings with central office staff, over time, Lucy lost confidence in her teaching abilities. Her overall teaching experience was positive from her perspective, but paperwork got in the way for her with its access issues and frequent interruptions. She felt guilty for not giving her students what they needed. The support she received for her profession decreased over time. Nobody seemed to have enough time. The atmosphere was just very demoralizing, especially during her last year of work. It seemed there were no real consequences for students who decided to disrupt the classroom, but there were plenty of adverse consequences for her not handing in paperwork in a timely manner. Lack of time, unrealistic expectations, and lack of support were barriers to what she needed to do as a professional.

Participant 4

Connor was a front office clerk, paraprofessional, and middle school co-teacher for 7th-grade language arts. Based on his job experience at the time, he reflected on how he needed something more individualized in terms of his career. He believed he could work well with students who had autism, especially in a one-on-one setting. In order to stay at the middle school, Connor left his job as front office clerk when the principal offered him the position of SEIT. His degree in liberal studies did not lend itself to the certification required for SEIT, so he had to complete an alternative certification program to keep the new job. He still taught 7th-grade language arts at the middle school and fulfilled the SEIT responsibilities for two years. Connor's duties included co-teaching, caseload and behavior management, monitoring of progress, grading, planning lessons, counseling, and teaching to special education and general education students. The most positive experiences involved the building of relationships with students and staff. The lowest moments involved overwhelming paperwork, lack of administrative support, and scarce time to address his students' academic and emotional needs. The job was challenging from the start, and he needed more training to get things done. There was a heavy reliance on veteran staff members to help process and complete required documentation, especially where IEPs were concerned. Connor was really good at classroom management, but the paperwork was so much that it cut into instructional time he could have spent with students. Most of his teaching experiences, though, were positive. At times, he did not receive enough accommodations from teachers and felt indifferent about his principal's leadership skills. The assigned mentor was an academic coach who could not answer his questions as well as the school's special education coordinator assigned who could not sufficiently address his inquiries. Connor departed from his job because of an overall lack of support and paperwork management problem he experienced. Lack of time, unrealistic expectations, and a lack of support were barriers for what he needed to do as a professional.

Discussion

The results of this narrative analysis indicated five essential themes concerning the statements of the participants: job choice, preparation, workload, job effectiveness, and job support (Schanck, 2023). Job choice referred to the extent participants decided, intended, or unexpectedly encountered their job positions in education. The participants did not have strong personal reasons for choosing to teach. They noted their career choice was out of their control. If they could have directed their career choices themselves, they would have done things differently.

Darcy said she did not have a reason to decide to teach. It was something she "had just fallen into." John "did not have any intention of going into teaching" as a career. When choosing to work as a SEIT, it was an income-based choice he made to help support his wife and himself. Lucy was a paraprofessional, but she "never intended to become a teacher for any reason." She only explored it because she trusted the opinion of someone else about her skills as a teacher. Connor "did not have a reason for choosing to teach," and, for him, it was something that just happened. This brings up the idea as to how reasons or decisions about careers are not always planned. Unexpected life situations may change possibilities. Other people can influence career-based decisions. All participants ended up departing from their jobs because they lacked the decision-making opportunities they wanted in terms of time, paperwork, instruction, and support. Each entered the job sensing they had very little control about what they could do, only to receive even less control in the long run.

Preparation referred to prior training and readiness to effectively enter teaching and complete tasks as a teacher. All participants suspected their coursework did not adequately prepare them for the job as a SEIT. They took university courses, certification-related courses, or both to teach. Darcy stated the following about preparation: "I thought my university courses were ineffective in preparing me to enter the field of teaching." John supported what Darcy said about courses: "I thought my college courses were ineffective in preparing me for the classroom. There was nothing they could teach to prepare me for the situations I would face." Lucy indicated the university courses "could have been more effective in preparing" for teaching. Both Lucy and Connor said the courses did not prepare them for their first year. Connor stated, however, there was an approach within the certification-related courses that helped him: "The only classes that were helpful were more of the hands-on ones that had us lesson planning." The consensus among all the study's participants was many of the courses did not fully align with actual teaching practice.

Workload meant the duties and responsibilities associated with teaching. The full workload experienced by the participants was something conflicting with what was believed to be required for the job. It became overwhelming and time-consuming. In order to have a chance of completing the requirements of the job, sometimes the participants would have to complete tasks after hours. For instance, Darcy described her workload in detail: "Progress monitoring, IEP writing, lesson planning, behavior monitoring, and daily meetings all contributed to an environment that was not conducive to teaching. My work would have to be taken home." John was very worried he did not have enough time: "Monitoring behaviors took up a large chunk of time. When I was not monitoring behaviors, I was writing IEPs, collecting data on goals, and conferencing with parents. It was all too much." Lucy described her workload in terms of her paperwork: "Teaching the students was not the issue. The mounds of paperwork were the problem. The administration cared more about getting their paperwork deadlines completed than the quality instruction given to the students." Connor, like Lucy, described the paperwork as a problem within his workload: "All the required paperwork was too much and took away from teaching the students. Work was done at home, and I would come in early." The participants all found the workload very undesirable to the point where they left their jobs.

Job effectiveness pertained to the ability to complete goals or tasks essential to job or student success. All participants understood they should have completed more than they did. The fact

they could not complete as much as they desired had an impact on their decision to leave their field. Darcy alleged her effectiveness lessened over time because of "constant micromanaging" and "an unmanageable workload of documentation and paperwork." John stated the following concerning effectiveness, "I could not provide for my students the way I thought they needed." Lucy indicated she was tired of Central Office deadlines because "it took away from the most critical aspect" of her profession, which for her was teaching. Connor "felt less effective than necessary for the job" because the documentation got in the way of helping students with their learning needs. Overall, they explained there was a lack of job effectiveness existing within themselves (e.g., individual actions, personal feelings, and personal opinions) and outside of themselves (e.g., external actions, job requirements, and administrative deadlines).

Job support pertained to the ability and capacity to address teaching needs. According to the participants, job support was low or non-existent. They especially experienced a lack of support when dealing with administrators. There were opportunities for teachers to help one another, but the overall support was lacking. Darcy recalled her experience with job support: "I was micromanaged, told I needed to improve without constructive feedback, and received poor scores on my teacher evaluation without any support. I relied on help from other teachers." John described his experience negatively: "I felt little support from the administration. They made my job more difficult and took little regard for my safety when I was injured trying to restrain a student." Lucy placed the lack of job support on the shoulders of the administration:

> *The administration provided little support. I mainly stopped interacting with the administration after asking for help with a student. He told me he needed to return to class since he was a special education student. He did not want to know why I needed help.*

Like Darcy, Connor had to rely on other teachers for support:

> *I had to depend on other teachers for help. I was required to learn new programs and hold IEP meetings quickly in my first year. When I had questions or needed help, the administration was nowhere to be found. Veteran teachers had my back and assisted me tremendously.*

The lack of comprehensive job support did play a role in why the participants decided to leave their jobs.

Application to Theoretical Framework

The participants mentioned the overwhelming nature of their job requirements and workload. They exhibited signs of exhaustion, depersonalization, and reduced personal accomplishment. Their statements supported the existence of burnout as described within the multidimensional theory of burnout. The demands of the job contributed to the participants' wanting to remove themselves or transfer from the situation. An overwhelming workload may contribute to the degeneration of one's mental health (Kelly, et al, 2023). The amount of time burnout occurred for the participants was unclear, but what was clear was their situation was aversive emotionally and psychologically to the point they decided not to stay in their situations.

The human capital theory of occupational choice was supported here in the sense that years of schooling did not contribute to the development of human capital for the job market. The theory is not fully supported in its explanation about abilities because job position is not always determined by skills, experiences, and abilities. Veteran teachers were valued by the participants for their abilities, but administrators were devalued by their lack of ability for support. Society tends to place more value on administrators and experts because they are supposed to be high within the organizational structure in terms of experience, knowledge, and skills (Brownell et al., 2010; Jackson, 2021; Mathews et al., 2023; Sayeski et al., 2019; Schanck, 2023). People generally expect administrators to know more than teachers and have more abilities and experiences (Jackson, 2021; Schanck, 2023; Shah & Whiteford, 2016); however, unexpected incompetence and ineffectiveness were witnessed by the study participants (Schanck, 2023). Administrators may not fully grasp what is required of the SEIT (Kelly et al., 2023). The participants were accepted very easily for their jobs, even though the demands of the job required extensive skills, dedication, and effort. It is true that their experience with teaching increased, but they did not feel valued enough to stay in their respective situations.

The theory of supply and demand is supported in the fact there is a high demand for SEITs (Jackson, 2021), but fewer people want to apply since the job is so demanding (Brownell et al., 2010; Hafiz & Marinescu, 2023; Jackson, 2021; Montrosse & Young, 2012). The participants viewed office staff and administrators to be very demanding in terms of their time, energy, and resources. The interview participants were more likely to receive teaching resources and supplies from other teachers. Hence, the workers knew more about supply, and the employers knew more about demand. There was a clear imbalance but no indication of a wage increase. Teaching is often associated with high demands and low compensation compared to the demands requested (Brownell et al., 2010). In this sense, the pricing effect for education does not follow the pricing trends in supply and demand when the demand is high, and the supply is low. The participants did not indicate a highly competitive environment with teachers because their best moments involved building relationships with teachers and students. All indicated the need for more cooperation to get things done. They all suspected the administrators were either negative or indifferent about reported incidents. The participants noted their perspective was not fully acknowledged or addressed. Within the economy, competitors are recognized and heard despite the fact they are not allied with one another.

Limitations

There are a few limitations to the study to be discussed. There were only four people interviewed and their responses do not account for all the possible responses a representative sample would provide. The profound insights gained from this study open more avenues for research, but more research can be done to determine what other groups have to say about their teaching experiences. For instance, responses for the participants could be compared with responses for teachers who stayed in their profession. Second, it is unclear if the pandemic involving COVID-19 had any impact on teaching demands. The interviews had to be conducted online because of the distancing restrictions at the time. Not having face-to-face meetings or less restrictive settings may have made a difference in their comfort level. Finally, there was no guarantee the participants genuinely answered everything in the way they would have liked. Effective interview and analysis strategies were put in place to address possible research bias and

reactivity, so the likelihood these existed was lower than it would have been. Even with that said, it is still unknown if their responses would have changed with a different interviewer or with a focus group.

Recommendations

Based on the participants' responses, the majority of the problems with their jobs as SEITs centered around differences between expectations and actual practice. There are three recommendations to be made based on the results of the study. The first recommendation is to have more practical resources for general education and special education teachers. This includes hands-on courses, assistants for paperwork, written plans followed by administrators, remedial professional services for struggling teachers, engaging workshops for building relationships, and counseling resources for those who experience burnout. Support for this recommendation is highlighted in the research conducted by Kelly et al. (2023) where they noted a strong and productive mentoring program, in conjunction with ongoing professional learning, was requested by SEITs. The second recommendation is to have internal (within school) guidelines matching the actions and capabilities of those who work in the school system. Having unrealistic guidelines for teachers makes them more likely to leave, especially if they do not receive the assistance needed to complete tasks in a timely manner. The ultimate goal for teaching is similar to that of learning: create opportunities for growth that lead to lifelong development, improvement, responsibility, and empowerment. This goal can only be reached when everyone works together to make it happen. If someone falls short, there should be opportunities available to build them up in order for them to want to keep trying. The school system is not going to be perfect, but making significant changes now will help the situation improve for those currently in education or who enter in the foreseeable future. The third recommendation is to conduct more comparative research. Qualitative, quantitative, and mixed methods studies comparing differences between two or more groups would give more insight about why educators and administrators act in the ways they do. A researcher can extensively interview teachers who had an innate desire to teach and teachers who had little to no desire to teach in the first place. A mixed methods study could be created to include observations, surveys, and interviews about teachers who decide to leave their teaching position as a SEITs. All participants in this study had disabilities such as anxiety, ADHD, dyslexia, and deaf/hard of hearing. Future studies can include those without disabilities as well as statistical information concerning the characteristics and themes discussed within this article.

Conclusion

A narrative analysis was completed with four participants from Central Georgia who decided to depart from their SEIT position. Each educator participated in at least three interviews, where they discussed their life history, teaching experiences, and meaning they derived from their experiences. Transcripts, codes, narratives, and themes were created from recordings of the interviews. Results identified five themes: 1) job choice, 2) preparation, 3) workload, 4) job effectiveness, and 5) job support, none of which were considered by the educators during their decision-making process to become SEITs. They did experience signs of burnout, but the extent of burnout teachers can endure as SEITs needs further investigation. The amount of value and wages they had did not match what they should have received in theory. Further research is

recommended in order to include samples of teachers with more diverse backgrounds, needs, and situations. The system of hiring, maintaining, and keeping SEITs will not fix itself. More needs to be done to help teachers meet the demands of their jobs in order for students to be successful leaders and lifelong learners. If the rules and deadlines do not match what teachers can reasonably accomplish from a practical standpoint, then they need to be changed. Healthy collaboration and relationship building are essential for completing

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Issues and Insights in Determining Special Education Eligibility for Traumatic Brain Injury

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Abstract

Despite the relatively high incidence rates of traumatic brain injuries (TBIs) in children and adolescents, few students qualify for special education services under the TBI category. Although many TBIs do not require specially designed instruction or related services, it is essential that students with substantive educational effects from TBI receive appropriate identification and educational programming. This article explains the school-based educational evaluation process and assessment considerations specifically for TBI. It summarizes obstacles to the referral and determination of eligibility for TBI, particularly the requirement for a medical statement for TBI eligibility in some states and districts. The use of a guided credible history interview is an alternative to a medical statement or health assessment statement, which has implications for training and practice, including educator preparation programs, professional development sessions, and policy development.

Issues and Insights in Determining Special Education Eligibility for Traumatic Brain Injury

For students with traumatic brain injury (TBI) who experience difficulties that adversely affect their educational performance, identification for special education is an essential first step to accessing appropriate services. A recent analysis found that only 32% of students with moderate to severe TBI are identified for special education under the TBI category (Nagele et al., 2019). Fuentes et al. (2018) found that six years after injury, those with mild-to-severe injuries reported academic challenges as one of the largest areas of unmet need. Those findings raise concerns that many students with educational needs following TBI are being mis- or under-identified for special education services.

Children with TBI can experience a variety of cognitive and social-emotional challenges that affect their academic achievement, behavior, and peer relations. Possible difficulties for students with TBI include impaired social and adaptive functioning, emotional and behavioral problems, and cognitive deficits. They can experience declines in school performance, poor organization and other executive function deficits such as impaired alertness and orientation, limited self-awareness, distractibility, and memory difficulties. During the acute and chronic recovery periods, youth with TBI might experience fatigue, impaired language and nonverbal skills, and cortico-sensory and motor skills issues (Centers for Disease Control and Prevention, 2018; Davies, 2016; Dettmer et al., 2014; Moore et al., 2016). For some school-age youth, the deleterious effects of TBI on academic achievement and social relationships are immediate and significant; for others, problems can emerge over time (Prasad et al., 2017).

Given the changing needs of children as they grow older and school and social demands increase, it is noteworthy that special education identification for TBI rarely occurs after the first year post-injury (Taylor et al., 2003). Although it is likely that some children with TBI receive services under different Individuals with Disabilities Education Act (IDEA) disability labels (e.g., specific learning disability, other health impairment), it is unclear whether the services related to those disabilities meet the unique cognitive and behavioral needs of students with TBI (Glang et al., 2015; McCaleb, 2006; Nagele et al., 2019). Such misidentification certainly contributes to the discrepancy between TBI incidence and TBI identification in schools (Glang et al., 2015).

Identifying a child under the TBI category is important because as a child heals and works through their recovery, their needs can change, and their condition often improves. When a child is found eligible under the TBI category, the school team can tailor goals and services that are appropriate for the student. Misidentifying a student under a different educational disability category has several potential downstream effects. For example, if a student who experienced a TBI is determined to be eligible under the specific learning disability category because an official medical statement cannot be obtained, the IEP goals developed for that student will probably reflect the specific academic needs typical of students with learning disabilities instead of addressing the short-term memory deficits and other executive functioning problems associated with TBI. Further, access to services as an adult works differently under the various eligibility categories. Having an eligibility category other than TBI could reduce a student's access to vocational rehabilitation services and social security insurance (Nagele et al., 2019). Another important consideration is that TBI eligibility gives parents access to respite care through the National Health Care Act.

Appropriately identifying a TBI in a child's history ensures that the special education evaluation documents the injury and, thus, will not be institutionally forgotten as years pass. Awareness of a documented prior injury is important because new problems related to the brain injury can arise as the student ages and moves to other schools. If the child moves to another district (or even from middle school to high school), the receiving team needs complete information about the student's needs, including that the child had a TBI. Furthermore, when a school team suspects that a student sustained a TBI, it is obligated to assess all areas of disability to meet the Child Find requirement. The team opens itself to legal liability if team members know there was a brain injury and the team does not appropriately identify the student. Thus, the primary purpose

of this paper is to offer evidence-based suggestions and practices within the framework of IDEA. These practices could facilitate the identification and eligibility determination process for students with a history of TBI.

Child Find Under the Individuals with Disabilities Education Act

Under the Child Find mandate of IDEA, school districts are obligated to identify, locate, and evaluate all students in their state suspected as having a disability and potentially needing special education services (34 C.F.R. § 300.111) and schools must have a proactive, coordinated program in place to seek and identify such students ("M.J.C. v. Special Sch. Dist. No. 1, (D. Minn. 2012)"; Yell, 2019). IDEA's Child Find obligations can be violated if a school district ignores evidence of a pattern of academic or behavioral problems (see *"Compton Unified School District v. Addison, 598 F.3d 1181 (9th Cir. 2010)"*). Because every TBI is different and because TBIs can have delayed effects, it can be difficult to detect such patterns after a brain injury.

Many states and school districts require a medical statement for TBI eligibility under IDEA (Nagele et al., 2019). However, even if a school does not obtain a medical statement documenting a TBI, failure to review other relevant information and complete an evaluation, including medical and historical data (such as a *credible history*), could lead to inaccurate eligibility decisions ("M.H. v. Nassau County School Board. District Court of Appeal of Florida, First District. Oct 18, 2005"; "N.G. v. Dist. of Columbia, 556 F.Supp.2d 11 [234 Ed.Law Rep. [660]] (D.D.C. 2008)"). For example, a district in Minnesota required a medical statement/diagnosis of ADHD, which led to a delay in evaluating a child who was subsequently found eligible under IDEA's other health impairment category. The court determined that the significant delay amounted to denial of a free and appropriate public education (FAPE), and awarded compensatory education to the student ("M.J.C. v. Special Sch. Dist. No. 1, (D. Minn. 2012)").

It is critical for states and districts to understand that the lack of a medical statement is not an acceptable reason for school-based evaluation teams to deny or delay an evaluation. School teams must consider all available information when making a professional judgment about whether a child with TBI qualifies for an Individualized Education Plan (IEP). If a school team has reason to suspect or knows a student's poor or declining educational performance may be due to a TBI, and they overlook it in favor of a more expedient disability category, they could be held responsible for a FAPE violation and face legal proceedings.

Assessment Considerations for TBI

It is important that the school team communicate and work closely with the medical team and parents when a child diagnosed with TBI is transitioning from the hospital setting to the school environment. Communication and collaboration will ensure that everyone has the most current information and recommendations so that reintegration can be successful.

Each educational evaluation for TBI (Table 1) must be tailored to the student's unique and changing needs. In addition to components that might be part of any educational evaluation, a school-based evaluation for TBI might include interviews with medical personnel, such as rehabilitation teachers, therapists, home instruction staff, and the medical team. A release of information that allows the school team and medical personnel to communicate with each other

is crucial. The medical report should document medical treatment and therapies, including the departments, doctors, and therapists involved in the care of the child. The file review should particularly focus on pre-injury performance. In conducting both file reviews and interviews, the team should pay particular attention to pre-injury factors, including psychiatric, neuropsychological, and family problems, all of which can affect recovery and long-term outcomes (Wade et al., 2016; Yeates & Taylor, 1997). For example, a history of attention-deficit/hyperactivity disorder, impaired communication skills, or learning problems can increase the risk that a student who sustained a TBI will experience impaired development of educational functioning and social interaction skills. Children with TBI who live in under-resourced families or those experiencing other life challenges show slower recovery time and lower functioning 12 months post-injury than those in more stable environments (Wade et al., 2016; Yeates & Taylor, 1997). When selecting standardized assessment instruments, the evaluators might select tests that focus specifically on executive functioning and cognitive processes such as short-term working memory, long-term retrieval, and processing speed. Glang et al. (2021), Cleary and Scott (2011), and Fiorello et al. (2010) provide examples of academic and psychoeducational tests that can be used for TBI evaluations in schools.

Table 1
School-Based Educational Evaluation

Domain	Measure/Method	Data Type	Evaluator
Background information (medical/health, family history, academic history)	Record review Questionnaires/interviews (parent, student, teacher) Medical/health reports (medical history, current status, diagnoses, medications; vision and hearing screening)	Textual data	Psychologist, nurse
Cognitive and executive functioning skill assessment	Individually administered standardized measures; classroom observations	Standard scores, percentiles	Psychologist, teacher
Academic achievement	Norm-referenced, criterion-referenced, curriculum based measures, classroom observations	Standard scores, percentiles, academic performance across domains	Psychologist, teacher
Social/emotional	Norm-referenced rating scales, classroom observations, psychological assessments	Standard scores, symptoms, behaviors, diagnoses	Psychologist, private practice providers, speech-language pathologist,

			teacher
Communication	Norm-referenced tests and rating scales, observations, interviews	Standard scores, percentiles, assessments of functioning across domains	Speech-language pathologist
Motor skills	Norm-referenced tests and rating scales, observations	Standard scores, percentiles, assessment of functioning across domains	Occupational therapist; physical therapist
Adaptive behavior	Norm-referenced rating scales, interviews	Standard scores, percentiles	Psychologist, teacher
Neuropsychological evaluation	Norm-referenced	Neuropsychological report	Psychologist*
Ongoing data collection	Response to intervention, observation, functional behavior assessment, direct observations	Interventions, progress monitoring,	School support team, psychologist, occupational therapist, physical therapist, speech language pathologist, nurse, teachers

* School employee or community-based neuropsychologist

Interpreting the assessment results requires an understanding of the potential effects of TBI on an individual student's learning and response patterns because performance can be uneven across domains (Mohr & Bullock, 2005). For example, a student might perform well on math skills mastered pre-injury but have difficulty with new learning. Additionally, observing the student in functional school contexts, such as the classroom, lunchroom, or during recess, can give school personnel valuable information that might not appear in standardized assessments (Olson-Madden et al., 2013) due to the varying nuanced needs of children with TBI (Haarbauer-Krupa et al., 2019). Members of the evaluation team should collaborate to combine their professional knowledge with classroom observations and teacher and parent reports. For example, a speech-language pathologist and school psychologist observing a student participating in a group learning activity might notice behaviors indicating that the student is struggling as a result of deficits in memory, attention, or poor comprehension of complex directions from the teacher.

As with all students with disabilities, students who are identified as having a TBI and deemed to qualify for special education must be given an IEP (IDEA 34 C.F.R. § 300.324) and monitored for progress toward their annual goals (IDEA 34 C.F.R. § 300.320(a)(3)(i)(ii)), as federally mandated in IDEA. However, because of the potential for skill recovery—and skill deterioration—over time, educators might find it necessary to revisit the goals of students with TBI more often than the law requires to ensure that the goals on the IEP are appropriate for the student's skill set (D'Angelo, 2019; Dettmer et al., 2014). This frequent progress monitoring is particularly important in the first year because a student with TBI can exhibit rapid progress during accommodations or interventions (Davies, 2016).

On the other hand, students with TBI are vulnerable to increasing difficulty as expectations for independence and executive functioning increase across grade levels. Thus, members of educational evaluation teams must rely on credible sources of information, and they should choose progress monitoring assessments closely tied to instruction and intervention (Camm et al., 2020; Glang et al., 2010; Treble-Barna, Zang, et al., 2017). Periodic reviews and follow-up meetings are recommended 2–3 months after a student is discharged from the hospital or at the team's discretion (Lindsay et al., 2015). Assessment must be frequent, flexible, and sensitive to uneven progress patterns (e.g., curriculum-based measures). Interventions and accommodations should be adjusted as recovery takes place or new needs develop.

Obstacles to Referral and Eligibility Determination for TBI

Among the large number of children who sustain brain injuries each year, approximately 83 percent are not formally identified as IDEA eligible, which indicates an IDEA eligible population that is either underserved or unserved by the schools (Glang et al., 2010). When Glang et al. (2015) surveyed special education directors, they found that students identified under the TBI eligibility category accounted for only 0.4% of all special education students in their states. Although not every student who sustains a TBI will require special education support, the number of students with brain injuries who require additional support far exceeds the number who are actually being served under the TBI eligibility category in schools (Lundine et al., 2021).

Following a brain injury, students often appear normal, making it difficult to perceive the injury. In some cases, students experience consequences of brain injuries that emerge months or even years after the initial injuries, making it difficult to link emerging school-related challenges to the initial brain injury (Ylvisaker et al., 2005). It can be difficult to identify students for brain injury eligibility after time has passed because medical documentation might no longer be available. Children who sustained a TBI at a young age and have emerging problems because of that brain injury are unlikely to be identified correctly, even if they are placed in another eligibility category (Glang et al., 2013; Glang et al., 2015). Educators who lack awareness or knowledge of TBIs can misinterpret indicators of educational needs (Glang et al., 2008). For example, a student who falls asleep in class might be seen as lazy, when they might, in fact, be experiencing a TBI symptom. This misinterpretation can result in missed opportunities to establish eligibility for services, as well as lost opportunities for intensive intervention, and that can make the problem more challenging to address.

Another factor in under-identification is the small number of TBI experts available to serve on multidisciplinary evaluation teams in school systems. This issue is compounded by the perception among educators that diagnosis and educational planning for medically related categories such as TBI require an extremely high level of training and expertise (Bateman & Linden, 2012). Glang et al.'s (2015) survey of state special-education directors found that 55% of states reported awareness that their state's TBI counts were inaccurate. Lack of training for educators also contributes to the under- and mis-identification of children with brain injuries (Glang et al., 2006).

For students to be found eligible for TBI under IDEA, many states require medical documentation of an event that was likely to have caused a TBI (Nagele et al., 2019). Such a requirement assumes that schools will be notified about a TBI by parents or medical providers when it happens, but that rarely occurs (McCart et al., 2023).Thus, the requirement for medical documentation is a persistent barrier to the timely identification of students with TBI for disability services under IDEA (Greene et al., 2018; McCart et al., 2023). This requirement becomes a barrier when: (a) there is a delay in securing the documentation, (b) a child did not receive medical attention for the TBI, or (c) medical care was provided but the documentation was not maintained or shared with the school. For example, some children are seen by multiple specialists, such as emergency room doctors, pediatricians, and specialty clinicians, and no one provider might feel qualified to sign the required medical statement (Arbogast et al., 2017). Even in the absence of official medical documentation, schools are legally required to proceed with an evaluation within a designated timeline. Thus, if a medical statement cannot be obtained, the school-based multidisciplinary evaluation team might and often does seek eligibility under a different category, such as specific learning disability or other health impairment.

Credible History

Identifying a child under a less accurate disability category can mean that important information about the TBI is minimized or lost due to a lack of documentation. It can also mean that the evaluation does not adequately explain the causes of behaviors and challenges in the school environment and that follow-up timelines are inappropriate. In one recent Oregon survey, nearly half of respondents indicated they had been unable to obtain medical documentation for one or more students they were evaluating who they knew had brain injuries (McCart et al., 2023). Through the resulting investigation, Oregon Administrative Rules (Oregon Administrative Rules 581-015-2175) were changed to allow a guided credible history interview (GCHI, Table 2) as an alternate way of substantiating eligibility under the TBI category when a medical statement cannot be obtained (McCart et al., 2023). The GCHI is conducted by a school professional, such as a school psychologist, who is familiar with the physical, cognitive, emotional, and behavioral effects of TBI, including how symptoms can emerge over time. The person interviewed is someone with knowledge of the TBI event, such as a parent, grandparent, or guardian. The information provided in the GCHI is used in lieu of a medical statement or health assessment to establish a student's special education eligibility under the TBI category when there is at least one reported brain injury and subsequent persistent symptoms.

The Oregon GCHI tool can be found here: https://www.oregon.gov/ode/students-and-family/specialeducation/regprograms_bestpractice/pages/traumatic-brain-injury-education-services.aspx

The interviewer should establish clear changes between the child's pre- and post-injury functioning in a variety of areas, including cognition, academic skills, memory, personality, social skills, executive functioning, and behavior. When the child's injury occurred before they entered formal schooling, the professional can use their understanding of a brain injury's effects on a developing brain to draw reasonable conclusions about the brain–behavior relationships observed. Pediatrician well-child visits document developmental milestones and can be essential records when considering pre-injury development. Because a school-based evaluation requires the assessment of multiple areas, the GCHI process alone is insufficient to determine TBI eligibility; however, it can add important information to substantiate a brain injury. If the evaluation team determines that the GCHI validates a history of a TBI, that information can be used to allow a student to qualify under the TBI category when a medical statement cannot be obtained and therefore allow the student to receive an appropriate evaluation in a timely manner, with appropriate services provided if indicated (McCart et al., 2023).

Now, Oregon and Colorado both use the GCHI process to establish special education eligibility for students with TBI. In the year following implementation of the GCHI process in Oregon, the number of students under the TBI category in that state increased by 21% (Oregon Department of Education, 2020). Although some states do not require a medical statement to establish special education eligibility for TBI, many school districts within those states still require a medical statement because they consider TBI to be a medical condition rather than an educationally related disability. Those districts forget that under IDEA, the effect on educational performance and need for special education are what determines eligibility, not the existence of a medical condition. In the absence of a state policy requiring medical documentation, districts could immediately begin using the GCHI process to establish a stronger special education eligibility protocol for students whose TBIs are adversely affecting their educational performance. As in IDEA's guidance for identifying specific learning disability, the use of GCHI relies on professional judgment for eligibility determination.

The following case study illustrates an application of the GCHI.

Case Study: Juan

Juan is a 9th grade student who was involved in a major car crash at the age of 8 when he lived in Mexico. His current high school was aware of this reported injury and recognized behaviors and academic difficulties that are commonly associated with TBI. Teachers reported that Juan had trouble paying attention in class and learning new material and that he often forgot to turn in homework assignments, even when they were completed. The school evaluation team reported that Juan was not eligible for special education in the area of TBI because they were not able to obtain a medical statement to document his injury. His teachers reported that Juan's behaviors, including impulsivity and outbursts, were escalating. The school psychologist observed Juan during both a physical education class and a math class. She noted that Juan was struggling to learn new rules and information. Because Juan moved from Mexico, he had no medical documents; his current doctor would not provide a written statement of TBI because he was not his doctor when the crash occurred. Juan continued to struggle in school, performed in the low average range on standardized tests, and did not qualify for any special education.

GCHI Application. Juan lives in a state that does not yet use the GCHI statewide; however, the state department of education does not explicitly require a medical diagnosis to support a TBI identification. Juan's school psychologist was trained to conduct credible history interviews. She met with Juan's mother and conducted the GCHI with the assistance of an interpreter. The school psychologist took a thorough health and developmental history, including a detailed account of Juan's injuries and specific symptoms of the brain injury. Per report, the front of Juan's brain was hurt in the accident, and he is having difficulty with the executive functioning skills expected to develop into early adulthood. Juan's current academic and behavioral issues and his mother's credible report of Juan's TBI— along with classroom observations, interviews with Juan and his teachers, and some testing to identify needed areas of support— all substantiated Juan's eligibility for special education under the TBI category.

Educational Support Plans for Students with TBI

For a child to receive special education services in the public education setting, they must (a) meet the eligibility requirements for the suspected disability as established by IDEA, and (b) require specially designed instruction/interventions and related services. The evaluation process described above is necessary to determine what type of plan a child needs. A child with TBI who does not qualify under IDEA—or who previously qualified under IDEA and was exited from services—can receive support in other ways. As they proceed through their education, students with TBI can require varying levels of support and diverse educational plans to meet their unique needs.

One such plan is an Intervention Plan, which can be appropriate for a student with a mild TBI or injury that occurred several years before (e.g., before they were school-age). The Intervention Plan should be implemented with fidelity, and progress should be monitored over time.

Another plan is a Medical Plan or Individual Health Plan (IHP). An IHP is designed to address medical issues (i.e., toileting issues, seizure management, medication, rest/breaks due to fatigue) that do not affect a student's academic or educational performance. The plan is created with a multidisciplinary team, such as parents/caregivers, school nurse, health care provider, teacher, and student. The plan should be reviewed often in conjunction with the physician's recommendations. The provisions for an IHP or Medical Plan vary from state to state and even school district to school district; it can exist alone or along with a Section 504 Plan (see https://oley.org/page/IHP_IEP_Difference).

Section 504 of the Rehabilitation Act of 1973 protects individuals against discrimination and provides services to address substantial effects on "major life activities," a category that includes "learning." Therefore, if a child does not meet IDEA's requirements for special education, schools still have a legal duty to determine whether the child qualifies for support under Section 504 (Yell, 2019). A 504 Plan provides accommodations for students who are served in the general education setting and should be reviewed at least annually (but likely more often for a student with a TBI).

If a school evaluation determines that a child meets the eligibility criteria for TBI under IDEA, then an IEP, a legal document that describes goals and objectives for a student with a disability, is developed. An IEP addresses all areas of need identified for a student, such as cognitive,

academic, behavioral, adaptive, communication, motor, post-secondary transition, and accommodations in the classroom, as well as accommodations for state-wide testing. IEPs are reviewed annually, and students with a TBI will likely require review more often. An IEP also documents the student's least restrictive environment (LRE). Students with a TBI can be served in whatever LRE is most appropriate. For example, a student with a TBI can be served in a unit for students with multiple disabilities [MD] without changing his disability to MD; in other situations, a student with a TBI can be served in a regular classroom given the appropriate supports and modifications.

Implications for Training and Practice

Educators and schools interested in implementing GCHI as an alternative to a medical statement will require training in both the symptoms of TBI and techniques for completing the interview. Such training should be done in both educator preparation programs and professional development for current educators. Training could be conducted in person, via pre-recorded or live webinars, or through websites.

Educator Preparation Programs

Historically, instruction about brain injury in school psychology and teacher education programs has been minimal (Davies et al., 2013; Glang et al., 2006; Hooper, 2006; Walker et al., 1999). Although a stand-alone course in brain injury might not be feasible, faculty in educator preparation programs can consider ways to integrate TBI information into their existing curricula. In addition to better equipping future school-based multidisciplinary team members with knowledge about eligibility determination and the skills needed to use the GCHI, this pre-service training could include aspects of TBI that require special attention, such as mis-identification, the need for frequent progress monitoring and goal modification, inconsistent performance patterns that might indicate a TBI, comorbidities and pre-existing conditions that can exacerbate TBI symptoms, and the need for social and emotional support for students who have sustained a TBI.

Professional Development

Professional development related to TBI is also needed for current teachers and related service providers. Such training should present the signs and symptoms of TBI, evidence-based interventions, supervised practice with new skills, and continued mentoring, feedback, and consultation in the school setting (Glang et al., 2010). It should also include information on effective specially designed instruction (e.g., must be intensive, structured, focused, goal-directed and apply progress monitoring and small/homogenous instructional groupings) and effective interventions. To maximize the efficacy of professional development, follow-up must be provided to help educators implement the skills gained in training.

Policy Development

Effective communication and care coordination among hospitals, rehabilitation centers, and schools is critical for identifying students with TBI for formal services. Collaboration among parents, educators, and healthcare providers facilitates the design and implementation of effective educational programs for students with TBI (Todis et al., 2018). For example, students who receive transition services from hospital to school are more likely than other students with TBI to be identified for special education; they also receive more services, and their parents are

more satisfied with the school than those of students who did not receive transition services (Glang et al., 2008). Nonetheless, such services are not available to most children with TBI because only a small percentage of them are hospitalized and receive the high-acuity service provision that would include hospital-to-school transition planning.

Policies promoting enhanced collaboration between medical and school personnel are essential, and GCHI could provide a bridge to close existing gaps. A crucial step in the GCHI procedure is having a school-based professional interview a person with knowledge of the student and the TBI incident. It is advantageous to have a reliable, experienced practitioner working in the school setting, such as a school psychologist, conduct these interviews and act as the contact for TBI referrals. Because parents make decisions about every element of their child's wellbeing, involving parents as partners in the GCHI process enhances the family-school partnership, which is essential (Haarbauer-Krupa et al., 2017).

Future research is needed to evaluate the effectiveness of GCHI in expanding the identification of students with TBI so that they receive appropriate learning and academic support. Additionally, policies that allow for the expanded use and interpretation of curriculum-based assessments or observations would promote the evaluation of students with TBI in the environments in which they are most likely to show deficits, including classroom and school-based activities.

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Resilience and Stressors: Examining Impact of COVID-19 on Rural Special Education Teachers

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Abstract

This research examined the impact of the COVID-19 pandemic on rural special education teachers and their resilience. Special education teachers face unique challenges in supporting students with diverse learning needs, and the pandemic has exacerbated these difficulties. The study focused on rural special education teachers in Nebraska and investigated their resilience and the main stressors they encountered. Preliminary findings indicated that these teachers have shown commendable levels of strength despite the challenges. However, they reported feeling less resilient when faced with discouragement from failure. Understanding the resilience and stressors experienced by rural special education teachers can inform targeted interventions and support systems to enhance their well-being and effectiveness. The study contributed to the existing literature on teacher well-being and provides valuable knowledge for policymakers, administrators, and stakeholders in special education.

Keywords: COVID-19 pandemic, rural, special education, teachers, stress, mental health

Resilience and Stressors: Examining the Impact of the COVID-19 Pandemic on Rural Special Education Teachers

The COVID-19 pandemic has had a significant impact on the field of education, most notably on special education teachers who already face distinct challenges in accommodating students with diverse learning needs (Averett, 2021; Darling-Hammond et al., 2020). With the advent of the pandemic, these educators have had to grapple with increased workloads, staffing issues, adapting to new learning environments, and more (Billingsley & Bettini, 2019; Fitzpatrick, 2022). The challenges can differ based on the location of educational institutions. For instance, schools in rural areas face specific contextual stressors that can exacerbate these issues (Hawley et al., 2016).

Defining Rural Education

Rural education is a concept that varies in description across different periods and research perspectives (Hawley et al., 2016). For the purpose of this paper, rural education refers to educational systems in rural areas where schools predominantly serve smaller population sizes. These rural communities often face unique economic challenges, thereby affecting school funding (Hawley et al., 2016).

The Role of Rural Schools in Education

In the United States, rural areas cover a massive 97% of the landmass, according to the United States Census Bureau's 2017 report. In Nebraska alone, the Nebraska Rural Community Schools Association (NRCSA) serves over 88,000 students out of a total of 327,055 students spread across six regions. This emphasizes the importance of rural schools in the educational landscape.

Pre-Pandemic Stressors in Rural Special Education

Even before the pandemic, special education teachers in rural areas faced unique stressors. These included limited access to technology, less support and resources, and varying levels of socioeconomic diversity (Berry, 2012). Rural special educators often found themselves as the sole special education teachers in their schools or districts, resulting in a heightened sense of commitment and stress (Berry, 2012).

Pandemic-Era Challenges: A Focus on Remote Learning

With the advent of the COVID-19 pandemic, the shift to remote learning presented another layer of stressors. While existing research on pandemic-era rural education is sparse, what is available suggests that educators had to adapt rapidly to new modes of instruction (Averett, 2021; Gross & Opalka, 2020). This adaptation involved mastering digital tools, ensuring student access to devices and reliable internet, and rethinking lesson plans for remote delivery (Gross & Opalka, 2020; Will, 2020; Witte, et al., 2023).

The Importance of Teacher Resilience and Emotional Support During Crisis

Teachers, especially special education teachers, are pivotal in providing emotional support in times of crisis (Ducy & Stough, 2021). Research indicates that effective teachers can profoundly impact students' well-being, which became even more vital during the pandemic (Ratiliff, 2019; Singh et al., 2020). Teachers were responsible for academic instruction and emotional and social support, which was crucial for students grappling with isolation and anxiety (Ratiliff, 2019).

Post-Pandemic Considerations: Stress, Workload, and Adaptability

The pandemic also affected other responsibilities, including formulating Individualized Education Plans (IEPs). These legal documents outline specific educational goals for students with disabilities (Konstantopoulou et al., 2022). The pandemic led to a spike in stress levels among special education teachers due to complications in implementing IEPs, thus exacerbating already existing stressors (Mendoza et al., 2022; Reich et al., 2020).

Research on stressors affecting rural special education teachers before, during, and presumably after the pandemic is essential. While much remains to be investigated, existing literature underscores the importance of resilience, adaptability, and these educators' multifaceted role in their communities. Future research should continue to explore these themes, particularly as they relate to the post-pandemic educational landscape.

Purpose of Study and Research

This study aimed to explore the resilience of rural special education teachers in Nebraska during the COVID-19 pandemic. Specifically, it explored the following research questions: How have

rural special education teachers fared in terms of resilience after teaching through COVID-19? What are the main stressors faced by rural special education teachers after COVID-19? Understanding this resilience is essential for several reasons. It offers insights into teachers' abilities to adapt to challenging situations and provides data that could inform the development of targeted support systems (Berry, 2012; Konstantopoulou et al., 2022).

Preliminary findings indicated that the special education teachers in rural Nebraska have generally demonstrated robust levels of resilience, echoing findings from prior research (Garwood et al., 2018). They take great pride in their work and have built strong support networks to help them manage stress. Nevertheless, their resilience appears to waver when they face setbacks, emphasizing the need for additional resources and support systems (Haines et al., 2022).

This research aimed to contribute to the existing body of literature by focusing on the well-being of rural special education teachers, a demographic often overlooked in mainstream educational research (Sindelar et al., 2018). It aimed to assist policymakers, administrators, and stakeholders create a more supportive environment for these educators (Mason-Williams et al., 2020).

Research Method and Procedures

The primary objective of this study was to investigate the unique challenges that rural special education teachers in Nebraska encounter, particularly in the aftermath of the COVID-19 pandemic. To accomplish this, we employed a multiple-methods approach, incorporating both quantitative and qualitative analyses, to capture a nuanced picture of the situation.

The use of a multiple-methods design was used to collect, analyze, and integrate quantitative and qualitative data (Tashakkori & Teddlie, 2010; Vivek & Nanthagopan, 2021). This approach was chosen to address a range of specific research questions and hypotheses that require a multi-faceted understanding. Participants were special education teachers (n=90) employed in rural Nebraska school districts, defined as districts with fewer than 200 students enrolled in grades 9 through 11.

Quantitative Analysis

A purposive sampling technique was used to recruit 90 rural special education teachers in Nebraska. Invitations to participate were sent via email, and the survey was administered online. The response rate was approximately 75%.

The quantitative component involved administering the Connor-Davidson Resilience Scale (CD-RISC-25), a 25-item questionnaire designed to measure resilience levels among individuals (Connor & Davidson, 2003). The scale includes items related to various dimensions of resilience, such as coping, adaptability, and self-efficacy.

Data was collected electronically, and responses were stored securely in a password-protected database. Raw scores were tabulated for each participant, and mean scores were computed for the seven dimensions of resilience covered by the CD-RISC-25. Descriptive and inferential statistics were employed for comparative analysis.

Qualitative Analysis

Alongside the quantitative survey, participants were also asked to respond to an open-ended question: "What do you feel was the main stressor put on you when you returned to work after COVID-19?" The aim was to delve deeper into the stressors experienced by rural special education teachers.

Qualitative data from the open-ended responses were subjected to thematic analysis following the guidelines proposed by Braun & Clarke (2006). Coding was done to the responses to identify recurring themes related to stressors, which were then organized into categories for more in-depth analysis. A coding process example, if a participant wrote, "The main stressor was juggling multiple roles," this could be coded under the theme "Role Overload." A comprehensive list of themes and codes was developed through iterative rounds of coding.

Integration of Quantitative and Qualitative Data

After data collection and analysis, findings from both the quantitative and qualitative sections were integrated. This integrative approach aimed to provide a multi-dimensional understanding of the challenges and stressors of rural special education teachers in Nebraska.

By explicitly addressing these methodological considerations, this study aimed to offer a detailed, replicable research design that allowed for a comprehensive understanding of the problems rural special education teachers face in Nebraska.

Findings

Quantitative Results

Table 1
Results of Connor-Davidson Resilience *Scale (CD-RISC-25) amongst rural Nebraska special education teachers*

Item No.	Item	*M*	*SD*
1	I am able to adapt when changes occur.	4.47	.64
2	I have at least one close and secure relationship that helps me when I am stressed.	4.57	.72
3	When there are no clear solutions to my problems, sometimes fate or God can help.	3.81	1.09
4	I can deal with whatever comes my way.	4.08	.71
5	Past successes give me confidence in dealing with new challenges and difficulties	4.14	.66
6	I try to see the humorous side of things when I am faced with problems.	3.73	.92
7	Having to cope with stress can make me stronger.	3.60	.75
8	I tend to bounce back after illness, injury, or other hardships.	4.01	.83
9	Good or bad, I believe that most things happen for a reason.	4.08	.88
10	I give my best effort no matter what the outcome may be.	4.31	.66

11	I believe I can achieve my goals, even if there are obstacles.	4.17	.62
12	Even when things look hopeless, I don't give up.	4.07	.70
13	During times of stress/crisis, I know where to turn for help.	4.08	.78
14	Under pressure, I stay focused and think clearly.	3.67	.76
15	I prefer to take the lead in solving problems rather than letting others make all the decisions.	3.73	.96
16	I am not easily discouraged by failure.	3.41	.73
17	I think of myself as a strong person when dealing with life's challenges and difficulties.	4.14	.71
18	I can make unpopular or difficult decisions that affect other people, if it is necessary.	3.48	.91
19	I am able to handle unpleasant or painful feelings like sadness, fear, and anger.	3.79	.80
20	In dealing with life's problems, sometimes you have to act on a hunch without knowing why.	3.51	.81
21	I have a strong sense of purpose in life.	4.04	.83
22	I feel in control of my life.	3.80	.88
23	I like challenges.	3.49	.64
24	I work to attain my goals no matter what roadblocks I encounter along the way.	3.88	.78
25	I take pride in my achievements.	4.40	.67
Total Score		98.46	10.15

The average total score for resilience based on the Connor-Davidson Resilience Scale (CD-RISC-25) amongst rural Nebraska special education teachers was 98.46, with a standard deviation of 10.15. In the context of the CD-RISC-25, scores can range from 0 to 100, with higher scores representing greater resilience. Based on available guidelines, a score of 98.46 indicates relatively high levels of resilience among the respondents.

Table 2
Results of Aspects of Resilience Subscales A*mongst Rural Nebraska Special Education Teachers*

Aspects of resilience	*M*	*SD*
Hardiness (i.e. commitment/challenge/control) (items 5, 10, 11, 12, 22, 23, 24)	4.06	.52
Coping (items 2, 7, 13, 15, 18)	3.89	.45
Adaptability/flexibility (items 1, 4, 8)	4.22	.49
Meaningfulness/purpose (items 3, 9, 20, 21)	3.86	.57
Optimism (items 6, 16)	3.57	.65
Regulation of emotion and cognition (items 14, 19)	3.73	.66
Self-efficacy (items 17, 25)	4.27	.60

Scores in individual subscales such as "Hardiness," "Coping," and "Self-efficacy" also reflect elevated levels of resilience-related attributes. For instance, the high mean score in "Self-

efficacy" suggested that teachers generally feel confident in handling their responsibilities, even amidst challenges. While the general trend indicates high resilience across participants, no notable differences were observed based on demographic categories like age, gender, or years of experience.

Qualitative Results

The qualitative analysis was conducted using ATLAS.ti and focused on identifying primary stressors as reported by special education teachers in rural Nebraska. The identified stressors fell under categories such as workload, staffing issues, learning challenges, student needs, and concerns about health and safety during the COVID-19 pandemic. When asked, "What do you feel was the main stressor put on you when you returned to work after COVID?" responses included: "My biggest stressor was adapting to fluctuating student attendance due to COVID-19 health and safety measures" and "Balancing the educational needs of my students while being severely understaffed was overwhelming."

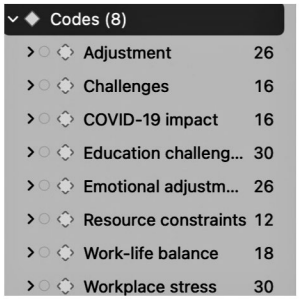

Figure 1

The qualitative findings resonated well with the subscale aspects of resilience, especially in "Coping" and "Adaptability/flexibility." These attributes were crucial when considering the demands and stressors revealed in the qualitative section. While the quantitative data suggested that teachers generally possess high levels of resilience, the qualitative data highlighted areas where additional support and resources are necessary to help these educators manage their challenges more effectively.

By taking both the quantitative and qualitative data into account, it is apparent that while resilience levels are generally high among rural Nebraska special education teachers, there are specific, real-world stressors that need to be addressed to ensure their well-being and effectiveness in their roles.

Summary of Data Analysis Results

Table 1 presents the results of the Connor-Davidson Resilience Scale (CD-RISC-25) among rural Nebraska special education teachers. The CD-RISC-25, a 25-item self-reporting scale, gauges resilience levels in adults. According to APA guidelines for reporting statistics, the scale exhibited a mean score (M) of 98.46 with a standard deviation (SD) of 10.15. Scores spanned from 1 to 5, where higher scores denoted elevated resilience. The highest mean scores were

observed for the items "I take pride in my achievements" (M = 4.40) and "I have at least one close and secure relationship that helps me when I am stressed" (M = 4.57). Conversely, the lowest mean score was "I am not easily discouraged by failure" (M = 3.41).

Table 2 expanded on Aspects of Resilience Subscales among the same population. Special attention is warranted for the Adaptability/Flexibility (M = 4.22, SD = 0.49) and Self-Efficacy (M = 4.27, SD = 0.60) subscales, as these dimensions scored the highest. The lowest score was observed for Optimism (M = 3.57, SD = 0.65). For context, the other subscales are presented as follows: Hardiness (M = 4.06, SD = 0.52), Coping (M = 3.89, SD = 0.45), Meaningfulness/Purpose (M = 3.86, SD = 0.57), and Regulation of Emotion and Cognition (M = 3.73, SD = 0.66).

Delving into the qualitative analysis, rural Nebraska special education teachers reported facing multifaceted challenges upon returning to work post-COVID-19. These challenges were synthesized into four categories: workload and staffing, learning challenges, student needs, and health and safety. Within workload and staffing, prevalent stressors encompassed staffing and caseloads, absenteeism, lack of substitute teachers, inadequate administrative support, and unsatisfactory compensation. Learning challenges predominantly consisted of learning loss, the need for academic catch-up, and curriculum adjustments. Pertaining to student needs, major concerns involved mental health, social and emotional support, emotional baggage, attendance issues, disruptive behavior, and diminished student motivation. Health and safety concerns were primarily related to cancellations, evolving regulations, safety apprehensions, the learning environment, and the shift to or from distance learning.

This qualitative data suggested a nuanced complexity in these teachers' challenges, underlying their generally high resilience scores. Therefore, interventions should be multifaceted to address these various concerns effectively. Future research should build on the existing literature on teacher retention and resilience, particularly in special education contexts, to inform the development of targeted support mechanisms. The current findings stressed the urgent need for nuanced support and resources tailored to help educators navigate the complex teaching landscape during or after a pandemic.

Discussion

The study offered critical insights into the resilience and challenges rural special education teachers in Nebraska face. These insights were instrumental for informing future research and developing targeted interventions and support systems.

The quantitative findings suggested that these educators displayed what was initially termed "elevated levels of resilience." The term "elevated" was used relative to indicate higher scores on the CD-RISC-25 scale, particularly in areas such as adaptability/flexibility, self-efficacy, and hardiness. However, this should not imply an objectively "elevated" level unless compared to a broader population or established norms. This distinction was crucial for the interpretation and generalization of the findings.

The study found alignment with prior research regarding resilience among special education teachers (Berry, 2012; Waldron-Soler et al., 2019). An interesting divergence emerged in the

subscale analysis, which revealed that the teachers scored lower on the 'optimism' dimension. This finding aligns with Mason-Williams et al. (2020) and pinpoints a specific area for potential interventions. Optimism is vital in sustaining motivation and a positive outlook, especially in challenging scenarios. Furthermore, the qualitative data outlined specific stressors rural special education teachers face in the post-COVID-19 work environment, such as workload, staffing, and student needs. These stressors corroborated findings from prior research (Billingsley & Bettini, 2019; Sindelar et al., 2018), emphasizing the need for targeted support.

Future interventions should focus on workload management, professional development, and mental health support. These areas are substantiated by recent studies (Haines et al., 2022; Weiss et al., 2023) and directly address the issues brought forth by the COVID-19 pandemic, as highlighted by Fitzpatrick (2022) and others.

The challenges of the pandemic add another layer to the pre-existing difficulties associated with retaining special education teachers, a subject currently prominent in the literature. Therefore, aligning the findings of this study with the broader discourse on teacher retention could offer additional validation and urgency to the results.

This study underscored the necessity for targeted interventions and robust support systems for rural special education teachers in Nebraska. By addressing the identified gaps, such as optimism and specific stressors, the study paves the way for multi-stakeholder efforts to create a more supportive environment for special education teachers, thereby improving educational outcomes for students with disabilities.

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Perspectives of Youth with Disabilities on Restorative Practice (RP) Circle Engagement and School Belonging

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Abstract

The literature base on Restorative Practice (RP) outcomes suggests that schools that adopt RP experience reductions in suspensions/expulsions and improved school climate. Yet data suggests disproportionality in exclusionary disciplinary practices persist. Less is known about whether there are differences among student populations in their perception of their experience with RP. This study examines student survey data, from a school district that has been implementing RP for 5 years. We conducted T-test analysis of student survey responses (grades 3-12) and compare whether there were statistically significant differences between students who identified as receiving IEP services and those who do not regarding their experience with RP circles. Findings suggest that some parts of RP circle engagement are perceived positively by all students. However, some statistically significant differences suggest variation in feeling respected by teachers and being listened to by peers. Additional findings illuminate how circle processes could be refined to be more inclusive.

Keywords: restorative practices, disability, school discipline, inclusion

Perspectives of Youth with Disabilities on Restorative Practice (RP) Circle Engagement and School Belonging

The Individuals with Disabilities Education Act (IDEA) aims to ensure that children with disabilities are guaranteed access to public schooling and are provided the supports and services needed to reap educational benefit, ideally within inclusive school settings. A central principle, Free Appropriate Public Education (FAPE) is intended to ensure that children with disabilities through provision of an individualized education program (IEP) of services and supports can benefit alongside peers without disabilities. Additional language obligates schools to meet the behavioral needs of students including requiring school-based teams to acknowledge when children with disabilities have behavioral challenges, regardless of disability category, and

identify appropriate goals, supports and services to address those needs (OSERS, 2017). Similarly, Every Student Succeeds Act (ESSA, 2015), emphasized the need for schools to implement positive behavioral interventions and document rates of utilization of exclusionary discipline practices with the aim of more effectively supporting students behavioral and academic growth. In July 2022, the U.S. Department of Education released updated guidance urging schools to "fulfill their responsibilities to meet the needs of students with disabilities and avoid the discriminatory use of student discipline". Among the range of positive behavior interventions recommended in the report, they specifically name Restorative Practices (RP) as a "targeted support" for developing relationships, addressing harm and reducing behavioral referrals and discipline disparity (U.S. DOE, 2022).

Unfortunately, despite clear guidance in U.S. education policy about the need to address both academic and behavioral needs of children with disabilities, data reveals a glaring feature of structural ableism in schools is the disproportionate use of exclusionary discipline on students with disabilities. In 2017-2018, approximately 1 out of 11 students with disabilities were suspended (Leung-Gagné, et al., 2022). Further, students with disability are twice as likely to receive out of school suspension than their non-disabled peers and face much higher likelihood of being secluded or restrained (National Center for Learning Disabilities, 2020). Evidence suggests that removing students from classrooms negatively impacts academic progress and increases risk for school dropout (McNeill et al., 2016). Therefore, children with disabilities, are at increased risk of poor outcomes due to the higher likelihood they will experience exclusionary, punitive discipline.

A recent report by Losen and Martinez (2020) in collaboration with the Learning Policy Institute (LPI) documents the degree to which disproportionate school discipline in the U.S. fuel inequities amongst different groups of students regarding educational opportunity including youth with disabilities. Of particular concern were the rates of lost instruction time experienced by students at the secondary level, the widespread use of suspension in alternative schools and rate of referral to law enforcement for student misconduct. Focusing on the data for youth with disabilities, high school age students were reported to have lost twice as much opportunity for instruction than their non-disabled peers. Alternative placements for students with behavior challenges are often topics of discussion within IEP teams, the argument being alternative placements tailor the environment to respond to behavioral needs more effectively. However, it's clear from the data in Losen and Martinez's report (2020) that the use of alternative schools is also perpetuating the use of exclusionary disciplinary practices. So even if school teams decide that behavioral supports will not be effective in meeting the child's needs in the general education classroom, alternative placements do not necessarily provide effective support or reduce the likelihood of exclusionary discipline and in some instances students in the alternative settings still experience high rates of instructional days lost (Losen & Martinez, 2020). Relatedly the U.S. Government Accountability Office (GAO, 2018) reported that while students with disabilities comprise approximately 12 % of the school population, they are overrepresented by over 13% within the number of students experiencing suspension and moreover face increased likelihood to be arrested or referred to law enforcement. Losen and Martinez (2020) advocate for efforts to reduce instructional time lost due to exclusionary and excessive disciplinary practice. One approach to prevention gaining traction is the RP framework. Through intentional focus on building relationships, fostering a positive school climate and shifting from punishment models

to accountability, schools have embraced RP with the goals of reducing rates of exclusionary discipline disproportionality to foster inclusive and equity-oriented school communities for all students (Gregory & Evans, 2020).

Restorative Practices in School Settings

According to a 2016 national survey, over half of U.S. states have adopted school-based restorative approaches (González, 2016) and likely that number is growing. The roots of restorative approaches can be found in global indigenous cultural and religious practices that focus on mediating conflict, repairing harm when it occurs and building strong communities (Umbreit & Armour, 2010). Central to restorative approaches is the adoption of relationship-centered practices for preventing and addressing harm (Fronius et al., 2019). When adopted by schools the goal is to fundamentally change school culture through implementing a set of values and practices that meet student needs, build healthy school communities and approach conflicts as an opportunity for increased accountability (Evans & Lester, 2013). Terminology varies when it comes to describing school-based restorative approaches including the use of the term's restorative justice, restorative justice education, and restorative practices (González et al., 2018; Gregory & Evans, 2020). For the purposes of this article, we adopt the term 'restorative practices' (RP) to capture the range of individual and classroom-based relational approaches, adopted by school districts. To be clear, RP is not a curriculum but a framework that when adopted within the context of schools includes practices that are universally integrated within the school system to both prevent behavioral misconduct and intervene when it occurs through relationship-centered approaches that promote accountability and repair rather than punishment (Gomez, 2020; González et al., 2018). Moreover, the RP framework when implemented effectively in schools can provide schools with an alternative set of procedures and practices for addressing harm from behavioral misconduct and reducing the number of days instructional days lost due to discipline (Augustine et al., 2018) while fostering a positive school climate (Darling-Hammond et al., 2020; Schiff, 2018).

RP Circles

At a universal level, school-based RP often includes implementation of community-building circles. RP circles are considered a preventative measure that can be effective in reducing instances of negative behavior (Smith et al., 2015) and building a positive classroom community (Evanovich et al., 2020). These community building circles create the opportunity for students and teachers to practice sharing and listening for the purpose of building relationships as well as engaging in problem-solving. (Gregory et al., 2021). Furthermore, students are given the opportunity to develop social competence (Evanovich et al., 2020) and build social skills through fostering safe communication (Wroldsen & Follestad, 2018). Procedurally RP community building circles entail students and adults seated in a circle at eye level, utilizing circle agreements, talking pieces, opening and closing ceremonies to promote inclusiveness, the group safety needed to center reflective, community building activities. (Boyes-Watson & Pranis, 2015).

The intent of community building circles is preventative in that the purpose is to build relationships, develop prosocial skills and foster a positive climate. These types of circles can also be utilized to proactively engage students in open discussion around a range of topics

including academics, classroom norms or social-emotional issues (Costello et al., 2010). Overall, the goal is to "strengthen social connection and responsibility for one another by increasing opportunities for affective communication" (Gregory et al., 2015, p. 4). Circles are often the entry point for early stages of RP implementation in school districts as the circle structure aligns with commonly utilized strategies for classroom community building activities and focus on universal strategies, building emotional intelligence and relationships among all students and classroom adults (Evanovich et al., 2020, Kidde, 2017).

RP School Outcomes

Since 2011, there has been a sharp and sustained increased in school-based RP evaluation studies using a variety of methodological designs and frameworks representing qualitative, mixed methods, non-experimental quantitative designs, and quantitative experimental evaluation designs, including randomized controlled trials and quazi-experimental designs (Darling-Hammond et al., 2020; Fronius et al., 2019; Zakszeski & Rutherford, 2021). In their recent systematic literature review on research on RP in schools, Zakszeski & Rutherford (2021) identified 71 articles reporting RP outcomes in schools published since 2000. While few studies systematically investigated implementation fidelity, several positive outcomes related to RP implementation are reported in their systematic review including reduction in exclusionary discipline practices and disparities and development of social-emotional behavioral skills. Moreover, Darling-Hammond and colleagues (2020) published an updated review of quantitative research on restorative justice (RJ) implementation in schools from 1999-2019, in which nearly all of the studies reviewed reported decreases in exclusionary discipline and harmful behavior after RJ program implementation as well as improvements across other discipline outcomes including a reduction in disciplinary referrals and decreased average time of in-school suspensions. Additional studies report reduction in suspensions (Schiff, 2018; Simson, 2012), strengthened relationships and improved school climate (Fronius et al., 2019; Gregory et al., 2015). Other studies have noted the additional benefits of centering student voice and engaging students in community building and problem solving with the goal of improving school climate (Acosta et al., 2019).

Promise of RP for Students with Disabilities

For students with disabilities, and particularly those with emotional behavioral disabilities, the relationship-driven approach at the heart of RP can foster healthier relationships between students and teachers which may result in in improved social-emotional and academic outcomes (Forsberg & Leko, 2021, Van Loan & Garwood, 2020). In fact, RP circles can promote opportunities for developing social skills while adopting a more inclusive approach to addressing harmful behavior (Forsberg & Leko 2021; Kline 2016). Students with behavioral disabilities often engage in externalizing behaviors that lead to punishment. RP shifts how teachers respond to challenging behavior from punitive and exclusionary consequences to active accountability with the goal of promoting student engagement and inclusion (Forsberg & Leko, 2021). While RP holds promise there are concerns about the degree to which these approaches are efficacious to youth with disabilities, particularly youth with language or communication challenges as the RP community circle is largely predicated on verbal communication (Meredith & Sellman, 2013).

Scholars have raised questions about the degree to which the practice of RP is accessible to students with disabilities and the degree to which RP if implemented unethically can cause harm to youth with disabilities (Kervick et al., 2019). One ableist structure of RP is the reliance on verbal communication and the ability to take perspectives. Sitting in a community building circle requires the ability to self-regulate, take turns effectively and listen intently to others. While students with ability privilege readily engage in these skills, they can be challenging for students with disabilities who may have difficulties with self-regulation, expressive and receptive language and interpreting social behavior. Kervick and colleagues (2020) suggest that classroom teachers and special educators must intentionally attend to accessibility of RP to ensure that students with disabilities are fully included in the practice of RP. In addition, teachers implementing RP circles, particularly circles that are in response to a particular behavior of concern need to be mindful of the Family Educational Rights and Privacy Act (FERPA), particularly if the behavior being problem-solved is one related to a student's disability.

We need to better understand how students with disabilities are accessing and experiencing RP circles to evaluate the degree to which RP might be effective for shifting responses to behavior away from punitive and exclusionary practices. A recent study examining student perspectives on RP circles reported that students participating in RP circles appreciated that circles foster communication, facilitate their ability to express thoughts and feelings and to practice perspective taking (Skrzypek et al., 2020). However, we were unable to find any U.S. studies that specifically examine the perspective of students with disabilities on RP circle participation in comparison to peers without disabilities. Given the touted promise of schoolwide RP to disrupt and improve documented disparities in exclusionary discipline experienced by marginalized student groups, a lack of explicit, intentional, and anti-ableist focus on RP implementation experiences of students with disabilities is a glaring omission in the RP literature and applied implementation field.

Purpose of this Study

The purpose of this study is to examine the experiences of students with disabilities within a school district that is five years into the process of implementing RP. In their recent report on RP implementation measurement, Darling-Hammond & Gregory (2023) note that evaluation of RP implementation requires a multi-dimensional approach over time, including gathering data to analyze structures supporting RP implementation as well as the ways in which RP is being integrated into school culture. Importantly, they remind that changing practices and culture in a school take time and this work is impacted by ever changing conditions and priorities in school systems. Therefore, systematic and intentional approaches to data collection and measurement of RP implementation enables researchers and school leaders to identify both bright spots and areas in need of targeted assistance. The district has been gathering student and staff survey data district-wide for five years and through our analysis of survey responses we aim to understand student perceptions of RP circles as well as their overall sense of belonging and quality of relationships with teachers. This mixed methods study adds to a conspicuous gap in the school-based RP literature by centering student voice through examining students with disabilities self-reported experiences with RP circle participation, sense of belonging and quality of relationships with teachers in comparison to their peers without disabilities. Through our analysis we hope to

provide insight into the following research questions and add to the literature examining RP implementation efficacy for youth with disabilities:

- How do students who self-identify as receiving special education or support services report their level of satisfaction with RP circle participation? How does this compare to their peers who do not identify as receiving special education or support services?
- How do students who self-identify as receiving special education or support services report their sense of belonging within a school implementing RP circles? How does this compare to their peers who do not identify as receiving special education or support services?
- What do students who self-identify as receiving special education or support services like about RP circles and what do they report disliking?

Methods

Context

This study is part of a multi-year mixed methods Community Based Participatory Research (CBPR) university-school district partnership evaluating the implementation of RP to improve school climate, reduce exclusionary discipline disparities and improve academic outcomes (Garnett et al., 2019). Our community partner school district is racially and ethnically diverse with a substantial population of BIPOC and new American students who are English Learners in part due to over 15 years of refugee resettlement. BIPOC families represent 38% of the overall student population, with over forty languages spoken within the community (Burlington School District, 2020). Data reported from the district in 2020 indicates that approximately 20% of the student population is receiving special education services.

The data for this study draws from the Student RP Experience and Equity Scale (Davis Simpfenderfer et al., 2023), administered in the School District between April-May of 2021 to all School District Students in grades 3-12th grade (N =1676), across 12 schools/sites. The Student RP Experience and Equity Scale student survey was developed to understand how students, in grades 3-12, are experiencing RP circle participation, adult responses to misbehavior, school climate and belongingness, as well as experiences of microaggressions and discrimination. Drawing heavily from the *RP-Assess: RP Student Use Scale* developed by Gregory (2017) to measure the quantity and student responsiveness to RP strategies, the student survey included 6 of the original 7 items from the RP -Assess: RP Student Use survey with additional questions from the School-Based Racial and Ethnic Microaggressions scale (Keels et al., 2017), the PBIS Student Satisfaction Survey (Center for PBIS, 2022), Chicago Public School's Impact of RP Student Survey (Chicago Public Schools, 2017), and originally designed questions from the school community (Moore, 2019; Garnett et al., 2020). To further elevate student voice, we included two short response open ended questions in the Spring 2021 survey: "What do you like about RP circles?" and "What don't you like about RP circles?" The Student RP Experience and Equity Scale, administered to students in grades 3-12, included three subsections measuring 1) student RP exposure, experiences and attitudes, 2) microaggressions and student connection to school community and 3) student wellbeing, for a total of 25 questions with Likert scale response options from 1 ("not at all") to 5 ("always"), with an option for students to indicate "I don't know". In addition to providing school name and grade, students completed an optional set of questions about their socio-demographics including information about 1) race/ethnicity, 2)

gender, 3) home language, and 4) special education services received. The response options for student social identities were heavily vetted with school community partners and youth leadership teams to ensure inclusive student-centered and culturally responsive language. Student self-reported receipt of special education services was asked through this question, "Do you have an IEP or receive special education services or other supports" with response options including "Yes", "No" or "I don't know".

Sample and Participants

The data analyzed for this paper focuses on a sub-set of the overall student survey responses (n=638) in grades 3-12. As this current study is centrally interested in exploring the perceptions of students with disabilities experiences of RP circles, we enforced two inclusion criteria for the analytic sample reflecting our interest in exploring RP circle participation experiences among students indicating that they have an IEP or receive educational support services. The students in our analytic sample must have indicated that they had participated in at least one RP circle in the past year as well as indicating "yes" or "no" to the question about having an IEP or other educational support services. Students who responded "I don't know" or who did not complete the question about IEP/receipt of support services were further excluded from the analytic sample. We chose not to analyze the responses of students who left that item blank, acknowledging it would be unfair to assume that they either do or do not receive IEP or other support services. Figure 1 details the process by which we arrived at our analytic sample, N=638.

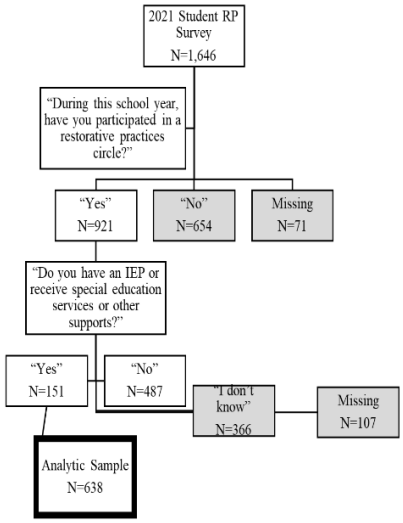

Figure 1: Analytic Sample Inclusion Criteria

In summary, of the 638 respondents we analyzed Likert survey responses for, 151 students reported receiving IEP or other support services and will be referred to throughout the remainder of the paper as students receiving support services (SRSS). The 487 respondents who indicated that they do not receive IEP or other support services will be referred to as students without support services (SWSS). Table 1 provides additional demographic information for the sample of participants.

Table 1
Sample Demographics (N=638)

Demographic	SRSS	SWSS
	%	%
Race/Ethnicity		
Am Indian/AN	7.64%	2.81%
Asian/Asian Am	8.33%	9.74%
Black/African Am	19.44%	12.12%
African	23.61%	13.64%
Hispanic	2.78%	2.38%
Native Hi/PI	<1%	0.00%
White	51.39%	59.09%
Multi-racial	1.39%	4.76%
Self Describe		
Grade		
Elementary	52.98%	50.92%
Middle School	26.49%	35.52%
High School	20.53%	13.55%
Gender		
He/Him	52.32%	46.41%
She/Her	44.37%	49.28%
Non-Binary	1.99%	2.46%
Home language		
English	77.48%	82.82%
Other	22.52%	17.18%

Data Collection

This specific study draws on a convergent mixed methods design in which quantitative and qualitative data were gathered concurrently through a single source survey that included both Likert scale items and open-ended questions (Creswell & Clark, 2018). The qualitative data generated from the student open-ended survey questions is used to triangulate and extend quantitative findings on student experiences and attitudes towards RP community building circles and school climate and connection. Findings are visualized (Fetters & Guetterman, 2021) and narratively arrayed to discuss areas of convergence and divergence between the student quantitative responses and qualitative open-ended responses to produce meta inferences regarding experiences and perceptions of RP community circles. Across all 12 school sites, 63% (N= 1,676) of students in grades 3-12 completed the 2021 survey with response rates ranging from 19%-99%, with elementary schools having the highest rate of school building response rates. Because the school district, administers, collects, and maintains the survey and associated data, our study was designated secondary data analysis and therefore, non-human subjects

research by the university IRB in September 2021. De-identified data was shared with the research team through a data sharing agreement as part of the multi-year research partnership MOU with the district.

Data Analysis

To examine if there were differences in experiences between students receiving support services (SRSS) and students without support services (SWSS) descriptive statistics and independent sample *t*-tests were run on each item within the Student RP Experience and Equity Scale. The *t*-tests allow for the examination of differences in the mean scores between populations to determine if they are significantly different than what would be expected due to random chance (Kranzler, 2017). Additionally, Cohen's *d* was calculated for those items that were significant to measure the effect size of the difference in students' experiences (0.2 - < 0.5 = small, 0.5 - < 0.8 = medium, ≥ 0.8 = large; Cohen, 1988).

For qualitative data analysis, the first author on the study examined student responses to two open-ended survey questions: (a). *What do you like about RP Circles?* and (b). *What do you dislike about RP Circles?* The raw data was first sorted into two excel spreadsheets of responses, *SRSS* and *SWSS*. Any responses that were blank were removed prior to beginning a manual open coding process. The response rates for the open-ended questions were 21% SRSS (n=135) and 69% SWSS(n=439). First cycle coding involved reading the student survey responses and assigning descriptive or in vivo codes. Descriptive codes summarized student responses with short phrases that captured the "topic" of the response. Sometimes these short phrases utilized the students' own words in assigning an in vivo code (Saldaña, 2009). After this initial coding phase, codes were then organized and grouped into structural codes. Structural codes can be useful as a categorization technique (Saldaña, 2009) and in this study we utilized that strategy to then engage in magnitude coding to understand both the strength of certain codes within those categories as well as to compare differences between the two comparison groups. First cycle coding resulted in 37 unique codes that were organized into five larger structural code categories:

- How Circles Make You Feel
- Ways in Which Circles Enhance or Impede Community/Relationship Building
- Appreciations and Concerns about Circle Structure and Format
- Utility of Circles
- General Impressions of Circles

Magnitude of codes was measured by calculating the percentages of the number of respondents for a particular code based on the total n. After these procedures were completed the first author consulted with co-authors to share initial findings from this round of coding to ensure conceptual and methodological alignment between the quantitative survey and the open-ended response coding schema. In a recent publication, Davis Simpfenderfer and colleagues (2023) describe the psychometric validation of the Student RP Experience and Equity Scale in greater detail, with preliminary results of the exploratory and confirmatory factor analysis indicating a five-factor structure to the quantitative student RP survey. As thus, we utilized the initial quantitative results to inform qualitative analysis procedures, leveraging the methodological rigor of a mixed methods design, as we decided to engage in second cycle coding to specifically look at the degree to which the qualitative data generated insights into what students reported liking about

circles in relationship to the five factors that were generated in the quantitative data analysis. Second cycle coding therefore involved aligning the first cycle codes with the conceptual framework of the five factors through focused coding procedures (Saldaña, 2009). Specifically, the five factors with corresponding description included:

- **RP Benefit:** work better, enjoy, calming, connections
- **RP Quality**: feel listened to, safe, sharing ideas/experiences/feelings, student participation/leadership
- **School Support:** problem solving, feel treated fairly, respected, adults care
- **Repair Harm:** when misbehaving, feel respected, teachers ask questions, if cause harm given chance to make it right
- **Feeling Left Out**: feeling left out/excluded due to identity by adults or peers

This resulted in reallocation of 9 first cycle codes into three of the five factors (figure 2). Two of the factors, *repair harm* and *feeling left out* did not align with any of the student responses to the open-ended survey questions so we focused our analysis for the second cycle on the responses to the question What do you Like about RP Circles. The omission of these two factors make sense because they are macro level items focusing on overall school climate and not solely related to RP.

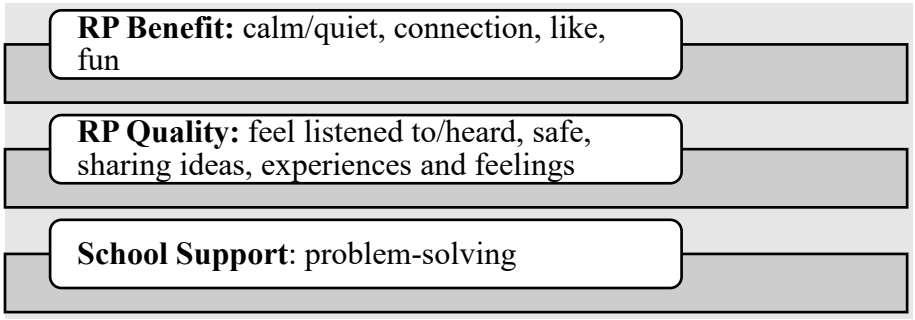

Figure 2: Alignment of Invivo Codes with Factor Categories from Factor Analysis

In the results section we report: (a.) magnitude of selected codes with student quotes from second cycle coding and explore how the student responses provide additional insight into a subset of the descriptive statistical analysis and (b.) additional contextual data with quotes that broadly illuminate key insights from students on their perspectives on circle participation. Our goal in providing this additional qualitative analysis is to provide more insight into student perspectives and add an additional layer of interpretation and meaning making of the descriptive statistical analysis showcasing the methodological complementarity of examining a phenomenon from multiple methodological viewpoints (Creswell & Clark, 2018).

Results

Descriptive Statistics

Of the 638 students in grades 3-12 who responded to the survey, 151 self-identified as SRSS and 487 as SWSS. Table 2 presents each survey item and the t-test statistical analysis of Likert scale

responses on how students report their experiences with participating in RP circles as well as broader perceptions of school climate.

Table 2
Student Experiences with RP Circles and School Climate by Student Self-Reported Status

Survey Item	n	mean	SRSS mean	SWSS mean	t-test[1]
1. I feel I am listened to during RP circles.	565	4.11	3.90	4.18	**
2. Doing RP circles has helped me work better with others.	550	3.25	3.56	3.15	**
3. I feel safe participating in RP circles.	604	4.30	4.21	4.33	
4. I enjoy my time in RP circles.	619	3.44	3.57	3.40	
5. Being in an RP circle helps me calm down and think more clearly.	589	3.23	3.34	3.19	
6. My teacher uses RP circles as a time for us to share feelings, ideas, and experiences.	600	4.14	4.14	4.15	
7. During RP circles, I am making connections with students I wasn't friends with before.	576	2.89	3.18	2.81	**
8. Students are encouraged to take part in helping run classroom RP circles.	557	3.41	3.37	3.42	
9. Frequency of RP	473	1.87	2.02	1.82	
10. If l have a problem, there are adults in the school I can talk to.	600	4.17	4.16	4.17	
11. The adults at school treat me and others fairly.	622	4.41	4.38	4.42	
12. I feel respected by the adults at school.	624	4.30	4.29	4.31	
13. Our school shows respect for people from all backgrounds and cultures.	615	4.60	4.40	4.41	
14. At this school, there are adults who care about what happens to me.	595	4.41	4.54	4.62	
15. I feel left out by adults because of who I am.	588	1.38	1.65	1.29	***
16. I feel left out by peers because of who I am.	600	1.58	1.73	1.53	*
17. If I misbehave, my teachers treat me with respect, are calm, and are open to what I have to say.	499	3.90	3.67	3.98	*
18. If I misbehave, my teachers ask me questions to hear my side of the story.	491	3.86	3.85	3.86	
19. If I cause harm, I am given an opportunity to understand the harm and make it right.	420	4.09	4.03	4.11	

[1] Significant t-tests at p-value <0.05*, <0.01** and <0.001***

For the first question which asked students to report whether they felt listened to in circles, SRSS had a statistically significant lower mean score that their counterparts indicating that they don't feel listened to at the same rate, however when asked in question 2 whether RP circles help students work better with others, SRSS reported a statistically significant higher level of agreement than SWSS. It's important to note that the effect size for both questions was .34 and .35 respectively, suggesting a small impact. When asked whether RP circles facilitated making

connections with students who they weren't connected to before, the difference was statistically significant when comparing the responses of SRSS and SWSS. The SRSS agreed more strongly than SWSS that RP Circles help them build connections with less familiar peers, but again the effect size was small (.33). Questions 9-14 did not reveal any statistically significant differences between the two groups, suggesting that RP circles are not working differently for SRSS and SWSS. At the micro level, responses to questions 1, 2 and 7, suggest that SRSS are receiving benefits from RP circles, while at the same time, the significant differences between the responses of the two groups suggests that some improvement is needed, particularly around the degree to which SRSS feel listened to.

Shifting to the macro level and students experience with the overall school environment, questions 15-17 asked students to evaluate the degree to which they feel a sense of belonging and to indicate whether they feel excluded due to their identity by either peers or adults. Additionally, students were asked to reflect on whether teachers treated them respectfully during instances of misbehavior. SRSS felt more left out by adults and peers than SWSS, with a greater effect size having been found for SRSS feeling left out by adults than peers (.46 and .23 respectively). SRSS indicated that they felt less respected by teachers during instances of misbehavior than SWSS, although again the effect size was small (.28). These findings suggest some mixed experiences in terms of how SRSS and SWSS are experiencing their relationships with adults and peers, with the finding that SRSS feel moderately more left out by adults being the most notable. Broadly, it also appears that all students are reporting higher levels of agreement with questions related to feeling respected while simultaneously reporting higher levels of disagreement with feeling left out of the school community.

Open-ended Responses

What do you Like about RP Circles?

Table 3 is a joint display in which the student quotes are arrayed showcasing alignment with the following factors from the quantitative five factor analysis: *RP Benefits, RP Quality* and *School Support*.

Table 3

Examining Selected Factors related to what Students Like about Circles

Factor	SRSS Quotes	SWSS Quotes
RP Benefit		
Calm/quiet	That everyone is calm and focused on the person talking	They calm me down and make me think more clearly during the day
	Peaceful…helps me calm down	I like when its quiet, and it sometimes feels good to share my feelings, and it usually helps me feel calm
Connection	Talking and connecting with others and to understand them	I like how it is a time I could chill and talk/connect with others
	Making connections	It helps connect with other students
Like	Everything	I like answering questions

	I like RP because it teaches me how to be kind	Everything about it
Fun	We get to answer fun questions We get to play games	We get to do fun activities and greetings I can answer however I want and it's fun to listen to other people answers
RP Quality		
Listened to/heard	You get to talk and other people will listen That they listen to me	What I like about RP circles is that everyone gets a chance to speak and everything that you say gets heard That people will almost always listen to you
Safe	It's a safe place That I feel safe	I like that all of our voices are heard in a communal space, and we delve safely into hard topics How safe and welcomed when I am RP circles
Sharing ideas/experiences/feelings	That every one is together and sharing ideas. I like that we can share how we feel	I like how we can share our thoughts and communicate with ideas. The fact that we get to share our thoughts
School Support		
Problem Solving	That we can help people	I like having the opportunity to talk to someone about problems we can fix

Coding of the student responses revealed a few shared reasons that both groups of students' report liking circles including the fact that RP circles can feel calming, build connection with others and can be fun leading them to "like" the circle experience. They also reported enjoying the opportunity to be listened to and to hear others' ideas through sharing feelings and personal experiences and the safety that ensues. Diving more deeply into the magnitude of the responses reveals some variation in how the two groups of students reported these positive descriptors of circles. For the factor *RP Benefit*, SRSS (33%) and SWSS (34%) reported similar rates of the factors (calm, quiet, connection, like, fun) in their responses. Within RP Benefit there were some

subtle variations in that while both groups reported similar percentages of appreciating the connection RP circles provided, SRSS (15%) reported higher percentages of feeling that a benefit of circles is that they foster calm than SWSS (9%). More students SRSS (7%) report circles as *fun* than SWSS (4%). However, to the degree that students reported "liking" circles and specifically noted appreciation for the structure of how circles are implemented, SWSS (13%) indicated stronger preferences for this RP benefit than SRSS (6%).

Within the category of *RP Quality*, SRSS (41%) reported similar rates of responses identifying factors (listened to/heard, safe, sharing ideas/experiences/feelings) of *RP quality* as a reason they liked circles when compared to SWSS (40%). A common response in this category was students appreciating sharing (SRSS 22% and SWSS 21%) and hearing from peers (10% for both SRSS and SWSS), which is also an area of agreement reflected in the *t*-test analysis, which suggests that overall RP circles are facilitating connection among students in ways that enable them to share and be heard by others which students mostly seem to enjoy. It appears however that a slightly higher percentage of SWSS (5%) named safety as one reason they like circles when compared to SRSS (2%). When analyzing student responses around the sub-code of feeling heard/listened to, more SRSS (6%) report that they feel listened to/heard than SWSS (3%) which is interesting because it contrasts the quantitative survey data results where SWSS report higher levels of agreement with the statement that they feel listened to during circles.

The category of *School Support* was not as strongly represented in the qualitative responses. Although both groups of students did have some respondents that specifically mentioned problem-solving, the rates of naming this characteristic had a more significant discrepancy (SRSS, 1% and SWSS 16%).

What do you Dislike about RP Circles

Analyzing the responses to the question exploring what students do not like about circles, resulted in an almost equal number of SRSS (11%) and SWSS (12%) reporting that what they disliked about circles was feeling uncomfortable and awkward. One student who identifies as a SRSS said, ‘Sometimes they make me insecure or just uncomfortable.’ Similarly, a SWSS said, ‘I don't like how they can get a little intense if we are talking about a hard topic like racism.’ The percentages of students in both groups were similar regarding disliking circles due to experiences of disruption and interruption during the circle process (SRSS, 7% and SWSS, 8%). One SRSS responded, ‘I don’t like when people talk over me'. Relatedly, SWSS described, ‘I don't like how sometimes kids will talk when other kids are talking'.

An interesting response that came up in response to the question about disliking circles was that a larger number of SRSS reported feeling pressure to speak and named that as a reason for disliking (9% vs. 4%). One SRSS stated, ‘I don't like feeling of being forced to participate in the circle.’ A greater number of SWSS (15%) reported that they disliked circles because they were 'boring' or 'too long' when compared to SRSS (10%). Students across both groups (10%) reported equal concerns about how circles are structured both in terms of frequency and the circle processes. One SWSS remarked, "ours are very structured and not engaging". A SRSS commented, "you have to be still." Lastly, as far as an overall impression SRSS and SWSS shared an equal percentage (10%) of comments indicating they dislike circles overall. Given that so many SRSS and SWSS identified circles being too long or boring as reasons they dislike

circles may suggest that they are not experiencing circles as meaningfully as they could. More dialogue with students to unpack how they experience RP circles is an important next step.

Discussion

Broadly the results indicate that the implementation of RP circles yield intended outcomes in that both SRSS and SWSS are reporting a relatively positive assessment of their experiences with circles on both the Likert scale items and in their open-ended responses. Students in both groups indicate that for the most part they are experiencing belonging within the school setting. Most notably, RP circles appear to foster connection with peers through providing dedicated time to sharing ideas and feelings. Yet when examining responses to the open-ended questions there is a mixed story. On the one hand SRSS indicate enjoying their time in circles and on the other report feeling more pressure to speak than SWSS. This is of particular concern through the lens of accessibility and inclusion. Could the requirement for verbal participation during an RP circle be a barrier to students for whom verbal communication is more challenging, and if so, this is a particular area where educators must aim to reduce that barrier through accommodations and modifications to the circle process (Kervick et al., 2020).

The open-ended responses shed additional light onto some of the reasons why students across both groups report disliking circles, including the length of circles and instances of disruptive behavior. While circles can have a positive benefit of creating a sense of calm and quiet for students, this can be countered if circle norms aren't being followed resulting in interruptions. There are also some discrepancies in how students are reporting their experiences. For example, in the open-ended responses SRSS (6%) reported slightly higher percentages of feeling listened to or heard than SWSS (3%). Whereas in the Likert scale items, SRSS indicated that they *feel listened to* a lesser degree than SWSS. While positively, both groups report in their responses to the open-ended questions that *connection* is something they like about RP circle participation, on the Likert scale SRSS report that they *feel left out* by both peers and adults to a higher degree in school. Careful attention to how RP is implemented beyond even the utilization of circles to foster a more inclusive school climate is essential for ensuring that students with disabilities are feeling connected within the broader school community.

Gregory and colleagues (2021) advocate for centering equity in school discipline. They discuss the ways in which efforts to reform school disciplinary approaches fall short if they disregard institutional oppression, the need for social and emotional support and providing students the opportunities to learn. In considering some of the findings from this study, SRSS are indicating that they feel a sense of belonging and enjoy circle participation but simultaneously express concerns about interactions with teachers during times of behavioral misconduct and when feeling pressured to speak in circles. This raises questions about how schools can critically examine implementation of RP through asking the questions: are these practices reinforcing ableist structures? Are just and equitable social and emotional behavioral supports and accommodations in place to fully include SRSS in circle processes? Special educators play an active role in partnering with general educators in delivering individualized educational supports and services to support children with disabilities in accessing the general education curriculum. Utilizing special educators as allies in assessing the efficacy of RP approaches to ensure accessibility for students with disabilities is key (Moore, 2021). This is particularly important as

RP can serve as vehicle for supporting social skill development and building social emotional competence (Evanovich et al., 2020), particularly when aligned with other SEL interventions (Gregory et al., 2021) and the need to ensure IEPs address behavioral support and services. Further, one of the benefits that SRSS reported in this study is "feeling listened to or heard". In a case study exploring the perspective of special educators on the value of RP implementation for youth with disabilities, Moore (2021) reported that RP circles can facilitate a moment where "students with disabilities experience empowerment while they get to honestly share their lived experience." These RP related experiences contrast with times when SRSS may experience an over-regulated rules-based approach. However, adults must intentionally commit to understanding the unique needs of SRSS and how to modify their approaches to facilitating circles and responding to behavioral misconduct in ways that are truly restorative and inclusive.

Limitations

One of the primary limitations of the study has to do with the fact that our analytic sample was significantly lower than the overall number of student respondents. In the future, it will be important as the district moves forward to ensure that students understand the identity marker questions. Many students indicated that they "did not know" if they were receiving IEP or other support services. This confusion prompted them to leave it blank or indicate 'I don't know' which reduced the size of our comparison sample. Moreover, there weren't accommodations built into the survey administration (e.g., use of talk to text technology). Given that students who may receive accommodations for writing are likely represented in the sample, there is a question about the degree to which the survey itself was accessible to students with disabilities. Another limitation is that the open-ended questions typically generated single word or sentence responses. Opportunities to explore more deeply how students experience circle processes through conducting student focus groups will be important for generating a more complex picture of the overall student perspective. Lastly, these data were collected in a single school district. As RP is not a curriculum but a framework, the degree to which there may be variances in how circles are implemented across grade levels, individual school buildings and/or in comparison of RP implementation and student experience to other schools around the U.S. or internationally is going to vary significantly.

Implications for Practice and Future Research

It is incredibly important for practitioners of RP to consider the perspectives of traditionally marginalized students in how RP circles are implemented and in evaluating the efficacy of RP in reducing exclusionary discipline and fostering positive school climate. While outcome data may suggest positive trends within school systems implementing RP, student perceptions of RP and the degree to which it is accessible to all students is critical. Furthermore, when schools decide to embark on RP evaluation, asking students to share their likes and dislikes reveals valuable feedback for improving implementation. As school professionals leading RP seek to refine practice, gathering additional student information is key. As such we believe extending this type of study to include focus groups with students, particularly of differing identify groups along with direct observation of RP circles will provide further insight as to the degree to which RP can be efficacious for and inclusive of students with disabilities.

Attending to how circles are structured to help students engage in ways they feel comfortable is important, particularly given that both groups of students cited one of the things they like about

circles is the chance to share ideas, listen to others and be heard. Further investigation through focus groups or targeted interviewing will clarify some of the reactions of students in response to these questions. There were students in both groups who reported disliking circles by saying they hate "everything" and in contrast liking circles by saying they like "everything"—unpacking this will help teachers design and implement circles in ways that attend to the needs of all their participants and to ensure that circles don't unintentionally feel punitive.

As more districts move towards implementation of RP, this study also highlights the importance of understanding the circle experience for different groups of students, such as students with disabilities to parse out this specific prong of RP implementation. A whole school restorative approach includes many aspects beyond circles and intentionally evaluating these various aspects, such as circle experience, will better help districts and RP staff within these districts know where to focus professional development and funding as they seek to further the efficacy of their holistic RP implementation.

Conclusion

To realize the potential of RP to reduce exclusionary disciplinary practices which disproportionality impact youth with disabilities, it is critical to go beyond suspension rate data and broader measures of school climate. Examining student survey data by identity groups provides a more intimate look as how students within those groups are experiencing RP implementation and the degree to which more broadly RP is enhancing student belonging and relationships with peers and adults. This study adds to the literature by taking an initial step towards understanding how students with disabilities report their participation with RP circles. While overall, it seems that they are reaping the benefits of district-wide RP implementation, there is still more work to do to ensure that RP is accessible, anti-ablest, and aligns with effectively including students with disabilities in all facets of schooling.

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Improving Transitions from Early Intervention (EI) to School: Strategies to Decrease Caregiver Stress and Increase Collaboration Between Families and School Professionals

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Abstract

Early intervention (EI) plays a crucial role in supporting infants and toddlers with developmental needs and helping families understand how to meet their child's needs. However, once a child reaches the age of three, these services come to an end and families must transition to school services. Surprisingly, there is a lack of research focusing on how families perceive this transition from EI to school services. To fill this gap in the literature, a qualitative study was conducted, involving semi-structured interviews with 14 parents. This study aimed to explore the transition process and the experiences of parents during this crucial phase. The results indicate that parents generally had positive experiences with EI, particularly with the EI team. However, a noteworthy finding was that parents reported heightened stress levels during the transition from EI to school services. They often relied on EI and school professionals to navigate the system and secure services, with limited involvement in the Individualized Education Program (IEP) process. These findings have important implications for both research and practice in the field.

Improving Transitions from Early Intervention (EI) to School: Strategies to Decrease Caregiver Stress and Increase Collaboration Between Families and School Professionals

The aim of early intervention (EI) is to address the developmental needs of infants and toddlers (i.e., children from birth through 3 years of age) with developmental delays or disabilities, and to help families better understand how to meet their child's needs (Individuals with Disabilities Education Act [IDEA], 2004). Such EI services may include speech and language therapy, behavioral therapy, occupational therapy, physical therapy, and other types of services that can meet the developmental needs of children. Although the federal government terminates EI services at age three (IDEA 2004), each state has the option to extend EI beyond age three through kindergarten (*§303.211).* IDEA (2004) mandates that every child who receives Part C services, is found eligible for Part B services, and accepts those services, must have their Part B services in place by the child's third birthday. Part B includes provisions that assist states in providing children with disabilities, ages three through 21, a free appropriate public education (Early Childhood Technical Assistance Center [ECTA], 2022; IDEA, 2004). Specifically, a transition meeting must be held at least 90 days before the child's 3rd birthday to determine the child's next program. Transition services help infants with disabilities and their families experience a smooth and effective transition from the early intervention program, under Part C, to the child's next program or next appropriate services, including services under Part B (Division for Early Childhood [DEC], 2014). For example, pre-transition support for families may include helping families understand the differences between Part C and Part B services and making sure they are aware of the various childhood developmental stages and sequence of

interventions and strategies used by service providers in schools (McCorkle & Diamond, 2022). Effective collaboration and partnerships with families are recommended practices for service providers (Division for Early Childhood [DEC], 2014; Early Childhood Technical Assistance Center [ECTA], 2022).

In addition to ensuring that young children with disabilities receive appropriate services, the premise of IDEA (2004) is that caregivers are equal partners in the EI process, including the transition from EI to school services. Caregivers of young children with disabilities are particularly vulnerable when there is less familial involvement in decision making with professionals (Vohra et al., 2016) and report more difficulty accessing disability services (Mueller et al., 2009). For example, caregivers operating without support from school personnel often encounter systemic barriers such as the level of readability of procedural safeguards (Mandic et al., 2012) and logistical challenges (e.g., lack of transportation and childcare to attend IEP meetings; Leiter & Krauss, 2004). Research and best practices recommend increased communication and collaboration between EI personnel, school personnel, and the child's family (Fontil et al., 2019; Pianta & Kraft-Sayre, 2003) for successful school transition from EI to school services. Studies show that families feel supported during the EI transition to school services when they have enough information to make informed decisions (Smalley & Reye-Blanes, 2001) and when families report having a strong family-school partnership (Burke & Hodapp, 2014). However, many caregivers report they would like to be more involved in their child's transition to school services but face barriers to collaboration (Buren et al., 2018). Some families report struggling to access school services (Ocasio-Stoutenburg & Harry, 2021). Others describe barriers such as the inability to navigate special education jargon, having a limited understanding of the school systems, or lacking information and resources to participate as equal partners in the transition process (Smalley & Reye-Blanes, 2001; Waters & Friesen, 2019). Such barriers may lead to caregivers lacking the time, effort, or ability to collaborate with the school (Harry & Occasion-Stoutenburg, 2020). Furthermore, extant research demonstrates that there is a connection between special education experiences and parent stress (Rios et al., 2020). Specifically, working caregivers of young children with disabilities have reported stress on their time, lack of resources, and ability to manage parenting and homeschooling (Fontanesi et al., 2020).

Caregivers

For this study, 14 caregivers from a Midwestern state were interviewed over the phone and completed a demographic questionnaire. To qualify for the study, caregivers had to have a child who received early intervention services, went through the early intervention transition process, and is currently receiving school services. On average, participants were 40 years of age. The majority of participants (52.4% or n =11) identified as Latinx and were female (95% or n =20). The majority of participants' children were male (66.7%; n = 14). In addition, most of the children's primary disability was a speech and language impairment (66.7%; n = 14). Some children had additional disabilities.

Purpose of the Study

The purpose of this study was to explore how caregivers of children with disabilities experienced the transition process from early intervention services to school services. Using semi-structured interviews, field notes, and observations, this study explored the caregivers' experiences with

early intervention services, the EI team, the transition meeting, the IEP meeting, and school personnel. The study attempted to answer the following research questions: (1) How do caregivers of children with disabilities characterize their experiences transitioning from early intervention to school services? And, (2) What is the role of stress on parents of children with disabilities during the transition from early intervention services to school services?

Findings, Key Takeaways, and Practical Recommendations

Domain A: Parent Experiences with the Transition from EI Services to School Services
Three themes emerged from the caregivers' experiences with the transition from EI services to school services: (a) relationships with EI team members are important, (b) the transition meetings with school personnel were challenging, and (c) caregivers felt uncertain about the school services offered and the judgment of school personnel.

Before transitioning out to school services, participants reported having a positive experience with their child's EI services and team. Additionally, participants reported joining parent support groups to learn from other caregivers transitioning from EI to school services. For example:

> *Sasha, a devoted mother of three-year old Kayla, lives in a remote, rural area. From age 6 months to three, Kayla received occupational and physical therapy through early intervention (EI) services. After expressing dissatisfaction with Kayla's original physical therapist who was assigned because they lived near the family but did not have experience working with children, Sasha advocated for a different therapist. The EI coordinator listened and responded to Sasha's concerns by providing someone who specializes in children's therapy and was willing to drive an hour to reach the family's rural home. From the beginning of the early intervention, Sasha was an active member of the team and an advocate for her daughter. She felt accepted and heard by the EI coordinator and therapists. When the team met to discuss her daughter, Sasha explained her perceptions of the team dynamics, "It felt like they, both the coordinator and the therapist, were accepting of me being the advocate for Kayla. I felt like they listened well."*

Recommendations
Schools may consider working on building positive relationships with caregivers of children with disabilities by focusing on open communication, building trust, increasing transparency, and addressing concerns in a clear and timely fashion (Buren et al., 2021). Expressly, school personnel should encourage families to seek guidance and information from local Parent Training and Information (PTI) Centers. To date, there is at least one PTI Center in every state to assist families of children with disabilities navigate the IEP process (IDEA, 2004). For example, after initially suggesting PTI Centers, school personnel should follow up with parents to inquire about their experiences or offer further support (National Parent Technical Assistance Center, 2016). This follow-up can be done through phone calls, emails, or in-person meetings, demonstrating the school's commitment to supporting families. Notably, school personnel can also offer individuals one-on-one meetings with parents. This can be an effective way to discuss their child's educational progress and any concerns they may have (Burke et al., 2016; Burke et al., 2019). During these meetings, school personnel can emphasize the benefits of connecting

with PTI Centers and even assist in making initial appointments if requested. See Table 1 for key takeaways and recommendations for findings in domain A.

Table 1
Key Takeaways and Recommendations for Domain A (caregiver experiences with the transition process)

Key takeaways
1. Caregivers reported the importance of relationships with EI team members. 2. Caregivers expressed that the transition meetings with school personnel were challenging. 3. During the transition meeting, caregivers felt uncertain about the school services offered and judged by school personnel.
Recommendations
1. Schools should provide support and resources to help caregivers understand the process transitioning from EI services (Part C) to School Services (Part B). 2. School personnel should encourage caregivers to connect to their local Parent Training and Information (PTI) Centers for guidance and information. 3. School districts should offer workshops for caregivers about the initial IEP and the transition process. 4. School personnel should follow up with parents to inquire about their experiences or offer further assistance in contacting their local PTI center. This follow up can be done through phone calls, emails, or in-person meetings.

Domain B: Experiences with Stress During the Transition Process

One theme emerged from caregivers' experiences with stress during the transition process: (a) participants experienced heightened stress during the transition process. Several participants reported feeling stress when they did not understand the process of transitioning from EI services to school services nor how to secure necessary special education services for their child. Additionally, some participants expressed concern over how school personnel would treat their family and how the teachers and students might react to their children with disabilities. Participants reported feeling worried their child would be judged by school personnel and ostracized in the classroom. When asked about stress levels during the transition from EI services to school services, multiple participants reported feeling confused about the steps of the process and the timeline of events. In addition, several participants reported feeling a heightened amount of stress when they attempted to secure the necessary support and services for their children. Some caregivers reported feeling additional stress when they met with school personnel because they worried what people would think about their family and their child with disabilities.

For example:

> *Katie's son experienced early intervention services during the pandemic. After successful telehealth therapy and a smooth transition to school services, Katie still expressed emotional stress over judgment from school professionals. She explained, "You always feel like somebody's judging you, especially when they know stuff that you don't know and they're experts at it, but maybe just the expertise difference was intimidating, but they were all super nice. That was totally on me. That was my own prejudice."*

Recommendations

As suggested by previous research (e.g., Rios et al., 2020; Rios & Buren, 2023), accessing school services is stressful for families. Given the lack of research on families' perception of the transition (i.e., initial IEP) process, this finding is alarming. This study also is consistent with previous research that the IEP process is likely to cause parental stress among families (Rios et al., 2020). As such, IEP team members may consider conducting a debrief meeting and/or pre-consultation meeting prior to the IEP meeting to help clarify any information. Special education teachers could consider developing a parent support group for caregivers of children with disabilities where caregivers can connect and build relationships with other caregivers. These support groups could provide an open and a safe space where those families can share with each other their experiences, challenges, and successes while navigating the IEP process and advocating for their children's unique needs (Burke et al., 2016). Moreover, families of children with an IEP can also benefit from the knowledge shared by peers in the support group. Those families will be able to receive emotional support and encouragement from other caregivers helping to alleviate feelings of isolation and stress and promote positive emotions (Buren et al., 2021).

Creating a parent support group for caregivers of children with disabilities can be a valuable resource. School personnel can follow a systematic approach to develop such a group effectively. First, school personnel can conduct a needs assessment or conduct surveys to identify the specific needs and interests of parents in the special education community. By gathering this information, school personnel can understand what topics or issues parents would like to address in the support group. School personnel can invite guest speakers, such as experts in special education, therapists, or community resources, to provide information and support during meetings (Walker et al., 2010). Notably, school personnel can regularly solicit feedback from parents to evaluate the effectiveness of the parent support group and make adjustments as needed based on parent input (Walker et al., 2010). Last, school personnel can continuously assess the impact of the support group on parents and their children with disabilities to ensure its sustainability by securing necessary resources and support. See Table 2 for key takeaways and recommendations for findings in domain B.

Table 2

Key Takeaways and Recommendations for Domain B (stress levels during the transition process)

Key takeaways
1. During the transition meeting caregivers experienced heightened levels of stress.

Recommendations
1. Schools should provide support and resources to help caregivers manage their stress throughout the IEP process, such as informational materials, pre-meeting consultations, and debriefing sessions. 2. Special education teachers should consider developing parent support groups, or workshops for families on stress management, coping strategies, and self-care practices. 3. School personnel can assess the impact of the parent support groups and make changes based on caregiver feedback.

Domain C: Factors that Decrease Familial Stress

Three themes emerged from the caregivers' experiences that assisted in decreasing stress during the transition process: (a) caregivers had outside resources and support, (b) caregivers had a strong knowledge of the special education system, and (c) having relationships with professional EI staff helped decrease stress levels. Several caregivers attributed low stress levels to resources such as family members who were available and willing to assist with daily childcare. This support lightened financial strain and increased flexibility with scheduling EI sessions. For example:

> *Sasha received support from family members, such as help with childcare, which decreased her stress levels during EI services and the transition to school. For Sasha, support during the transition to school included coordinated efforts to listen, address concerns, and ensure that families have a clear understanding of the process (Landmark et al., 2022;McCorkle & Diamond, 2022). In addition, she attributed her limited stress to a supportive family and resources, explaining, "I didn't feel like it was overly stressful. I think that we're really fortunate that we have good resources in our lives like grandparents who could be at home with her, so we didn't have a daycare thing to have to worry about, trying to plan services around." Sasha felt taken care of by the EI team and repeatedly expressed that she would miss the therapists and the support provided during early intervention.*

Further, caregivers with older children with disabilities or who worked in special education settings attributed their prior experience with special education systems to reduced levels of stress during the transition. Schools may consider providing families with training on the special education system, services and supports offered, and their rights and responsibilities before the transition meeting.

Last, caregivers with strong, professional relationships with EI therapists reported lower levels of stress during the transition to school. As such, participants further ascribed respectful interactions and positive relationships with school professionals to decreased stress levels. Notably, schools may consider professional development for school personnel around topics such as building relationships with families and the importance of providing families with information about special education services prior to the transition meeting.

Recommendations

Training for families. Schools can organize informational sessions or workshops for parents and caregivers. These can be held in person or virtually, and they should cover topics such as the special education system, available services and supports, and the rights and responsibilities of parents and students (Burke et al., 2016; Burke et al., 2019). These sessions should be accessible and offered at various times to accommodate parents' schedules. Notably, school personnel should ensure that training materials are available in multiple languages and accessible formats to accommodate diverse communities and individuals with disabilities (Shapiro et al., 2004). For example, school personnel can create a dedicated section on the school's website or a digital platform where families can access resources, webinars, videos, and written materials at their convenience.

Professional Development for School Personnel. With respect to professional development for school personnel, schools can provide workshops and training sessions for school personnel that address specific areas, such as building positive family-school partnerships, effective communication, and understanding the transition process (Rios & Buren, 2023). These should be tailored to the needs of different staff roles, including teachers, counselors, and administrators. Specifically, schools can incorporate practical, hands-on components in the professional development sessions such as role-play, case studies, and real-life scenarios that can help school personnel develop practical skills (Burke et al., 2016; Rios et al., 2021). In addition, guest speakers and experts can be invited to speak at such professional development sessions. Their expertise can enhance the quality of training (Hadar & Brody, 2010). Schools can then encourage open feedback from staff members about their training experiences and this feedback can be used to continually improve and adapt professional development programs. Effective professional development should be grounded in research and evidence-based practices to ensure that school personnel receive the most current and effective information.

Coordination and Responsibility. A designated special education coordinator or liaison within the school can take the lead in coordinating training for families and professional development for school personnel. Schools should work collaboratively with local education agencies, parent organizations, PTI Centers, and special education advocacy groups to ensure that training and professional development are comprehensive and well-coordinated. It is also important that schools establish feedback mechanisms that allow families and school personnel to provide input and suggestions for improving training and professional development programs. Such feedback should be used to make necessary adjustments and improvements. See Table 3 for key takeaways and recommendations for findings in domain C.

Table 3
Key Takeaways and Recommendations for Domain C (factors that decrease stress during the transition process)

Key takeaways

1. Caregivers with outside resources and support experienced less stress during the transition process.
2. Caregivers with a strong knowledge of the special education system also experienced decreased levels of stress during the transition.
3. Caregivers with collaborative relationships with school professionals and EI staff experienced limited stress.

Recommendations

Training for Families

1. Schools should provide training for caregivers to help them learn about the special education system and transition from EI services to school services.
2. Schools should consider professional development for school personnel on topics such as building collaborative relationships with families and strategies for successful transitions from EI to school.

Professional Development for School Personnel

1. Provide workshops and training sessions for school personnel that address specific areas such as: building positive family-school partnerships, effective communication, and understanding the transition process.
2. Invite experts in the field of special education, family, engagement, or communication to conduct professional development sessions.

Concluding Thoughts

There are many critical suggestions for practice. School professionals should consider forming strong partnerships with families during the initial IEP meeting, as this is the first encounter many families have with the school. Caregivers value collaborative partnerships with school professionals (Buren et al., 2021, Burke & Goldman, 2018) and believe in the importance of personal, caring relationships with teachers (Lalvani, 2019; Ocasio-Stoutenburg & Harry, 2021). When parent participants were asked how EI and school teams can better support families in the transition from EI to school services, several suggestions emerged. To begin, school teams should help caregivers feel included in the decision-making process with frequent communication and updates on service and placement decisions. Specifically, caregivers reported that EI providers offered clear communication and information on EI. Families report feeling like equal partners on a collaborative team when communication is reciprocal and happens on a regular basis (Buren et al., 2018; Ocasio-Stoutenburg & Harry, 2021). Additionally, participants suggest that practitioners increase communication amongst each other; EI teams and school teams should share information such as previous services provided, evaluation data, and professional opinions. Last, parent participants suggest the use of a representative, specifically a parent who experienced the transition process, to act as a guide. Research suggests that when caregivers form advocacy groups and teach one another how to navigate the special education system, caregivers feel supported (Burke & Goldman, 2018) with increased empowerment (Burke et al., 2016; Magaña et al., 2017). In conclusion, this study

provides key insights about the challenges facing families transitioning from EI to school services and the importance of communication and professional support during the experience.

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The Best Kept Secret: Readability and Accessibility of IEPs

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Abstract

Individualized education plans (IEPs) are to serve as a guideline for the supports and services a student with a disability needs to have access to the general education curriculum. State departments of education monitor the compliance of these programs within the public schools. This study found the materials that state departments use to inform parents and guardians about IEPs and their rights and responsibilities in the special education process are difficult to read and understand for most parents, which potentially limits the ability to advocate for their children. The implications of these findings suggest the parents' capacity for active participation in the IEP processes are diminished. Opportunities for improving collaboration and communication between schools and families are discussed.

Keywords: IEPs, disability, parents, readability

The Best Kept Secret: Readability and Accessibility of IEPs

Students with disabilities who receive special education and/or related services under the Individuals with Disabilities Education Act (IDEA) of 2004 (PL 108-446) have the right to an individualized education program (IEP) that specifies their goals, services, and accommodations. According to the United States National Center for Education Statistics (Irwin, et.al., 2023; Schaeffer, 2023), there were 7.3 million students ages 3-21 who received special education and/or related services under IDEA in 2021-2022, meaning that at least 7.3 million IEPs were developed and implemented in collaboration with parents and/or guardians, who have a vital role and responsibility in the IEP process. This population represents approximately 15% of the public school enrollment which was an increase of 2 % before the pandemic (Schaeffer, 2023).

As stated by Cadieux, Crooks, and King (2019), the IEP is a contract between the parents, schools, and students who are identified as having a disability which outlines how the school will address the student's educational needs through appropriate accommodations, program modifications, and/or alternative programs as well as specific instructional and assessment strategies. It is anticipated that with these accommodations or modifications, students will be able to achieve the learning outcomes as outlined within the curriculum—thus, leveling the playing field. Blackwell and Rossetti (2014) believe the IEP is the conceptual and practical intersection of policy, schools, and families of students with disabilities which serves as the foundation for effective special education and related services and positive student outcomes. When the IEP is viewed only as a perfunctory requirement, then a unique opportunity for developing and implementing meaningful educational experiences for students with disabilities will be missed, and the intentions of IDEA will not be fulfilled (Blackwell & Rossetti, 2014).

Since 1975, IDEA has been amended several times to strengthen and clarify the rights and responsibilities of parents and guardians in the IEP process. Parental involvement in the development of a student's IEP is both crucial and legally mandated; however, research suggests that parent participation during IEP meetings is relatively low compared to that of teachers and administrators (Martin et al., 2006). Zirkel and Hetrick (2016) provide a legal perspective of professional development and practice for the IEP process, noting that procedural violations in the parent participation category were the most frequently adjudicated. Research findings demonstrate parents' IEP satisfaction was positively associated with parent–school connectedness which furthermore supports the importance of parent–school relationships (Slade, Eisenhower, Carter, & Blancher, 2018).

IDEA empowers educators and parents to be collaborative partners for the betterment of the student in creating a shared vision of the child's educational plan. Parents want what is best for their children, but the world of disabilities is often mysterious with parents not knowing which way to turn for support (Cadieux, Crooks, & King, 2019). The materials provided by State Departments of Education are to serve as a resource to support them in their active participation in the IEP process. Many parents and guardians may not be fully informed or involved in the IEP process due to various barriers and challenges, such as lack of information, language differences, time constraints, negative attitudes, disagreements or simply not knowing their role (Rosas & Winterman, 2023; Slade, Eisenhower, Carter, & Blancher, 2018). To participate in the IEP meeting, parents are expected to advocate for their child, know their rights, be knowledgeable about school rules, and educational politics to be equal partners in the IEP process without formal training (Kupper, 2000; IDEA, 2004; and Zirkel & Hetrick, 2017). To assist parents in knowing their role and provide foundational support, State Departments of Education are charged with developing resource materials for parents to offer guidance as to best practices and minimum standards. Kupper (2000), developed IEP guidelines as a parent support in understanding the various aspects of the IEP document. Since then, states continue to expound on improved practices for IEP teaming. It is important for parents to have access to materials that are within their readability level which enables them to be more involved in their children's education, which can have a powerful impact on their outcomes. The significance of comprehensible and accessible IEP materials for parents and guardians necessitates an exploration of what states are currently providing. Therefore, the purpose of this study was to analyze the availability and readability level of informational materials on IEPs supporting parental rights and responsibilities published by State Departments of Education websites.

Smith (1984) offers that the Flesch Readability Scale is among the oldest and most widely recognized readability metric which speaks to the intuitive appeal and usefulness of reading ease based on sentence and word length. Its historical significance added to the credibility of its use. Given its significance as being the most tested and reliable formula in readability, the Flesch scale was incorporated in this study (DuBay, 2004). Flesch (1963) believed that no matter how complex the topic all writing should be conveyed in a manner that was easily read by the reader. Flesch developed his readability score by examining the average length of words and syllables in a sentence (Flesch, 1963; Smith, 1984). Easy-to-read texts have an average of eight words or less per sentence and standard writing has seventeen. The authors of this study utilized

Flesch's approach to examine the readability of the IEP resources available to parents to support their active engagement in the IEP development.

Methodology

Given the importance of the IEP and resource materials, it is essential that state departments of education provide comprehensible and accessible materials to educate and train parents and guardians on IEPs and their rights and responsibilities in the special education process. Therefore, the purpose of this study was to explore the availability and readability level of materials developed and published by state departments of education to inform parents and guardians about IEPs and their rights and responsibilities in the special education process. The following research questions guided this study:

1. What is the readability level of sample IEPs and materials on special education provided by state departments of education whose purpose is to provide training and education to parents and guardians who serve as advocates for children with disabilities?

2. What is the readability level of Parent Special Education Handbooks provided by State Departments of Education whose purpose is to provide training and education to parents and guardians who serve and advocate for children with disabilities?

3. Is there a difference in the readability level of IEPs vs. parent handbooks?

4. Are sample IEPs and information on special education available on state departments of education websites?

5. Do state departments of education provide IEP information in languages other than English?

6. Are IEPs and parent handbooks on state department websites easily accessible to consumers?

Research Design & Data Analysis

The research design of this study was descriptive and comparative. The researchers employed descriptive statistics to describe the readability levels of the IEP templates and parent special education handbooks available on the websites of 50 state departments of education.

The researchers located IEP templates and parent handbooks on special education from the websites of 50 state departments of education in the United States. The websites were accessed in May and June of 2023 using a web browser. The researchers randomly selected 500 words from each document. The words were extracted from different sections of the document, such as introduction, eligibility, evaluation, IEP development, placement, services, rights, and resources.

Using the Flesch Reading online calculator, the researchers calculated the readability score of each 500-word sample. The Flesch Reading Calculator is an online tool for estimating the

reading level of English-language content, based on the average length of words and sentences in the text. This calculator was developed by Rudolf Flesch in 1948 and has been widely used to measure readability levels of documents (Flesch, 1963; Smith, 1984). The score ranges from 0 to 100, with higher scores indicating easier readability. The score can also be converted to a grade level equivalent, which indicates the minimum grade level required to understand the text.

The researchers reordered the Flesch Reading Score and grade levels for each sample in a spreadsheet. They also noted whether the state department of education provided IEP information in languages other than English, and whether the IEPs and parent handbooks were easily accessible on their website.

Assumptions, Limitations, Delimitations. Assumptions are the beliefs or premises that the researchers hold to be true but cannot prove or verify. For this study, there are three assumptions that the researchers identified. First, the readability level of the materials is a crucial factor that affects parents' understanding, involvement, and satisfaction with the IEP process. A second assumption is that the Flesch Reading online calculator is a valid and reliable tool for measuring the readability level of the materials. The third assumption is that the 500-word samples are representative of the whole document in terms of readability level.

Limitations are the potential weaknesses or flaws of the study, based on factors that are outside of the researcher's control. For this study, the researcher acknowledged three limitations. First, the study only used one readability formula (Flesch Reading) to measure the readability level of the materials, which might not capture other aspects of readability, such as vocabulary, syntax, coherence, etc. Second, the study only focused on the readability level of the materials, and did not measure other factors that might influence parent understanding, involvement, and satisfaction, such as content, format, design, language, etc. Third, the study only analyzed the materials available on the websites of state departments of education and did not include other sources of information or training that parents might access or receive from other agencies or organizations.

Delimitations are the boundaries or scope of the study, based on the researcher's choice of what to include and what to exclude. For this study, the researchers decided to delimit the study by including only IEP templates and parent special education handbooks as the types of materials to analyze, and excluded other types of materials, such as training modules, videos, etc. The researchers included only materials from fifty state departments of education in the United States and excluded materials from other countries or regions. Finally, readability levels were only included for those materials in English and excluded materials from other languages.

Summary

The researchers of this study conducted a descriptive and comparative analysis of the readability levels of IEP templates and parent handbooks on special education provided by 50 state departments of education in the US. They used the Flesch Reading Calculator (Flesch, 1963) to measure the readability scores and grade levels of 500-word samples extracted from different sections of each document. They also compared the mean readability scores and grade levels between the IEP templates and parent handbooks using a t-test. They also examined the

availability, accessibility, and language diversity of the IEP templates and parent handbooks on the state department websites.

Findings

The purpose of this study was to explore the availability and readability level of materials developed and published by state departments of education to inform parents and guardians about IEPs and their rights and responsibilities in the special education process.

Readability Findings. Descriptive statistics were used to answer the following research questions.

- What is the readability level of sample IEPs and materials on special education provided by State Departments of Education whose purpose is to provide training and education to parents and guardians who serve as advocates for children with disabilities?

- What is the readability level of Parent Special Education Handbooks provided by State Departments of Education whose purpose is to provide training and education to parents and guardians who serve and advocate for children with disabilities?

Readability was measured using two indicators: the Flesch Kincaid Easy Score and the Flesch Kincaid Grade Level. The Easy Score is a measure using a number ranging from 0 to 100 of how easy a text is to read, with higher scores indicating easier readability. The Grade Level is a measure of the education level required to understand a text, with lower scores indicating easier readability. The readability sample consisted of 46 IEP and 49 Special Education Parent Handbooks documents obtained from State Department of Education websites. Four State Departments of Education did not include IEPs and one State Department of Education did not include a Special Education Parent Handbook. Table 1 provides the readability for the documents reviewed.

Table 1
Readability of Special Education State Department's Documents

Document Type	Easy Score			Grade Level		
	n	*M*	*SD*	*n*	*M*	*SD*
IEP	46	30.64	15.71	47	14.77	5.56
Parent Handbook/Website	49	37.28	13.45	49	13.28	3.07

The results indicate that parent handbooks/websites had higher Easy Scores and lower Grade Levels than IEPs, suggesting that they were more readable and accessible for the public.

However, both document types had low easy scores and high academic grade levels, indicating that they were difficult to read and understand for most people.

Difference in Readability. An independent *t*-test was used to compare the mean Easy Score and mean Grade Level of the readability of the parent handbooks and IEPs to answer the following research question: Is there a difference in the readability level of IEPs vs. parent handbooks? The null hypothesis (Ho) is that there is no difference between the mean readability scores or grade levels of IEPs and parent handbooks. The alternative hypothesis (Ha) is that there is a difference between the mean readability scores or grade levels of IEPs and parent handbooks. The significance level was set at 0.05 or 5%.

The results indicate that there was a significant difference between the mean Easy Score of the IEP documents (M = 30.64, SD = 15.71) and the Parent Handbook/Website documents (M = 37.28, SD = 13.45), $t(93) = -2.36$, $p = 0.02$, two-tailed. The parent handbook documents had a higher easy score than the IEP templates, indicating that they were more readable. These results suggest that there is a discrepancy in the readability of the special education state department's documents, and that the IEP templates may be less accessible and understandable for parents than the parent handbook documents.

A two-sample t-test was conducted to compare the readability of the IEP templates and the parent handbook documents in terms of grade level. There was a significant difference in the grade level for the IEP templates (M = 14.77, SD = 5.56) and the parent handbook documents (M = 13.28, SD = 3.07); $t(94) = 1.83$, $p = 0.04$, one-tailed. The IEP templates had a higher grade level than the parent handbook documents, indicating that they required a higher level of education to comprehend. These results suggest that there is a discrepancy in the readability of the special education state department's documents, and that the IEP templates may be less accessible and understandable for parents than the parent handbook documents. Therefore, we reject the Ho and accept Ha. The effect size is medium, indicating that the difference is meaningful.

Accessibility of Documents. Descriptive statistics were used to answer the following research questions:

- Are sample IEPs and information on special education available on state departments of education websites?

- Do state departments of education provide IEP information in languages other than English?
- Are IEPs and parent handbooks on state department websites easily accessible to consumers?

A review of all 50-state department of education websites revealed that only one state provided an example of an IEP. As shown in Table 2, eleven state departments of education provided IEPs in languages other than English, with a range of 1 to 11 languages per state (M = 4.9, SD = 3.38). Half of the U.S. state departments of education (n = 25) provided parent handbooks in languages other than English, with a range of 1 to 21 languages per state (M = 5.2, SD = 5.7).

Table 2
Available Multi-Language IEPs and Parent Handbooks from State Departments of Education

Document Type	n	M	SD
IEP	11	4.9	3.38
Parent Handbook	25	5.2	5.7

Summary
The findings of this study revealed that the materials developed and published by state departments of education to inform parents and guardians about IEPs and their rights and responsibilities in the special education process were not very readable or accessible. The parent handbooks and websites were easier to read than the IEP templates, but both types of documents required an elevated level of education to understand. There was also a lack of availability, diversity, and quality of the materials on the state department websites. To access materials in languages other than English, parents first need to navigate the state websites in English to find the materials in other languages which further challenges the availability of these resources. These findings suggest that there is a need to improve the readability and accessibility of the materials for parents and guardians who serve as advocates for children with disabilities.

Discussion

A review of the U.S. Department of Commerce (2021), Census Bureau revealed that the majority of the US population 89.4% had a high school or higher degree. These findings initially suggest that IEPs and materials on special education were written at a grade level commensurate with the majority (89.4%) of the US population (White & McClosky, nd; Nord, et al, 2011). However, in reviewing the National Assessment of Adult Literacy (NAAL) study, only 13% of the population had the daily literacy skills of being proficient in understanding documents (Nord, et al, 2011; White & McClosky**,** nd). Since the IEP forms are documents requiring complex and challenging literacy skills, when considering the results of the NAAL study, this suggests that the majority of the population (87%) do not have the necessary skills to actively participate in the development of the IEP document. In addition, since the materials developed by state departments of education fall under NAAL's daily literacy skill of prose and according to NAAL's study only 57% of the population would have the necessary reading skills to understand the training materials. Results of this study indicate that the IEPs and materials developed by state departments of education surpass the literacy level of most of the US's population. These findings imply that most parents may face difficulties in understanding and participating in the IEP process, which is a key component of their educational rights under IDEA. The study found significant differences in readability between the IEP templates and the special education handbook, with the former being more challenging to comprehend than the latter. These findings suggest that there is a discrepancy in the quality and clarity of the information and documents provided by state departments of education to parents. Therefore, the results highlight the need

for improving the accessibility and clarity of the IEP templates and the special education handbook for parents and students with disabilities.

The gap between parents' reading grade levels and the readability levels of documents provided by state departments of education can create barriers for effective communication and collaboration between parents and school personnel, which may limit the parents' adeptness to advocate for their child's best interests. Parental involvement is not only legally protected, but also beneficial for students' academic and social outcomes. Parents from culturally and linguistically diverse backgrounds may face additional challenges in accessing and comprehending the information and documents related to special education when documents are also not available in their home language. Therefore, state departments of education should re-examine the true accessibility of the resources available to families, especially in light of the changing demographics of the US and the increased need for students' services as a result of the pandemic.

To minimize the involvement of parents in the educational decisions for their children not only denies parents their rights to full participation, which is legally protected, but establishes barriers which inhibit parents from becoming active members of their child's educational team. Such barriers can be even more problematic for families from culturally and linguistically different backgrounds who often have dissimilar perceptions of how decisions are made. Given the changing demographics of the United States and the increased need for students' services as a result of the pandemic, State departments of education should re-examine the true accessibility of the resources available to families for the betterment of our student population.

Based on the results and implications of this study, the following recommendations are proposed to enhance the readability of the IEP templates and the special education handbooks for parents and students with disabilities:

- Use plain language that is clear and concise. Avoid using jargon, acronyms, or technical terms that may confuse or intimidate parents. If needed, provide definitions and examples in simple words.

- Use visual aids, such as charts, graphs, pictures, or symbols, to illustrate key points or concepts. Visual aids can help parents grasp information more easily and quickly.

- Use various tools and strategies to assess the readability level of your document, such as Flesch-Kincaid Grade Level, SMOG Index, or Fry Graph. These tools can help determine if your document is too complex or too simple for your intended audience.

- Check with the students' families on preferred language use and secure qualified interpreter as needed (Rosas & Winterman, 2023).

- Schools, state agencies, and related services providers can provide interactive training (ie. face-to-face or webinars) for parents to better understand the process.

- Involve parents in the writing process and ask for their feedback. Parents are the experts on their children and their needs. Involving them in the writing process ensures that the IEP reflects their perspectives and preferences.

- During the IEP development, periodically check to see if the parents/guardians understand the document and have questions or concerns. This can help identify and address any gaps or misunderstandings in the document.

- Check with family on effective use of interpreter (Rosas & Winterman, 2023).

Conclusions

The purpose of individualized education plans (IEPs) is to provide guidelines for the support and services that students with disabilities need to access the general education curriculum. State departments of education are responsible for monitoring the compliance of these programs in public schools and providing guidance to schools and families about the services offered. However, the materials that state departments use to inform parents and guardians about IEPs and their rights and responsibilities in the special education process are often too difficult to read and understand for most parents, which limits their capacity to advocate for their children. As a result, parents may not be able to participate effectively as members of the IEP team. This study examined the readability and accessibility of special education materials developed and published by state departments of education, including parent handbooks, websites, and IEP templates. The results revealed that the parent handbooks and websites were more readable than the IEP templates, but both types of documents required a high level of education to comprehend. The study also found that the state department websites had limited accessibility of comprehensible materials to inform parents and guardians of the special education process. The implications of these findings for improving communication and collaboration between schools and families are offered.

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Kathleen G. Winterman's experiences in the field include teaching as an intervention specialist in inclusive settings, serving as an Elementary Principal, an Associate Professor, Program Director, Director of the School of Education, and Director of the Educational Centers at Xavier University while serving on multiple State of Ohio committees. She holds an Ed.D in Special Education Leadership. As an educational advocate, research interests include teacher preparation, IEP development, family supports, Early Childhood Special Education, Autism, educational leadership, the use of instructional technology, and services for students with mental illnesses. Grant interests include incorporating evidence-based practices for program improvement and increasing opportunities for impactful growth through authentic experiences. Leading educational programs while providing instructional supports for program development, grant writing, management, technical assistance, and reporting are a means for continuous

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