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Support Networks, Students with Disabilities, and Social and Academic Contexts in a School Environment : A Scoping Review

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Support Networks, Students with Disabilities,
and Social and Academic Contexts in a School Environment:
A Scoping Review

By

Meghan Matje

This thesis is submitted in fulfillment of the requirements
for the Elizabethtown College Honors Program

May 1, 2020

Thesis Director Judy Beck Ericksen

Second Reader ___ Tamera Keiter Humbert, D, Ed.,
OTR/L _____

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According to the National Center for Education Statistics, 7 million students are receiving special education services as of the 2017-2018 school year (National Center for Education Statistics, 2019). That still does not include students with undeclared or undiagnosed disabilities in school. These students are at a disadvantage when it comes to participating in a school environment because students with disabilities tend to struggle more than typical students with social and academic aspects in school (Lackaye & Margalit, 2006).

The National Center for Learning Disabilities states that students with learning disabilities are often misunderstood and are ineffectively taught by untrained educators, leading to poor outcomes and limited opportunities. Because of schools' lower expectations and standards for students with learning disabilities, those students are not receiving the push they need to prepare for college or the workforce (National Center for Learning Disabilities, 2017). Nationwide, 7 out of 10 students with specific learning disorders and other health impairments spend around 80% of their day in general education classrooms where teachers may not be prepared to support them effectively (2017). However, there are ways to benefit those students through the use of training/educating school staff, advocating for the individual needs of students, and providing them with access to the technology and services they need to succeed.

Literature Review

I conducted a literature review prior to this study to gain insight into the difficulties students with disabilities face at school, which encompasses not only their academic lives, but their social lives as well since the majority of students' social lives is found in the school

environment. The literature review provided information how students with disabilities receive services, accommodations, and/or supports, how and why students with disabilities are struggling in school environments, as well as the experiences and perceptions of the adults involved in students' lives.

Students with Disabilities

The population in question refers to students with disabilities. This means 1) the student has demonstrated a need for specially designed instruction and 2) the student meets one of the disability categories under the Individuals with Disabilities Education Act (IDEA), including autism, deaf-blindness, deafness, emotional disturbance, hearing impairment, intellectual disability, multiple disabilities, orthopedic impairment, other health impairments, specific learning disabilities, speech or language impairments, traumatic brain injuries, or visual impairments (Clark, Rioux, & Chandler, 2019).

Where Do Services Come From

Students with disabilities have a right to education in the least restrictive environment including services and appropriate accommodations under IDEA. In order to receive services, students must have a need for it stated on their Individualized Education Plan (IEP). The IEP is an important document that delineates the services the school will provide for the student in order to maintain reasonable access to education (Clark, Rioux, & Chandler, 2019). This legal document outlines the accommodations, services, and assistive devices, or in other words “supports”, that the student needs to thrive in school (Understood Team, 2020). According to the Disabilities, Opportunities, Internetworking, and Technology (DO-IT) Center, these supports can be defined as, “an alteration of environment, curriculum format, or equipment that allows an

individual with a disability to gain access to content and/or complete assigned tasks” (DO-IT, 2019).

General Types of Support

There are various types of supports that can be provided and access, or lack of access, to these services have a large impact on students’ social and academic success in school. For example, a student with dyslexia may have more time on tests to decipher questions and prompts. A student with a hearing impairment may have an FM system to amplify the teacher’s voice. A student with oppositional defiant disorder (ODD) may have extra sessions with the school counselor to strategize emotional management techniques. These supports can come in the form of human services, like the counselor, electronic devices, like the FM system, or as a strategy to enable the student’s success, like granting more time on a test. These are just a few examples of supports, but there are many more for all different types of disabilities to facilitate student progress in school despite the barriers their disabilities may bring.

Academic success is typically measured with academic tests. The grades students receive indicate their level of knowledge about the subject and how well it was retained. The higher the grade, the more successful the student is academically. For the purposes of this scoping review, social success will be defined as the ability to establish and maintain social connections with other peers through communication, having a physical presence in each other’s lives, and feeling a sense of belonging in the environment they are in (Minor, 2018). One way this can be measured, as demonstrated by one article, is by documenting the, “social contacts, friendships, social skills, and activities of focus students” (students with disabilities) and measuring the number of social interactions between the focus students and their assigned peer partners (Asmus, et al., 2017). In addition to this, the researchers also asked the teachers and parents of

the focus students to fill out a Social Connections and Relationships Assessment (Kennedy and Itkonen's study, 1996).

Academic and Social Difficulties

According to the literature, students with disabilities struggle more than the typical student in their social and academics lives at school. Overall, students with disabilities report a higher rate of social dissatisfaction compared to typical-functioning students due to a propensity for being targets for bullying in inclusive classrooms, where special education students are integrated into general education classrooms (Grütter, Gasser, & Malti, 2017; Koster, Pijl, Nakken & Van Houten, 2010). This can be attributed to the negative perceptions their peers may have of them that leads to exclusionary behavior. Being rejected consistently throughout life can lead to an increased risk of low self-esteem and poor self- concept in addition to social withdrawal, depression, loneliness, and self-destructive and/or antisocial behaviors. By extension, this can lead to struggling with academics, dropping out of high school, truancy, aggression and violence, adolescent delinquency, relationship difficulties, and substance abuse (Coie et al., 1990; McDougall et al, 2001; Rubin et al., 2006). To put it briefly, students with disabilities may struggle in social situations and this can, in turn, exacerbate already existing academic issues.

Moreover, the negative attitudes of peer students toward students with disabilities can promote low peer acceptance, less friendships, social isolation, and increased risk of bullying and/or rejection. This can impact a student's ability to join in group activities, clubs, and social friend groups and have a negative impact on their academic performance (De Boer, Pijl, & Minnaert, 2012).

Other Perspectives

The literature proceeded to ascertain that a team of people is needed to provide a student with disabilities the opportunity for success in the school environment. This team includes teachers, parents, administrators, peers, and other school staff, such as librarians, can play a role in the success of these students (Carter & Hughes, 2006; De Boer, Pijl, & Minnaert, 2012; Evaldsson & Svahn, 2019; Farooq, Aasma, & Iftikhar, 2015; Marschark, 2007).

The literature review also revealed the feelings and experiences of adults involved in a child's schooling. The literature discussed parents' struggles to obtain adequate accommodations for their child, especially when it was controlled by others, like the school for example. Parents are involved in drawing up their child's IEP and they usually have a better understanding of their child's abilities and what supports are required to address those needs (Marschark, 2007). One article described a parent's experience in attempting to get services as a "depowering" process (Broberg, 2011). Parental involvement is essential to a child's success in school. If the parent is unable to effectively advocate for their child, the child may struggle more in school.

Teachers are also crucial to students' success (Evaldsson & Svahn, 2019). Establishing characteristics of trust, mutual respect, and appreciation in a student-teacher relationship is an essential part of the child's motivation to thrive in an education setting (Evaldsson & Svahn, 2019; McCoy & Banks, 2012). Unfortunately, teachers may emphasize the technicalities for providing law-required support and not provide enough attention to the emotional support and empathy a child may need. Thus, there is some evidence from isolated articles that suggest teacher-student relationships are important in the academic success of students (Evaldsson & Svahn, 2019; Kayama & Haight, 2018).

Finally, the literature review looked at administrators and/or principals' experiences regarding students with disabilities in the classroom. One article pointed out that administrators do not interact with students nearly as much as the general and special education teachers do and this assertion was backed up by the questionnaire used in the study. The findings demonstrated that administrators did not differentiate educational needs between typical-functioning students and students with disabilities, even though students with disabilities typically require additional accommodations (Carter and Hughes, 2006). In other words, the study demonstrated that administrators' lack of interaction with students impact their understanding of the educational needs of students with disabilities by assuming they are no different from typical functioning students. This may further impact their decisions to provide their staff with additional training since they view instructional priorities for special education students and general education students as the same for both (Carter and Hughes, 2006). Another article added administrators may have increased expectations for special education students and generally more favorable views of general education student participation than has previously been attributed to them (Praisner, 2003).

Summary

In summary, the literature review details the struggles students with disabilities encounter in their social and academic contexts at school. Negative perceptions from peers decrease self-esteem, inhibit the formation of relationships, negatively impact the ability to learn, and overall harms the students' overall well-being. This is impacted by the people involved in the students' lives. Parents have the power to advocate for their child's need for accommodations. Teachers can impact the academic performance of students through their teacher-student relationships. Administrators and principals make executive decisions for the school that may not help or may

even serve as a detriment to students with disabilities. This can be attributed to administrators and principals' lack of interaction with students and their incorrect assumptions that general education students and students with disabilities can succeed with the same resources.

From the existing literature, we can conclude that professional school staff, parents, and peers have the potential to provide opportunities for students with disabilities to succeed socially and academically through the relationships they establish and the access to resources they can provide. What we do not know from this literature review is what specific types of supports, which includes accommodations, services, and resources (either in the form of other humans, a device, or an adapted strategy) can be provided to the student to increase their chances of social and academic success in school.

Purpose and Research Question

Given the information found in the literature review, this indicates a need to research supports and types of accommodations available to students with disabilities to enable their success in a school environment. We already know many supports exist, yet the literature indicated students with disabilities are still struggling. Therefore, the purpose of this scoping review is to gather into one place the existing literature on the supports that are available to students to ease the difficulties they face in their academics and social life at school. My research question for this scoping review is this: "How do different supports and services affect the social and academic contexts of students with disabilities in a school environment?"

Methodology

A scoping review is a method of research in which a study is done to find the breadth and range of articles related to a certain topic that is currently available in the literature (Levac,

Colquhoun, O'Brien, & Levac, 2010). This type of mapping of information can allow for a demonstration of where there may be gaps in the literature (Levac, Colquhoun, O'Brien, & Levac, 2010).

This is the reason I chose to utilize a scoping review for my research. The literature review indicated there is a need to socially and academically support students with disabilities and a scoping review would demonstrate where the research is lacking in how we can support students with disabilities and encourage others to pursue that research.

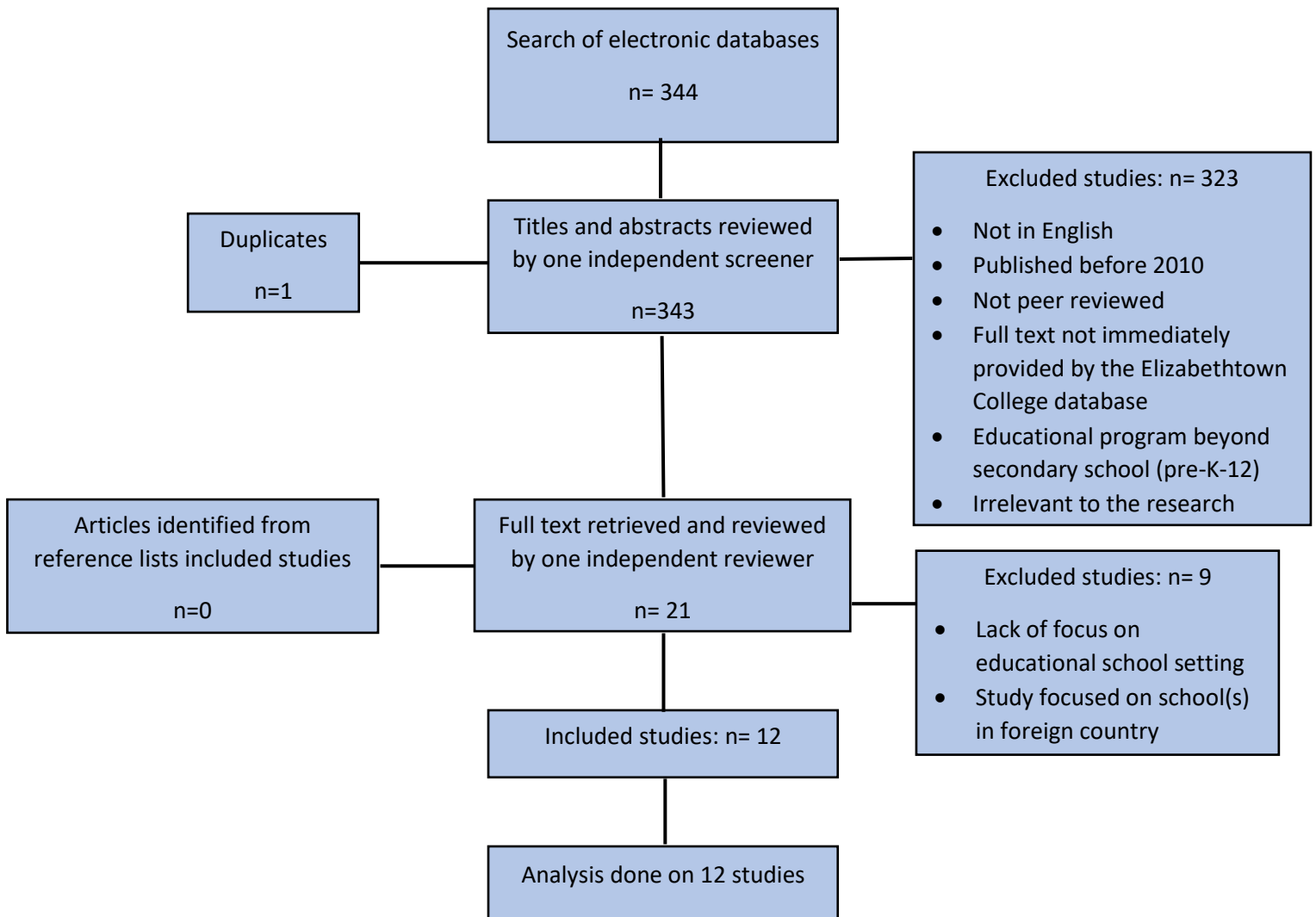
To start the research, it was determined EducationSource would be a suitable database to utilize for this research considering the research analyzes these effects on students with disabilities in a school environment, specifically. Three waves of searches in EducationSource took place. The first search used the key phrases, "Social support AND Children AND School AND disabilities". This yielded 238 results. After screening through the abstracts, only ten articles were kept for further analysis based on relativity to the topic. The second search used the key phrases, "(assistive technology OR mobility devices) AND (children AND school) AND disabilities". There were sixty-three results in total and seven were kept for further analysis. Finally, "(spiritual OR religious) AND (children AND school) AND disabilities" was searched with a result of forty-three articles. From this pool of articles, only four were kept.

To keep an article, the article had to fall within the established parameters. The inclusion factors consisted of peer reviewed articles in the EducationSource database that were published in the past 10 years (2010-2020) and dealt directly with students with disabilities and their social and/or academic lives in school. Exclusion factors included articles that were not in English, articles published before 2010, articles in which the context was after 12th grade (such as college, graduate school, or the workforce) or if the full text was not available online due to time

restraints. Articles were also excluded if they were irrelevant to the research. For example, many articles talked about supports for activities outside of school and lack the crucial context of a school environment.

Figure 1

Study selection process: Data gathering and elimination (from 344 articles to 12)



Following this screening process, another screening process took place using the twenty-one texts that passed the first round. In this second screening process, each of the twenty-one articles were read in their entirety in the context of newly established inclusion and exclusion factors. Articles were excluded if the school reviewed in the article was outside of the United States or if it did not explicitly relate to student's academic and social performance specifically in a school environment. Twelve articles were retained after this second screening process to be further analyzed for the purposes of this research.

Results

As the twelve articles were analyzed, five prominent variables that appeared across multiple articles were extracted: types of disability, types of supports, educational levels, types of schools, methodology, and supports divided into social and academic contexts. (See Fig. 2). It is important to understand that these articles included conceptual/theoretical articles in addition to research studies. Table 2 may be used for reference throughout this section.

Figure 2

Variables analyzed

1. Types of Disability
2. Types of Supports
3. Educational Levels
4. Types of Schools
5. Methodology
6. Types of Supports Categorized into "Social Contexts" and "Academic Contexts"

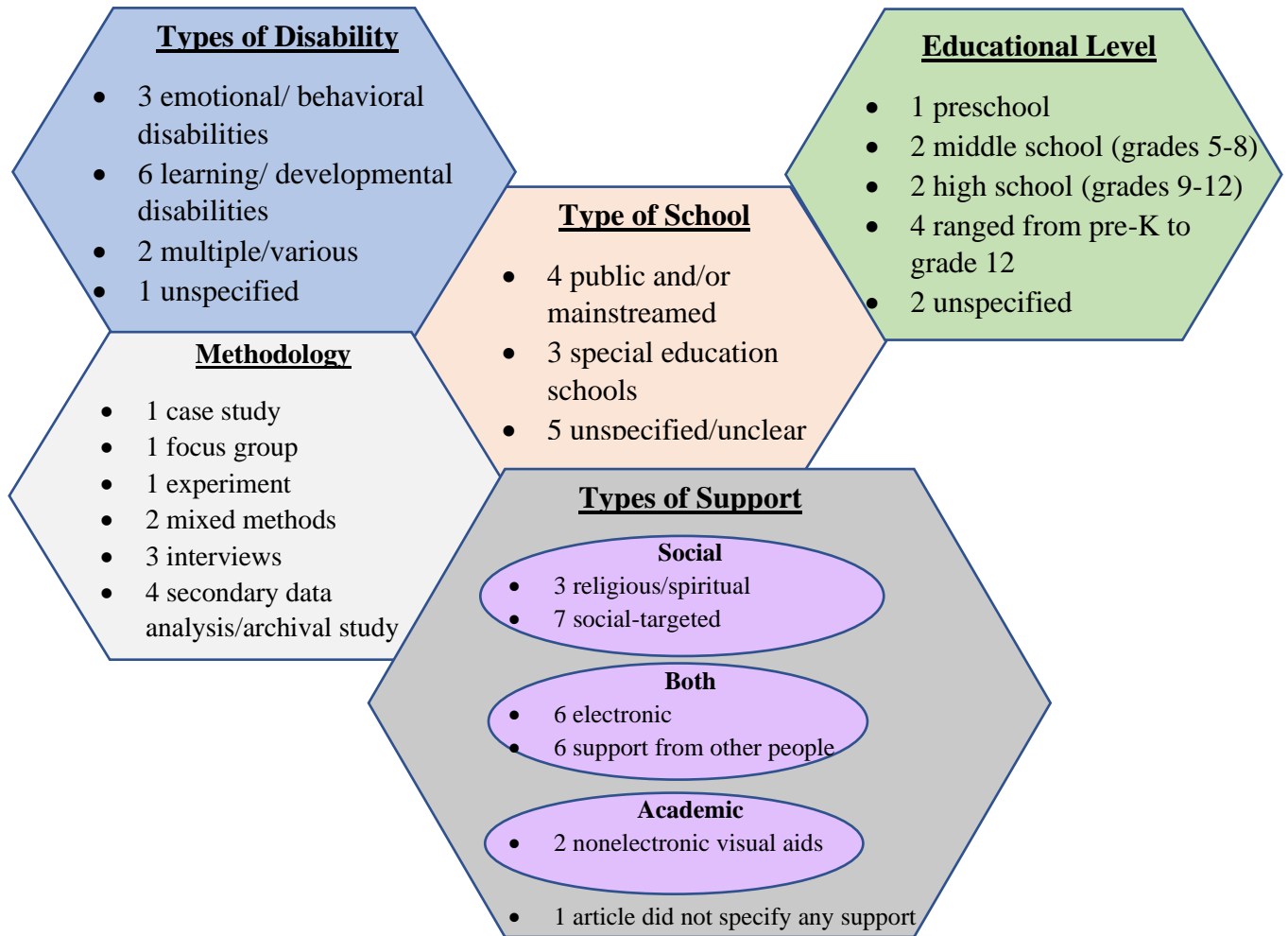
Table 1

Corresponding in-text citations for Results section

1	Green, J. G., Donaldson, A. R., Nadeau, M. S., Reid, G., Pincus, D. B., Comer, J. S., & Elkins, R. M. (2017). School functioning and use of school-based accommodations by treatment-seeking anxious children. <i>Journal of Emotional & Behavioral Disorders</i> , 25(4), 220–232. https://doi-org.proxy-etown.klnpa.org/10.1177/1063426616664328 .
2	Mitchell, B. S., Kern, L., & Conroy, M. A. (2019). Supporting students with emotional or behavioral disorders: State of the field. <i>Behavioral Disorders</i> , 44(2), 70–84. https://doi-org.proxy-etown.klnpa.org/10.1177/0198742918816518 .
3	Asmus, J. M., Carter, E. W., Moss, C. K., Biggs, E. E., Bolt, D. M., Born, T. L., Bottema-Beutel, K., Brock, M. E., Cattet, G. N., Cooney, M., Fesperman, E. S., Hochman, J. M., Huber, H. B., Lequia, J. L., Lyons, G. L., Vincent, L. B., & Weir, K. (2017). Efficacy and social validity of peer network interventions for high school students with severe disabilities. <i>American Journal on Intellectual & Developmental Disabilities</i> , 122(2), 118–137. https://doi-org.proxy-etown.klnpa.org/10.1352/1944-7558-122.2.118
4	Demirok, M. S., Gunduz, N., Yergazina, A. A., Maydangalieva, Z. A., & Ryazanova, E. L. (2019). Determining the opinions of special education teachers regarding the use of assistive technologies for overcoming reading difficulties. <i>International Journal of Emerging Technologies in Learning</i> , 14(22), 141–153. https://doi-org.proxy-etown.klnpa.org/10.3991/ijet.v14i22.1176 .
5	Simmons, K. D. (2014). Apps for communication and video modeling for middle school students with autism spectrum disorders. <i>Journal of Instructional Psychology</i> , 41(1–4), 79–82.
6	Tamakloe, D., & Agbenyega, J. S. (2017). Exploring preschool teachers' and support staff's use and experiences of assistive technology with children with disabilities. <i>Australasian Journal of Early Childhood</i> , 42(2), 29–36. https://doi-org.proxy-etown.klnpa.org/10.23965/AJEC.42.2.04 .
7	Murry, F. (2018). Using assistive technology to generate social skills use for students with emotional behavior disorders. <i>Rural Special Education Quarterly</i> , 37(4), 235–244. https://doi-org.proxy-etown.klnpa.org/10.1177/8756870518801367 .
8	Ennis-Cole, D., & Smith, D. (2011). Assistive technology and autism: Expanding the technology leadership role of the school librarian. <i>School Libraries Worldwide</i> , 17(2), 86–98.
9	Schock, R. E., & Lee, E. A. (2016). Children's voices: Perspectives on using assistive technology. <i>Exceptionality Education International</i> , 26(1), 76–94.
10	Harris, K. I. (2015). Children's spirituality and inclusion: Strengthening a child's spirit with community, resilience and joy. <i>International Journal of Children's Spirituality</i> , 20(3/4), 161–177. https://doi-org.proxy-etown.klnpa.org/10.1080/1364436X.2015.1086728 .
11	Baker, J. (2012). Spiritual education in the special school setting for pupils with learning difficulties/disabilities. <i>International Journal of Children's Spirituality</i> , 17(2), 153–166. https://doi-org.proxy-etown.klnpa.org/10.1080/1364436X.2012.721751 .
12	Zhang, K. C., & Wu, D. I. (2012). Nurturing the spiritual well-being of children with special needs. <i>Support for Learning</i> , 27(3), 119–122. https://doi-org.proxy-etown.klnpa.org/10.1111/j.1467-9604.2012.01528.x

Figure 3

Map of variables measured by number of articles



Types of Disability

Emotional/Behavioral

Emotional/behavioral disabilities included disabilities that impact the student's ability to regulate emotions and/or interact with others in an appropriate manner. There were three articles included in the analysis that contained examples that could pertain to this population (1, 2, 7).

Article 1 and 2 ranged from pre-K to 12th grade in an unspecified school type while article 7 studied a public/mainstreamed high school population. Both 1 and 2 included supports from other people and both 1 and 7 discussed electronic supports. Each of them used different methodologies: Article 1 used mixed methods by utilizing self and parent-reported measures as well as a survey. Article 2 was a secondary analysis/archival study and article 7 was a case study.

Learning/Developmental

For the purposes of this scoping review, learning/developmental disabilities were defined as disabilities that affected education, learning, intellectual and cognitive abilities, including those caused by developmental delays as seen in disorders such as autism spectrum disorder (ASD). There were six articles that included learning/developmental disabilities (4, 5, 8, 11, 3, 9). Two of them specifically discussed ASD (5, 8). In the articles that focused on students with learning/developmental disabilities, articles 3, 8 and 8 were in unspecified schools, articles 4 and 11 were in special education schools and 9 looked at a public school. Articles 5 and 9 were in middle schools, 3 was in high school, and 8 and 11 ranged throughout all the education levels. The education level for article 4 was not specified. As for methodologies, 4 and 11 conducted interviews. The rest of the articles used different methodologies in their studies: 3 conducted an experiment, 5 was a secondary analysis/archival study, 8 used mixed methods, and 9 examined a focus group. Finally, in the population of students with learning/developmental disabilities, four articles used electronic supports (4, 5, 8, 9), three articles talked about using other people as support (3, 8, 9), and three discussed social supports (3, 5, 11). Article 4 also mentioned nonelectronic visual aids and article 11 reviewed the benefits of religious/spiritual supports.

Various/Multiple

Article 6 included various/multiple disabilities as they analyzed students with disabilities through a very broad lens and neglected to focus on one type of disability or even one category that numerous disorders could fall under. This article interviewed public, preschool teachers on the supports they used including ones that fell under the categories of social, electronic, using other people's services, and nonelectronic visual aids.

Unspecified

Finally, article 12 was unspecific as it neglected to list any specific disabilities or disability types their study could pertain to. Rather, they referred to their targeted population mainly as, "people with disabilities" (12). This article was a secondary data analysis/archival study that looked at special education schools without specifying the grade and demonstrated the positive effects religious/spiritual supports can have on a student's education.

Educational Level

The variables under this topic include pre-K, elementary, middle, and high school, but the grade range within each group can vary depending on the region a school is in. For the purposes of this study, the categories will be defined as follows: Pre-K is any schooling before kindergarten. Elementary school started at kindergarten and went through fourth grade; however, there were no articles that only examined the elementary school population. Middle school ranged from fifth to eighth grade. High school included grades ninth through twelfth. Post-secondary schooling, such as colleges and graduate programs, were excluded from the study.

Pre-K

Article 6 was the only study done in a preschool. The researcher interviewed public preschool teachers on electronic, social and other people supports, and nonelectronic visual aids for a variety of multiple disabilities.

Middle School

Two articles focused on students with disabilities in middle school (5, 9). Both articles analyzed students with learning/developmental disabilities. Article 5 did a secondary analysis/archival study on a public school while article 5 analyzed a focus group from an unspecified type of school. Both studies discussed how electronics could be used as a support. Article 5 also mentioned social supports and article 9 also mentioned using other people as supports in addition to electronics.

High School

Articles 3 and 7 focused on the high school population. The only things these two articles had in common in relation to the variables analyzed was that they both discussed social supports. Article 3 did an experiment with students who had learning/developmental disabilities at an unspecified type of school while also utilizing other people as a support in their study. On the other hand, article 6 did a case study on students with emotional behavioral disabilities in the public school system and also discussed electronic supports.

Ranged from pre-K through High School

In the four articles the ranged from pre-K through high school, articles 1, 2, and 8 completed their studies on unspecified schools while article 11 specifically looked at a special education school. Articles 1 and 8 both did a study using mixed methods, but article 1 focused on students with emotional/behavioral disabilities, like article 2 did, while article 8 looked at

students with emotional/behavioral disabilities, same as article 11. Article 2 did a secondary analysis/archival study that looked at other people as supports (which was also mentioned in articles 1 and 8), while article 11 conducted interviews that delved into religious/spiritual supports.

Unspecified

Three articles did not specify any education level their study referred to, but simply stated “students with disabilities” and “early childhood classroom” (4, 10, 12). Articles 10 and 12 both did secondary analyses/archival studies on how religious/spiritual supports can benefit students in special education schools. The only difference between the two, in terms of the set variables, was that article 10 also discussed social supports in their study. Although article 4 was also set in a special education school, it stated a focus on obtaining information on students with learning/developmental disabilities via interviews.

Types of Schools

Public/Mainstreamed

The four articles that obtained their information from public and/or mainstreamed schools were all very different in terms of the analyzed variables (6, 7, 9, 10). Article 6 interviewed preschool teachers on supports for multiple disabilities. Article 7 did a case study on supports for students with emotional/behavioral disabilities in high school. Article 9 examined a focus group regarding supports for students with learning/developmental disabilities in middle school. Finally, article 10 completed a secondary analysis/archival study on an unspecified disability in an unspecified grade. Even in their differences, all the articles shared a similarity in talking about at least one type of support with at least one other article. Articles 6, 7, and 10 discussed social

supports, articles 6 and 9 talked about people as supports, and articles 6, 7, and 9 mentioned electronic supports. Article 6 also included nonelectronic visual aids and article 10 examined religious/spiritual supports in addition to the supports already mentioned.

Special Education

Three articles acquired their data from special education schools (11, 12, 4). Articles 4 and 11 both conducted interviews regarding students with learning/developmental disabilities while article 12 was a secondary data analysis/archival study for an unspecified type of disability. All three articles differed in education levels and supports. Article 11 ranged from pre-K through high school and article 12 was unspecified about the grades the article was tailored to. Article 4's education level was unspecified. Regarding supports, article 4 discussed electronics and nonelectronic visual aids and 11 talked about social supports. Both 11 and 12 revolved around the topic of religious/spiritual supports.

Unspecified/Unclear

Five articles did not specify or were unclear in the type of schools they received the information in their study from (1, 2, 3, 5, 8). Articles 3, 8 and 8 looked at students with learning/developmental disabilities while Articles 1 and 2 looked at students with emotional/behavioral disabilities. Articles 1, 2, and 8 included a range of students from pre-K through high school. While article 5 was specifically analyzing high school populations and article 5 was analyzing middle school populations. Mixed methods were utilized in articles 1 and 8 while articles 2 and 5 were secondary data analyses/ archival studies. Article 3 was an experiment. The supports mentioned in every article over overlapped with at least one other article. Articles 1, 2, 3, and 5 all mentioned social supports. Articles 1 and 3 additionally

mentioned other people as support, as did article 8. Articles 5 and 8 also included electronic supports.

Methodology

Case Study

Article 7 was the only article to use a case study in which it analyzed the electronic and social supports available for students with emotional/behavioral disabilities in a public high school.

Focus Group

The only article that had a focus group was article 9. The focus group examined public, middle-school students with learning/developmental disabilities as they interacted with electronics and people as supports.

Experiment

An experiment was conducted in a single article that tested social supports and support from other people for students with learning/developmental disabilities at an unspecified type of high school.

Interviews

There were three articles that all used interviews for their methodology (4, 6, 11). Articles 6 and 11 assessed students with learning/developmental disabilities at special education schools while article 6 explored the application of supports for multiple disabilities at public preschools. Article 11 included students from pre-K through high school and article 4 did not specify. In terms of the supports analyzed in the studies that conducted interviews, information

was found about nonelectronic visual aids and electronic supports in articles 4 and 6, social supports in articles 6 and 11, people as support in article 6 and religious/spiritual support in article 11.

Secondary Analysis/Archival Data

Four articles used a methodology in which the researchers wrote a secondary data analysis/archival study (2, 5, 10, 12). Articles 10 and 12 did not specify the disabilities they were looking at, but article 2 stated it looked at students with emotional/behavioral disabilities and article 5 looked at students with learning/developmental disabilities. Articles 2 and 5 did not specify the type of school used. Article 10 looked at a public school while article 12 used a special education school; both did not specify the education level analyzed. Article 2's population ranged from pre-K through high school which article 5 just looked at middle school. Supports in the secondary analysis/archival data studies included people supports in article 2, electronic supports in article 5, religious/spiritual supports in articles 10 and 12, and social supports in articles 5 and 10.

Mixed Methods

In the two articles that utilized mixed methods, both of them did not specify the type of school or the education level of the populations in their articles, but both did discuss the use of people as supports (1, 8). Article 1 analyzed students with emotional/behavioral disabilities and also discussed social supports while article 8 analyzed students with learning/developmental disabilities and talked about electronic support.

Types of Support

Religious/Spiritual

When analyzing the various types of supports offered, I found that three articles discussed religious/spiritual support; however, it should be noted that there was no indication these services were directly received in classroom (10, 11, 12). Rather, the articles discussed how spiritual education can serve as a support for social life in school. Both 10 and 12 were secondary data analysis/archival data, but neither one of them specified the type of disability or school examined in their articles. Article 11 interviewed a population that consisted of students with learning/developmental disabilities from a range of grades from pre-K through high school. Articles 11 and 12 looked at special education schools while article 10 looked at public schools.

Social

Seven articles demonstrated examples of social supports, making it the most discussed type of support in this sample (1, 3, 5, 6, 7, 10, 11). Social supports were targeted at establishing appropriate coping strategies for social interactions and the relationships the student had established in school, particularly with their peers and teachers, but could also include other professional school staff and parents. Almost half of the articles specifically included students with learning/developmental disabilities (3, 5, 11). Articles 1 and 7 wrote about students with emotional/behavioral disabilities, article 6 included multiple disabilities and article 20 did not specify any disabilities. One only article looked at special education schools (11). Articles 6, 7, and 10 were public schools and the rest did not specify the type of school (1, 3, 5). Throughout the seven articles, the education levels and methodologies were mixed. Article 1 used mixed methods on a range of students from pre-K through high school. Article 3 ran an experiment on high school students. Article 5, like article 10, was a secondary data analysis/archival study, but article 5 focused on the middle school population while article 10 did not specify the education

level in their article. Article 6 held interviews regarding the preschool population and article 11 also did interviews, but the education levels ranged from pre-K through high school.

Electronic

The second most-discussed type of support in this sample was electronics. Six articles listed several types of electronic supports in the form of high-tech devices (4, 5, 6, 7, 8, 9). More than half of the articles that fit in the category focus on learning/developmental disabilities (4, 5, 8, 9). Article 6 covers multiple disabilities and article 8 does not specify any type of disability. When it comes to the school type included in articles that provide examples of electronic supports, half of the articles looked at public schools (6, 7, 9). Articles 5 and 8 did not specify the type of school they were looking at. Article 4 was the only article in this sample that discussed electronic supports in a special education school. Again, the education levels and methods varied through this group of articles. Article 4 and 6 conducted interviews, but article 6 focused on a preschool population while article 4's education level was not stated. Article 5 and 9 both focused on middle school populations, but article 5 was a secondary data analysis and article 9 was a focus group. Article 7 was a case study in a high school population and article 8 used mixed methods for pre-K through high school range.

Other People

Tied for second most-discussed support with electronics is using people as supports with six articles (1, 2, 3, 6, 8, 9). To clarify, using people as supports means utilizing people in the form of human services, like counseling for example. Two-thirds of the six articles did not specify a school type (1, 2, 3, 8, 9). The rest looked at public schools (6, 9). When it came to using people as support, half of the articles in this category focused on students with

learning/developmental disabilities (3, 8, 9). Articles 1 and 2 focused on emotional behavioral disabilities and article 6 discussed multiple disabilities. Regarding education levels, half of the articles that discussed people as support utilized a wide range of grades from pre-K through high school (1, 2, 8). Article 6 dealt with preschool populations, article 9 dealt with middle school populations, and article 3 dealt with high school populations. Finally, there was a range of various methodologies used throughout this group of articles. Articles 1 and 8 used mixed methods, article 2 was secondary data analysis/archival study, article 3 was an experiment, article 6 conducted interviews, and article 9 examined a focus group.

Nonelectronic Visual Aids

Two articles stated nonelectronic visual aids as examples of support (4, 6). Both articles used interviews as their methodologies, but that is where the similarities end. Article 4 focuses on students with learning/developmental disabilities in special education schools, but did not specify the education level. Article 6 examines a wide array of disabilities in public preschools.

Unspecified

One article did not specify any certain type of support because the topic revolved around the feelings students had towards their AT (assistive technology) (9). This article analyzed a focus study of students with learning/developmental disabilities in public middle schools.

Types of Support Categorized into Social and Academic Contexts

Within the category of “Types of Support” there was another variable in which the support types could be divided into categories of where it is typically utilized: in social contexts, in academics contexts, or both. Seven articles, consisting of the three “religious/spiritual” articles and the four “social support” articles, were categorized as supports for primarily social contexts.

The two articles that had “nonelectronic visual aids” were categorized as being utilized in academic contexts. Nine articles could be applied to both social and academic contexts and included the five “electronic” articles and the four articles that discussed “support from other people”. It should be noted that “social supports” are different from “supports from other people” in that “social supports” center around social relationships while “support from other people” refers to human services.

Table 2

In Table 2 (below), each of the articles on the y-axis are compared to the variables along the x-axis. Each article row is contained by a red box for easier separation. Each column contains a variable and it checked off by a colored box in the row of articles that include the variable. The color in the box correlates to the colored “types of support” in the far top-right of the table. Type of support is slightly divided from the main table to categorize the types of support into “social contexts”, “academic contacts”, and “both contexts”. So, religious/spiritual supports are implemented to benefit social contexts. The gray colored boxes reiterate which articles contain which supports. The boxes in the main table are colored to integrate article, variable and types of support altogether. For example, article 12 includes: unspecified disability, special education school, unspecified education level, and it was a secondary analysis. Because the color of the boxes in that row are orange, the article discusses support type of the “religious/spiritual” nature, which is under the social context category.

Discussion

Considering this is a scoping review of the academic and social supports for students with disabilities in school, I thought it would be most appropriate to discuss each of the variables in the context of its relationship to types of support. In other words, in order to understand this information in the context of the research question, “How do different supports and services affect the social and academic contexts of students with disabilities in a school environment?” it is crucial to cross-analyze the results for the “types of support” variable with the other four variables (See Table 1).

Supports for Various Types of Disabilities

The majority of articles focused on learning/developmental disabilities followed by emotional/behavioral disabilities. Four out of the six articles that centered around learning/developmental articles used electronic supports most of which specifically mentioned AT. These articles highlight the benefit electronic forms of support provided to students with learning/developmental disabilities. Computers/laptops, tablets, projections, CDs, smartboards, audiobooks, and software were suggested to ease access to learning for students with learning/developmental disabilities (4, 8, 9) There was also significant support for the use of VSM (video self-modeling) for students with ASD, as well as students with EBD (emotional-behavioral disorder) because these two populations struggle with social skills and behaving appropriately in social and academic contexts and VSM is an intervention used to rectify social behaviors (5, 7). This supports the idea that utilizing another medium (such as an electronic format) enables students with disabilities to engage with people and educational content by overcoming the barriers their disabilities may present. like the different and unique cognitive processes students with ASD have, for example. One article reinforces this by stating that

students with ASD learned information more effectively when processing it visually (Simmons, 2014). Thus, supports like apps on the iPad that can assist students with communication and social skills in the classroom are a good fit for students with ASD due to its visual nature (Simmons, 2014).

For students with emotional/behavioral disabilities, their brains are wired to emotionally react differently than a typical-functional student. This causes social barriers for these students and VSM is an electronic support in which students created a video sequence that underlines social skills and reinforces appropriate behaviors. In VSM, the students act out the appropriate behaviors and repeatedly watch themselves act it out to increase the likelihood that the students will react the same way when the real situation occurs (Murry, 2018).

This electronic support positively impacts social relationships by reinforcing social skills, providing opportunities for communication with other students, and serving as a means to engage with peers as seen in the VSM article where the students with emotional/behavioral disorders would invite their peers to join their videos.

Additionally, receiving support from others is important with these populations. There are three articles, each of which deal with anxiety, EBD, and ASD, respectively, and each list support from other people as a valuable resource for students with these disabilities. The anxiety article lists support from people such as teachers, peers, and other professional school staff. Teachers can provide accommodations like extending deadlines and time on tests, and permission to leave the classroom if the student struggled with testing anxiety. Peers were suggested as supports in the form of lunch and study groups, as well as peer helpers to overcome social anxiety. Other professional staff, such as counselors, can provide therapy for dealing with anxiety issues. These

are all examples of other people providing services to support students with anxiety (Green, et al., 2017).

The EBD article demonstrate people as support mainly through utilizing the teacher as a resource. According to this article, effective strategies for interacting with students with EBD include things the teacher would provide:

“(a) teacher praise (reinforcement); (b) high rates of opportunities to respond; (c) precision requests and behavioral momentum; (d) clear instructional methods including direct instruction, class-wide peer tutoring, and continuous monitoring of student performance (e.g., curriculum-based measurement); (e) positive behavior support, including functional assessment-based planning, self-management, and modifying antecedent and consequence events; and (f) group-oriented contingencies such as the Good Behavior Game and Class-Wide Function-Related Intervention Teams” (Mitchell, Kern, & Conroy, 2019, p 78).

Parental advocacy, counseling, and having a reader/interpreter are also briefly mentioned (Mitchell, Kern, & Conroy, 2019).

Finally, the ASD article revolved around applying the potential librarians had for being a valuable resource for students with ASD. Because of librarians’ knowledge of and experience with technology, this article recommends librarians as collaborators, AT trainers, and advocates to provide supports for students with ASD (Ennis-Cole & Smith, 2011).

Two articles discuss the applications of electronics and other people for all types of disabilities (Tamakloe & Agbenyega, 2017; Schock & Lee, 2016). One mostly spoke to how laptops eased access to learning academic content by allowing for increased independence and

organization (Schock & Lee, 2016). The other was more in-depth and explained how assistive technology devices (ATD's) enabled students with various disabilities to enhance their social skills and communicate more effectively, thus facilitating social relationships between peers (Tomakloe & Agbenyega, 2017). This article continues to analyze other forms of supports in the form of nonelectronic visual aids and support from other people, though ATD's were the main focus. As for nonelectronic visual aids, the Picture Exchange Communication System was mentioned. Regarding people support, the article goes more in-depth, explaining the impact positive attitudes from teachers can have on the motivation and empowerment of students with disabilities (Tomakloe & Agbenyega, 2017).

Supports for Education Levels

There were no more than two articles for each specific grade category. As seen in Fig. 3, most of the articles spanned across the grades from pre-K to twelfth grade. There was one article that studied a preschool setting in which various types of supports were analyzed. This study contained a wide range of various disabilities and listed ATD's (electronic), PECS (Picture Exchange Communication System) and visual picture schedules (nonelectronic visual aid), and the positive attitudes of teachers (other people) to encourage personal growth in students with disabilities (Tomakloe & Agbenyega, 2017). The teachers that were interviewed in this article talked mainly about the impact ATDs have on students with disabilities by providing access to education and communication with peers. One teacher said, "[The] Tobii DynaVox, iPads, iPods, Tapit and picture cards assisted them in developing inclusive practice. The assistive devices made lessons responsive to children's diversity; they made lessons accessible to all children and minimised barriers" (Tomakloe & Agbenyega, 2017, p 34).

The researchers discussed how the teachers were motivated to use ATD's to enhance students' social skills with the goal of developing their independent thinking skills to be able to successfully interact with their peers (Tomakloe & Agbenyega, 2017). This is likely the case because lower education levels have less advanced academics and there is less focus on subjects such as math and English and more focus on building developmental and social skills in early education classrooms.

Two articles analyzed the middle school population, ranging from fourth to eighth grade. Both of them referenced electronic supports. One of the articles demonstrated the accessibility and low price of apps on the iPad that are geared towards teaching children communication and social skills and how to behave appropriately in the classroom to provide success in social contexts (Simmons, 2014). The other one focused on how laptops can make the academic curriculum easier for students with learning disabilities to access. According to the participants, it made work easier to keep up with, as well as easier overall, reduced the amount of handwriting required, and created more positive self-perceptions about themselves as students (Schock & Lee, 2016).

Another two articles were set in high schools. While both articles included social supports, they were implemented in different ways. One article's main focus was on an VSM, which is an electronic medium; however the study vouched for the positive social implications VSM could have by way of facilitating social interactions since the students using VSM would invite their peers to join in the videos they were making (Murry, 2018).

The other article was a pristine example how social supports can be implemented in schools (Asmus, et al., 2017). In this study, the researchers set up an experiment in which one group was a control group and went along "business as usual" and the other group received the

Peer Network Intervention in which trained adults facilitated activity sessions between students with disabilities and typical-functioning peer students who volunteered to be part of the program (Asmus, et al., 2017). The intervention built social connections through these group sessions and set it up in the hopes that social interactions would continue outside the classroom, and they did. The researchers asked the peer students to document how many social interactions they have with their assigned focus student and also asked special educators to fill out a questionnaire on the focus student to assess the social validity of the intervention (Asmus, et al., 2017).

Overall, the Peer Network Intervention significantly increased the number of social connections the students with disabilities had compared to before the intervention; yet, something interesting about the study was the questionnaires that the special educators filled out indicated no increase in social skills on the part of the students with disabilities leading to the idea that social skill are not necessarily required to create opportunities for social inclusion (Asmus, et al., 2017).

Finally, the studies that spanned the whole range of education levels from pre-K to twelfth grade included social supports, electronic supports, people support, and even religious supports. This integrates everything the articles with specific grade levels included: Finding support in people such as teachers, librarians, counselors, and parents, using devices to facilitate positive social interactions, and using electronics to support academic and social pursuits (Baker, 2012; Ennis-Cole & Smith, 2011; Green, et al., 2017; Mitchell, Kern, & Conroy, 2019). One support that was not mentioned in the grade-specific articles was religious/spiritual support. In this study, the researchers interviewed teachers at special schools in which ages ranged from three all the way up to age 19 for some schools and 16 for others. Questions regarding “spiritual education” and the implementation and impact on students were asked. The researchers stated

that the teachers' answer highlighted the importance of human relationships in spiritual education. For example, they talked about how the AT they used allowed for higher quality relationships because the AT increased students' awareness of the world around them and allowed them the opportunity for more intense interactions and deeper relationships. Another key to spiritual education was fostering the students' emotional well-being and overall promoted a very holistic type of education.

Regarding the articles that ranged from pre-K to twelfth grade, I think it may be appropriate to raise the question of the effectiveness and varying implementations in supports regarding how they are used between education levels in relation to students' developmental levels. Not only will a second grader academically and socially behave very differently than someone who is in high school, but the expectations are drastically dissimilar.

For instance, one article found there were differences anxiety levels between elementary and middle/high schoolers in which the middle/high school students more often reported feeling anxiety, likely due to being an advanced grade level (Green et al., 2017). There should be more specific research based on developmental age regarding types of supports that would benefit this population. Different supports may be needed to meet the different levels of expectations for preschool, elementary school, middle school, and high school.

Supports Provided in Different Types of Schools

Although there was almost equal research between public/mainstream/special education schools, the majority of articles did not specify the type of school their study focused on. One thing to consider is if the majority of students in public/mainstreamed schools are typical-functioning and public schools sometimes struggle with money allocations with the amount they

receive from the state, then how much does that affect access to supports for students with disabilities (Park, 2019). Administrators have to decide which resources to put their money towards and they may choose that which benefits the majority of the population instead of electing to spend it on supports only a handful of students will use.

To demonstrate, almost half of the articles discussed electronics as a support type, likely due to its popularity in our age of technology. However, electronics can get expensive. Some articles provide example at high-tech AT like iPads for assistive apps, the Tobii DynaVox, Augmented Alternative Communication Devices, even virtual reality (Ennis-Cole & Smith, 2011; Simmons, 2014; Tamakloe & Agbenyega, 2017). The prices of some of these devices are very high. For example, the Tobii DynaVox is \$15,000 for the device alone (Robles-Sanchez, n.d.). If a public/mainstreamed school has to allocate its limited funds, they may decide to choose something that benefits the majority of their student population, and students with disabilities are not in the majority. Thus, the question may be asked how administrators make decisions about the use of technology funds for both the general population and those with disabilities. On the other hand, for special education schools, they do not have a small handful of students with disabilities; Their entire student population is students with special needs. Thus, obtaining resources for them will be the top priority because there is not another population to consider.

Methodologies Used to Study Types of Support

The methodologies used indicated the way researchers are gathering their data and information. To determine the types of supports that were available to students with disabilities, the majority of researchers used secondary analysis/archival studies and interviews. Four of the twelve articles used secondary data analysis while three used interviews. All of these articles,

except one contained purely qualitative information. The one outlier utilized quantitative information in the form of demographics to discuss how certain demographics with ED were affected (Mitchell, Kern, & Conroy, 2019). This demonstrate a need for more quantitative measures. One article operated an experiment in which the peer network intervention was tested against “business as usual” and the researcher documented the effect the intervention has on the social relationships between students with disabilities and their peers (Asmus, et al., 2017). This is the type of study we need more of.

The current research ultimately stems from personal narratives and synthesizing information from other articles make their own point. This is a good start, but more research in general needs to be done. On the other, hand, there was a wide array of methodologies that were used, even if just once, and it is beneficial to study the research in various forms to look at the topic from different perspectives.

Types of Supports: Social Versus Academic

Beyond how support types go hand-in-hand with the remaining variables, I thought it was important to analyze in which contexts, social or academic, would students be able to utilize these supports in because the research question specifically looks to examine social and academic contexts.

Supports Used in Social Contexts

Religious/Spiritual. The articles regarding spiritual supports revolved around a social context regarding themes of inclusion, resilience, positive relationships and the idea of holistic education to address the student as a whole, including their spiritual, mental, physical, and

emotional well-being, beyond nurturing their cognitive and intellectual functions (Baker, 2012; Harris, 2015; Zhang & Wu, 2012) .

Social. There were 4 social supports listed in the results; however, one article discusses supports for anxiety, which can be social or academic. The top three supports listed in this article were, “permission to leave the classroom”, “more time on tests”, and “extended deadlines” (Green, et al., 2017).

These supports could be utilized for social or academic purposes depending on the situation the student is in. For example, if the student has extreme social anxiety and the teacher wants the class to form small discussion groups, the student may choose to leave the classroom as a social support. However, if the student suffers from testing anxiety, then he or she may request more time to take tests. In both of these situations, support to deal with anxiety is utilized, but the support can be used to deal with both, academic difficulties or social difficulties. Although, I would like to point out having permission to leave the classroom is not considered to be best practice according to CBT studies because it encourages escapism instead of dealing with the issue and coping with it in a healthy way (Green, et al., 2017).

Within the variable of social supports, there were three articles that discussed video modeling as an effective intervention (Ennis-Cole & Smith, 2011; Murry, 2018; Simmons, 2014). Two of the three articles discussed the implementation of video modeling for specific types of disabilities while the remaining article suggested video modeling as a general example). One of the two articles suggested video modeling as an effective support for those with learning/developmental disabilities, specifically autism (Simmons, 2014). Because students with autism tend to learn better visually, video modeling, or videos that model appropriate behaviors, are considered a good fit for this population (Simmons, 2014).

The other article discussed implementing a video modeling intervention for students with emotional/behavioral disabilities (Murry, 2018). This article focused on a specific type of video modeling, VSM, in which the student builds a storyboard and creates their own video where they act out the appropriate behavior themselves, and then they repeatedly watch themselves act out those behaviors on the video (Murry, 2018).

Finally, the last article briefly mentioned video modeling as an example of a social support for students with autism (Ennis-Cole & Smith, 2011). This article's focus was on the benefits of training school librarians in various AT devices and listed example of different types of supports the librarian could implement if trained, and included video modeling in that list.

Even though the population for video modeling was used for different types of disabilities, this specific type of support is meant to serve as a social support to encourage students to behave in a way that is expected by society.

Supports Used in a (Mainly) Academic Context

Nonelectronic Visual Aids. Two articles brought attention to nonelectronic visual aids and the examples listed mainly served to benefit the student's ability to learn educational materials and engage in the academic classroom environment. These supports included bookmarks, highlighting important parts of text, bookmarks, highlighting important parts of text, pictures, visual schedules, and visual cues (Demirok, Gunduz, Yergazina, Maydangalieva, & Ryazanova, 2019; Tamakloe & Agbenyega, 2017).

Though the articles did not directly state this, it can be argued that visual cues and the Picture Exchange Communication System [PECS], another nonelectronic visual aid listed, could be supports for social contexts as both facilitate communication between the student and another

person, usually the teacher, but it can apply to other peers. For example, a student who has trouble speaking may use the PECS to communicate with another student, by point at a picture related to his or her response (Tamakloe & Agbenyega, 2017).

Supports Used for Both Social and Academic Contexts

Electronic. Almost half of the articles mentioned using electronic technology as supports for students with disabilities and the examples listed could be used in both social and academic contexts. This includes a wide range: from mainstream technology that is used in general education classrooms, like laptops and smartboards, to technology specifically made for people with disabilities, like the DynaVox, to apps that can be found on an iPad to aid with communication, social, reading, writing, and even math skills (Demirok, Gunduz, Yergazina, Maydangalieva, & Ryazanova, 2019; Ennis-Cole & Smith, 2011; Murry, 2018; Simmons, 2014; Tamakloe & Agbenyega, 2017). Several of these supports are not exclusive to just students with disabilities, but could also assist typical-functioning students who may be struggling in a certain area.

Something that recurred throughout some of these articles was the assertion that there was a lack on training for teachers on how to use AT and more training may be needed (Demirok, Gunduz, Yergazina, Maydangalieva, & Ryazanova, 2019; Ennis-Cole & Smith, 2011; Schock & Lee, 2016). Lack of training results in the inability to utilize the full potential of AT and robs the student of a prospective support that may permit their social and academic success.

Support from Other People. Lastly, support from other people could benefit students socially or academically. Some articles point out the value of using school professionals for support such as one-on-one tutoring with the teacher, counseling, and librarians (Ennis-Cole &

Smith, 2011; Green, et al., 2017). Others state the importance of parental advocacy in getting the services their student needs (Mitchell, Kern, & Conroy, 2019; Schock & Lee, 2016). Yet others advocate for the use of peers as support via lunch groups, study groups, and the peer network intervention (Asmus, et al., 2017; Green, et al., 2017).

Overall, using others as a support meant interacting with people that have the means to enable success for students, socially or academically, in one way or another. For example, one article provided example of using teachers as a support to overcome anxiety issues by rehearsing the student's answers to questions asked in class to facilitate participation or utilizing lunch groups in which a pre-determined group of people gather for lunch to facilitate socialization at lunch (Green, et al., 2017).

Other examples of peer group-oriented supports were listed in another article that specifically examined students with emotional disturbances (ED), such as class-wide peer tutoring and group-oriented events such as the Good Behavior Game and Class-Wide Function-Related Intervention Teams (Mitchell, Kern, & Conroy, 2019.) The articles also briefly mentioned services such as speech and language therapy, communication services, and physical and occupational therapy, which can also be considered receiving support from other people. Finally, the article pointed out that one of the service gaps for ED likes in the lack of parental advocacy, implying that parental involvement in securing services supports this population (Mitchell, Kern, & Conroy, 2019).

This idea of parental advocacy serving as a support is reinforced by a separate article. This article states that parental advocacy is important because children are often not listened to or ignored due to power imbalances and marginalization. Therefore, it is the role of the parents to step in and use their authoritative adult-status to advocate and request the services their children

need to thrive in school (Schock & Lee, 2016). Moreover, this article listed teachers as a barrier to using AT in this study because they were not prepared with the device, did not allow it in their class, or lacked the training to use it effectively (Schock & Lee, 2016). However, it is possible teachers could easily become supports by rectifying these points, by working with the student to be prepared and trained and utilize in class as Ennis-Cole and Smith's article suggests (2011).

In their article, they argue that librarian can serve as a beneficial resource to students with ASD by applying their knowledge of technology that is already included in the job description (Ennis-Cole & Smith, 2011). The researchers listed specific approaches in which librarians could support students with ASD:

[In regards to AT, librarians can] teach students to assess the validity and authenticity of electronic resources, collaborate with teachers to teach research skills and integrate digital and print resources into curricula, instruct teachers and students on the ethical use of technology and digital resources, connect technology tools to national, local, and state educational standards, and train teachers to use technology to engage students by using technology" (Ennis-Cole & Smith, 2011).

The article concluded with endorsing librarians as collaborators, AT trainers, and AT advocates because of their experience with technology and their ability to connect that resource to support students with ASD (Ennis-Cole & Smith, 2011).

Last, but certainly not least, the last article is prime example of using other people as a support in social contexts. The entire study focuses on the social impact the Peer Network Intervention had on the focus students: students with disabilities. In this intervention, typical-functioning students volunteer to be a part of a peer network system in which they are partnered

with a focus student and adult facilitators aid social interaction between the two groups by providing activities and lay the foundation to establish a relationship and hopefully the interactions will occur outside of the scheduled peer network sessions (Asmus, et al., 2017). The entire study focused on how people, specifically peers (with the help of the adult facilitators), can be a support to students with disabilities by making a social impact on their lives. The study used the Social Skills Improvement System (which the special education teachers filled out before and after the intervention) and a social validity questionnaire to assess the social support by asking the focus students their perceptions of their peer networks, friendship, and enjoyment of school.

The study found that Peer Network Interventions supported positive enhancements in social relationships of students with disabilities (Asmus, et al., 2017). The intervention increased social interactions, even outside of scheduled meeting times and led to more social contacts and reported friendships by the end of the intervention (Asmus, et al., 2017). Finally, the article also suggested the role a teacher can play in supporting these social interactions by creating opportunities that allow for exposure and connections to foster these friendships (Asmus, et al., 2017).

Summary

To summarize, this discussion supports Fig. 3 by analyzing how different supports and services affected the social and academic contexts of students with disabilities in a school environment. It was found that nonelectronic visual aids served a mostly academic purpose by providing more visual information for the student to utilize, such as students with ASD who process information better visually (Simmons, 2014) Additional example include PECS, visual picture schedules, bookmarks, highlighting important parts of text, bookmarks, highlighting

important parts of text, pictures, visual schedules, and visual cues, all of which allowed students to interact with the educational content and better communication with the teacher.

Social supports facilitated social contexts as demonstrated through the Peer Network Intervention and provided more social connections. Religious and spiritual supports also benefitted students' social contexts by emphasizing how the importance of human connection, emotional well-being, and sense of belonging to a community through spiritual education. Electronics and spirituality often went hand-in-hand with social supports as a means to end: using one support inadvertently facilitated social supports, like how using VSM encouraged students to ask their peers to join their video (Simmons, 2014).

Finally, electronics and other people positively impacted both, social and academic, contexts. As previously stated, electronics aided social interaction and provided students with the skills or opportunities to engage appropriately in social situations. Electronics also helped in an academic sense by providing visual input, and alternative means of communication, and a more engaging medium with which students felt more empowered to succeed in their role as a student. Other people as a support also impacted social and academic contexts. Teachers, peers, parents, along with other professional school staff, can provide services in their respective roles that benefits students socially and academically.

Yet, the scoping review left some questions behind in its wake, one of which deals with the implications developmental stages may have on the types of supports implemented and how they are utilized considering the social and academic behaviors and expectations are very different from a child in early education compared to a teenager in high school. Another question that remains to be answered regards students with physical and sensory disabilities and what supports

might be available to benefit them since those populations were not represented in any of the articles.

Limitations

There were some limitations to this study, including a restricted amount of time to complete this study, having access to the articles that Elizabethtown College had access to, using one database, and having one person to read through and analyze all the articles. I had a four-month window to complete the scoping review. This included reading the titles and abstracts of almost 350 articles, reading the entirety of 21, articles and taking detailed notes, categorizing, and analyzing the variables within the 12 articles. Though I had two readers to look over my work, the process I just described was done by one reviewer.

Additionally, I only used one database, EducationSource, due to the lack of time to search other databases. I felt EducationSource was the optimal database to use if I was only using one because the study revolves around a school environment, specifically.

Finally, as a student of Elizabethtown College, I only had access to what the college had access to. If the college did not have access to it, it was not included in the study. There are likely more articles on the topic of social and academic supports for students with disabilities in a school environment that were not included in this study due to this limitation.

Future Research

This scoping review set out to explore the various supports that can positively affect the social and academic contexts of students with disabilities in a school environment. I found a variety of supports within the articles found; however, the amount of literature in the study was very small due to the limitations present. Therefore, I recommend more research be done into

this topic, utilizing other databases to expand upon more articles and refine the types of supports that are available to students. Additionally, research into these types of supports are needed to enable success for all students in schools and more empirical studies are needed to validate the effectiveness of those supports since most of the data is qualitative via interviews and secondary data analysis. Finally, there was no representation of students with physical or sensory disabilities in the sample. In future research, “physical disabilities” and “Sensory disabilities” should be key words to ensure more representation in the sample, especially considering their social contexts and social inclusion could be affected due to peer perceptions and perceived external differences that set them apart from other students.

Conclusion

In summary, there are various supports students utilize in the classroom to support their social and academic contexts. More research with larger samples should be done, but the foundation is existent. Gaining an understanding of how academic and social supports, or lack thereof, affect students in their social and academic occupations will allow all school professionals, including teachers, librarians, principal/administrators, counselors, therapists and special education teachers to influence the life of a student and set them up for success. All of the aforementioned roles, among others involved in students’ school experiences, can use this research to advocate for what students with disabilities need to be able to succeed in school. This will make a difference in the lives of many.

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