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Cover Page Footnote

Author Note: Shelby Hinrichs is an undergraduate student in the Department of Communication Disorders at the University of Nebraska Kearney. This research was completed through and funded by the University of Nebraska Kearney Summer Student Research Program. Dr. Whitney Schneider-Cline, an assistant professor in the Communication Disorders Department at the University of Nebraska Kearney, served as a faculty mentor for this project.

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Shelby Hinrichs

ABSTRACT

Little is known about the communication abilities, needs, and services provided for children who are homeschooled. The current study utilized a national survey to explore this topic and to better inform future research to determine if families who homeschool have the necessary resources for information, support, and services regarding children's speech, language, and literacy abilities. The participants of this study were contacted through a variety of homeschool associations via social media. The survey was developed through Qualtrics and guided by resources from two existing surveys directed towards homeschool education (Lewis, Robertson, Parsons, 2005; United States of Commerce, 2008).

The survey was distributed and opened during a four-week span. Ninety-eight participants answered questions about whether they were aware of services available to them through their state, if their child(ren) had received any previous speech and hearing services, their child(ren)'s development, and their interest in receiving extra information about communication skills and/or speech-language pathology services. Sixty parents indicated in the survey that they were aware of what public resources were available to them and their family. Out of 118 reported children, 24 children were reported as not typically developing in one or more areas (speech, language, reading, writing). Only 22 parent participants indicated interest in receiving additional information/education about different areas of development and/or speech-

language services. It is vital that researchers explore this area more, in order to inform home educators about the developmental expectations in the areas of speech, language, and literacy and to educate this population about the public resources available to them.

THE SPEECH AND LANGUAGE SKILLS, NEEDS, AND SERVICES FOR CHILDREN WHO HOMESCHOOL: A NATIONAL SURVEY

When considering education, identifying which form of schooling is optimal for a particular student can be controversial. For some families, homeschooling is the answer to this debate. The number of people homeschooling their children in the United States is growing rapidly (Ray, 2018). Currently there are roughly 2.3 million children being homeschooled from ages five to seventeen years (Ray, 2018). These many unknowns, such as the speech-language needs and services available for students who are homeschooled; the current study aims to explore this particular topic. First, however, a review of what is known about the homeschool population is provided.

Demographics of Families Who Homeschool

Homeschool education is not owned by a certain race, geographical area, or even socioeconomic background. Even though the vast majority of students who are homeschooled may be white, there are many other ethnicities in the homeschool community including Blacks, Hispanics, Asians, and Pacific Islanders (Ray, 2018). Homeschool education is prevalent across settings, as 41% live in rural areas, 28% live in suburbs, and 21% live in cities (Ray, 2018). Furthermore, according to a recent survey, the gender of students who participate in homeschool education is fairly equal, as about 54% percent of students who are homeschooled are female and 46% percent are male (Ray, 2018).

Reasons for Choosing Homeschooling

Many explanations have revealed the recent increase in homeschooling popularity. For example, personal beliefs such as religious views are one of the main reasons parents indicate as rationale for their decision to homeschool. According to Vieux (2014), homeschooling was the number one type of education that appealed to religious conservatives with concerns regarding the public school curriculum. In 2014, 36% of parents with children who were homeschooled indicated that they took their children into home education due to the desire to provide more of a religious structure, and this statistic continues to grow (Vieux, 2014).

In addition, homeschool education's growth has expanded as parents developed concerns after their child started in a public or private school system. Some of these concerns included the safety of their children. These situations have been associated with school security and bullying (Ray, 2018).

According to Brian Ray from National Center for Education Statistics (2018), 91% percent of parents were strongly concerned about the atmosphere and the environment of schools which included the issues of safety, drug use, peer pressure, and bullying. Some parents were not only concerned about the child's physical well-being, but also disappointed in academic environments, as 74% percent of parents surveyed indicated that they were dissatisfied with learning styles brought into public schools (Ray, 2018).

Dissatisfaction towards academic systems has been a double-ended issue spanning from parents believing that no one was challenging their child enough in the classroom, to the opposite end of the spectrum where parents thought that their child wasn't getting the essential support they needed in the classroom (Ray, 2018). Specifically, parents of children with special needs deal with this first hand, which is why they have also found that home education has been a positive change to their family and child's life. In 2013, 17% percent of parents who have their

children participating in home education were because their child had special needs (Ray, 2018). Even though the majority of reasons for home education of children were because of unhappiness, dissatisfaction, or other “push” factors, some parents decided that home education adapted to their daily life and better suited their child(ren)’s academic needs.

In addition to the factors provided from parents’ criticism, the prominent statistics comparing homeschooling to public school systems had been the leading factor that has drawn societal interest towards homeschooling. Recent statistics have shown high success rates in relation to home education in many areas of standardized testing. According to Brian Ray, in 2015 homeschool students typically scored 15 to 30 percentiles above public school students on academic achievement tests. These students also received above average SAT and ACT test scores; colleges take this into consideration when they recruit and award scholarships to students who are homeschooled (Ray, 2016).

Not only have some parents noticed advancement in their children’s academics, but homeschooling can also strengthen family ties. Studies completed in Israel (Guterman & Neuman, 2017) have revealed parents’ opinions about the relationships among their families. These parents reported a substantial impact in relationships between children and parents, and also between siblings regardless of family size (Guterman & Neuman, 2017). Strengthening family relationships is not the only thing that there is more time for when utilizing home education, but also more time is available for children to get further involved in other activities. For example, many famous people like Tim Tebow, Simone Biles, and numerous music artists were homeschooled due to their commitments in specific areas such as athletics, music, and acting (Top Education Degrees, 2018).

Available Resources

A challenge for all parents and educators who implement homeschooling is making sure their children are receiving the necessary resources to gain a well-rounded education. This not only entails academics but other areas like in social skills, physical health, opportunities to explore the arts, and many more. For most parents, finding these resources have not been a challenge. According to Guterman and Neuman (2017), children who were homeschooled spent at least 12 hours a week with other children their age other than their siblings. Sixty percent of these homeschooled students were involved in athletic groups, 48% were involved in music opportunities, and 45% participated in academic lessons with other children outside their own home (Guterman, Neuman, 2017). This is likely made possible that 70% of families who are homeschooled are involved in homeschool associations in order to learn about such opportunities available (Hanna, 2012).

Although homeschool associations help support parents to develop a well-rounded education with developed curriculums, some public programs are also available for families who homeschool. Public libraries have been vital contributors towards the curriculums of children who are homeschooled, as they are the number one preferred resource used by homeschoolers (Pearson, 2002). Some of these resources include tours, longer borrowing privileges, and programming that entails collecting curriculum guides and guest speakers (LaRue & LaRue, 1991). Public libraries also display art and science projects, hold story hours for younger students, provide career and college information to older high school students, and offer resources like math manipulatives, science equipment, and computer software (Gatten, 1994).

Another opportunity that is available for families who homeschool are physical health programs provided by universities nationwide (Wachob, 2015). From a financial aspect, these programs are often appealing as many are offered free of charge, and the majority of the families

participating are single income households as one parent is usually staying home and teaching the children (Wachob, 2015). Having access to facilities and programs like these that work into a family's schedule and finances is valued by homeschooled families.

While public services are often available to promote physical health and improvement in gross motor skills, there are also resources developed to promote fine motor skills for families who homeschool. One example of locally available public services for families who homeschool is the Museum of Nebraska Art (MONA); MONA has expanded its agenda to reach out to children of all ages who are homeschooled with different programs like Art Start. Within this program students have the option to explore different interests like drawing, painting, printmaking, and even sculpting (MONA, 2017). Not only do local homeschool students have the opportunity to experience the visual arts but also the performing arts as some local professors have provided services for instrumental and voice lessons. These examples reveal that the resources and opportunities for children who are homeschooled to socialize and gain new interests exist, even in rural areas.

Public school districts have also created service delivery models for the homeschooling population. Public school systems can be great assets for families who homeschool, in particular for children with special needs. In many states, public school districts are responsible for providing special education services to eligible homeschool students (Pearson, 2002). Parents are not only encouraged to seek out services, but are encouraged to have their child evaluated by the public school district. After the child is evaluated, the amount of services provided is established through the child's Individualized Education Plan (IEP; Pearson, 2002). These services involve a variety of different professionals, as needed, which may include a speech-language pathologist, an occupational therapist, or a physical therapist.

The Current Study

While public school systems may offer appropriate special education services for families who homeschool, other options, such as private practice and university clinics are also available to serve students with speech and/or language disorders or delays. However, families must be aware of the options available to them when special services are needed for their child(ren). Furthermore, parents who homeschool need information and training of typical developmental milestones within areas such as speech and language in order to recognize when/if such services are warranted. In relation to this topic, the goal of this research was to investigate parent awareness of speech and language development and the related resources available for students who are homeschooled nationwide. Within the existing literature, no evidence of research regarding speech and/or language services offered to students who are homeschooled was present. Therefore, there is a definite need for research on parents' awareness for speech and language services and resources that are available for children who are homeschooled.

The authors' initial research in this area included conducting free speech and language screenings at the University of Nebraska at Kearney Speech, Language, and Hearing Clinic for children who are homeschooled (Hinrichs & Schneider-Cline, 2018). Screenings were intended to identify if further assessment was needed. Therefore, if a child passes a screening in a given area, their abilities are considered within normal limits. However, if a child fails in a given area, additional assessment is recommended to further explore his/her skills/needs in this area (i.e., speech, language, and/or literacy; Hegde & Pomaville, 2017). Seven school-age children and their parents participated in the pilot study. The child participants' ages ranged from five to sixteen years and their education levels ranged from Kindergarten to eighth grade. While the child participants were completing the screenings, the parents completed a survey asking

common background information about the child and family's demographics, strengths and weaknesses of child, as well as medical and education history. Responses to the survey revealed that parents were most concerned about their child's expressive abilities. Other concerns that were mentioned included the child's pragmatic, vocabulary, and/or literacy skills. Results from the screenings showed four of the seven participants failed at least one portion of the screening battery. One child failed in language and reading, one failed in reading only, one failed in speech and reading, and lastly, one failed in speech only.

Five months after the screening results were collected and evaluated; one of the researchers contacted each participant's family who had failed a portion of the screening with follow-up questions, resources, and information. The follow-up phone calls revealed that out of the four participants that failed in at least one area of the screening, two participants went on to schedule comprehensive evaluations. The results of the two comprehensive evaluations indicated that both children qualified for speech and/or language services.

Based on the results of this pilot study, the researchers became curious regarding parental awareness of speech and language resources for children who are homeschooled. The researchers decided to seek out families who homeschool to learn about general parental awareness of speech and language development and resources for children who are homeschooled from a national point of view.

The current study evaluated how aware parents are about typical speech, language, and literacy development as well as the related available resources and services for their child(ren). The following research questions were addressed in this study:

1. In general, are parents who homeschool aware of speech/language services that are available to them?

- a. Based on the pilot study, it is anticipated that many families who homeschool may not be aware of all the services that are available to them.
2. Do parents who homeschool believe that each of their child's speech, language, and literacy development is typical?
 - a. The researcher foresees that the majority of participants will answer that their child is typically developing rather than not typically developing. However, for those who indicate that their child's development is not typical in one or more of these areas, it is anticipated that parents may desire more information for related clarification and/or support.
 3. Do parents who homeschool have interest in receiving more information regarding services and/or resources for speech, language, and literacy development?
 - a. The researcher expects participants will want more information regarding services available and/or resources regarding speech, language, and/or literacy, specifically parents who indicate that their child is not typically developing in one or more of these areas.

Although parents typically have their child(ren)'s best interest in mind, they may not be familiar with developmental expectations in the areas of speech, language, and/or literacy. Furthermore, parents may not know the extent of what services and resources are available for them and their family to utilize to improve their child's speech, language, and/or literacy (if needed). The primary goal of this study is to indicate if a need of awareness and resources for

families who homeschool truly exists within the homeschool population via a survey. Then, if a need does exist, the researchers hope to help families who homeschool their children gain access and awareness of speech and language resources and services available.

METHODS

Participants

Ninety-eight parents of homeschooled children participated in this study. The age range of parent participants is outlined in Figure 1. The survey was distributed to these parent participants through homeschool associations willing to share the survey link via newsletters, email, and/or social media. The survey was networked across the United States; see Appendix A for a detailed list of homeschool associations that were invited to distribute the survey. The total number of children reported in the survey was 118 (48 females and 43 males). The number of children per family ranged from 1-12 with an average of 1.95. The age range of these children ranged from four to twenty-four years old; see Figure 2 for children's age distribution. Demographic data such as ethnicity (see Figure 3), primary native language of child (see Figure 4), and total number of children from each family (see Figure 5) are illustrated below.

Figure 1. Parent Participant Age Range

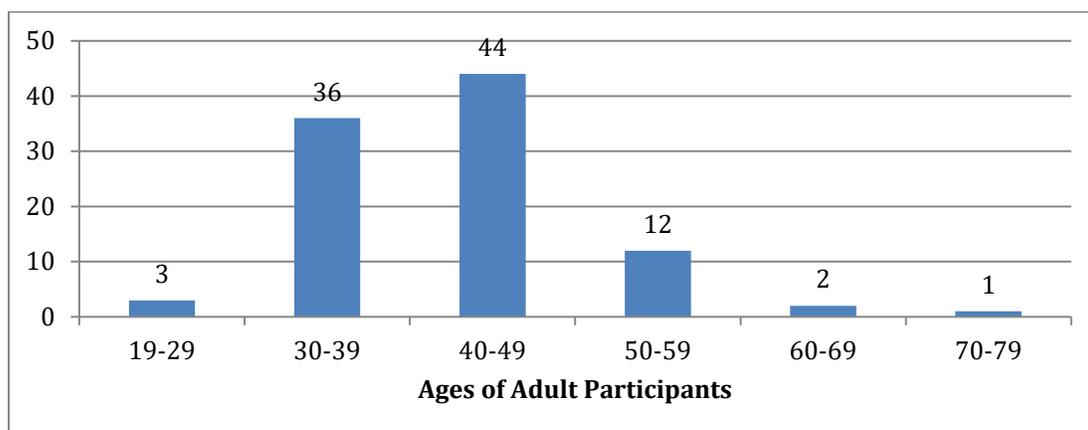


Figure 2. Child Age Ranges

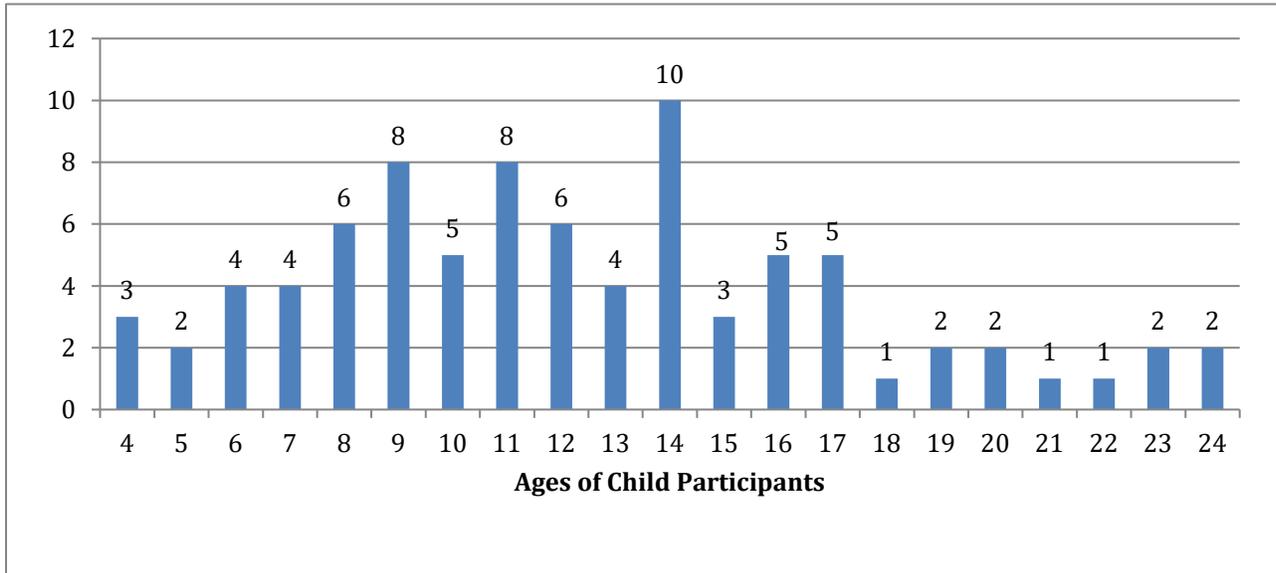


Figure 3. Child's Ethnicity

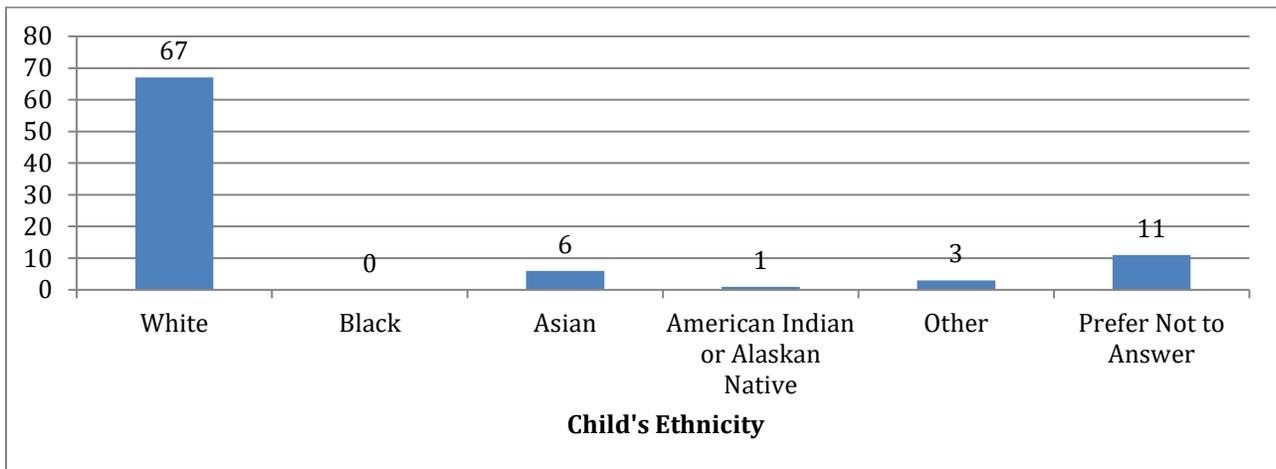


Figure 4. Child Native Language Information

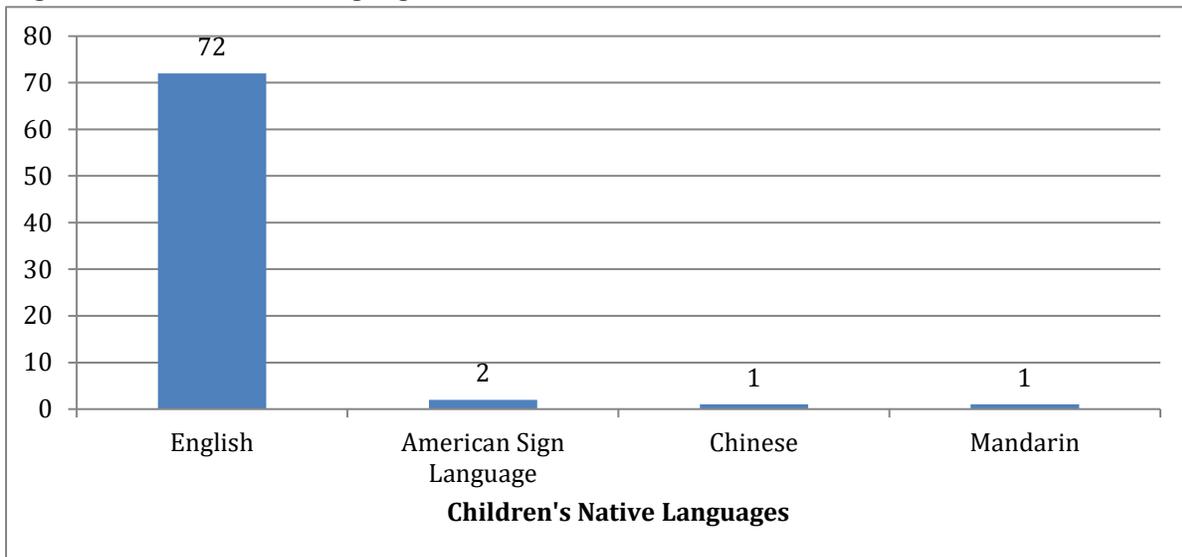
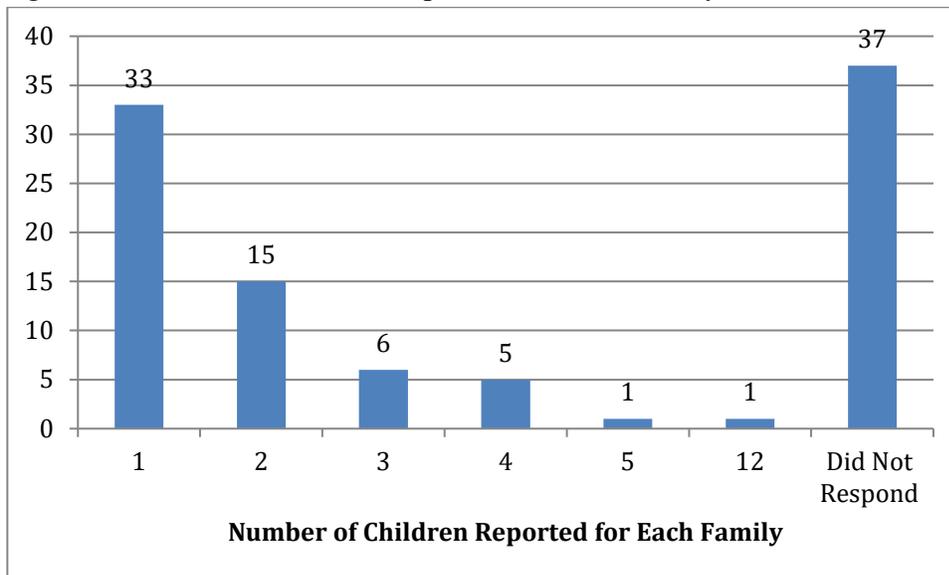


Figure 5. Number of Children Reported for Each Family



Materials

The survey was created using Qualtrics, an online data collection program. The researchers utilized two existing resources in the development of this survey; one resource was directed more towards the needs of special education in homes (Lewis, Robertson, & Parsons, 2005), but both resources contributed to the survey in guiding the content/questions posed

(Lewis, Robertson, & Parsons, 2005; United States of Commerce, 2008). The Homeschool Legal Defense Association was also a valuable resource as the website displayed multiple homeschool associations that were contacted about distributing the survey (see Appendix A for list of homeschool organizations contacted about distributing the survey).

Throughout the survey, participants answered demographic questions including the age of parent participants and their children, each child's native language, ethnicity, gender, and the number of children per family. The participants were also asked about each of their child's speech, language, and literacy development (i.e. is development in each of these areas typical or atypical). To conclude, the survey participants were offered the option of later receiving additional information about speech, language, and literacy development (survey questions are provided in Appendix B). As an incentive, participants were also offered a chance to be in a drawing and win one of four \$50 Amazon gift cards, but this required that they share an email address. No other identifying information was gathered throughout the survey, and participants' survey responses were not linked to their email address, if provided.

Procedure

The University of Nebraska Kearney Institutional Review Board (IRB) approved the current study; following this approval, the survey link was sent to the associations who indicated via email that they were willing to distribute the survey by newsletter, email, or social media to their constituents. The survey was open for four weeks. Participants were required to be age 19 years or older and a parent to a child who was homeschooled. The survey took participants an average of 28 minutes; the length of time likely depended on how many children the participant had/reported.

After the survey closed, the researchers organized the participants' responses into Excel spreadsheets for analysis. Descriptive statistics were used to analyze participants' responses. These results were analyzed and compared by both researchers to ensure reliability; any discrepancies in calculations were resolved until 100% agreement between the two raters was obtained.

RESULTS

Throughout the four weeks the survey was open, 99 participants started the survey. The completion rate varied among these participants as some filled out the survey thoroughly (n = 59 completed the entire survey) and others filled out the survey partially (n = 39). One person started the survey and then chose not to participate in the survey. All data collected (n = 98) was included in our analysis regardless of how complete/incomplete each participant's responses were, therefore the number of respondents per item varies.

Awareness of Services Available

To explore participants' awareness of services in their state of residence, each one was asked if they knew what kind of services were available to them and their families. The survey results indicated that 60 participants reported that their state provided services. Three participants reported that their state provided no services towards families that homeschooled. In addition, 31 participants said that their state provided some services; four participants did not respond to this question.

Child Development

The parent participants were asked about each of their child's speech, language, decoding, reading comprehension, and writing skill development. Parents indicated areas in which they believed their children were typically developing; Figure 6 presents a general

overview of the parent reports. Table 1 displays the results of how many child participants were reported as performing below typical development, at typical development, or above typical development specifically in the areas of speech, language, decoding, reading comprehension, and writing development.

Figure 6. Summary of Parent Development Reports

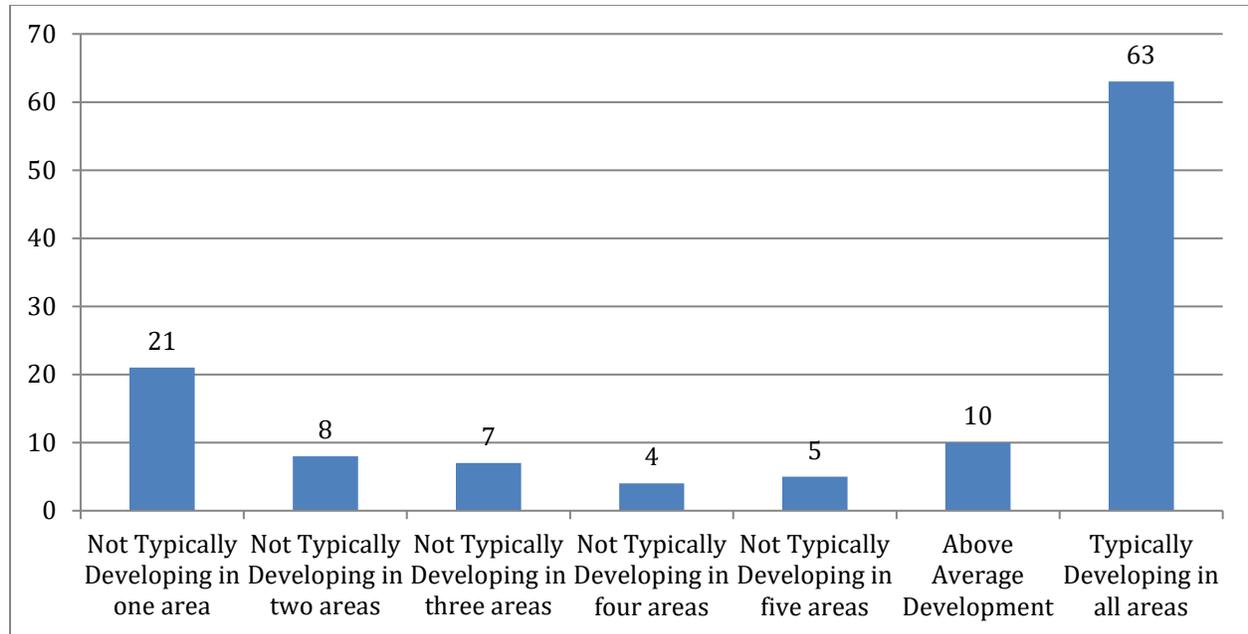


Table 1

Development Report by Performance Area

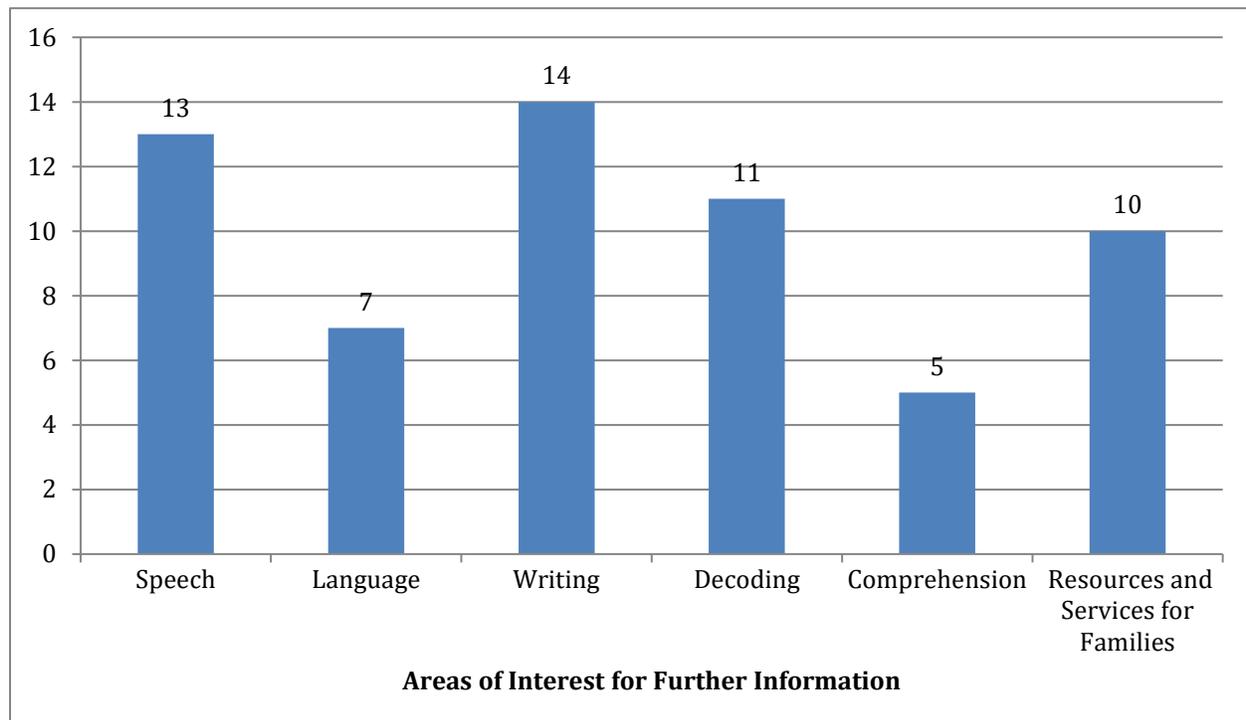
Developmental Area	Performance Reported: Above Average	Performance Reported: Typical	Performance Reported: Below Average	Total Number of Responses
Speech	0	64	17	81
Language	1	94	23	118
Reading: Decoding	5	96	19	120
Reading: Comprehension	4	99	13	116

Writing	0	85	32	117
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Interest in Additional Information

To conclude the survey, the researchers asked the participants if they were interested in receiving additional information regarding speech/language services; 22 parents indicated areas where they would like more information (see Figure 7). In addition, the researchers asked if the participant would be willing to provide an email address in order to be contacted with any requested supplemental information they indicated would be beneficial to them and their children; only 17 participants provided their contact information so the requested information could be distributed to them in the future.

Figure 7. Areas of Interest for Receiving Further Information



DISCUSSION

When comparing the demographic results in the current study to resources and past articles about the homeschool population, a distinctive connection is apparent. As previously stated, research has shown that there is an equal number of males and females participating in homeschool education as 54% percent of students who were homeschooled were female and 46% of students who were homeschooled were male (Ray, 2018). The results from this survey support these findings, as parents that reported their child's gender indicated that 45 children were female (53%) and 40 were male (47%). The results of ethnicity and primary language also connected to past literature sources reflecting the diverse population represented within the homeschool population. In the current study, the results indicated primarily white children, however there were some responses from Asian, American Indian/Alaskan Native, and other ethnicities. Furthermore, although English was the primary language used among the students reported, there were other primary languages like American Sign Language, Mandarin, and Chinese reported. Overall, the demographic data collected within the current study matched the existing national data trends regarding children who are homeschooled.

The remaining portion of this discussion section will address the results as they pertain to each of the research questions for this study.

Research Question 1: In general, are parents who homeschool aware of speech/language services that are available to them?

According to the survey results, the majority of participants reported that their state provided at least some services to families who homeschool. This response demonstrates some awareness of the services available. However, the researchers would like to further explore homeschool parents' awareness of what speech/language services are available to them beyond

what is provided through their state of residence. It would be of value to determine if families who homeschool seek out services through public school districts or if they are they aware of public resources like private practice or university clinics offering speech-language services.

While it was hypothesized that some parents may not be aware of services available to them, the survey results indicated that the parent participants were, in general, aware of what public services were available for their children.

Research Question 2: Do parents who homeschool believe that each of their child's speech, language, and literacy development is typical?

The majority of parents surveyed indicated that their child(ren)'s speech, language and literacy development was typical (see Figure 6 and Table 1). However, out of the 118 children reported, 45 were indicated as having below average development in one or more of the areas surveyed (i.e. speech, language, decoding, reading comprehension, and writing). The results showed that the greatest area parents reported as not typically developing was in writing skills (n = 32), but there were concerns reported within each category. In addition, ten children were reported as particularly gifted or advanced in a certain area.

As parents completed the section of the survey related to their child(ren)'s development, they were asked to state some type of reasoning for their answer. In general, the majority of parents presented evidence through specific examples to demonstrate their child's level of development (n =51); future analysis of this data will be conducted to determine the accuracy of these reports. Some parents who reported their child as typically developing may have given evidence that does not match this report; similarly, parents who reported their child as not typically developing may have provided evidence of the contrary.

As hypothesized, most parents reported typical development for their child(ren), yet further data collection and analysis is needed to determine the accuracy of the parental reports.

Research Question 3: Do parents who homeschool have interest in receiving more information regarding services and/or resources for speech, language, and literacy development?

While 45 parents indicated that their child(ren) was not typically developing in one or more of the presented areas, only 22 parent participants indicated interest in receiving further information about their child(ren)'s development in speech, language, writing, decoding, reading comprehension, and/or speech-language pathology resources and services available for families who homeschool. Furthermore, only 17 parent participants provided their email address for future communication/education in the areas requested. This mismatch between those who indicated a potential need for information about development and or related services and those actually interested in receiving such information demonstrates the importance of further exploration in this area of education. In addition, these results show necessity for additional efforts to inform more parents in these areas of communication development to help and prepare them for any obstacles that they may encounter. Furthermore, additional research in this area is needed to understand the interest in receiving information, yet a lack of willingness to seek out such resources (i.e. providing an email address).

It was hypothesized that the majority of the parents that participated in the survey would want to receive extra information for different resources and services that would benefit the families. The results contradicted this hypothesis as only 22 parent participants indicated interest in receiving further information about their child(ren)'s development in speech, language, writing, decoding, reading comprehension, writing development, and/or speech-language

pathology resources and services available for families who homeschool. From these 22 participants, 17 provided their email address for future communication/education in the areas requested. This identifies that not many participants wanted to receive supplemental information.

Limitations

There were some limitations that affected the quality of the current study. The primary limitations of this study centered around the development of the survey. There were technical issues in establishing the format/content of the survey within Qualtrics. For example, for the first 36 participants, when asked about each child's development, the first set of questions for child #1 regarding age and gender were not visible to participants; this was brought to the researcher's attention by a participant after the survey had been open for twelve days. This problem was addressed as soon as possible, so the remaining 63 participants were able to view and respond to these questions about their first-born child. However, this limitation could have impacted the quality of the data collected for the first 36 participants, and the overall results of this study.

Another limitation that became apparent after the researchers closed the survey and reviewed the results was the lack of questions regarding the history of those who had utilized speech and language services in the past and their satisfaction with these services, the participants' geographic location, and their reasons for homeschooling. While these questions were included in our survey, a setting error within the survey hid them from the participants. It would be beneficial for future studies in this area to explore where each participant came from. This could reveal a pattern that shows what states do and do not provide services which then could lead to more efficient ways to reach out to the homeschooling community. Further knowledge of participants' reasons for homeschooling would have been helpful to determine if issues related to access to/knowledge of speech and language services had any impact on

families' decisions. Additional information about past experiences with speech and language services could help inform future efforts to educate and better serve families who homeschool in regards to speech, language, and literacy development and resources available.

Future Directions

In order to learn more about homeschool families and their speech, language, and literacy knowledge and needs, the researchers plan to redistribute this survey to obtain more participants to gain more knowledge about this population. Additional participants are desired to provide further insight into areas that were not included in the results of this study (i.e. geographic location, reasons for homeschooling, services received). Another goal that will be met in the future will be contacting the participants who indicated interest in receiving additional information about a specific area(s) in speech, language, decoding, reading comprehension, and/or writing development. To conclude the study's future goals, the researchers will work to educate homeschool families on child development and set the families up with resources within their geographic area. The ability to expand from the screening could open up more possibilities and answers for this specific area of research.

CONCLUSION

Little research has been conducted about parental awareness in families who homeschool regarding speech, language, and literacy development as well as awareness of the related services and resources that may be available to families who homeschool via public school districts, private practice, university clinics, etc. It is vital that the public explores this area more in order to inform home educators about the developmental expectations in the areas of speech, language, and literacy as well as educate this population about the public resources available to them. The research conducted in this study is a preliminary exploration of speech-language

pathologists' services and needs specifically for families who homeschool. This study revealed a need for further research on this topic, specifically to explore more detailed knowledge of resources families use for speech and language services, as well as a greater understanding of the need for more education in these areas of development, and means for distributing related information to families who homeschool.

REFERENCES

- Dodd, B., Hua, Z., Crosbie, S., Home, A.; Ozanne, A. (2002). *Diagnostic Evaluation Articulation and Phonology*. New York, NY. Pearson.
- Gatten, S. B. (1994). The development of home schooling services in the public library: A case study. Retrieved from Kent State University, Ohio. <https://www.ericdigests.org/1997-/public.html>
- Guterman, O. Neuman, A. (2017). The role of family and parental characteristics in the scope of social encounters of children in homeschooling. *Journal of Childhood Family Studies*, 26(10), 2782-2789.
- Hanna, L. G. (2012). Homeschooling Education: Longitudinal Study of Methods, Materials, and Curricula. *Education and Urban Society*, 44(5), 609631. <https://doi.org/10.1177/0013124511404886>
- Hegde, M.N., & Pomaville, F. (2017). *Assessment of communication disorders in children: Resources and protocols, Third edition*. San Diego, CA: Plural Publishing.
- Hinrichs, S., & Schneider-Cline, W. (2018). *Screening Speech, Language, and Reading Abilities of Home-Schooled Children*. Poster presentation at the University of Nebraska Kearney Student Research Day.
- LaRue, J., LaRue, S. (1991). Is anybody home? Schooling and the Library. *Wilson Library Bulletin*, 66(1), 32-39.
- Lewis, A., Robertson, C., & Parsons, S. (2005). DRC Research Report - Experiences of disabled students and their families: Phase 1. *Disabled Rights Commission*, 117-130. Retrieved April 18, 2018. Retrieved from Retrieved from <https://disability-studies.leeds.ac.uk/wp.../lewis-Experiences-1-full-report-word.pdf>

Museum of Nebraska Art. (2017).

Pearson, R. (2002) The worth of a child: Rural homeschooling / public school. Partnerships are the Leading the Way, 3-11. Idaho State University. Retrieved from <https://files.eric.ed.gov/fulltext/ED464788.pdf>.

Ray, B. (2018). *Research Facts on Homeschooling: Homeschool Fast Facts*. Retrieved from National Home Education Research Institute website: <https://www.nheri.org/research>

Redford, J., Battle, D., and Bielick, S. (2016). *Homeschooling in the United States: 2012*. Retrieved from National Center for Education Statistics, Institute of Education Sciences, U.S. Department of Education website: <https://nces.ed.gov/pubs2016/2016096rev.pdf>

Top Education Degrees (TED). (2018, March). 30 Successful People Who Were Homeschooled. Retrieved from <https://www.topeducationdegrees.org/successful-people-who-were-homeschooled/>.

United States of Commerce. (2008). National Household Education Survey, 1991. *ICPSR Data Holdings*,03-18. doi:10.3886/icpsr09877

Vieux, R. (2014). The Politics of Home Schools: Religious Conservatives and Regulation Requirements. *Social Science Journal*. (51) 556-563.

Wachob, David. (2015) Starting a University-based Physical Educational Program for Homeschooled Children, *Journal of Physical Education, Recreation & Dance*, 86:3, 37-42, DOI: [10.1080/07303084.2014.998396](https://doi.org/10.1080/07303084.2014.998396)

Wiig, E., Secord, W., Semel, E. (2013) *Clinical Evaluations of Language Fundamentals*. New York, NY. Pearson.

APPENDIX A**Homeschool Associations Contacted**

The researchers emailed each of the following homeschool associations. The associations were asked to distribute the survey link to their members; some associations agreed to share the survey link, others did not wish to participate and some did not respond to the request.

Catholic School House
Eden Hope Academy
Messianic Homeschoolers
National Challenged Homeschoolers Association
National Christian Forensics and Communications
National Home Education Research Institute
Regina Caeli Academy
Scholar Rosa: Co-op and Home Curriculum
SPED Homeschool
Nebraska Christian Home Educators Association
Nebraska Homeschool- The Home Educators Network
TEACH-CT
Family Educators Alliance of South Texas
Greater Houston Area Home Educators
North Texas Home Educators Network
Alaska's Private and Home Educator's Association
Christian Home Education Fellowship of Alabama
The Education Alliance of Arkansas
Arizona Families of Home Education
Covenant Home School Resource Center
Christian Home Educators' Association of California
Christian Home Educators of Colorado
Joint Base Anacostia-Bolling Home Educators
Florida Parent Educators Association
Georgia Home Education Association
Christian Homeschoolers of Hawaii

Network of Iowa Christian Home Educators
Christian Homeschoolers of Idaho State
Idaho Coalition of Home Educators
Illinois Christian Home Educators
Greater Lafayette Home Educators Association
Indiana Association of Home Educators
Indiana Association for Home Educators Action
Indiana Foundation for Homeschooling
Indiana Home Educators Network
Teaching Parents Association
Christian Home Educators of Kentucky
Homeschool Louisiana
Massachusetts Homeschool Organization for Parent Educators
Massachusetts Homeschool Organization for Parent Educators
Homeschoolers of Maine
Home Education League of Michigan
Information Network of Christian Homes
Minnesota Association of Christian Home Educators
Families for Home Education
Lee's Summit Home Educators
Mississippi Home Educators Association
Yellowstone Coalition of Home Educators
North Carolinians for Home Education
North Dakota Home School Association
Education Network of Christian Homeschoolers of New Jersey
Gloucester Country of Christian Homeschoolers Association
New Jersey Homeschool Sports Association
Christian Association of Parent Educators-NM
Nevada Homeschool Network
Loving Education at Home
Christian Home Educators of Ohio
Ohio Homeschooling Parents
Christian Home Educators Fellowship of Oklahoma

Oklahoma Christian Home Educators Consociation
OCEANetwork
Christian Homeschool Association of Pennsylvania
Rhode Island Guild of Home Teachers
ENRICHri
Christian Homeschoolers' Association of South Carolina
Grace School Association
Parents' Association for Christian Education in SC
South Carolina Association of Independent Home Schools
South Carolina Home Educators Association
South Carolina Homeschool Accountability Association
Carolina Homeschooler
South Dakota Christian Home Educators
Mid East Tennessee Home Educators Association
Middle Tennessee Home Educators Association
New System School Inc.
West Tennessee Home Educators Association
Utah Christian Homeschool Association
Homeschooling Vermont (Facebook) Chat Group
Home Educators Association of Virginia
Christian Heritage Home Educators of Washington
Washington Homeschool Organization
Homeschoolers of Wyoming

APPENDIX B

Survey Items

1. By clicking the link below I verify that I am age 19 or older, am the parent of at least one homeschooled child, understand my rights as a research participant, and agree to participate in the study.

- Yes (1)
- I choose not to participate in the study. (2)

2. Please indicate your age range:

- 19-29 (1)
- 30-39 (2)
- 40-49 (3)
- 50-59 (4)
- 60-69 (5)
- 70-79 (6)
- 80+ (7)

3. Are you aware of your state's provisions regarding special education services (including speech) through the public schools for children who homeschool?

- My state provides services (1)
- My state does not provide services (2)
- My state provides some services (3)

** How many family members currently live in your household?

** What was your reason for homeschooling your child(ren)?

- Negative peer pressure (1)
- Dissatisfied with academic instruction at former school (2)
- To provide religious instruction (3)
- Physical or mental health problems (4)
- Illnesses (5)
- Other, please explain. (6) _____

**Who is the person that mainly provides this child's homeschool instruction?

- Parent/Guardian (1)
- Private Tutor or Teacher (2)
- Other, please explain. (3) _____

** Is any of your child(ren)'s instruction provided by a local homeschooling group and/or co-op?

- Yes (1)
- No (2)

**How many hours each week is your child(ren) homeschooled?

** Does your homeschool location have internet access?

- Yes (1)
- No (2)

** How many hours does your child(ren) use technology in a week?4. ***The remainder of this survey will ask questions specifically tailored to each of your individual children. Please respond to these questions about each of your children ages five and above.

*For your oldest child please complete the following section.

Birth date of child 1:What is the child's sex?

- Male (1)
- Female (2)
- Prefer not to answer (3)

What is the child's native language?

- English (1)
- Spanish (2)
- French (3)
- German (4)
- Other, if so please list. (5) _____

What is the child's race?

- White (1)
- Black or African American (2)
- American Indian or Alaska Native (3)
- Asian (4)
- Native Hawaiian or Pacific Islander (5)
- Other (6)
- Prefer not to answer (7)

Do you believe your child's speech sound production is developing typically for his/her age?

- Yes. Please explain/provide examples to support your response. (1)
- No. Please explain/provide examples to support your response. (2)

Do you believe your child's language skills are developing typically for his/her age?

- Yes. Please explain/provide examples to support your response. (1)
- No. Please explain/provide examples to support your response. (2)

Do you believe your child's reading (decoding skills) are developing typically for his/her age?

- Yes. Please explain/provide examples to support your response. (1)
- No. Please explain/provide examples to support your response. (2)

Do you believe your child's reading comprehension skills are developing typically for his/her age?

- Yes. Please explain/provide examples to support your response. (1)
- No. Please explain/provide examples to support your response. (2)

Do you believe your child's writing abilities are developing typically for his/her age?

- Yes. Please explain/provide examples to support your response. (1)
- No. Please explain/provide examples to support your response. (2)

Do you have another child/children to share about?

- Yes (1)
- No (2)

5. How did you find out about this survey?

6. I am interested in receiving information about (check all that apply):

Speech sound development (1)

Language skills development (2)

Reading (decoding) skill development (3)

Reading Comprehension skill development (4)

Writing skill development (5)

Speech-language pathology resources and services available for families that homeschool (6)

7. Would you like us to contact you information on the topic(s) you previously indicated interest in above (i.e. speech sound development)?

Yes. Please contact me at the following email address:

No (2)

8. Would you like to be entered into a drawing for one of four \$50 Amazon gift cards?

Yes; please provide your preferred email address here:

No (2)

Note. * This item was not present in the first 36 surveys; a correction was made and the last 63 participants were able to view/respond to this item. ** While these items were intended to be included in the survey, participants were not able to view them, therefore, no data for these items was collected. *** Items listed under question 4 were repeated (as needed) and completed for each child that the parent participant reported.