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Teachers' Knowledge and Perceptions of Children who Stutter

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SENIOR THESIS APPROVAL

This Honors thesis entitled

"Teachers' Knowledge and Perceptions of Children Who Stutter"

written by

Kathryn Knight

and submitted in partial fulfillment of the requirements for completion of the Carl Goodson Honors Program meets the criteria for acceptance and has been approved by the undersigned readers.

Mrs. Carol Morgan, thesis director
Dr. Nancy Hardman, second reader
Dr. Elizabeth Kelly, third reader
Dr. Barbara Pemberton, Honors Program director

2020

Teachers' Knowledge and Perceptions of Children Who Stutter

Kathryn Knight

Honors Senior Thesis, Ouachita Baptist University

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Abstract

Stuttering is often negatively perceived and very misunderstood by teachers. According to the Stuttering Foundation, about 5% of children go through a period of stuttering in their early childhood. However, 1% of those children become persistent stutterers and slowly develop negative feelings about themselves and their disorder. Listeners who develop negative perceptions of children who stutter may add to the negative feelings which children who stutter already have for themselves.

This study examined the negative perceptions which many teachers understand to be true about children who stutter and whether teachers with less teaching experience and less special education in-service hold more negative perceptions of children who stutter. For the project, 51 special education and general education teachers in elementary schools in Arkansas were given a survey consisting of demographic questions and statements about children who stutter. Teachers were asked to answer questions about their background and then were asked whether they agreed or disagreed with statements about children who stutter.

The results of my research indicated teachers are unsure of the cause of stuttering as well as how to best respond to an support a child in their classroom who stutters. A majority of teachers who responded to the survey believed anxiety to be the most common cause of stuttering. Many of them also agree that they do not feel that they are trained on how to interact with students who stutter in their class. These results are consistent with current literature that identified negative perceptions held by teachers about children with communication disorders, including stuttering.

Introduction

Current research shows that about 5% of children go through a period of stuttering (National Stuttering Association, 2019). This means that in a class of twenty preschoolers, at least one of them is likely to stutter. Although many children begin to experience speech disfluencies at this age because of the large amount of language their immature brains are rapidly learning, about 20% of those children who stutter will continue stuttering throughout their lives (NSA, 2019). Because some children do continue to stutter after age 5, it is necessary for teachers to know the importance of treating children who stutter the same way as they treat other students who do not stutter. Negative perceptions of children who stutter by teachers may have a negative effect on the educational progress of these children.

According to the National Stuttering Association (2019), stuttering is characterized by speech disfluencies such as repetitions of parts of words, prolongations, or blocks. It also usually includes the stutterer developing negative feelings about him/herself and thus sometimes developing a lower quality of life. Stuttering does look different in every child and not every child develops those negative feelings. It also may take a period of years after onset of stuttering for a child to develop awareness of his/her stuttering.

Of all disorders, stuttering is one of the most negatively perceived by parents and teachers because it is very misunderstood. It has been shown that children develop the mindset that stuttering is an internal trait (Fabus & Sidavi, 2010). Teachers, along with parents, play one of the most vital roles in supporting children who stutter and making sure that they do not begin to have the negative feelings of fear and anxiety which often develop with stuttering. It is important for parents and teachers of children who stutter to know that these children may try to cope with their stutter by developing associated characteristics. It helps the teacher and the

student when the teacher can recognize the behaviors that often accompany the student's stutter. It can significantly impact the child in a positive way when teachers demonstrate a desire to want to help the child who stutters.

Negative perceptions toward children who stutter may be shown by teachers in a variety of ways. Often a teacher with negative perceptions of children who stutter may interact with them differently than with children who do not stutter. For example, a teacher may not ask the child who stutters to answer questions aloud, read aloud in class, or recite information for class. This misconception is that the person who stutters doesn't want to speak aloud, though that often is not the case. The teacher may also become more easily frustrated when speaking with a child who stutters because the teacher may feel too busy to slow down and patiently listen to the child. Because negative feelings about stuttering can stay with a child throughout his/her life, it is important for teachers not to make children who stutter feel differently than their peers. A teacher who exhibits positive perceptions toward children who stutter will likely result in a student who develops more positive feelings about his/her stuttering disorder. There are a variety of feelings that develop as stuttering severity progresses including shame, embarrassment, loneliness, and fear (Boyle, Buhr, Daniels, & Hughes, 2016).

After graduation from college, teachers often go into a school setting without enough preparation to be the best teacher for a student who stutters. Many colleges do not require their education majors to take a class on how to manage the special needs child in the classroom. Teachers are trained to educate children, but colleges are doing their future teachers a disservice by not preparing the teachers to teach and interact with children who stutter. Throughout a teacher's career, s/he will attend in-service, but will likely never receive training on communication disorders. A teacher being educated on special needs children or communication

disorders could make a huge difference in the perceptions regarding a child who stutters. There is no "magic pill" to fix stuttering so creating a positive experience for children at school is a large part of remediating the negative experiences of a child who stutters.

One of the obstacles to knowing how to interact with the child who stutters is a lack of knowledge about the cause. People use whatever resources they have to explain occurrences of an almost infinite number of phenomena (Ambrose, 2004). This statement remains true regarding stuttering. People want to try to pin point a single cause of stuttering so that they can try to prevent it or just simply understand why it happens. Many of the teachers in my survey indicated that they believed that things such as anxiety, childhood trauma, and genetics were the "cause" of stuttering. The truth is that many factors, both in children themselves and in their outside environments, create the conditions under which stuttering first emerges and then either disappears or grows worse (Guitar, 2014).

The Stuttering Foundation is active in bringing awareness to the public about the disorder of stuttering. There have been many articles published which offer advice to parents and teachers of stuttering. One of the main messages of the advice is that these children should be treated like any other child. In order to spread more awareness, there is a full week in May dedicated to Stuttering Awareness. Although there are several things which The Stuttering Foundation does to dispel myths about stuttering, there is still so much more which can be done to make the life of a child who stutters more positive. This includes educating teachers on how children who stutter should be treated in the classroom.

One of the purposes of this study is to make elementary school teachers aware of how children who stutter should be treated in the classroom. The hypothesis for the study states that "teacher's knowledge about stuttering and perceptions of children who stutter increases

positively with years of teaching experience and number of hours of special needs in-service." This hypothesis was tested using a survey which was given to just over fifty teachers around the state of Arkansas. These teachers were first asked about their teaching background then asked to rate their beliefs about stuttering. This project attempts to dispel myths about stuttering and as a follow up provide teachers tips through a handout (Appendix E) on how to interact with children who stutter, specifically inside the classroom, but also outside of the classroom.

Method of Research

In order to research how teachers in Arkansas perceive children who stutter, a survey was sent to approximately 150 teachers in Arkansas through an email. The email contained a Google Forms survey for the teachers to complete voluntarily. The survey was sent to special education and general education teachers. There were 51 responses to the survey. To gain permission to complete the project, an Institutional Review Board Application was submitted to the Institutional Review Board at Ouachita Baptist University. The IRB gave approval for the project.

The first 6 questions included questions about the teacher's background and their familiarity with children who stutter. The last 13 questions asked the teacher to rate how strongly he/she agreed or disagreed with statements regarding children who stutter. The rating scale ranged from strongly disagree to strongly agree. The options for each statement rating were strongly disagree, disagree, neutral, agree, and strongly agree. In order to develop the survey (Appendix D), the researcher looked into several myths which are commonly believed to be true by all people, specifically teachers.

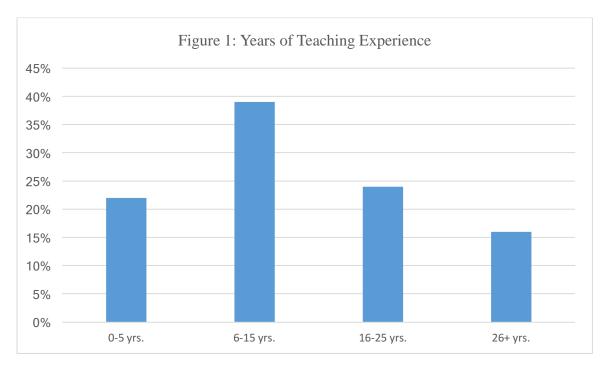
The survey included the Cover Letter (Appendix A) which gave an overview about the research. The survey also included an Informed Consent Form which participants were to read and indicate they understood before they completed the survey. Participants were then able to open up the survey (Appendix D) where they completed the background questions and rated the statements about children who stutter.

Results

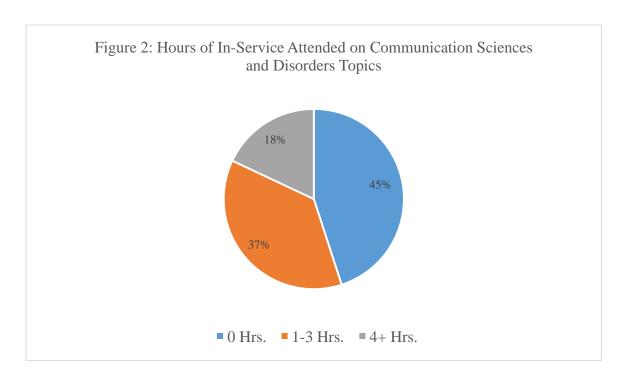
This study researched teacher's knowledge and perceptions of children who stutter. All participants answered the same questions about their background and perceptions of children who stutter. Before beginning research, it was hypothesized that teachers with more special education in-service hours and more years of teaching hold more positive perceptions of children who stutter. The following paragraphs show the results of the study.

Participants

The student researcher sent the survey to hundreds of teachers hoping to receive 50-75 responses. After sending the survey to teachers in six elementary schools in Central and South Arkansas, the student researcher received 51 teacher responses to the survey.



Of the general and special education teachers who responded to the survey, 22% (n=11) had 0-5 years of teaching experience, 39% (n=20) had 6-15 years of teaching experience, 24% (n=12) had 16-25 years of experience and 16% (n=8) had 26 or more years of teaching experience.



It was important to my research to obtain information about the average number of hours the respondents had attended which provided information on communication disorders. The teacher responses indicated that 45% (n= 23) of them had never attended in-service that provided information about any type of Communication Disorder. It also showed that 37% (n= 19) of teachers had attended 1-3 hours of CMDS in-service in their teaching career. Only 18% (n= 9) of the teachers have attended 4 or more hours of CMDS in-service.

Data Analysis

The survey questions examined three areas: teacher's confidence and role when having children who stutter in class, teacher's beliefs about academic abilities and characteristics of children who stutter, and teacher's beliefs about the cause of stuttering. Specifically, two statements pertained to the child's academic ability, two statements pertained to characteristics of children who stutter, three statements pertained to the cause of stuttering, and five statements regarding the teacher's role and responsibility when having a child who stutters in class.

Statements 1 and 8 (Appendix E) regarded perceptions held by teachers about the academic ability of children who stutter. Specifically, the teachers were asked to rate whether they believed a child who stutters should give an oral presentation and whether a child who stutters will struggle more in school than a child who does not stutter. For statements 1 and 8, a disagree or strongly disagree response indicates a more positive perception of children who stutter. In each of the tables below, the responses given by the teachers were analyzed to determine if the teachers with more experience had more positive perceptions about a child's academic abilities. The responses recorded in the table are strongly disagree and disagree since those responses indicate the more positive perception. The tables show the percentage of positive responses for statements one and eight among different categories of teaching experience.

Statement 1: Students who stutter should not give an oral presentation in class.

Statement 1	Experience	Experience	Experience	Experience
Response	(0-5 yrs.)	(6-15 yrs.)	(16-25 yrs.)	(26+ yrs.)
Strongly Disagree	18%	10%	0%	0%
Disagree	55%	55%	66%	75%
Total Percentage	73%	65%	66%	75%
of Positive				
Responses				

Statement 8: Students who stutter struggle more academically than those who do not stutter.

Statement 8	Experience	Experience	Experience	Experience
Response	(0-5 yrs.)	(6-15 yrs.)	(16-25 yrs.)	(26+ yrs.)
Strongly Disagree	0%	5%	8%	0%
Disagree	55%	40%	67%	63%
Total Percentage	55%	45%	75%	63%
of Positive				
Responses				

The results for statement one did not indicate that teachers with more years of experience held more positive perceptions of children who stutter. The results for statement eight indicated that teachers with 16-25 years of experience had the most positive perceptions of children who

stutter when compared with teachers with more and less years' experience. However, the results did not show that experience level was related to positive perceptions.

Statements 2 and 3 (Appendix E) examined teachers' perceptions of characteristics of children who stutter. These statements asked teachers to rate whether they believed children who stutter are more shy and awkward than children who do not stutter. Responses of strongly disagree and disagree on both statements indicate a more positive perception of children who stutter. The tables show the percentage of positive responses for statements two and three among different categories of teaching experience.

Statement 2: Students who stutter seem very socially awkward.

Statement 2	Experience	Experience	Experience	Experience
Response	(0-5 yrs.)	(6-15 yrs.)	(16-25 yrs.)	(26+ yrs.)
Strongly Disagree	27%	14%	0%	0%
Disagree	55%	57%	54%%	63%
Total Percentage	82%	71%	54%	63%
of Positive				
Responses				

Statements 3: Students who stutter are usually very shy.

Statement 3 Response	Experience (0-5 yrs.)	Experience (6-15 yrs.)	Experience (16-25 yrs.)	Experience (26+ yrs.)
Strongly Disagree	0%	15%	0%	0%
Disagree	36%	30%	46%	50%
Total Percentage of Positive	36%	45%	46%	50%
Responses				

The statement 2 response reveals results that are opposite of the hypothesis. The group of teachers with zero to five years of experience gave a higher percentage of positive responses. However, statement 3 regards shyness and indicates that teachers with more than 26 years of experience have more positive perceptions of children who stutter. Overall, because statement 2 responses indicated more positive perceptions given by teachers with less experience and

statement 3 responses indicated more positive perceptions given by teachers with more experience, the student researcher cannot state that a single group holds more positive perceptions of children who stutter regarding characteristics often given to them.

Statement 11 asked teachers to agree or disagree with a statement regarding being comfortable talking about communication disorders with students. Statement 12 asked teachers to indicate whether they agreed or disagreed that they have confidence when speaking with a child who stutters. A response of agree or strongly agree on statements 11 and 12 indicates a more positive perception of children who stutter. The tables show the percentage of positive responses for statements 11 and 12 among different categories of teaching experience.

Statement 11: I would feel comfortable talking openly with students in my class about communication disorders, including stuttering.

Statement 11	Experience	Experience	Experience	Experience
Response	(0-5 yrs.)	(6-15 yrs.)	(16-25 yrs.)	(26+ yrs.)
Strongly Agree	18%	11%	23%	0%
Agree	55%	58%	38%	89%
Total Percentage	73%	69%	61%	89%
of Positive				
Responses				

Statement 12: I feel confident when speaking with a student who stutters.

Statement 12	Experience	Experience	Experience	Experience
Response	(0-5 yrs.)	(6-15 yrs.)	(16-25 yrs.)	(26+ yrs.)
Strongly Agree	36%	20%	17%	12%
Agree	45%	55%	58%	88%
Total Percentage	81%	75%	75%	100%
of Positive				
Responses				

The results of statement 11 reveal that the groups with zero to five years of experience and more than 26 years of teaching experience had more positive perceptions of children who stutter regarding interactions between the teachers and children. Results of statement 12 revealed

that the group with more than 26 years of experience gave more positive responses which indicates a more positive perception of children who stutter regarding confidence when speaking with those children.

Statements 4, 5, and 6 (Appendix E) asked teachers to rate their beliefs about the cause of stuttering. Statement 4 asked teachers to rate their belief about whether stress or anxiety would cause a student to stutter more. The most common answer among each experience level was agree. For statement 5, which asked teachers to indicate their belief about stuttering resulting from childhood trauma, the most common answer was disagree in each group of teaching experience. Statement 6, regarding teachers' beliefs on whether stuttering is inherited, was not a statement which all groups of teaching experience agreed on. The most common response for the groups with zero to five years, sixteen to twenty-five years, and 26 and more years of teaching experience was disagree. However, the group with six to fifteen years' experience agreed with the statement which indicates that the teacher's experience level does not impact knowledge about the cause of stuttering.

Statements 9 and 10 examined teacher's knowledge about their interactions and role with children who stutter. Statement 9 asked teachers to rate their agreement about finishing a sentence when a student is stuttering. Teachers in all experience levels had a common answer of disagree. In statement 10, teachers were asked whether they should refer any student who stutters, regardless of age, to a Speech Language Pathologist for screening. The most common answer among teachers in all experience groups was strongly agree or agree.

In addition to teacher experience, the student researcher also hypothesized that teachers with more in-service hours on Communication Disorders would have more positive perceptions of children who stutter and greater knowledge about children who stutter. The responses were

divided based on responses of 0 hours, 1 to 3 hours, 3 to 5 hours, and 6 and more hours. The responses were compared and the results are in the charts below.

The teacher perceptions of the academic abilities of children who stutter are in the two tables below. Responses of strongly disagree and disagree indicate a positive perception. The tables show the percentage of positive responses for statements one and eight among different categories of hours of communication sciences and disorders in-service.

Statement 1: Students who stutter should not give an oral presentation in class.

Statement 1	0 Hrs. of	1-3 Hrs. of	4+ Hrs. of
Response	CMDS In-	CMDS In-	CMDS In-
_	Service	Service	Service
Strongly Disagree	9%	11%	0%
Disagree	61%	58%	56%
Total Percentage of Positive	70%	69%	56%
Responses			

Statement 8: Students who stutter struggle more academically than those who do not stutter.

Statement 8 Response	0 Hrs. of CMDS In- Service	1-3 Hrs. of CMDS In- Service	4+ Hrs. of CMDS In- Service
Strongly Disagree	4%	5%	0%
Disagree	52%	63%	33%
Total Percentage of Positive Responses	56%	68%	33%

The results of statement 1 and 8 did not indicate that the teachers with more CMDS inservice had more positive perceptions of children who stutter.

The following statements examine teachers' perceptions of children who stutter regarding certain characteristics which many people believe children who stutter possess. Responses of strongly disagree or disagree indicate a more positive perception of children who stutter. The

tables show the percentage of positive responses for statements two and three among different categories of hours of communication sciences and disorders in-service.

Statement 2: Students who stutter seem very socially awkward.

Statement 2	0 Hrs. of	1-3 Hrs. of	4+ Hrs. of
Response	CMDS In-	CMDS In-	CMDS In-
	Service	Service	Service
Strongly Disagree	4%	21%	11%
Disagree	61%	63%	33%
Total Percentage	65%	84%	44%
of Positive			
Responses			

Statement 3: Students who stutter are usually very shy.

Statement 3	0 Hrs. of	1-3 Hrs. of	4+ Hrs. of
Response	CMDS In-	CMDS In-	CMDS In-
	Service	Service	Service
Strongly Disagree	0%	16%	0%
Disagree	39%	37%	33%
Total Percentage	39%	53%	33%
of Positive			
Responses			

The results from statements 2 and 3 reveal that teachers with 1-3 hours of CMDS inservice hold the most positive perceptions regarding characteristics of children who stutter. This does not support the hypothesis which stated that the teachers with the most hours of CMDS inservice would hold the most positive perceptions of children who stutter.

Statements 11 and 12 asked teachers to agree or disagree about a how comfortable and confident they feel when speaking with a child who stutters and a class of students about communication disorders. For statements 11 and 12, a response of agree or strongly agree indicates a more positive perception of children who stutter. The tables show the percentage of positive responses for statements 11 and 12 among different categories of hours of communication sciences and disorders in-service.

Statement 11: I would feel comfortable talking openly with students in my class about communication disorders, including stuttering.

Statement 11	0 Hrs. of	1-3 Hrs. of	4+ Hrs. of
Response	CMDS In-	CMDS In-	CMDS In-
	Service	Service	Service
Strongly Agree	22%	5%	11%
Agree	48%	53%	89%
Total Percentage	70%	58%	100%
of Positive			
Responses			

Statement 12: I feel confident when speaking with a student who stutters.

Statement 12	0 Hrs. of	1-3 Hrs. of	4+ Hrs. of
Response	CMDS In-	CMDS In-	CMDS In-
	Service	Service	Service
Strongly Agree	26%	16%	22%
Agree	52%	58%	78%
Total Percentage	78%	74%	100%
of Positive			
Responses			

Results from statements 11 and 12 revealed that the teachers with the most hours of inservice on communication disorders had the most positive perceptions of children who stutters regarding the teacher's confidence when speaking with a child who stutters and comfort when speaking with students about communication disorders. This is working under the researcher's assumption that a person with positive perceptions of stuttering would have confidence speaking with the child who stutters or speaking about stuttering to a class.

Statements 4, 5, and 6 (Appendix E) asked teachers to rate their beliefs about the cause of stuttering. Statement 4 asked teachers to rate their belief about stuttering being caused by anxiety or stress. The most common response among teachers within all categories of CMDS in-service hours indicated that they agreed that a student stutters more when anxious or stressed. Statement 5 asked about teacher's beliefs on stuttering being caused by childhood trauma. Most teachers in

every category disagreed that stuttering is caused by childhood trauma. Statement 6 stated that stuttering was inherited. Teachers in all categories of hours of CMDS in-service were unsure about whether stuttering is inherited. The data was not consistent among any groups.

Statement 9 required teachers to agree or disagree with a statement regarding whether it is best for teachers to finish the sentence for a student who is stuttering and can't get the words out. The most common answers for all age groups were "strongly disagree" and "disagree". Statement 10, which asked teachers to rate whether they believed they should refer students, regardless of age, if they stutter to a Speech Language Pathologist for screening. The most common answer was "agree" for all of the groups.

In addition to the statements above, teachers were asked whether they believe that their college education prepared them for having a student in class with any type of communication disorder. Of these teachers, 86% responded "no" while 14% responded "yes". In addition, the survey asked the teachers whether they had ever had a student in their class who stutters. Of the teachers, 63% responded that they had experienced having at least one student in their class who stuttered. 69% of teachers have used various resources including Speech Language Pathologists, other teachers, websites, books, and/or articles to obtain more information about stuttering.

Conclusion

This survey attempted to examine teacher's perceptions of children who stutter along with their knowledge regarding children who stutter.

After examining the results, the student researcher concluded that although many teachers hold negative perceptions and lack important knowledge about children who stutter, the amount of in-service hours and years of teaching experience do not seem to influence that data. The data did not consistently show that teachers with more experience and more hours of in-service on communication disorders have more positive perceptions of children who stutter. These results did not support my hypothesis that teachers with more years of experience and more CMDS inservice hours would have more positive perceptions and more knowledge regarding children who stutter.

Although my hypothesis was wrong, I feel that it is important for teachers to learn more about students who stutter. Of the teachers, 80% who were surveyed agreed or strongly agreed that they would benefit from attending in-service on classroom management and communication strategies for students with Communication Disorders. This is a significant percentage of teachers who want to improve their classroom skills with regard to students with communication disorders. Of the teachers who responded to the survey, 86% responded that their college education did not prepare them for a student in class with a speech or stuttering disorder. It is important for all teachers to have knowledge about classroom management skills for a child with a communication disorder, specifically stuttering. Although Speech Pathology professionals cannot control what teachers learn in college, they can provide informative in-service opportunities regarding the student with a communication disorder. With only 14% of respondents indicating they had received in-service on communication disorders, and more than

half of the teachers reported to have taught a student with a communication disorder, I feel there is a need for information for teachers regarding communication disorders. I compiled information on a handout for teachers regarding stuttering and the child in their classroom, and will make it available to teachers in south Arkansas schools.

Limitations

Although the student researcher sent out over 300 emails to teachers, only 51 of the teachers completed the survey. The student researcher would have preferred at least 100 responses to the survey.

Another limitation of the survey is that the ratings for the statements in the survey included a neutral option. If I could change one thing about the research, I would have only allowed the response choices to be strongly agree, agree, disagree, and strongly disagree.

Future Research

Since 80% of teachers indicated that they believed they would benefit from in-service on classroom management and communication strategies for children with communication disorders and 63% of teachers responded that they had at least one student in their class who stuttered in the past, future research could examine how much in-service is available each year across the state of Arkansas on the topic of communication disorders in the classroom. The student researcher could research this by conducting interviews or giving surveys to principals, teachers, and school speech language pathologists. Future research may also want to examine teacher's beliefs about common myths and facts about children who stutter.

Personal Connection to the Research

I became interested in the topic of stuttering after having the opportunity to provide stuttering therapy at the Ouachita Baptist University speech/language clinic. During that time I became interested in stuttering and, specifically, children who stutter. When it came time to decide on a thesis topic, I knew that I wanted to focus on children who stutter.

I know teachers have an enormous impact on all children in the classroom. I also recognize that children who stutter benefit from an understanding teacher who realizes the benefit of improved classroom interactions. I believe the speech-language pathologist in the school is an excellent source of information for the teacher of a child who stutters. Stuttering and emotions are related, and improved classroom interactions can benefit both the student and teacher.

This spring, I was able to take a fluency class which taught me more about the feelings which children who stutter hold about themselves. Many of them feel embarrassed, ashamed, and different from their peers. The class taught me the importance of working with the teachers to train them to have the best environment they can in the classroom for children who stutter.

Overall, because of personal experience in therapy and other opportunities to learn about stuttering, I have become very interested in this topic and have been very excited to get to learn more about children who stutter and the important role teachers have in the lives of those children. I hope to use all that I have learned from my research in my future career to educate teachers about children who stutter.

APPENDIX A: Survey Cover Letter

Survey Cover Letter

To Whom It May Concern:

You are invited to participate in a research study titled "Teachers' Knowledge and Perceptions of Stuttering". This research is being conducted by Kathryn Knight under the supervision of Mrs. Carol Morgan, associate professor of Communication Sciences and Disorders at Ouachita Baptist University. The research is being conducted in order to complete my thesis which is a requirement to graduate from Ouachita Baptist University with honors. The goal of this research is to survey special education and regular education teachers in order to educate teachers on children who stutter.

Thank you for your time. Kathryn Knight, Ouachita Baptist University CMDS student APPENDIX B: Informed Consent Form

Informed Consent Form

Project Title: Teachers' Knowledge and Perceptions of Stuttering

Investigator: Kathryn Knight

Project Overview: This research project is being conducted by Kathryn Knight under the supervision of Mrs. Carol Morgan, associate professor of Communication Sciences and Disorders at Ouachita Baptist University. This study is being done in order to fulfill research for my thesis which is a requirement to graduate from Ouachita Baptist University with honors. The goal of this research is to survey special education and regular education teachers in South Arkansas schools in order to educate teachers on children who stutter. Benefits to you include gaining knowledge about students who stutter. There is no risk in participating in this survey and your participation in completion of this survey is entirely voluntary. All responses will be kept completely confidential. There is no compensation for participating in this study.

This research has been approved by the Ouachita Baptist University Institutional Review Board.

For any questions or concerns regarding this study, please contact:

Kathryn Knight, Principal Researcher

Email: kni62353@obu.edu

OBU Box 3937 410 Ouachita Street

Arkadelphia, AR 719998-0001

Faculty Advisor: Mrs. Carol Morgan, CCC-SLP

You may contact the following person regarding your rights in this study:

Dr. Kluck, Chair of the Institutional Review Board

OBU Box 3758

410 Ouachita Street

Ouachita Baptist University Arkadelphia, AR 71998-0001

Telephone: 870-245-5222

I have read and understand this document. Completion of the survey form gives consent for my survey response to be used for this project.

APPENDIX C: Institutional Review Board Application

Ouachita Baptist University Institutional Review Board Human Subjects Review Application Cover Sheet

Submission Date: 10/7/19 Project Title: Teachers' Knowledge and Perceptions of Stuttering **Project Personnel** Principle Investigator: Kathryn Knight (Student) Department: Communication Sciences and Disorders School: Natural Sciences PI contact information: e-mail- kni62353@obu.edu telephone- (870)833-9999 campus box- 3937 **Suggested project classification**: Exempt \underline{X} Nonexempt \underline{X} **Estimate of risk to subjects**: None X Low Moderate High **Proposed Project Dates**: 10/1/19 to 11/1/19 Estimated number of participants 50 **Funding Agencies or Research Sponsors:** N/A **Submission Status:** X New Project _____ Renewal or Continuation _____ Change in Procedure for Previously Approved Project Annual Review _____ Resubmission **Action of the Research Committee** Project Number _____ Approve___X__ Approve with minor revision_____ Defer for revisions_____ Disapprove_____

Human Subjects Application Checklist

□ Detailed project description
A survey, which includes background and opinion questions, will be emailed to teachers in the following schools: Camden Harmony Grove Elementary School, Ouachita Elementary School, and Perritt Elementary School. If additional responses are needed, the survey will be opened to teachers in other schools across Arkansas. The survey will be completed through Google Forms. After each anonymous survey is completed, I will use the results for completion of my Honors Thesis. I will compare all of the data, but will only use surveys which were completed with consent given.
□ Selection of subjects
☐ Method of recruitment & selection
I proposed in my thesis proposal that I would use elementary school teachers from around the Arkadelphia area which includes Camden Harmony Grove Elementary, Ouachita Elementary, and Perritt Elementary. These teachers will receive the survey through their professional email. The survey will be sent to additional teachers at other schools if needed.
☐ Recruitment advertisements or script
N/A
☐ Demographics- Ages and gender, etc.
Participants will be special-education or regular education teachers from preschool to the sixth grade at Arkansas schools.
☐ Compensation
☐ Compensation conditions and schedule of payment
Participants will not gain any compensations or payment for their participation in this study.
☐ Location and duration of experiment
The survey will be completed online through Google Forms. Results will be kept in my possession. The survey will be opened for approximately 2-3 weeks, but more if needed.
☐ Investigator's relationship to subjects
There is no relationship between the investigator and the subjects.
☐ Alternatives to participation
They may choose not to participate by not completing the survey or not signing the consent form.
□ Purpose of Study
The purpose of the study is to gain information on teachers' knowledge and perceptions of children. This will in turn allow me to educate those teachers' and other teachers about children who stutter through a pamphlet.
□ Research Procedures

☐ Physical/Behavioral aspects
Participants will truthfully answer the questions in the survey regarding their background and their opinions of children who stutter.
□ Deception or Coercion
There is no deception or coercion involved in this study.
☐ Debriefing opportunities
There will be no debriefing, but a pamphlet will be given to these teachers in order to educate them on children who stutter.
☐ Survey/Assessment Instrument(s)
A survey will be sent to each teacher through their email. They will follow the link in their email in order to complete the Google Form survey.
☐ Required policy statements
☐ Benefits to the individual and to the university and to humanity
More knowledge about having a child who stutters in class.
☐ Risks to the participant
There are no risks to the participant.
☐ Comparison of risks and benefits
There are no risks to the participants in this study. The benefits outweigh the risks because the participant will receive knowledge that can be used in the classroom.
☐ Procedures for minimizing risk
Since the survey is being completed through Google Forms, the name of the subject will not be given because I will turn on the anonymous response setting.
☐ Procedures for maintaining confidentiality of data
Data will not be shared with anyone until it is transferred to organized tables.
☐ Procedures for final disposition of data
The data will be disposed through a written thesis and a presentation on that thesis.
Conflict of interest statement

\Box C

Participants should not face any conflicts of interest throughout the duration of the study, as all risk and risk of disputes is very low.

APPENDIX D: Survey Questions

Teachers' Knowledge and Perceptions of Stuttering Survey

The following questions will ask about your education and experiences with children who stutter.

1. Please indicate how many years you have worked in special education or regular

	education.
	Special: Regular:
2.	Choose from the following how many hours of in-service you have attended that provided information about Communication Disorders.
	0, 1-3, 3-5, 6+
3.	Do you think that your college education helped you prepare to have a student in your class with a speech or stuttering disorder?
	Yes No
4.	If you have had a student who stutters in class, please select which resources you have used to obtain more information about stuttering.
	Speech Language Pathologists, other teachers, websites, books, articles, none
5.	How many children who stutter are you fairly familiar with?
	0, 1, 2+
•	answer the following question if you indicated that you were fairly familiar with 1 or more en who stutter.
6.	Of those children referred to in question 5, indicate if they were (choose all that apply):
	Family members, acquaintances, student in my class
	ollowing questions will refer to your knowledge and perceptions of stuttering. Please rate cale of 1-5 how strongly you don't agree or do agree with the following statements. 1

1. Students who stutter should not give an oral presentation.

means that you strongly don't agree and 5 means you strongly agree.

- 2. Students who stutter seem very awkward.
- 3. Students who stutter are usually very shy.
- 4. If a student who stutters is stressed or anxious, they may stutter more.
- 5. Stuttering is caused by childhood trauma.

- 6. Stuttering is inherited.
- 7. Students who often add "uhhh" into their speech are not stuttering.
- 8. Students who stutter struggle more academically than those who do not stutter.
- 9. It is best for me to finish the sentence for a student who is stuttering.
- 10. It is best for me to refer a student to a Speech Language Pathologist to be screened when they are as young as 3 to 6 years old.

The following questions refer to your interactions with children who stutter and the training you receive. Please rate on the same scale of 1-5 how strongly you agree or don't agree with the following statements.

- 11. I would feel comfortable talking openly with students in my class about communication disorders.
- 12. I feel confident speaking with a student who stutters.
- 13. I believe I would benefit from training on management of students with communication disorders.

APPENDIX E: Data Tables

Statements Regarding Teachers Knowledge and Perceptions of CWS (refer to these when reading the tables below)

- 1. Students who stutter should not give an oral presentation in class.
- 2. Students who stutter seem very socially awkward.
- 3. Students who stutter are usually very shy.
- 4. If a student who stutters is stressed or anxious, they may stutter more.
- 5. Stuttering is caused by childhood trauma.
- 6. Stuttering is inherited.
- 7. Students who often add "uhhh" into their speech are not stuttering.
- 8. Students who stutter struggle more academically than those who do not stutter.
- 9. It is best for me to finish the sentence for a student who is stuttering and can't get the words out.
- 10. I should refer any student who is stuttering, regardless of age, to the school Speech Pathologist for screening.
- 11. I would feel comfortable talking openly with students in my class about communication disorders, including stuttering.
- 12. I feel confident when speaking with a student who stutters.
- 13. I believe I would benefit from attending in-service on classroom management and communication strategies for students with Communication Disorders.

Table 1: Teacher's Responses to Statements about Children Who Stutter

Academic Ability of CWS						
Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree	
1	8%	59%	29%	4%	0%	
8	4%	53%	35%	8%	0%	

Table 2: Teacher's Responses to Statements about Children Who Stutter

	Characteristics of CWS						
Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree		
2	12%	57%	26%	6%	0%		
3	6%	37%	43%	14%	0%		

Table 3: Teacher's Responses to Statements about Children Who Stutter

	Belief about the Cause of Stuttering						
Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree		
4	6%	0%	4%	63%	27%		
5	4%	47%	41%	6%	2%		
6	4%	27%	51%	18%	0%		

Table 4: Teacher's Responses to Statements about Children Who Stutter

	Other Statements Regarding Stuttering						
Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree		
7	0%	28%	37%	31%	4%		

Table 5: Teacher's Responses to Statements about Children Who Stutter

	Teacher Interaction with CWS						
Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree		
9	20%	57%	24%	0%	0%		

Table 6: Teacher's Responses to Statements about Children Who Stutter

	Teacher's Feelings Toward CWS						
Statement	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree		
11	2%	10%	17%	57%	14%		
12	2%	0%	17%	59%	22%		

Table 7: Teacher's Responses to Statements Regarding a Teacher's Responsibility of Having a

Child Who Stutters in Class

Statement	Strongly	Disagree	Neutral	Agree	Strongly
	Disagree				Agree
10	2%	6%	21%	55%	16%
13	4%	2%	14%	55%	25%

APPENDIX F

Stuttering: A Guide for Teachers

How do I know if a child in my class is stuttering?

- The child's speech may not be smooth or fluent
- The child may often pause when speaking
 - > "I want....a....sandwich....for lunch.
- The child may not be able to get his words out. This is called a block. The child may show some tension when this happens.
- The child may repeat parts of words, whole words, or phrases.
 - > "P-p-p-please may I have some ice cream?"
 - > "But but but I can't do it."
 - ➤ Can I, can I go with you?"

Is it normal for children to stutter?

- Many children experience developmental stuttering. This often occurs during a period of intense speech and language acquisition.
- Normal development stuttering may become chronic stuttering if the student experiences negative emotions and beliefs about himself as a speaker.

Are some children more prone to stuttering than others?

- Males are more prone to stuttering than females.
- Having relatives who stutter can sometimes increase a child's chance of developing a stuttering disorder.

Is there anything I can do to help the student in my class who stutters?

- Eliminate any teasing the student who stutters is receiving.
- Do not interrupt or rush the student when he/she is speaking.
- If your student expresses concern about his/her speech, speak calmly about it with them and acknowledge the stuttering. It is important that your student feels there will be understanding, help, and support in the classroom environment.
- Make sure that the child who stutters feels comfortable speaking in class, but do not eliminate the student from all oral participation.

Should I refer the student in my class who stutters for speech therapy?

• It is important for all children who stutter to be referred to a Speech Language Pathologist. The SLP can decide whether the child needs speech therapy or not. Early Intervention is important!

REFERENCES

- Ambrose, N. G. (2004). Theoretical Perspectives on the Cause of Stuttering. *Contemporary Issues in Communication Science and Disorders*, 31(Spring), 80-91. doi:10.1044/cicsd_31_s_80.
- Fabus, Renee & Sidavi, Aimee. (2010). A Review of Stuttering Intervention Approaches for Preschool-Age and Elementary School-Age Children. *Contemporary Issues in Communication Sciences and Disorders*, 37. Retrieved from https://pubs.asha.org/doi/10.1044/cicsd_37_S_14.
- Groner, S., Walden, T., & Jones, R. (2016). Factors Associated With Negative Attitudes Toward Speaking in Preschool-Age Children Who Do and Do Not Stutter. *Contemporary Issues in Communication Science and Disorders*, 43(Fall), 255-267. doi:10.1044/cicsd_43_f_255.
- Guitar, B. (2014). *Stuttering: An Integrated Approach to Its Nature and Treatment* (4th ed.). Philadelphia, Pennsylvania: Lippincott Williams and Wilkins.
- Henderson, J. K. (2019). Helping Students and Their Families Accept Stuttering. *The ASHA Leader*, 24(2), 40-41. doi:10.1044/leader.scm.24022019.40
- Hobbs, M. (2012). *Teacher Perception and Knowledge About Stuttering Before and After An In-Service Training* (Unpublished master's thesis). Eastern Kentucky University. Retrieved 2020, from https://encompass.eku.edu/cgi/viewcontent.cgi?article=1078&context=etd
- National Stuttering Association. (2019, February 1). Basic Facts About Stuttering. Retrieved from https://westutter.org/who-we-help/basic-facts-stuttering/.
- Scott, Lisa. (2017). 8 Tips for Teachers. Retrieved from https://www.stutteringhelp.org/8-tips-teachers.
- Williams, D. (2013). Book Preview: Transfer and Maintenance. Retrieved 2020, from https://www.stutteringhelp.org/book-preview-transfer-and-maintenance

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