

Louisiana Tech University

Louisiana Tech Digital Commons

Master's Theses

Graduate School

Spring 5-2020

Stuttering and the Early Childhood Educator

Haley Jo Wesson

Follow this and additional works at: <https://digitalcommons.latech.edu/theses>

Recommended Citation

Wesson, Haley Jo, "" (2020). *Thesis*. 43.

<https://digitalcommons.latech.edu/theses/43>

This Thesis is brought to you for free and open access by the Graduate School at Louisiana Tech Digital Commons. It has been accepted for inclusion in Master's Theses by an authorized administrator of Louisiana Tech Digital Commons. For more information, please contact digitalcommons@latech.edu.

STUTTERING AND THE EARLY CHILDHOOD EDUCATOR
by

Haley Jo Wesson, B.A.

A Thesis Presented in Partial Fulfillment
of the Requirements for the Degree
Master of Arts, Speech Language Pathology

COLLEGE OF LIBERAL ARTS
LOUISIANA TECH UNIVERSITY

May 2020

LOUISIANA TECH UNIVERSITY

GRADUATE SCHOOL

March 3, 2020

Date of thesis defense

We hereby recommend that the thesis prepared by

Haley Jo Wesson

entitled **Stuttering and the Early Childhood Educator**

be accepted in partial fulfillment of the requirements for the degree of

Master of Arts in Speech-Language Pathology



Kimmerly Harrell
Supervisor of Thesis Research



Brenda Heiman
Director, School of Communication

Thesis Committee Members:

Kimmerly Harrell
Keri Phillips
Brenda Heiman

Approved:



Donald Kaczvinsky
Dean of Liberal Arts

Approved:



Ramu Ramachandran
Dean of the Graduate School

Abstract

The purpose of this research study was to gain information on early childhood educator's knowledge of the myths and facts of stuttering. The researcher's main question at hand is what are the effects of educator knowledge regarding fluency on young children? It was hypothesized that participants with a higher level of education will correctly identify more statements regarding stuttering than participants with a lower level of education. The researcher created a survey that was distributed to early childhood educators. The findings of the survey may be helpful in educating early childhood educators and bringing awareness to the misconceptions of stuttering.

APPROVAL FOR SCHOLARLY DISSEMINATION

The author grants to the Prescott Memorial Library of Louisiana Tech University the right to reproduce, by appropriate methods, upon request, any or all portions of this Thesis. It is understood that “proper request” consists of the agreement, on the part of the requesting party, that said reproduction is for his personal use and that subsequent reproduction will not occur without written approval of the author of this Thesis. Further, any portions of the Thesis used in books, papers, and other works must be appropriately referenced to this Thesis.

Finally, the author of this Thesis reserves the right to publish freely, in the literature, at any time, any or all portions of this Thesis.

Author Haley Jo Wesson

Date 03/31/2020

TABLE OF CONTENTS

Abstract	iii
List of Tables	vi
Chapter I	1
Introduction	1
Chapter II	3
Review of Literature	3
Statement of Problem.....	14
Chapter III	16
Methodology	16
Subjects	16
Procedure	17
Questionnaire	18
Chapter IV	21
Results	21
Chapter V	24
Discussion	24
References	26
Appendices.....	28

LIST OF TABLES

Table 1: Participants' Education Level.....	22
Table 2: % of Statements Identified Correctly	23

Acknowledgments

I would like to thank Mrs. Carol Morgan and Dr. Nancy Hardman for their research supervision at Ouachita Baptist University during my undergraduate studies and my undergraduate research partner Laura Beth Dixon. I would also like to thank my thesis committee, which included Dr. Kimmerly Harrell, Dr. Kerri Phillips and Dr. Brenda Heiman, as well as the remaining faculty of the speech language pathology graduate school department at Louisiana Tech University.

CHAPTER I

Introduction

The purpose of this study was to investigate early childhood educator's knowledge of the myths and facts about stuttering. The findings of the survey may be helpful in educating early childhood educators and bringing awareness to the misconceptions of stuttering. This study was conducted in school districts in the surrounding North Louisiana parishes that included Bossier, Caddo, and Monroe City Schools. These schools provided information regarding the knowledge that early childhood educators have in the area of stuttering.

In our society today there are many sources available that show time and time again that there is a negative connotation when the subject of stuttering arises (The Stuttering Foundation, 2014). A study conducted by Boyle (2014) analyzed perceptions, attitudes, reactions and many more details when looking at children who stutter. This current study will provide the opportunity to understand how much early childhood educator's specifically know about the topic. Boyle (2014) studied how the attribution theory applies with speech-language pathologist's (SLPs) understanding of the perceptions of stuttering and that there are many different attitudes regarding people who stutter. In a separate study Adriaenssens and Struyf (2016) also analyzed teacher's beliefs about students who stutter compared to the different reactions of teachers and non-teachers toward people who stutter.

Each of these studies has played a role into further researching early childhood educator's knowledge and attitudes towards stuttering.

For this study, a survey was created that provided a foundation to see how much early childhood educators truly understand stuttering. This study provided a framework to better understand what early child educator's do know and what steps need to be taken to effectively equip these educators to provide an environment for these students who stutter.

CHAPTER II

Review of Literature

Other studies have analyzed SLPs perceptions and attitudes in regards to the specific communication disorder of stuttering. Boyle (2014) designed a study to investigate if the attribution theory could explain SLPs perceptions of children with communication disorders such as stuttering. The study more explicitly wanted to determine if perceptions of onset and offset controllability, as well as biological and non-biological attributions for communication disorders were related to sympathy toward children who stutter (Boyle, 2014). Throughout this study Boyle (2014) hypothesized that the higher onset and offset controllability were expected to have less sympathy to help children who stutter.

Throughout Boyle's (2014) research the amount of participants waived. Boyle (2014) originally generated a randomized sample, via the American Speech-Language Hearing Association (ASHA), of 1000 SLPs in the school system and a total sample size of 330 were completed and analyzed.

Boyle's research was conducted by creating a three part survey consisting of a single item section measuring perceptions of controllability and attributions, a nine question survey regarding the SLPs perceptions of willingness to help and sympathy and lastly a 14 item survey with questions regarding people who stutter (Boyle, 2014).

The results of the surveys completed found to support the predictions from the attribution theory. The results showed that with high controllability (onset and offset) there was a relation to less sympathy and willingness to help. The results also showed that there was a higher amount of sympathy reported regarding the participants that had increased biological attributions (Boyle, 2014). This study concluded that SLPs must become educated about the variables that could improve attitudes, increase awareness and understanding of people who stutter (Boyle, 2014).

In a separate study, the researchers St. Louis, Przepiorka, Beste-Guldborg, Williams, and Blanchino, (2014) wanted to distinguish the different factors that affect SLP students attitudes toward stuttering. They wanted to identify the attitudes of SLP students when compared to college students in regards to people who stutter. It was hypothesized that the SLP students would be more willing to help people who stutter than other college students.

The participants were given a questionnaire to complete in regards to people who stutter. The results of this study found that SLP students had more positive attitudes than non-SLP students (St. Louis et al., 2014). The researchers final conclusions showed that SLP students have a more positive attitude due to the “halo effect”, which means they have a more positive outlook regarding this topic, of being in that major. The researchers are justifying the SLP students’ positive attitude with the fact that these students have more exposure and experience with people who stutter compared to the other students. In future studies, St. Louis et al. (2014), suggested that further research be done using the

Public Opinion Survey of Human Attributes-Stuttering (POSHA-S) assessment in regards to participants' attitudes. This survey is simply an instrument that analyzes the public's opinion of stuttering within the context of a variety of human attributes or conditions (St. Louis et al., 2014).

Several other studies analyzed the attitudes and perceptions of educators when it came down to the topic of people who stutter. A study conducted by Plexico, Plumb and Beachman (2013) was designed to assess how much teachers knew about stuttering as well as their sensitivities on the development of stuttering. The study wanted to determine how much detail educator's know about stuttering including: how the stuttering originated, specific aspects of stuttering and how to correctly approach stuttering when found within the classroom (Plexico et al., 2013). The purpose behind all of these details and why educators were chosen to evaluate is because of the amount of time children spend with their teachers. Throughout this study there was no specific hypothesis, rather the researchers wanted to just evaluate how much knowledge these educators have regarding the subject of stuttering and because this research was conducted through administering a survey there were no independent or dependent variables.

Throughout this research the amount of participants waivered due to participants initially participating and then withdrawing from the study. Plexico et al. (2013) addressed educators in a variety of geographic regions attempting to gather results. The participating states included: Alabama, Illinois, New Mexico, Rhode Island and Washington. There were a total of 8,298 emails that were sent to administrative staff and through those emails there were initially 101 participants in this study (Plexico et al.,

2013). However there were only 84 individuals who actually completed the survey, and of those 84 completed there were only four states represented with zero participants from Rhode Island.

This research was conducted by creating a 32-item web-based survey through a software called Qualtrics (Plexico et al., 2013). Qualtrics is a subscription software for collecting and analyzing data for market research, customer satisfaction, concept testing, employee evaluations and website feedback. This survey was formatted in a way that addressed three general areas: background, general understanding of stuttering and how to manage bullying. The first area was gaining personal information about the participant through completing a questionnaire, which included: age, gender, race, state of residence, education level and their teaching experience. The second area looked at the educator's overall understanding of stuttering: which included questions regarding the factors related to the onset of stuttering, the difference between children who stutter compared to fluent children in development, familiarity with characteristics of stuttering, and the teacher's feelings towards stuttering. The last area looked at how the educator handles the classroom when having a student who stutters.

The results of the surveys completed found that educators had a general knowledge of characteristics that are found in children and more specifically most educators thought that stuttering is a mix of both genetic and non-genetic factors (Plexico et al., 2013). The results also showed that these teachers feel slightly uneasy about managing a classroom with a child who stutters and that they are not aware of a clear

plan of management. These results were analyzed through the same software that the survey was generated from, Qualtrics, and formatted into specific tables and figures.

The conclusions of this study revealed that teachers had mixed insight in certain areas of stuttering and bullying, but reduced awareness or total misunderstandings in other areas (Plexico et al., 2013). The generalization of these results is fairly limited by the possibility of biases, interests, or responses from the participating educators (Plexico et al., 2013). A couple of limitations include: the smaller than expected population size and the lack of the survey's validity. Two areas that could further be researched are how cyber bullying can come into play, and what feelings or knowledge educator's from different states have regarding stuttering.

In a different study, Li and Arnold (2015) designed a study to assess if schoolteachers differ from people in non-teaching professions in their reactions towards people who stutter. This study wanted to examine whether gender differences are associated with reactions to people who stutter (Li & Arnold, 2015). The purpose behind each of these details and why both educators and non-educators were chosen to evaluate is to see if the reactions were significantly different when age and years of education were considered. Throughout this study the researchers had only one prediction and it was that male teachers would have more sympathetic reactions to people who stutter than men in the general public.

Throughout this research the participants were divided into the two groups of "teacher" and "non-teacher". Li and Arnold (2015) used a large database to gain a diverse group of participants from many different geographic regions. The procedure resulted in

a total of 1657 participants where 1388 were non-teachers and 269 were teacher (Li and Arnold, 2015). Within the total sample size 1179 were female and 461 were male; the researcher also stated that 17 of the participants did not provide a gender. This research was conducted by using different sections of POSHA-S, which contained four components totaling to 23 items. The four components were: (a) accommodating/helping, (b) sympathy/social distance, (c) knowledge/experience, and (d) knowledge source. Each of these components were measured on the ordinal scale. The results indicated that educators, compared to the general public, use a greater number and variety of information sources about people that there was a higher amount of sympathy reported regarding the participants that had increased biological attributions (Boyle, 2014). This study concluded that SLPs must become educated about the variables that could improve attitudes, increase awareness and understanding of people who stutter (Boyle, 2014).

In a separate study, the researchers St. Louis, Przepiorka, Beste-Guldborg, Williams, and Blanchino, (2014) wanted to distinguish the different factors that affect SLP students attitudes toward stuttering. They wanted to identify the attitudes of SLP students when compared to college students in regards to people who stutter. It was hypothesized that the SLP students would be more willing to help people who stutter than other college students.

The participants were given a questionnaire to complete in regards to people who stutter. The results of this study found that SLP students had more positive attitudes than non-SLP students (St. Louis et al., 2014). The researchers final conclusions showed that SLP students have a more positive attitude due to the “halo effect”, which means they

have a more positive outlook regarding this topic, of being in that major. The researchers are justifying the SLP students' positive attitude with the fact that these students have more exposure and experience with people who stutter compared to the other students. In future studies, St. Louis et al. (2014), suggested that further research be done using the Public Opinion Survey of Human Attributes-Stuttering (POSHA-S) assessment in regards to participants' attitudes. This survey is simply an instrument that analyzes the public's opinion of stuttering within the context of a variety of human attributes or conditions (St. Louis et al., 2014).

Several other studies analyzed the attitudes and perceptions of educators when it came down to the topic of people who stutter. A study conducted by Plexico, Plumb and Beachman (2013) was designed to assess how much teachers knew about stuttering as well as their sensitivities on the development of stuttering. The study wanted to determine how much detail educator's know about stuttering including: how the stuttering originated, specific aspects of stuttering and how to correctly approach stuttering when found within the classroom (Plexico et al., 2013). The purpose behind all of these details and why educators were chosen to evaluate is because of the amount of time children spend with their teachers. Throughout this study there was no specific hypothesis, rather the researchers wanted to just evaluate how much knowledge these educators have regarding the subject of stuttering and because this research was conducted through administering a survey there were no independent or dependent variables.

Throughout this research the amount of participants waivered due to participants initially participating and then withdrawing from the study. Plexico et al. (2013)

addressed educators in a variety of geographic regions attempting to gather results. The participating states included: Alabama, Illinois, New Mexico, Rhode Island and Washington. There were a total of 8,298 emails that were sent to administrative staff and through those emails there were initially 101 participants in this study (Plexico et al., 2013). However there were only 84 individuals who actually completed the survey, and of those 84 completed there were only four states represented with zero participants from Rhode Island.

This research was conducted by creating a 32-item web-based survey through a software called Qualtrics (Plexico et al., 2013). Qualtrics is a subscription software for collecting and analyzing data for market research, customer satisfaction, concept testing, employee evaluations and website feedback. This survey was formatted in a way that addressed three general areas: background, general understanding of stuttering and how to manage bullying. The first area was gaining personal information about the participant through completing a questionnaire, which included: age, gender, race, state of residence, education level and their teaching experience. The second area looked at the educator's overall understanding of stuttering: which included questions regarding the factors related to the onset of stuttering, the difference between children who stutter compared to fluent children in development, familiarity with characteristics of stuttering, and the teacher's feelings towards stuttering. The last area looked at how the educator handles the classroom when having a student who stutters.

The results of the surveys completed found that educators had a general knowledge of characteristics that are found in children and more specifically most

educators thought that stuttering is a mix of both genetic and non-genetic factors (Plexico et al., 2013). The results also showed that these teachers feel slightly uneasy about managing a classroom with a child who stutters and that they are not aware of a clear plan of management. These results were analyzed through the same software that the survey was generated from, Qualtrics, and formatted into specific tables and figures.

The conclusions of this study revealed that teachers had mixed insight in certain areas of stuttering and bullying, but reduced awareness or total misunderstandings in other areas (Plexico et al., 2013). The generalization of these results is fairly limited by the possibility of biases, interests, or responses from the participating educators (Plexico et al., 2013). A couple of limitations include: the smaller than expected population size and the lack of the survey's validity. Two areas that could further be researched are how cyber bullying can come into play, and what feelings or knowledge educator's from different states have regarding stuttering.

In a different study, Li and Arnold (2015) designed a study to assess if schoolteachers differ from people in non-teaching professions in their reactions towards people who stutter. This study wanted to examine whether gender differences are associated with reactions to people who stutter (Li & Arnold, 2015). The purpose behind each of these details and why both educators and non-educators were chosen to evaluate is to see if the reactions were significantly different when age and years of education were considered. Throughout this study the researchers had only one prediction and it was that male teachers would have more sympathetic reactions to people who stutter than men in the general public.

Throughout this research the participants were divided into the two groups of “teacher” and “non-teacher”. Li and Arnold (2015) used a large database to gain a diverse group of participants from many different geographic regions. The procedure resulted in a total of 1657 participants where 1388 were non-teachers and 269 were teacher (Li and Arnold, 2015). Within the total sample size 1179 were female and 461 were male; the researcher also stated that 17 of the participants did not provide a gender. This research was conducted by using different sections of POSHA-S, which contained four components totaling to 23 items. The four components were: (a) accommodating/helping, (b) sympathy/social distance, (c) knowledge/experience, and (d) knowledge source. Each of these components were measured on the ordinal scale.

The results indicated that educators, compared to the general public, use a greater number and variety of information sources about people who stutter and more specifically, male teachers do so even more than female teachers (Li and Arnold, 2015). The results also showed that teachers did not have higher scores in regards to accommodating/helping, having experiential knowledge of, or sympathy of people who stutter compared to the general public. Li and Arnold (2015) also concluded from their findings that no matter the profession, females were more accommodating and helpful to people who stutter than males. After completion of this study there were different limitations that were found by the researchers and it is suggested that for future implications it will be important to evaluate if reactions were based on the age of the person who stutters.

In a similar study Adriaensens and Struyf (2016) looked specifically at educators and their attitudes toward their students who stutter. This study was designed to identify teachers' beliefs about and attitudes toward stuttering and explore to what extent these beliefs and attitudes prompt specific teachers' reactions to the stuttering of a student. The study wanted to provide detailed qualitative data focusing on the teachers' point of view to studying why and how teachers react to the stuttering of a student (Adriaensens & Struyf, 2016). The research question that Adriaensens and Struyf (2016) had was to see the attitudes and reactions toward students who stutter and what prompted those specific reactions. The overall purpose was to truly understand the reactions of the educators. Throughout this study there was no specific hypothesis, rather the researchers wanted to evaluate the reactions and responses that the educators had regarding the subject of stuttering and because this research was conducted through reactions there were no independent or dependent variables.

Throughout this research study Adriaensens and Struyf (2016) gathered participants who were teachers of mainstream secondary education in Flanders (Belgium), currently teaching an adolescent who stutters. A total of seventeen potential participants were contacted and the final number of interviews completed was ten. The research was gathered by completing semi-structured interviews that left room for variability between each interview. These interviews were to investigate the educators' knowledge and beliefs about stuttering. The information collected also analyzed the relationship that the teacher had with the student who stutters in their classroom (Adriaensens & Struyf, 2016).

The results of the interviews completed found many different conclusions. Previous to analyzing, Adriaensens and Struyf (2016) created a word for word transcript of each interview and then analyzed each interview thematically. The first thing that Adriaensens and Struyf (2016) found was that teachers believe that peers do not react to the students who stutter and that their lectures are not interrupted by the disfluencies. The teachers also believed that the student who stutters still participates in class and that stuttering is not a problem for the classroom environment. On the other hand, the participants did say that when attention is paid to it, stuttering could be a problem within the classroom (Adriaensens & Struyf, 2016). The teachers also discussed how they try to not react to the stuttering and they hardly ever bring up the topic of stuttering.

Adriaensens and Struyf (2016) concluded that although teachers reported that they were confident in how to deal with stuttering, teachers could consult their students on this matter of stuttering. Even though these teachers do not believe that it is necessary to talk about the topic, they would acknowledge the stuttering and provide encouragement to students who do stutter.

Statement of the Problem

The previous literature supports the fact that educators' play a major role in students' lives and that these educators do have an amount of knowledge regarding the topic of stuttering. Although there is some knowledge, the purpose of this study was to determine early childhood educator's knowledge of the myths and facts about stuttering. The findings of the survey may be helpful in educating early childhood educators and bringing awareness to the misconceptions of stuttering. The researcher hypothesized that

participants with a higher level of education will correctly identify more statements regarding stuttering than respondents with a lower education level. This study would help further understand how much educators' truly know about stuttering and how to decipher the training that they need to have a productive environment.

Chapter III

Methodology

The purpose of this study was to determine early childhood educator's knowledge of the myths and facts about stuttering. The findings of the survey may be helpful in educating early childhood educators and bringing awareness to the misconceptions of stuttering. This research will help SLPs understand how much educator's know about the topic of stuttering and what, SLPs, can do to help educate teachers for success within the classroom.

Subjects

The researcher contacted and gained permission from Superintendents or Department chairs to send surveys to educators in the surrounding parishes school districts. The participants only had to meet the criteria of being at least 21 years of age and also being employed as an early childhood educator. The participating northern Louisiana parishes included: Bossier, Caddo, and Monroe City Schools. The researcher had no direct relationship with the participants and there were no known risks to the participants. The participants of this study completed an informed consent form before participating (Appendix A). The participants were also made aware that their participation is completely voluntary; therefore they can exit the study at any point.

Procedure

The researcher provided an informed consent for the participants and once the consent form is signed the participants were sent a link to a survey. The researcher used Survey Monkey as the survey/assessment instrument. In order to maintain confidentiality of data the participants were asked to not put their names on the survey, the researcher did not have any participants names or email addresses and the participants received all information (pre-study/post-study) via the Superintendent and/or Department chair. The survey was sent to the participating educators via email. The participants received the survey via email, completed the survey and submitted the survey upon completion through Survey Monkey. The survey consisted of 20 statements regarding stuttering (Appendix B). The participants rated each statement as true or false.

Upon completion of the surveys, the researcher used the data analysis program through the Survey Monkey database to analyze responses. The researcher analyzed each of the following education levels within each question:

- Some college
- Graduated college
- Some graduate school
- Currently enrolled in graduate school
- Completed graduate school
- Post Master's work

Questionnaire

The researcher requested information of the educators' perceptions regarding the myths and facts of stuttering using a 26-item survey. Questions 1 through 6 were demographic questions that addressed age, gender, ethnicity, education level, years of teaching experience and if the participant knows someone who stutters. Questions 7 through 26 evaluated the subject's perception and understanding of stuttering by having the respondent choose true or false on statements regarding fluency. The researcher compiled information regarding stuttering from a variety of evidence based sources including the Stuttering Foundation, Do Something Foundation, Center of Colorado Therapy and ASHA. Question 7 stated that more males stutter than females, which is true (Stuttering Foundation). Question 8 stated that approximately 5% of all children go through a period of stuttering, which is true (Stuttering Foundation). Question 9 stated that nervousness causes stuttering, which is false because although nervousness may increase disfluencies it is not an etiology of stuttering (Stuttering Foundation). Question 10 stated that stuttering can be "caught" through imitation or by hearing another person stutter, which is false because stuttering is not something that is contagious (Stuttering Foundation). Question 11 stated that telling a person, "take a deep breath before talking," or "think about what you want to say first," helps them get through their stuttering event, which is false because that actually makes a person more self-conscious, making the stuttering worse. Something that would be more beneficial to the person who stutters would be to listen patiently and model slow speech (Stuttering Foundation). Question 12 stated that stress causes stuttering, which is false. Similar to the question about

nervousness, stress can be a factor to increase the amount of disfluencies but stress is not a central etiology of stuttering (Stuttering Foundation). Question 13 stated that over three million Americans stutter, which is true (Stuttering Foundation).

Question 14 stated that people generally do not stutter when they sing or whisper, which is true (Stuttering Foundation). Question 15 stated that bilingual children stutter more often than monolingual children, which is false (Center of Colorado Therapy). Question 16 stated that children who stutter show no differences in intelligence from children who do not stutter, which is true. Stuttering has no effect on intelligence (Stuttering Foundation). Question 17 stated that stuttering is not caused by psychological differences, which is true. There is no connection between psychological or emotional problems as an etiology for stuttering (Stuttering Foundation). Question 18 stated that teachers should try to fill in words or sentences when a child is stuttering, which is false. The last thing that a teacher of a student who stutters would be to fill in their thoughts for them, rather they should allow the student to finish completing their thought (Stuttering Foundation). Question 19 stated that teachers should require the child who stutters to talk in front of the class, which is false. If there is a true fluency disorder present that child should be advocated for and provided accommodations within their special education services; however, it is important for the educator's to hold a student who stutters to the same standard of work and intelligence as the student who does not stutter (Stuttering Foundation). Question 20 stated that when talking to students, a teacher should approach stuttering like any other matter, which is true (Stuttering Foundation). Question 21 states that most people who stutter in childhood do not stutter as adults, which is true.

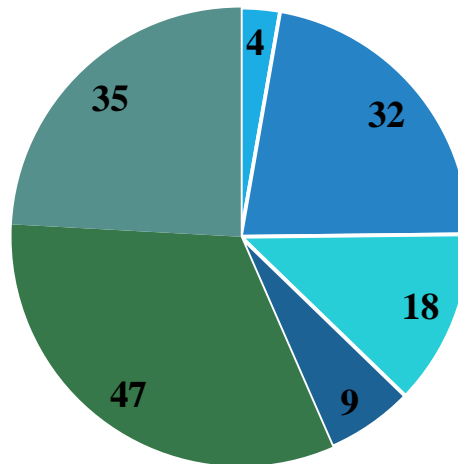
Approximately 5% of all children go through a period of stuttering that lasts six months or more. Previous research through the Stuttering Foundation has noted that of those children, three-quarters will recover by late childhood, leaving about 1% with a long-term problem. Question 22 stated that most treatment programs for people who stutter are "behavioral." They are designed to teach the person specific skills or behaviors that lead to improved oral communication, which is true (ASHA). Question 23 stated that environmental factors, such as stressful life events in the home, do not influence stuttering, which is false. Although environmental factors cannot be an etiology of stuttering, these factors can impact the child who stutters drastically (DoSomething Foundation). Question 24 stated that there is a genetic component involved in stuttering, which is true (Center of Colorado Therapy). Question 25 stated that stuttering is defined by repetition of words, which is false. Stuttering is defined by more than just repetition of words including: prolongations, abnormal blocks, and in some cases secondary body movements (Stuttering Foundation). Question 26 stated that a teacher of a child who stutters should insert more pauses into their own speech in order to reduce speech pressure, which is true. As a teacher, simply slowing down their own rate is a type of way to reduce pressure and model for the child who stutters (Stuttering Foundation).

CHAPTER IV

Results

A total of 145 surveys were completed across the three school boards including: Bossier Parish, Caddo Parish and Monroe City Schools. Upon completion of the surveys the researcher analyzed each group of participant's responses, which included the following groups seen in Table 1:

- Some college, which 4 participants identified.
- Graduated college, which 32 participants identified.
- Some graduate school, which 18 participants identified.
- Currently enrolled in graduate school, which 9 participants identified.
- Completed graduate school, which 47 participants identified.
- Post Master's work, which 35 participants identified.

Table 1**Participants Education Level**

■ Some College

■ Graduated College

■ Some Graduate School

■ Currently Enrolled in Graduate School

■ Completed Graduate School

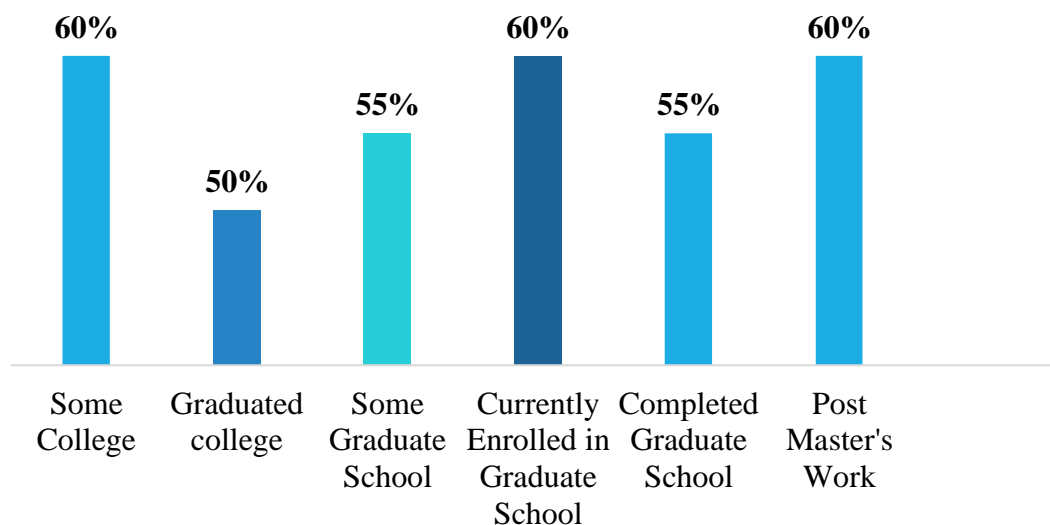
■ Post Master's Work

The researcher then analyzed each participant group's responses to the 20 question survey and gave credit for the response if at least 75% of that population group selected the correct answer. The researcher hypothesized that the higher the education level the more statements would be identified correct. The results are summarized in Table 2. For the some college population, of the 20 statements at least 75% this group identified 12 of the 20 statements correct. For the graduated college population, of the 20 statements at least 75% of this group identified 10 of the 20 statements correct. The next

group was the participants that had some graduate school experience, of the 20 statements at least 75% of this group identified 11 of the 20 statements correct. The fourth group was the participants that are currently enrolled in graduate school, of the 20 statements at least 75% of this group identified 12 of the 20 statements correct. The next group had completed some graduate school, of the 20 statements at least 75% of this group identified 11 out of the 20 statements correct. The last group of participants was those who had post master's work, of the 20 statements at least 75% of this group identified 12 of the 20 statements correct.

Table 2

% of Statements Identified Correctly



* Questions counted correct if at least 75% of participants in each group got the question correct

CHAPTER V

Discussion

The purpose of this study was to determine early childhood educator's knowledge of the myths and facts about stuttering in North Louisiana. The findings of the survey may be helpful in educating early childhood educators and bringing awareness to the misconceptions of stuttering. When compared to the researcher's previous study that took place in Central Arkansas, the North Louisiana early childhood educator's identified more statements correct compared to Central Arkansas educators; however the methodology changes between the studies should be noted. The first change that took place was that the original study was a Likert scale where the participants answered the statements on the scale of:

- Absolutely True
- Probably True
- Probably False
- Absolutely False

The study that was conducted in North Louisiana had the participants just choose between either true or false when identifying the statements. The second change is that when analyzing the results the researcher gave credit for each question if at least 75% of that group identified the statement as correct. In the previous study the researcher gave credit if 80% of the participants identified the statement correct.

Overall the results of this study showed that participants' education level did not significantly increase the determination between myth and fact. The results of this survey also show that there is a continued need for education regarding the definition, etiology and communication strategies of stuttering.

References

- Adriaensens, S., & Struyf, E. (2016). Secondary School Teachers' Beliefs, Attitudes, and Reactions to Stuttering. *Language, Speech, and Hearing Services in Schools (LSHSS)*, 47(2), 135–147. Retrieved from <http://ezproxy.latech.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eoah&AN=39256026&site=ehost-live&scope=site>
- Boyle, M. P. (2014). Understanding perceptions of stuttering among school-based speech–language pathologists: An application of attribution theory. *Journal of Communication Disorders*, 52(1), 143–155. Retrieved from <http://ezproxy.latech.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eoah&AN=33396651&site=ehost-live&scope=site>
- Li, J., & Arnold, H. S. (2015). Reactions of teachers versus non-teachers toward people who stutter. *Journal of Communication Disorders*, 56(1), 8–18. Retrieved from <http://ezproxy.latech.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eoah&AN=36054881&site=ehost-live&scope=site>
- Plexico, L. W., Plumb, A. M., & Beacham, J. (2013). Teacher Knowledge and Perceptions of Stuttering and Bullying in School-Age Children. *Perspectives on Fluency and Fluency Disorders*, 23(2), 39–53. Retrieved from <http://ezproxy.latech.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eoah&AN=32075510&site=ehost-live&scope=site>

St. Louis, K. O., Przepiorka, A. M., Beste-Guldborg, A., Williams, M. J., Blachnio, A.,
Guendouzi, J., ... Ware, M. B. (2014). Stuttering attitudes of students: Professional,
intracultural, and international comparisons. *Journal of Fluency
Disorders*, 39(4), 34–50. Retrieved from
[http://ezproxy.latech.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=t
rue&db=eoah&AN=32690222&site=ehost-live&scope=site](http://ezproxy.latech.edu:2048/login?url=http://search.ebscohost.com/login.aspx?direct=true&db=eoah&AN=32690222&site=ehost-live&scope=site)

Appendix A
(Informed Consent Form)

Informed Consent Agreement

Project Title: Stuttering and the Early Childhood Educator

Please read this consent agreement carefully before you decide to participate in the study.

The purpose of the study is to examine early childhood educators' knowledge of stuttering. In this study, you will complete a survey regarding your knowledge of stuttering. The total time spent on this survey will be approximately 10 minutes.

The information you provide in the study will be handled confidentially, and your data will be identified by an anonymous code number instead of your name. Your name will not be used in any report. Your participation in the study is completely voluntary, and you have the right to decide not to complete the survey.

Results will be compiled and presented only in aggregate form- responses will be reported in individual format. The results from our current research will be compared to published research as found in professional journals.

If you have questions or concerns about the study please contact:
Haley Jo Wesson

I have read and understand this document and have had the opportunity to have my questions answered. I agree to participate in the research study described above. I also certify that I am 18 years of age or older.

Completion of the survey indicates my agreement to participate in this study.

Participant's Signature

Date

NOTE: The research has been approved by the Institutional Review Board (IRB) of Louisiana Tech University

Appendix B
(Elements of Survey)

Survey Welcome Page

Thank you for voluntarily participating in this undergraduate research project to determine educators knowledge of the myths and facts of stuttering.

The survey should take no longer than 15 minutes & completed survey responses will remain confidential.

Results will be compiled and presented only in aggregate form – responses will not be reported in individual format.

Dr. Kimmerly Harrell, CCC-SLP is the faculty sponsor of this project.

Thank you for your time.
Haley Jo Wesson – Graduate Student
Louisiana Tech University

NOTE: This research has been approved by the Institutional Review Board (IRB) of Louisiana Tech University.

Survey Questions

Answer options for all statements: True or false.

1. More males stutter than females.
Stuttering Foundation
2. Approximately 5% of all children go through a period of stuttering.
Stuttering Foundation
3. Nervousness causes stuttering.
Stuttering Foundation
4. Stuttering can be “caught” through imitation or by hearing another person stutter.
Stuttering Foundation
5. Telling a person, “take a deep breath before talking,” or “think about what you want to say first,” helps them get through their stuttering event.
Stuttering Foundation
6. Stress causes stuttering.
Stuttering Foundation
7. Over three million Americans stutter.
Stuttering Foundation
8. People generally do not stutter when they sing or whisper.
Stuttering Foundation
9. Bilingual children stutter more often than monolingual children.
Center of Colorado Therapy
10. Children who stutter show no differences in intelligence from children who do not stutter.
Stuttering Foundation

11. Stuttering is not caused by psychological differences.
Stuttering Foundation
12. Teachers should try to fill in words or sentences when a child is stuttering.
Stuttering Foundation
13. Teachers should require the child who stutters to talk in front of the class.
Stuttering Foundation
14. When talking to students, teachers should approach stuttering like any other matter.
Stuttering Foundation
15. Most people who stutter in childhood do not stutter as adults.
Stuttering Foundation
16. Most treatment programs for people who stutter are "behavioral." They are designed to teach the person specific skills or behaviors that lead to improved oral communication.
ASHA
17. Environmental factors, such as stressful life events in the home, do not influence stuttering.
Dosomething.org
18. There is a genetic component involved in stuttering.
Center of Colorado Therapy
19. Stuttering is defined by repetition of words.
Stuttering Foundation
20. A teacher of a child who stutters should insert more pauses into their own speech in order reduce speech pressure.
Stuttering Foundation

Appendix C
(Results of Survey by Education Level)

Correct Answer	Some College (4)	Graduated College (32)	Some Graduate School (18)	Currently enrolled in Graduate School (9)	Completed Graduate School (47)	Post Master's Work (35)	Combined Data for all participants (145)
1. True	YES (3t 1f)	YES (29t 3f)	YES (17t 1f)	YES (7t 2f)	YES (42t 5f)	YES (32t 3f)	YES (130t 15f)
2. True	NO (2t 2f)	NO (25t 7f)	YES (16t 2f)	YES (7t 2f)	YES (42t 5f)	YES (31t 4f)	YES (123t 22f)
3. False	NO (4t 0f)	NO (25t 7f)	NO (15t 3f)	NO (5t 4f)	NO (32t 15f)	NO (27t 8f)	NO (108t 37f)
4. False	NO (2t 2f)	NO (13t 19f)	NO (8t 10f)	YES (1t 8f)	NO (13t 34f)	YES (6t 29f)	NO (43t 102f)
5. False	NO (3t 1f)	NO (18t 14f)	NO (12t 6f)	NO (4t 5f)	NO (19t 28f)	NO (23t 12f)	NO (79t 66f)
6. False	NO (4t 0f)	NO (27t 5f)	NO (15t 3f)	NO (8t 1f)	NO (38t 9f)	NO (30t 5f)	NO (122t 23f)
7. True	YES (4t 0f)	YES (26t 6f)	YES (16t 2f)	YES (9t 0f)	YES (38t 9f)	YES (30t 5f)	YES (123t 22f)
8. True	YES (4t 0f)	YES (30t 2f)	YES (17t 1f)	YES (9t 0f)	YES (44t 3f)	YES (35t 0f)	YES (139t 6f)
9. False	YES (1t 3f)	YES (4t 28f)	YES (4t 14f)	YES (1t 8f)	YES (9t 38f)	YES (4t 31f)	YES (23t 122f)
10. True	YES (4t 0f)	YES (29t 3f)	YES (17t 1f)	YES (9t 0f)	YES (45t 2f)	YES (31t 4f)	YES (135t 10f)
11. True	YES (3t 1f)	NO (16t 16f)	NO (12t 6f)	NO (3t 6f)	NO (24t 23f)	NO (17t 18f)	NO (75t 70f)
12. False	YES (1t 3f)	YES (4t 28f)	YES (1t 17f)	YES (2t 7f)	YES (5t 42f)	YES (4t 31f)	YES (17t 128f)
13. False	YES (0t 4f)	YES (3t 29f)	YES (1t 17f)	YES (1t 8f)	YES (4t 43f)	YES (3t 32f)	YES (12t 133f)
14. True	YES (3t 1f)	YES (24t 8f)	NO (13t 5f)	YES (7t 2f)	NO (30t 17f)	YES (27t 8f)	NO (104t 41f)
15. True	NO (0t 4f)	NO (19t 13f)	NO (9t 9f)	NO (5t 4f)	NO (26t 21f)	NO (23t 12f)	NO (82t 63f)
16. True	YES (4t 0f)	YES (30t 2f)	YES (16t 2f)	YES (9t 0f)	YES (44t 2f)	YES (29t 6f)	YES (132t 13f)
17. False	YES (1t 3f)	YES (3t 29f)	YES (3t 15f)	YES (0t 9f)	YES (4t 43f)	YES (5t 30f)	YES (16t 129f)
18. True	NO (2t 2f)	NO (13t 19f)	YES (14t 4f)	NO (5t 4f)	NO (30t 17f)	NO (21t 14f)	NO (85t 60f)
19. False	NO (4t 0f)	NO (14t 18f)	NO (10t 8f)	NO (3t 6f)	YES (10t 37f)	NO (10t 25f)	NO (51t 94f)
20. True	YES (3t 1f)	NO (21t 11f)	NO (11t 7f)	NO (6t 3f)	NO (30t 17f)	NO (21t 14f)	NO (92t 53f)
	Total YES: 12 12/20=60%	Total YES:10 10/20=50%	Total YES: 11 11/20=55%	Total YES: 12 12/20=60%	Total YES:11 11/20=55%	Total YES:12 12/20=60%	Total YES: 10 10/20=50%