

Teachers' Knowledge and Attitudes Toward Children Who Stutter

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Abstract:

*The purpose of this research was to understand the relationship between knowledge about stuttering and attitudes towards students who stutter by primary school teachers in Mitrovica. Sample of this research were lower grade teachers as well as lower middle class teachers in primary schools in Mitrovica. The instrument used for this research was a questionnaire which contained 36 questions, of which 5 of them were related to demographic data, as well as 31 statements on a Likert scale. The questionnaire was distributed electronically to teachers, where they had the opportunity to answer questions. The questionnaires were anonymous and teacher participation was voluntary. Data were analyzed with SPSS-21. The first hypothesis is confirmed by correlation analysis where it is understood that there is a significant positive correlation between knowledge and attitudes towards stuttering: $r = .925^{**}$; $p < 0.01$. The second hypothesis is not substantiated where we understand that there is no significant correlation between the level of education and knowledge and attitudes towards stuttering. The third hypothesis is confirmed by T-test analysis where we understand there is a significant difference between the averages of the groups in knowledge about stuttering. In this case female teachers have higher knowledge about stuttering.*

Keywords: *stuttering, attitudes, knowledge, teacher*

1.INTRODUCTION

In every day of our lives it happens that we constantly see a large number of children with various disorders. We often see that childrens, depending on their typical development, they still have difficulty in speaking fluently, so in alot of cases we see that they face with stutter. Thus, the human curiosity arises to understand how these children are treated by their peers and what is their situation within the regular classrooms. Then the main focus is on understanding the attitudes and knowledge of teachers about stuttering disorder.

Stuttering is one of the common speech disorders, which is characterized by the main features such as blocking, lengthening and repetition of words or syllables and secondary features such as additional body movements or tightness inside the face, hands, body, difficulty in rhythm and mastery of speaking (Sari, Gokdag, Kizilkaya, 2019).

According to the International Classification of Diseases (WHO, 2008), stuttering is a speech disorder characterized by frequent repetition and prolongation of sounds, syllables or words, as well as frequent hesitations and pauses, which disrupt the rhythm of speech. Dobrota (2011), defines stuttering as a condition that manifests itself in the disorder of all forms of fluency, with marked changes at the somatic, psychological and social level. The most striking symptom is difficult and interrupted verbal communication with impaired reactions. Stuttering is reported to affect 1-2% of the entire population and that the incidence is highest in children aged two to six years and is over 15%. The prevalence rate is highest in preschool children, when stuttering usually begins (Andrews & Harris, 1964). Stuttering affects boys more than girls and the frequency is three times higher (Dobrota, 2011; Golubović, 2012). In the United States, the data show a prevalence rate of 2.52% in the preschool population and is significantly more common in boys (Proctor, 2008). In children who did not go for treatment, in the first two years after the onset of stuttering, spontaneous "healing" occurs in 65% of preschool children (Yairi & Ambrose, 1999), while with treatment this rate increases to 85% in first five years (Månsson, 2000). Recent data from studies show that the prevalence of stuttering in school-age children is slightly lower than 1% (Yairi & Ambrose, 2013).

The prevalence of stuttering in school children is 1%. Teachers are therefore more likely to encounter students who stutter in their professional lives and because children spend important years of their lives in school and with their teacher, the student-teacher relationship is extremely important (Adriaensens & Struyf, 2016;

Placencia, 2014). Students with stuttering can transfer negative traits to teachers such as anxiety, irritability, shyness, disbelief or introversion. On the other hand, teachers' attitudes also affect students' feelings and self-efficacy (Abdalla & Louis, 2012; Kakourou, Papaeliou, Maniadaki, Dalapa, 2007).

For children in school, teachers are authoritarian figures who can have a significant impact on their lives. Previous studies (Lass et al., 1994; 1992; Yeakle & Cooper, 1986) found that teachers and school administrators held mostly negative stereotypes about people they trust. Yeakle and Cooper (1986) also investigated the effect of experience with people who stutter or training work on speech disorders in teachers' perceptions of people who stutter.

Negative perceptions of students who stutter by classroom teachers can have a negative impact on the assessment, instruction, and educational achievement of these students in their classrooms (Lass et al., 1992).

A positive shift in teachers' attitudes towards persons who stutter was also observed by Cooper and Cooper (1996) regarding causation, early intervention, and character judgment. Two more recent studies by Healey, Gabel, Daniels and Kawai (2007) and Gabel (2006) found that members of the general population reported more positive attitudes towards people who stutter than in the past.

Crowe and Cooper (1977) found that knowledge about specific communication disorders positively influences an individual's attitude towards that disorder. Overall research has found that teachers have little knowledge of stuttering, which in turn causes more negative perceptions towards people who stutter in their classrooms (Allard & Williams, 2007; Clauson & Kopatic, 1975; Crowe & Cooper, 1977; Crowe & Walton, 1981; Dopheide & Dallinger, 1975; Ebert & Prelock, 1994; Lass et al., 1992; Roberts, 1998; Yeakle & Cooper, 1986).

Crowe and Walton (1981) explored teachers' perceptions and knowledge of stuttering to determine if there was a statistically significant relationship between teachers' attitudes to stuttering compared to the individual's knowledge of stuttering. The results showed that teachers with more knowledge about stuttering had more desirable attitudes and interacted differently with persons who stuttered.

1.1 Purpose of the Research

The purpose of this research was to understand the relationship between knowledge about stuttering and attitudes towards students who stutter by primary school teachers in Mitrovica.

1.2 Participants

Participants of this research were lower grade teachers as well as lower middle class teachers in primary schools in Mitrovica.

1.3 Research Questions

- Q1. Is there a correlation between teachers' knowledge about stuttering and their attitudes towards stuttering?
- Q2. Is there a correlation between teachers' level of education and attitudes toward students who stutter?
- Q3. Is there a difference in attitudes between the gender of teachers?

1.4 Hypotheses

- H1. There is a significant positive correlation between knowledge about stuttering and teachers' attitudes towards their students who stutter.
- H2. There is a positive significant correlation between the level of education and the attitude towards stuttering.
- H3. There is a difference in the knowledge about stuttering between gender of teachers.

2. METHODOLOGY

2.1 Participants

The sample of this research was 72 teachers of primary schools in Mitrovica. 8.3% of them were male, while 91.7% were female. Their age was: 20-29 years old 5.6%, 30-39 years old 25%, 40-49 years old 27.8% and 50+ years old were 41.7% of them. Regarding the level of education, with bachelor level were 75%, master 22.2% and doctorate 2.8% of them. Work experience ranged from 3 months to over 40 years, where with three months of experience were 2.8%, 1-10 years were 22.2%, 11-20 years were 44.4%, 21-30 years were 13, 9% as well as 31-40 years old were 16.7% of teachers.

2.2 Instrument

The instruments used for this research were: Teachers' Attitudes Toward Stuttering (TATS) (Crowe & Walton, 1981), and the Parental attitudes toward and knowledge of stuttering (Crowe & Cooper, 1977).

The TATS questionnaire contained 36 questions, 5 of which were related to demographic data, as well as 31 Likert-scaled statements from: Strongly Agree, Agree, Undecided, Disagree and Strongly Disagree. The stuttering knowledge questionnaire had 26 questions related to stuttering knowledge, rated with: Correct and Incorrect. The questionnaire was distributed electronically to teachers, where they had the opportunity to answer questions. The questionnaires were anonymous and teacher participation was voluntary.

3. RESULTS

According to the results of the analysis, the average of 6 male participating teachers is 26.3 and the average of 66 female teachers is 34.57. So there is a significant difference in knowledge about stuttering between the sexes. Even the Sig (2-tailed) result ($p = .021, .000$) shows that there is a significant difference between the group averages in knowledge about stuttering. In this case female teachers have higher knowledge about stuttering. Also, the results of the analysis show us that the average of 6 male participating teachers is 70 while the average of 66 female teachers is 98.24. Here, too, we have a significant difference in attitudes towards students who stutter between the sexes in children with SD. Even the Sig (2-tailed) result ($.006, .021$) shows that there is a difference between the means of the groups in attitudes towards stuttering.

Table 1. Group Statistics

Variables	Gender	N	MA	SD	Std.Error Mean
Knowledges about sttutering	Male	6	26,3333	2,25093	,91894
	Female	66	34,5758	8,49626	1,04582
Attitudes towards children who sttuter	Male	6	70,0000	21,37288	8,72544
	Female	66	98,2424	23,62923	2,90856

Table 2. Independent Samples Test

t-test for Equality of Means						
		Sig. (2-tailed)	Mean Difference	Std. Error Difference	95% Confidence Interval of the Difference	
					Lower	Upper
Knowledges about sttutering	Equal variances assumed	,021	-8,24242	3,50045	-15,22385	-1,26100
	Equal variances not assumed	,000	-8,24242	1,39218	-11,12013	-5,36472
Attitudes toward children who sttuter	Equal variances assumed	,006	-28,24242	10,00988	-48,20650	-8,27835
	Equal variances not assumed	,021	-28,24242	9,19745	-50,60082	-5,88403

According to the correlation analysis, there is a significant positive correlation between age and knowledge of stuttering: $r = ,871^{**}$; $p < 0.01$ as well as age and attitudes towards stuttering: $r = ,917^{**}$; $p < 0.01$. There is also a significant positive correlation between knowledge and attitudes towards stuttering: $r = ,925^{**}$; $p < 0.01$. Significant positive correlation also exists between the variables: experience and attitudes towards stuttering: $r = ,923^{**}$; $p < 0.01$, as well as experience and knowledge about stuttering: $r = ,928^{**}$; $p < 0.01$. But there is no significant correlation between the level of education and knowledge and attitudes towards stuttering.

Table 3: Analysis of correlation between variables

	1	2	3	4	5
Level of education	1				
Work eksperience	,003	1			
Age	,026	,833**	1		
Attitudes towards children who stutter	,025	,923**	,917**	1	
Knowledges about sttutering	,092	,928**	,871**	,925**	1

** . Correlation is significant at the 0.01 level (2-tailed).

A simple linear regression was carried out to test if the age significantly predicted Knowledge about sttutering . The results of the regression indicated that the model explained 75.9% of the variance and that the model was significant, $F(1,70)= 220,493$, $p<.001$. Also, a simple linear regression was carried out to test if the age significantly predicted attitudes about sttutering. The results of the regression indicated that the model explained 84.1% of the variance and that the model was significant, $F(1,70)= 371,525$, $p<.001$.

Table 4: Linear regression analysis

	R	R square	Adjusted R Square	Std. Error of the Estimate	F.	Sig.
Knowledges about sttutering	,871 ^a	,759	,756	,469	220,493	,000 ^b
Attitudes towards children who stutter	,917 ^a	,841	,839	,380	371,525	,000 ^b

- a. Dependent variable: age
- b. Predictors:(Constant), knowledges about sttutering & attitudes towards children who stutter

A simple linear regression was carried out to test if eksperience significantly predicted Knowledge about sttutering . The results of the regression indicated that the model explained 86.1% of the variance and that the model was significant, $F(1,70)= 434,189$, $p<.001$. Also, a simple linear regression was carried out to test if eksperience significantly predicted attitudes toward children who sttuter. The results of the regression indicated that the model explained 85.2% of the variance and that the model was significant, $F(1,70)= 403,135$, $p<.000$.

Table 5: Linear regression analysis

	R	R square	Adjusted R Square	Std. Error of the Estimate	F.	Sig.
Knowledges about sttutering	,928 ^a	,861	,859	,397	434,189	,000 ^b
Attitudes towards children who stutter	,923 ^a	,852	,850	,409	403,135	,000 ^b

- c. Dependent variable: work eksperience
- d. Predictors:(Constant), knowledges about sttutering & attitudes towards children who stutter

Except this, a simple linear regression was carried out to test if the level of education significantly predicted attitudes about sttutering . The results of the regression indicated that the model explained 0.1% of the variance and that the model was not significant, $F(1,70),044$, $Sig=,835$. Also, a simple linear regression was carried out to test if the level of education significantly predicted knowledges about sttutering . The results of the regression indicated that the model explained 0.64% of the variance and that the model was not significant, $F(1,70)=,599$ $Sig=,442$.

4. DISCUSSIONS

The main focus of this research was to understand the relationship between knowledge about stuttering and attitudes towards students who stutter by primary school teachers in Mitrovica.

The hypotheses raised in this research are as follows: There is a significant positive correlation between knowledge about stuttering and teachers' attitudes towards students who stutter; There is a significant positive correlation between the level of education and attitudes towards stuttering; There is a difference in attitudes towards students who stutter between male and female teachers; There is a difference in attitudes towards students who stutter between levels of teacher's education.

The first hypothesis is confirmed by correlation analysis where it is understood that there is a significant positive correlation between knowledge and attitudes towards stuttering: $r = .925^{**}$; $p < 0.01$. The second hypothesis is not substantiated where we understand that there is no significant correlation between the level of education and knowledge and attitudes towards stuttering. The third hypothesis is confirmed by T-test analysis where we understand there is a significant difference between the averages of the groups in knowledge about stuttering. In this case female teachers have higher knowledge about stuttering. Also, the fourth hypothesis is confirmed by the analysis of the T-test where it is understood that there is a difference between the means of the groups in the attitudes towards stuttering.

About the first hypothesis it can be said that are some authors who in their research helps understand what can happen to students if teachers would not have enough knowledge about stuttering. Then, if teachers have misconceptions about stuttering, these beliefs can have a negative impact on how they perceive and interact with students who stutter (St. Louis, Wesierska & Polewczyk, 2019). Teachers are role models for school-age children. Moreover, the academic success and failure of students in school depends mainly on the beliefs and attitudes of teachers towards their students. This is because stuttering students need all the support they can get from their teachers given their struggle in public speaking, group discussion and the challenges with interpersonal communication. If teachers do not have a positive attitude towards students who stutter, these restrictions can negatively affect their academic and social interaction with peers at school and even jeopardize their future (Walden & Lesner, 2018).

Also for the second hypothesis it can be said that Grigoropoulos (2020) in his study concludes that the ASK Test and the TATS inventory were used to assess the knowledge of educators and to measure their perceptions and knowledge about children who stutter. The results show that there is a significant positive correlation between the TATS inventory and the ASK test results of early childhood educators, which means that educators with greater knowledge of stuttering demonstrated more desirable attitudes toward stuttering. These results are consistent with research data showing a significant link between knowledge and attitudes toward stuttering. This study found that participants demonstrated at least some basic knowledge in the area of the impact of stuttering - their perceptions of children who stutter in their classrooms.

For the third hypothesis Katebe & Mwewa (2020) do not stand in harmony and manage to show us that Teachers' Attitudes are generally negative; and their knowledge and beliefs about stuttering are characterized by misunderstandings and misinformation. The study concludes that there is a need for increased knowledge about stuttering to help dispel myths, clarify misunderstandings, and correct teacher misinformation before and during service. He further calls for a curriculum and training of teachers that reflect an enriched content about stuttering if they are to take care of the educational needs of stuttering children.

Based on teachers' responses to the semantic differential scale, it was found that K-12 school teachers did not report openly negative attitudes towards persons who stutter. Both stutterers and fluent speakers were positively described for each item on the semantic differential scale, which also yielded a positive result for the overall average score. While both groups were rated positively, persons who stuttered received significantly more positive results than fluent speakers for three items on the semantic differential scale. Educational and experiential factors were not found to have an impact on teachers' overall positive attitudes towards people who stutter (Irani & Gabel, 2008).

So in a word it can be said that although it seems to us that it is a large increase in knowledge and attitudes of the media towards children who stutter, it still does not suffice with this, as often the results vary depending on the number of respondents, by country on site and from school to school. Teachers should be constantly

informed about all the innovations that come about the treatment of children who stutter, because like any child and disorder, children who stutter are all unique in their development.

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