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THE LEVEL OF STUTTERING SEVERITY AMONG STUDENTS WITH LEARNING DISABILITIES IN ENGLISH LANGUAGE

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ABSTRACT
The study aimed at identifying the extent of the prevalence of behaviors associated with the phenomenon of stuttering and the degree of its severity among students with learning disabilities in English in the basic stage and its relationship with variables of age and gender. The sample of the study consisted of 310 female and male students from 100 schools in Irbid city, Jordan, in the academic year 2019/2020. The study used a test to measure the the levels of stuttering among students. The results of the study showed that the prevalence of behaviors associated with stuttering of all degrees of severity, simple, medium, and severe, was 0.51% of the study sample. The degree of prevalence of behaviors associated with stuttering was more in males than in females, and the degree of moderate stuttering severity constituted the highest percentage in the study sample. The results also showed that there were no statistically significant differences in the degree of severity of stuttering among primary school children with learning disabilities in English due to the variables of age and gender.

Key Words: learning disabilities, English language, suttering.

1. INTRODUCTION
Stuttering behaviors appear at any age and tend to appear at the stage of language acquisition or the stage of entering primary school. More than 50% of stuttering starts early in life, and stuttering usually begins at the age of three. The percentage of stutterers in the world ranges between (4% - 0.7) and their number is approximately (15) million cases (Code, 2021).

When individuals speak using words, sentences, and paragraphs to express their needs, thoughts, and feelings, the speech comes out according to a specific harmony and a specific timing between one word and the other, or between one sentence and another, or between one idea and another. Therefore, the speech comes out in a naturally flowing manner. But in the case of fluency disorders, the timing between words or sentences are not appropriate so that there are long or short pauses between words or sentences, reluctance to start speaking, or repetition of the first letter of spoken words. One manifestation of fluency disorders is the increased speed of speech to the point that the listener cannot follow through or understand the speech. The most common and familiar type of this disorder is what is known as stuttering, and it appears in the form of a disturbance or defect in the frequency, rhythm, and flow of speech with intermittent pauses or an extension or repetition of different sounds and syllables, especially at the beginning of speech (Espir & Rose, 2015).

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Different theories explain the occurrence of stuttering or stammering in children with different causes. Some theories consider that the main causes are the tension and anxiety that the child feels in situations that require him to speak. They infer from this that stuttering or stammering increases in situations in which the child is forced to speak in front of strangers or in situations that arouse anxiety, such as exam situations and situations that require quick, separate, or specific answers during direct observation by others. Stuttering or stammering is reduced and may disappear completely in situations that are free of anxiety and tension, such as talking with familiar people such as parents and friends or even in the case of singing. However, some other theories hold that there is an organic or physiological basis for stuttering or stammering that must be recognized and treated. There are also some behavioral theories that explain the occurrence of stuttering or stammering by the failure of the child to learn the appropriate speech model. However, the modern trend believes that the occurrence of stuttering is a result of the interaction between biological and physiological factors on the one hand and environmental and psychological factors on the other (Al-Qaryouti et al, 2015).

The effect of stuttering on the fluency, integrity, and effort of the produced words was also identified. It is a complex problem and an unusual disorder that confuses the patient. The performance of people with stuttering also shows a wide range of visible and invisible symptoms, and there are many therapeutic methods that have been used in the treatment of stuttering, which is medical treatment and includes treatment with surgery, drug treatment, and psychotherapy. Scientists also used speech therapy, which is necessary and complementary to psychotherapy, and there is environmental therapy, which is meant to gradually integrate the child into social activities until he is trained in giving and receiving and has the opportunity for social interaction.

Students who suffer from fluency disorders (stuttering) experience psychological anxiety, fear, and negative attitudes that affect their quality of life. These feelings and trends exacerbate this phenomenon. Students who stutter may avoid people with authority, such as the teacher, principal, father, older brother, and others. The life of the stutterer is not without social isolation and apathy in social relations with others. Stuttering among school students leads to feelings of fear in the school environment and avoiding interaction with students and participating in the classroom, in addition to the negative impact on educational achievement. Stuttering may lead the person to engage in negative behaviors such as avoiding verbal situations and confrontations with the rest of society for fear of ridicule. Because of the importance of treating the phenomenon of stuttering as a serious social problem, this study attempted to identify how common the phenomenon of stuttering is and its level among students of the basic stage with learning disabilities in English language and its relationship with the variables of age and gender.

This study attempted to answer the following questions:

What is the degree of stuttering severity among primary school students with LDS in English in Irbid city?

Are there any statistically significant differences in the degree of stuttering severity among primary school students with LDs in English due to the age variable?

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Are there any statistically significant differences in the degree of stuttering severity among primary school students with LDs in English due to the gender variable?

The results of answering these questions provide significance for this study. The study is one of the first survey studies that provides researchers with a statistical representation of the reality of the phenomenon of stuttering among students with learning disabilities in English in the Arab world. The importance of this study stems from the fact that it opens the door to more future studies on the phenomenon of stuttering in the Arab countries.

However, there are several limitations to this study. The study was implemented during the second semester of the 2019/2020 academic year. The study was applied in public schools in Irbid Governorate, Jordan. The study was applied to primary school students from 6-18 years old.

2. LITERATURE REVIEW

Stuttering is one of the most common fluency disorders, but there is still no precise quantitative definition of it. Stuttering is a multidimensional phenomenon. The best description of stuttering is that it is a set of verbal behaviors, feelings, beliefs, self-concepts, and social interactions. These component elements or behaviors differ from one person to another, and cultural differences appear in the symptoms of stuttering. In every individual, we find that stuttering affects him/her to cause a complex problem that appears in the form of torn speech linked to reactions. Therefore, if stuttering appears in speech, it requires the speech and language pathologist to deal with emotional and social problems and the speech disorder in itself (Al-Zarad, 1990).

The American Psychological Association has set out in the DSM-IV the following diagnostic criteria for stuttering disorders. These standards include "disturbance in an individual's inappropriate habitual fluency characterized by repetition of syllables, prolongation, interruptions, and broken speech or pauses during the audible and the inaudible word and the complexity of words or the release of words with excessive physical effort and the repetition of the whole word" (Harmath-de Lemos, 2021).

Stuttering behavior is characterized by three clear manifestations that scholars have agreed upon, which are repetitions, prolongations, and speech halt. Repetitions are one of the most common manifestations of stuttering, especially when several repetitions of the same sound occur in succession to the point that they catch the listener's attention. There are different types of repetitions that depend on what is repeated when the stuttering child speaks, such as repeating the whole word, repeating the whole phrase, repeating a letter or a sound, or repeating a whole syllabus (Zureikat, 2005).

Prolongation is another manifestation of stuttering, where the pronunciation of the sound is prolonged for a longer period, especially in vowels. The prolongation of the sound is an important form of this speech disorder because it is rarely found in the speech of non-stutterers (Amin, 2001). Prolongations are very common among stutterers, and are of acceptable personal significance, due to their low incidence among individuals with verbal fluency. It often occurs in

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the advanced stages of stuttering, but in its early stages, the child often produces more productive vocal or syllable repetitions of vocalizations (Bloodsten et al, 2021).

Speech halts are also other manifestations that cause frustration and psychological tension for both the speaker and the listener, and are related to silent pauses and manifest through the speaker's inability to make any sound at all despite his violent effort. Speech halts occur due to a blockage in the vocal tract that impedes the mechanical movement of speech with the continued flow of air behind the blockage point. It is noted that speech halts occur frequently at the beginning of the half of the word or phrase or at the beginning of stressed words (Harmath-de Lemos, 2021).

There are stages of the development of stuttering. The first is the primary stuttering stage, which is characterized by easy repetitions of the beginning of words or syllables of sentences and is not accompanied by signs or emotional signs, or psychological pressure. In the Transitional Stuttering stage, signs of frustration, surprise, resistance, and avoidance of speech appear along with the efforts made in repetitions and prolongations in words and syllables. The development of this stage leads to the transition to the secondary stage. As for the Secondary Stuttering stage, it is characterized by the awareness of the stuttering child about the imbalance of fluency when trying to correct it. This is an indication of the beginning of the anticipation and the fear associated with stuttering (Hosseinzadeh, & Taghizadeh, 2021).

Stuttering, like other speech disorders, causes negative feelings and attitudes that affect the quality of life of a child who stutters. These feelings and tendencies exacerbate this phenomenon to cause feelings of fear, anxiety, confusion, and shame in the stutterer, as well as reactions that are sometimes characterized by irony and criticism among the listeners. In school children, it causes feelings of fear from school and avoiding students' interaction and speaking in the classroom and with the teacher, in addition to the negative impact on achievement. Moreover, stuttering pushes the person to engage in avoidant behaviors by avoiding verbal situations and individuals for fear of being ridiculed and criticized. This leads the child to behave in a non-adaptive way and impedes the implementation of his daily life activities. This is one of the most prominent effects of stuttering (Eggers et al, 2021).

Previous Studies

Alharbi (2020) investigated the impact of stuttering modification and compared the effectiveness of the used treatments in this regard. The study used the systematic review of diffefent studies tackling the treartment of stuttering. The review covered studies published from 1990 to 2018. Twenty-nine papers proved that some treatments cause relapsing and the quality of sound, which might affect the limited evidence on such treatement. The participants, who were treated by integration approaches, showed an ability to reduce stuttering and keep the benefits of the treatment for a monger period. The review concluded that it is not simple to identify the limited evidence nehind stuttering modification.

Al-Qawaqneh (2020) explored the impact of a training program in reducing the problem of stuttering disorders in elementary school students in Ajloun, Jordan. The study identified five dimensions of stuttering disorders. The study included participants from the third-grade students,

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who were distributed equally to experimental and control group. The results showed the presence of differences in all disorders of the dimensions of stuttering prior and subsequent to the performance of the control and experimental groups students due to the training program implemented in the study.

Khalil (2016) investigated the effectiveness of a program in reducing the severity of the stuttering among basic education pupils. The sample consisted of (30) male and female stuttering students randomly distributed into an experimental and a control group. The study used a checklist to reveal the existence of the stuttering disorder among students and the Raven's (1998) Test of successive matrices prepared by Rahma (2004). The study also developed a remedial program based on the prolonged Speech method prepared. The findings showed the existence of statistically significant differences between experimental group sand control group after applying the treatment program.

Egger et al (2021) evaluated possible relationship between treatments covering children and their mothers, the severity of stuttering, and the level of stuttering in students who stutter. The sample of the study included 123 children who stutter (94 boys and 29 girls). The Early Adolescent Temperament Questionnaire was used as an instrument of the study. The results revealed the absence of correolations between stuttering severity and temperament.

Eichorn and Pirutinsky (2021) compared the levels of attention and flexibility among students who suffer from stuttering and normal students. The study relied on the copariosn on studnts' scores on a behavioral task and parent report. The sample of the study included 33 children between 8 and 11 years of age. The findings showed that children scored good in the test. When it comes to high demand on cognitive flexibility, the students faced more challenging tasks to perform

Walsh et al (2020) documented the behaviors of disfluency presented in children aged 4-5 years old, who suffer from stuttering. The idea behind the study is to identify if stuttering characteristics at this age could be predictied. The study included 47 children diagnosed with stuttering. The findings revealed that this age group show high levels of stuttering compared to other age groups. The study suggested that using the appropriate clinical instruments could help in detecting disfluency behaviours.

3. RESEARCH METHODOLOGY

Population and Sample

The study population consisted of (600) male and female students from (100) schools in Irbid city. The sample of the study included (310) male and female students from the population of the study.

Instrument of the study

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The researcher used the A-19 Scale (2000 Guitar & Grims), which consisted of (19) items. The instrument was applied to (310) male and female students after extracting the indications of validity and reliability.

To verify the validity of the instrument, it was presented to seven qualified and experienced judges. The judges" observations were taken into consideration by amending and changing g some items of the instrument.

In order to verify the reliability of the instrument, the test and retest method was followed on a sample of the study population from outside the original study sample, consisting of 15 male and female students. The instrument was collected after 3 weeks. The stability coefficient was 0.91, which is suitable for conducting the study. Cronbach's alpha coefficient of internal consistency between study items was also calculated, and its value was 0.90, which is also acceptable.

4. RESULTS AND DISCUSSION

First: results of the first question

To answer this question, the researcher calculated the frequencies and percentages of the degree of stuttering among the children of the study sample and based on the stuttering degrees of the study scale. Table (1) presents the results.

Table 1. Frequencies and percentages of the degree of stuttering among the children of the study sample

degree of stuttering	Gender	Frequemcy	Percentage	Frequemcy	Percentage
Simple	Males	47	%51	93	%.30
	Females	46	%49		
Medium	Males	89	%52.3	170	%.54
	Females	82	%47.7		
Severe	Males	24	%53.1	47	%.15
	Females	22	%46.9		
Total	Males	160	%52	310	%100
	Females	150	%48		

It is clear from Table (1) that the degree of stuttering is more common in males than in females. The medium degree of stuttering constituted the highest percentage of the children of the study

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sample, reaching (54.4%), followed by low stuttering, which was (30%), and finally, severe stuttering ranked last, with had a rate of (15%).

The reasons behind this case by the lack of rehabilitation and treatment programs that help students with simple stuttering to treat it, which leads to its development to a medium degree. The student here is automatically cured without therapeutic intervention, leaving only students who suffer from stuttering to the point of severe stuttering in a way that will continue with them for life. For this reason, the medium degree of stuttering was more common than the rest of the degrees among the study sample.

Second: results of the second question

To answer the second question of the study, the frequency and percentage of the relationship between the degree of stuttering and age were calculated, as shown in Table (2).

Table 2. The relationship between the degree of stuttering and age

degree of stuttering	Age group	frequency	Percentage
Simple	6-9	21	22.98
	10-13	31	%35.5
	Over 14	40	41.6
	Total	94	%100
Medium	6-9	26	%15.6
	10-13	83	48.2
	Over 14	61	%36.2
	Total	170	%100
Severe	6-9	9	%20.5
	10-13	19	%40.7
	Over 14	18	%38.8
	Total	46	%100

Table (2) shows that the age group from (10-13) was the most affected group with stuttering, as the number of people affected in all degrees of stuttering was 133, while the number of people in

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the age group from age 14 and over was 122. The age group (6-9) was the least affected, as the number of students with stuttering was 56 students.

In the degree of simple stuttering, the age group of 14 and above was the most affected by simple stuttering, with a percentage of 41.6% of those with simple stuttering. As for the medium degree of stuttering, the age group (10-13) was the most affected age group with 48.2% of the sample. While in the degree of severe stuttering, the age group (10-13) was the most affected group with a percentage of 40.7%.

The mean scores and standard deviations of the degree of stuttering were also calculated according to the age variable, and Table (3) shows the results.

Table 3. Mean scores and standard deviations of the degree of stuttering according to the age variable

Age	Mean score	Standard deviation
9 - 6	9.27	3.199
13 - 10	9.45	2.734
18 - 14	9.14	2.910
Total	9.30	2.886

It is noted from Table (3) that there are apparent differences between the mean scores of stuttering among primary school children with difficulties in learning English due to the age variable. To find out if these differences are statistically significant, the one-way ANOVA analysis was used. Table (4) shows the results.

Table 4. The One-way ANOVA analysis for differences in the degree of stuttering according to the variable of age

Variance	Sume of squares	Mean squsre	F value	Sig.
Between groups	6.271	3.136	.3750	.6880
Within groups	2642.437	8.362		

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Total	2648.708

It is noted from the results contained in Table (4) that there are no statistically significant differences in the degree of stuttering among children of the basic stage with difficulties in learning the English language due to the variable of age. The F-value was (0.375) with a probability value of (0.688), which is greater than the specified value of significance (0.05). The researcher explains the lack of influence of the age variable on the degree of stuttering by the possibility of the influence of other factors such as the genetic factor, the environmental factor, or the psychological factor.

Third: results of the third question

To answer this question, the frequency and percentage of the relationship between the degree of stuttering and gender were calculated, and Table (5) shows the results.

Table 5. The relationship between the degree of stuttering and gender

Degree of stuttering	Gender	Frequency	Percentage
Simple	Male	48	%51
	Female	46	%49
	Total	94	%100
Medium	Male	89	%52.3
	Female	81	%47.7
	Total	170	%100
Severe	Male	24	%53.1
	Female	22	%46.9
	Total	46	%100

It is clear from the above table that males are more affected than females in all degrees of stuttering, as the percentage of males from the entire sample was 51% in the simple degree, 52.3% in the medium degree, and 53.1% in the severe degree. The higher the degree of stuttering, the less affected females are compared to males, as the percentage difference between males and females in the degree of simple stuttering is 2%, in the medium degree is 4.6%, and in the severe degree is 6.2%.

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The most common degree of stuttering among both genders was the medium degree, which was 91 for males and 83 for females, followed by the simple degree, with 49 males and 47 females. While the least common degree of stuttering was the severe degree, with 26 males and 23 females affected.

The mean scores and standard deviations of the degree of stuttering were also calculated according to the gender variable, and Table (6) shows the results.

Table 6. The mean scores and standard deviations of the degree of stuttering according to the gender variable

Gender	No.	Mean score	Standard deviation
Male	166	9.24	2.884
Female	153	9.36	2.896

It is clear from Table (6) that there are apparent differences between the average degree of stuttering among primary school children with LDs in English due to the gender variable and in favor of female children, as the mean difference was (0.12). To find out whether these differences are statistically significant, the (T) test was used for independent samples, and Table (7) shows the results.

Table 7. T-test results for the degree of stuttering according to the gender variable

T value	Significance
0.037	0.715

It is clear from Table (7) that the value of (T) was (0.037) with a probability value of (0.715), which is less than the specified value (0.05), which means that these differences are not statistically significant. Thus, there are no statistically significant differences in the degree of stuttering among primary school children in Irbid city due to the gender variable. The researcher explains the lack of influence of the gender variable on the presence of stuttering by the possibility of the influence of other factors such as the genetic factor, the environmental factor, or the psychological factor.

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5.RECOMMENDATIONS

Based on the results of this study, the researcher recommends the following:

- Holding instructional and educational courses for parents and English language teachers in the primary classes to deal with stuttering phenomena and their indicators.
- Conducting studies and research on larger samples and other variables, in particular studying the relationship between the genetic factor and stuttering.
- Providing diagnostic tools to teachers in schools to discover students who suffer from stuttering.
- Observing children in their first years of life. In the event that they are suspected of having any speech disorder, they should be shown to a speech therapist.

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