

Self-Esteem Among Individuals with Speech Disorders in Light of Some Variables

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Abstract

The present study aimed to identify the level of self-esteem among individuals with speech disorders; fluency, articulation, and voice disorders, in light of some variables. Researchers used Rosenberg's self-esteem scale on the study sample consisted of (97) individuals with speech disorders in hearing, speech clinics and special education centers in Jordan. Results showed that the level of self-esteem among individuals with speech disorders was moderate, and the type of disorder was the most influential factor on self-esteem, as individuals with speech and voice disorders had more self-esteem compared to those with fluency disorders (stuttering), results also indicated that individuals with category of less than (18) years old show more self-esteem than those of more than (18) years old, and that those with mild and moderate disorders have more self-esteem than those with severe and very severe disorders, furthermore, study pointed out that there were no statistically significant differences in the degree of self-esteem among individuals with speech disorders attributed to the variables of gender, social status, and monthly income of the family. The study concluded with a number of recommendations, as establishing specific groups for self and inclusive-support to develop self-esteem among individuals with speech disorders.

Keywords: articulation disorders, fluency disorders (stuttering), individuals with speech disorders, self-esteem, special education centers, voice disorders

1. Introduction

Communication is one of the primary needs of innumerable living beings, chiefly humans, as a means of living and survival. It is a principal way of expressing ideas, information, opinions, feelings, and needs and sharing them with others through a verbal and non-verbal language to achieve these different needs and desires. For one reason or another, the individual's communicative ability may be impaired which affects one's acquisition or development of language or confines one's ability to communicate with others and creates adaptive, psychological, and social problems that greatly affect one's concept and self-esteem. Therefore, this study sought to determine the extent of the impact of communicative disorders, specifically verbal disorders of various types, on self-esteem among individuals, the following is an explanation of the most important terminologies of the study.

Self-Esteem: self-esteem concept is one of the most essential and prevalent concepts in recent times, and it is one of the important topics that are still a priority in psychological research for a number of researchers and for those interested in this field (Al-Hamidi, 2002), self-esteem affects the individual in several aspects and fields, Rosenberg defined self-esteem as a sense of value and a concept that reflects the individual's attitude towards himself, positively or negatively (Abu Asa'ad, 2019), so that the individual feels valuable and respects himself. Likewise, Researchers believe that self-esteem concept is the feeling or judgment of an individual concerning himself, whether positive or negative, through his view of himself or others' view.

Kafafi (2015) mentioned that there are different types of self-esteem:

i) People with high self-esteem who are confident in themselves, take responsibility, have an understanding and optimism for life, flexible in dealing with situations, have independence in many situations, and are more productive; happy; and satisfied with their lives.

ii) Individuals with low self-esteem who feel that they are unqualified and incompetent in getting things done and have a negative view of themselves and see themselves as unloved.

2. Speech Disorders

Communication disorders appear in three main aspects: hearing disorders, language disorders, and speech disorders. Speech disorders are usually divided into three main sections: speech disorders, voice disorders, and fluency disorders. The following is an explanation of speech disorders and the impact of self-esteem on individuals with speech disorders.

2.1 Articulation Disorders

EL-Zraigat, (2018) defines speech disorders as difficulties in the manners of the motor production of speech, or the inability to produce specific speech sounds. The speech disorder is described as vocal in nature and differs from the phonological disorder, which is described as a phonemic disorder and a disability in the organization and representation of the phonemes in the linguistic system and problems in distinguishing meaning at the phonological level, due to environmental deprivation, childish behavior, and emotional problems (Al-Khatib & Al-Hadidi, 2020).

Social and psychological factors are closely related to articulation and physiological disorders, especially with regard to several variables, including age variable, where the child's acquisition of the adult vocal system is linked to maturity, and the mastery of the phonological system is completed among normal children at about the age of eight. The other variable is the gender variable where girls at a certain age progress slightly over males in acquiring the vocal system. As for the variable of the family background, available reports and studies, including (Matheny & Bruggeman, 1973), (Lewis, Ekelman, & Aram, 1989), and (Felsenfeld et al., 1995), indicate that there is a weak relationship between the economic level and the verbal state. Moreover, they indicated that the acquisition of phonology, according to studies of twins and families, is related to the presence of some familial or genetic impact on the presence of such disorders. Other studies (Bloch & Goddstein, 1971; Shriberg & Kwiatkoski, 1994; Parlor & Broen, 1991) revealed a relationship between the personality characteristics of some children and articulation disorders, the most important of which are: emotional adjustment problems, behavior management skills, lack of acceptance from peers, hypersensitivity, and psychological and social difficulties (Berntal & Bankson, 2009).

Articulation disorders—in their various forms of substitution, distortion, deletion and addition—greatly affect the individual's ability to express what is going on in his mind or what is going on between him and others, defects on articulation leads to confusion, failure to communicate and may also lead to many psychological and social problems, the most important of which are: shyness, frustration, introversion, social anxiety, decreasing in achievement level, and aggression and exposure to ridicule and mockery of mates which significantly weakens his self-esteem (Al-Beblawi, 2012).

2.2 Voice Disorders

Al-Rousan (2019) defines voice disorder as the disorders related to the difference in the quality, pitch, loudness or flexibility of the voice from others within the same age, gender, and cultural group, individuals with voice disorders suffer from several symptoms that greatly affect their daily life and their ability to communicate, including hoarseness, vocal strain, expiratory sound, reduced vocal range, vocal vibrations, loss or disappearance of voice, and physical pains and other feelings. Undoubtedly, these symptoms, especially the loss or disappearance of the voice, psychologically affect children and adults, furthermore, they generate a state of psychological insecurity, anxiety, tension, depression, lack of self-confidence, and intense fear of speaking in front of others, this is due to the difference in the quality, class, loudness or flexibility of their voice from their peers and their exposure to ridicule and mockery, which results in poor self-confidence and low self-esteem (Batayneh et al., 2009).

2.3 Fluency Disorders

Starkweather et al. (1990) and Amayrah & Al-Natour (2014) mentioned that the word “fluency” means the flow and passage of speech easily, gently, effortlessly, and at an appropriate speed, while disfluency disorders mean that the continuous speech does not come out easily and the transition between words is not smooth, they also declared that the most common of these disorders is “stuttering.” Both Guitar (2014) and Ramig and Dodge (2013) claimed that stuttering is a repetitive and the length of stopping before pronunciation at a very high degree affects the continuity of pronunciation in a smooth manner and without tension or apparent physical effort. Researchers identify stuttering as a disorder of abnormal fluency in speech, which includes major symptoms such as repetition, blocks, and prolongation that result in secondary symptoms or behaviors such as eye blinking and head shaking. It also involves invisible symptoms such as running away, avoidance, word substitution, indirect speech about the topic or topic negligence it, in addition to the negative feelings of fear and anxiety during speech.

Stuttering is a complex and multidimensional problem that can be easily observed and heard, speech of an individual with stuttering is usually a frustrating and confusing experience, and a person with stuttering suffers

because of psychological adjustment problems, feelings of fear, anxiety, confusion, and shame and social isolation, these problems in addition to others affect the attitudes of individuals with stuttering towards themselves and lead to low self-esteem. Psychological treatment of stuttering basically focuses on dealing with factors causing psychological and emotional problems as claimed by Al-Bdour (2013), Ramig and Dodge (2013).

After thoroughly probing into the previous studies, researchers found few studies that attempted to determine the impact of speech disorders, specifically (articulation and voice disorders) on the self-esteem among individuals. (Lindsay et al., 2002), for instance, investigated the self-esteem of children with specific speech and language disorders on a sample consisted of (69) children, they reviewed the self-perception profile of children whose age range was (6-7) years, results showed that children with speech disorders showed low rates of school competition compared to their normal peers, and that problems related to self-esteem persisted among three-year-old children they also indicated that the educational needs of children with speech and language disorders increased, and that there were no statistically significant differences between males and females related to the level of self-esteem, specifically at the ages of (6) and (7) years.

Wadman et al. (2008) study aimed to determine whether low self-esteem, shyness, and the lack of socializing with others are of the results associated with language and articulation disorders among adults, in the light of gender and age variables, sample consisted of (54) individuals, whose ages ranged between (16) and (17) years and who were not verbally and linguistically disturbed, using the Rosenberg scale for self-esteem (1956) and the Cheek & Buss scale for shyness and mixing with others. However, their degrees in terms of socializing, gender, and age showed no difference compared to their normal peers. Nonetheless, the study of (Shofa, 2016) determined the relationship between speech disorders and self-esteem among a sample of late childhood for (9) cases of (9-12) years old using the case study method, the interview, and Bruce Arher's (1985) rating scale of the self. It, further, showed that there was no relationship between speech disorders and self-esteem. Another study, conducted by Daniel and McLeod (2017), discussed topics on school children with speech disorders, challenges for children, and families and teachers. The study used the interview on the study sample which consisted of (34) participants, including children, their families, relatives, friends, and teachers, researchers aimed to identify the challenges that children face in schools, with a special focus on their limited experience in the school environment, shyness to enter additional rooms, specialized services that support students' joining the school, and learning in the social environment of the school, they attributed such problems to the children's speech problems, their unwillingness to socialize, their tendency to isolate themselves from others, and their low perception and self-esteem, study of Plesea-Condratovici et al. (2018) aimed to identify the impact of speech disorders on some important principles such as performance, ethics, self-esteem, and social integration of children and adults in the state of Moldova using the pronunciation test and personality questionnaire called (16PF) included (2468) individuals of (3.5-12) years old, results of the study showed that articulation problems were associated with negative effects of distortions and defects, particularly in the teeth structure, which resulted in negative thoughts among the individual about his self-perception and abilities. Further, they highlighted improper behavioral reactions such as covering the mouth with hands, avoiding eye contact, lowering the voice, squinting the face while speaking, avoiding talking with people or rejecting them, and their low self-esteem.

However, researcher found that previous studies of self-esteem among individuals with fluency disorders—specifically stuttering disorder—were more fortunate than those of articulation and voice disorders, as they are one of the most common speech disorders affecting the psychological state and self-concept of the individual. Kotbi (1992) conducted a study in Cairo to compare between stutterers and non-stutterers in terms of intelligence, anxiety, self-concept, and depression, study sample consisted of two groups, (29) males with stuttering, and (29) non-stutterers, results concluded that there were no differences between stutterers and non-stutterers in relation to the ideal self-concept, physical self-concept, and family and social self-concept. They, furthermore, indicated that there were differences between stutterers and non-stutterers in relation to anxiety and depression and for the benefit of stutterers. Hindiyah (1997) tried to find the gender differences of self-concept among stutterers and non-stutterers in late childhood and the relationship between self-concept and the economic and social level, study sample consisted of (60) male and female children, results revealed that there were statistically significant differences between children of both genders, males and females, in terms of self-concept, and there were no statistically significant differences between the self-concept and the social and economic level of children with stuttering.

Blood and Blood (2004) tackled the phenomenon of aggressiveness, self-esteem, and social communication among a sample of adolescents with stuttering consisting of (53) adolescents with stuttering and (53) without stuttering. The results of the study showed that adolescents with stuttering disorder were lower in communicative competence and self-esteem and more aggressive compared to their normal peers. Bloodstein & Ratner (2008)

concluded that stuttering affects males more than females, and thus we find that studies of self-esteem tended more towards males.

Nonetheless, few studies that dealt with females, as mentioned by Sheehan (1970), claimed that, using the Rotter level Aspiration board scales, there were significant differences in low self-esteem among female stutterers compared to their peers of fluency. Such results accord with the findings of the studies of Zelen (1955) and Graham-Bethea et al. (2012). Melli and Afra (2010) also examined the differences between children with stuttering and non-stuttering children in terms of self-esteem within the dimensions of (public and social self, friends and self at home, parents, the self at school, and academic aspect), they also attempted to identify the relationship between stuttering severity and self-esteem among (80) children of (9-6) years old, results showed that there were differences in self-esteem, in its various dimensions, between the sample that represents speech stuttering and its normal theory. A relationship was also found between the severity of stuttering and self-esteem.

Kathard et al. (2010) discussed the components of self-assertion among adult stutterers, and identified two types of self-esteem, positive and negative. They recommended that it is very important for specialists and pathologists to know how the individual with stuttering perceives and values himself in order to be able to provide them with effective and useful training. Similarly, Blood et al. (2011) study aimed to investigate the effect of self-esteem, life satisfaction, and bullying and their relationship to the problems of harming individuals with stuttering. The study sample consisted of (54) stutterers and (54) non-stutterers, results showed that students with stuttering are exposed to very serious problems in abuse with a rate of (44.4%) compared to non-stutterers with a rate of (9.2%), they also signposted the low level of self-esteem and positive attitudes toward life among individuals with stuttering compared to non-stutterers. Boyle (2013) built a psychometric scale to measure the different levels of internal stigma among adult stutterers and determine the validity and reliability factors of the scale, which was applied to (291) individuals with stuttering, results showed that individual stutterers' perception of self-assertion was negative and related to the scale dimensions (self-esteem, self-efficacy and life-satisfaction). Abdul Muttalib & Abdul Muttalib (2015) conducted a study to identify some psychological and personal characteristics of secondary school students in Kuwait compared to normal ones according to the variables of social anxiety, feeling of loneliness, and self-esteem on a sample of (68) students, study indicated that there were no differences between the two groups on the scale of self-esteem, besides, results underscored the existence of a negative correlation between loneliness and self-esteem among those individuals with stuttering.

Courtney et al. (2017) examined the impact of self-disclosure on the perceptions and impressions of stutterers of themselves, they confirmed the effectiveness of self-disclosure as a positive strategy that stutterers could use to influence those who listen to them, especially if the listener is a friend and a trusted person with stuttering, study indicated that females were less able to reveal themselves compared to the males.

Boyle et al. (2018) identified the factors that contribute to the effective communicative participation of individuals with stuttering, specifically addressing psychological and social variables of self-esteem, self-efficacy, social support, and their relationship to some demographic and articulation variables. The results of the study showed that after controlling relevant articulation and demographic variables (age, gender, and degree of disorder), the degrees of self-esteem, self-efficacy, and social support were high. Furthermore, the researchers emphasized the need for the speech language pathologist to focus on these important factors and treat them in order to achieve successful, communicative participation of individuals with stuttering.

The study of Cherif et al. (2018) assessed anxiety and self-esteem among young stutterers from the point of view of their parents. The results of the study showed that young stutterers have higher levels of anxiety compared to normal children, and that there are negative attitudes and dangerous indicators for the parents of individuals with stuttering manifested by anxiety and low self-esteem towards their stuttering children.

Nang et al. (2018) investigated the effect of stuttering on the development of self-independence, the relationships, and quality of life among female stutterers, in particular, in light of the few previous studies on females. study found that stuttering has extended effects on all aspects of a women's life, as it greatly affects how she sees herself, her relationships, her professional abilities, and how others see her in society, it also showed that the interviewed women have a negative self-concept, and that they feel that stuttering affects their quality of life is negatively. Further, the study concluded that fluent communication is an essential factor in the development of personality and relationships.

Sikandar et al. (2019) investigated the level of self-esteem and anxiety among young male stutterers, they also assessed the relationship between young male stutterers and the severity of stuttering, results showed a clear increase in anxiety levels in favor of stutterers over the non-stutterers, especially in the group with a moderate to severe degree of stuttering, while the levels and degrees of self-esteem showed no differences.

Although there are few studies that dealt with the effect of articulation and voice disorders on self-esteem, and few more on the effect of self-esteem on individuals with stuttering, they showed an effect of speech disorders on self-esteem at certain times and no relationship at other times, accordingly, the current study aimed to investigate the level of self-esteem among individuals with all types of speech disorders, articulation, voice, and fluency disorders (stuttering) in the light of some variables, to enrich the local and Arabic library of such topic, and to consider self-esteem by the remedial programs offered to individuals with speech disorders.

3. Study Problem and Its Significance

The data of the General Population and Housing Census for the year (2015) indicate that the percentage of the prevalence of functional difficulties among the Jordanians of (5) years and above was (2.7%), and that it is more common among males than females. Among these functional difficulties are communication disorders, whose prevalence rate among other disorders was (1.67%), this means that there is a need to pay attention to this category and to identify its psychological and social characteristics, as speech disorders of different types mainly affect the quality of life and self-esteem of the individual compared to other communication disorders because individual often feels negative feelings represented in his inability to communicate in a clear pronunciation and a smooth voice, continuous speech without interruptions like others, which causes him psychological pressure, tension, anxiety, and fear of facing any verbal situations and generates a feeling of inferiority and a tendency to isolate himself from others and to stay away from verbal situations that cause him embarrassment, such feelings and frustrations may lead to slow or unsuccessful treatment and training, therefore, the idea of the current study came to identify the most important factors and variables that contribute to the development of and strengthening the view of individuals with speech disorders towards themselves and to face verbal situations and life positively.

In addition, the researchers observed through their work in speech disorders field that most of the programs dedicated to training individuals with speech disorders largely neglect focusing on the negative aspects of speech disorders in low self-esteem, which is one of the most important needs of an individual, and through revising theoretical literature and previous studies, researchers found that the Jordanian and Arabic library significantly lack studies related to the self-esteem of individuals with speech disorders (specifically articulation disorders and voice disorders), describing self-esteem as an important human need and an important factor for building programs focusing on mental health of individuals.

Therefore, the current study attempted to provide a theoretical and reference framework for further studies, it also aimed to become a reference for speech and language pathologists and others interested in the field of speech disorders to help them in including programs for developing self-esteem among children and adults and focus on them during training, to success in overcoming daily and psychological speech problems. Hence, study problem crystallized in revealing the level of self-esteem among individuals with speech disorders and the extent to which self-esteem is affected by important variables, such as the type of speech disorder, age, gender, and social and economic status, study problem is summarized in the following questions:

- 1) The first question: What is the level of self-esteem among individuals with speech disorders in Jordan?
- 2) The second question: Does the degree of self-esteem among individuals with speech disorders differ according to different variables of types of disorder, age, gender, severity of disorder, social status, and monthly income of the family?

4. Methodology and Procedures

The descriptive survey method was used to describe the level of self-esteem among individuals with speech disorders according to some variables.

4.1 Study Population and Sample

Study population consisted of all patients of hearing and speech clinics and some special education centers in Amman, Irbid, Ma'an, and Aqaba governorates during the second semester of the academic year 2020-2021. study sample consisted of (117) individuals, and after excluding the pilot sample, which consisted of (20) individuals, final study sample consisted of (97) individuals selected from available sample, researchers distributed study tool to them personally and electronically, and they were all collected, and statistically analyzed. Table (1) shows the distribution of the study sample according to the study variables.

Table 1. The distribution of the study sample according to the study variables

Variable and its levels		Number	Percentage
Type of speech disorder	fluency disorder (stuttering)	37	38.1
	articulation disorder	30	30.9
	voice disorder	30	30.9
Age	18 years old and less	48	49.5
	More than 18 years old	49	50.5
Gender	Male	57	58.8
	Female	40	41.2
Severity of the disorder	Mild and moderate	60	61.9
	severe and very severe	37	38.1
Social status	Unmarried	71	73.2
	Married or separated	26	26.8
Family monthly income	Less than 500 Jordanian dinars	42	43.3
	500 - less than 1000 Jordanian dinars	30	30.9
	1000 Jordanian dinars and more than	25	25.8
Total Sample		97	100

4.2 Study Tool

To achieve the objectives of the study researchers used the self-esteem scale, which was prepared by Rosenberg (1975) and translated to Arabic by Kashif (2004), that is globally considered one of the most widely used measures of self-esteem by researchers. In its basic form, the scale consists of ten questions of a gradual scale according to the Likert scale method. For the purposes of the current study, two items were added, item (11) "I accept the fact that I have speech disorders," and item (12) "I face speech disorders with confidence," so the total number of items was (12) positively worded items, with the exception of item (2) which was negatively formulated. The five-point Likert scale was used in distributing scores on the responses: (1) very few, (2) few, (3) moderate, (4) significant, (5) extremely significant, and the scores were reversed in the case of the negative item (2), where the highest score obtained by the respondent is (60) and the lowest score is (12). Mean was used as a criterion for judging the level of self-esteem according to the following equation:

Range = highest weight - lowest weight divided by the number of categories ($5-1 = 4$, $4/3 = 1.33$), and accordingly, the total score (2.33 or less) indicates a low level of self-esteem, (2.34 - 3.67) indicates a moderate level of self-esteem, and (3.68 or more) indicates a high level of self-esteem.

4.2.1 Validity and Reliability of Scale

The validity of the scale was verified using two methods:

First: Apparent validity (the arbitrators):

Validity of the scale was verified by presenting it to (8) arbitrators, expert and competent professors at Al-Hussein Bin Talal University and the University of Jordan specialized in measurement and evaluation, psychology, and articulation and language disorders. They were asked to express their opinion on the accuracy and validity of the content of the scale, the clarity of the items, the wordings of the items, and the extent of the correlation of the items of the study tool to the scope of the scale. They made a number of observations that were taken into consideration, and the criterion of (80%) for the arbitrators' agreement was adopted.

Second: Validity of internal consistency:

The validity of the internal consistency was verified by calculating the correlation coefficient between the item and the total score, where the scale was applied on a pilot sample, of the study population and external sample consisting of (20) male and female patients, and Table 2 presents the results.

Table 2. Items' correlation coefficients to the total score of the self-esteem scale

Item	Item correlation to total score	
	R	Sig.
1	.943**	.000
2	.923**	.000
3	.809**	.000
4	.672**	.000
5	.852**	.000
6	.834**	.000
7	.582**	.000
8	.851**	.000
9	.636**	.003
10	.740**	.000
11	.628**	.003
12	.775**	.000

**Significant at ($\alpha \leq 0.01$).

Results of Table 2 show that the correlation coefficients of the items to the total score of the scale ranged between (0.582-0.943) which is statistically significant at the significance level of ($\alpha \leq 0.01$), and this indicates the validity of the internal consistency of the scale.

Scale reliability: The reliability of the self-esteem scale was verified using the reliability of internal consistency through Cronbach's Alpha equation, which was (0.929), and this indicates the reliability of the scale and its suitability for conducting the current study.

5. Results

5.1 Results of the First Question

What is the level of self-esteem among individuals with speech disorders in Jordan? To answer the first question, the means of the scores obtained by the study sample members on each item of the tool and the tool as a whole, their standard deviations, and their ranks were calculated as illustrated in Table 3 below.

Table 3. Means and standard deviations of self-esteem items for individuals with speech disorders in Jordan

Item S. No.	Item	Mean	SD	Rank	Level
1	Generally, I feel good about myself in general	2.7526	1.11832	2	Moderate
2	I feel I am useless	2.7629	1.21427	1	Moderate
3	I think I have many good traits	2.6082	1.09503	4	Moderate
4	I can do what others do	2.6392	1.16535	3	Moderate
5	I feel proud of my abilities and capabilities	2.5052	1.07164	5	Moderate
6	I feel I am useful in this life	2.4845	1.10974	6	Moderate
7	I feel I am as valuable as others	2.3402	1.14461	10	Moderate
8	I respect myself	2.3402	1.19797	11	Moderate
9	I think I am successful in my life and I am not a failure	2.4124	1.14339	7	Moderate
10	I see myself in a positive attitude	2.3918	1.14161	8	Moderate
11	I accept the fact that I have a speech disorder	2.3608	1.11976	9	Moderate
12	I face speech disorders with confidence	2.2784	1.12493	12	Low
Mean of total self-esteem		2.4897	.99115		Moderate

Table 3 shows that the total mean of self-esteem among people with speech disorders was (2.4897) with a standard deviation of (.99115), and this represents a moderate level of self-esteem. Item (2) ranked first with a mean of (2.7629) and a standard deviation of (1.21427), followed by item (1), with a mean of (2.7526) and a standard deviation of (1.11832), in the second place, item (4) came in third place with a mean of (2.6392) with a standard deviation of (1.16535), these items appeared at a moderate level, and in the last place came item (12) with a mean of (2.2784) and a standard deviation of (1.12493) with a low level.

5.2 The Results of the Second Question

Does the degree of self-esteem among individuals with speech disorders differ according to different variables of types of disorder, age, gender, severity of disorder, social status, and monthly income of the family? To answer this question, the means and standard deviations of the degree of self-esteem among individuals with speech disorders were calculated according to the variables of the type of disorder, age, gender, severity of the disorder, social status, and monthly income of the family as illustrated in Table 4.

Table 4. Means and standard deviations of the degree of self-esteem among individuals with speech disorders according to the variables of the type of disorder, age, gender, severity of the disorder, social status, and monthly income of the family

Variable and its levels		Mean	SD
type of speech disorder	Fluency disorder (stuttering)	1.9820	.88935
	articulation disorder	2.7694	.85059
	voice disorder	2.8361	1.00632
Age	18 years old and less	2.8194	1.07743
	More than 18 years old	2.1667	.78285
Gender	Male	2.5775	.98386
	Female	2.3646	1.00048
Severity of the disorder	Mild and moderate	2.7389	1.02974
	severe and very severe	2.0856	.78136
Social status	Unmarried	2.6009	1.02158
	Married or separated	2.1859	.84797
Family monthly income	Less than 500 Jordanian dinars	2.6528	1.10476
	500 - less than 1000 Jordanian dinars	2.2972	.90937
	1000 Jordanian dinars and more than	2.4467	.86632
Total Sample		2.4897	.99115

Table 4 shows an apparent variance in the means and standard deviations of the degree of self-esteem among individuals with speech disorders depending on the variables of the type of disorder, age, gender, severity of the disorder, social status, and family monthly income. Six Way-ANOVA Without Interaction was used to find the significance of the statistical differences for the tool as a whole as shown in Table 5.

Table 5. Six Way-ANOVA Without Interaction for the significance of the differences between the means of the degree of self-esteem among individuals with speech disorders according to type of disorder, age, gender, disorder severity, social status, and family monthly income variables

Source of Variance	Sum of Squares	df	Means of Squares	F	Sig.	Partial Eta Squared
Type of Disorder	14.647	2	7.323	10.808*	.000	.197
Age	5.734	1	5.734	8.463*	.005	.088
Gender	1.312	1	1.312	1.936	.168	.022
Severity of Disorder	3.299	1	3.299	4.869*	.030	.052
Matrial Status	.022	1	.022	.032	.859	.000
Family monthly income	1.256	2	.628	.927	.400	.021
Error	59.626	88	.678			
Total	695.569	97				
Total Corrected	94.309	96				

* Significant at ($\alpha \leq 0.05$).

It is clear from Table 5 that there are statistically significant differences in the degree of self-esteem among individuals with speech disorders depending on the type of disorder variable ($F = 10.808$, $\alpha = 0.000$), and to find out the responsibility of the significant value, the results of Scheffe's post-comparisons test were calculated as shown in Table 6.

Table 6. Scheffe's post-comparisons method for the effect of the type of disorder on the total score

	Means	Fluency Disorder (stuttering)	Articulation Disorder	Voice Disorder
Fluency Disorder (stuttering)	1.9820			
Articulation Disorder	2.7694	.7874*		
Voice Disorder	2.8361	.8541*	.0667	

* Significant at ($\alpha \leq 0.05$).

It is clear from Table 6 that there are statistically significant differences between fluency disorder (stuttering) (mean = 1.9820) and articulation disorder (mean = 2.7694) in favor of articulation disorder. In other words, individuals with articulation disorder show more self-esteem compared to those with fluency disorder (stuttering). Furthermore, the results indicated that there are statistically significant differences between fluency disorder (stuttering) (mean = 1.9820) and voice disorder (mean = 2.8361) in favor of voice disorder, which means that individuals with voice disorder show more self-esteem compared to those with fluency disorder (stuttering).

As it is clear from Table 5 that there are statistically significant differences in the degree of self-esteem among individuals with speech disorders according to the age variable ($F = 8.463$, $\alpha = 0.005$). The means in Table 4 showed that those with the age group of less than 18 years old a mean of (2.8194) show more self-esteem compared to those of more than 18 years old with a mean of (2.1667).

Table 5, further, shows that there are statistically significant differences in the degree of self-esteem among individuals with speech disorders according to the severity of the disorder variable ($F = 4.869$, $\alpha = 0.030$). The means in Table 4 show that individuals with mild and moderate disorders (mean = 2.7389) had higher self-esteem compared to those with severe and very severe disorders (mean = 2.0856).

As shown in Table 5, there are no statistically significant differences at the level of ($\alpha \leq 0.05$) in the degree of self-esteem among individuals with speech disorders according to the variables of gender, social status, and monthly income of the family.

As shown in Table 5, the type of disorder variable is the most influential on the self-esteem among individuals with speech disorders with an effect of (0.197), which is considered a great effect, followed by the age variable with a moderate effect of (0.088), and finally the severity of the disorder variable with a mild effect of (0.052).

6. Discussion

The results related to the first question indicated that the level of self-esteem among individuals with speech disorders in Jordan was moderate, and the researchers attribute this to the fact that speech is one of the most important needs of the individual to communicate with his surroundings. Therefore, speech problems and disorders weaken the individual's ability to communicate and generate dissatisfaction and low confidence in himself, an individual, thus, avoids verbal situations and isolates himself from others, and considers himself inferior to others, which decreases his self-esteem and view of himself as a human being like others, this was evident in the items that ranked last on the self-esteem scale among individuals with speech disorders, which reflected their feelings of mistrust, low self-esteem, and a feeling of worthlessness as a human being like others, on one hand, these results concurred with the findings (Kathard et al., 2010; Kotbi, 1992; Boyle, 2013; Blood, 2011; Daniel & McLeod, 2017; Cherif et al., 2018; Plesea-Condratovici et al., 2018; Abdul Muttalib, 2015), who confirmed the existence of self-esteem problems for individuals with speech disorders compared to their normal peers, on the other hand, the results differed from (Shofa, 2016) study which did not show a relationship between speech disorders and self-esteem.

The results related to the second question showed statistically significant differences in the degree of self-esteem among individuals with speech disorders according to the type of disorder variable, which is considered the most influential variable in the self-esteem of individuals with speech disorders. Further, a variance in the degree of the influence of speech disorders on the concept of self-esteem was also found depending on its type, in other words, individuals with articulation and voice disorders had more self-esteem than those with fluency disorder (stuttering) this is because the nature of fluency disorders (stuttering) differs from the nature of articulation disorders, which is a defect in the production of specific sounds, or voice disorder, which is an imbalance in one of the characteristics of voice, such as loudness, pitch, and quality, moreover, articulation and voice disorders affect specific aspects of speech that may not significantly decrease individual's self-esteem, thus, fluency disorder (stuttering), which is a complex and multi-dimensional qualitative problem that can be easily observed and heard through apparent behaviors (repetition, obstruction, and prolonged blinking, shrugging shoulders, etc.), and invisible behaviors (running away and avoiding verbal situations), which makes speaking a frustrating experience for the individual

that leads to problems in psychological adaptation and feelings of fear, anxiety, confusion, shyness, social isolation, and avoiding verbal situations of ridicule, as a result, this reduces the individual's adaptation to the surrounding environment and his attitudes towards himself and lessens his self-esteem. In addition, supporting the importance of the impact of fluency disorders on self-esteem, it was found that many studies have dealt with this matter including Hindiyah (1997), Bloodstein and Ratner (2008), Kathard et al. (2010), Blood et al. (2011), Courtney et al. (2017), Cherif et al. (2018), and Sikandar et al. (2019), while other studies that dealt with the effect of articulation and voice disorders on self-esteem were few, such as Lindsay et al. (2002), Wadman et al. (2008), and Plesea-Condratovici et al. (2018).

The results, moreover, showed statistically significant differences in the degree of self-esteem among individuals with speech disorders according to the age variable, individuals of less than (18) years old showed more self-esteem than those of more than 18 years old, Furthermore, the researchers elucidate this by the fact that the individual's self-awareness, perceptions, and judgment on himself develop over time, and deepen with the events, stages, and even the problems an individual undergoes, and, therefore, the more the individual advances in age, the more clearly he forms a perception and judgment on himself, consequently, researchers found that speech problems and their psychological and social effects on individuals with speech disorders deepen as their age increases, which negatively affects their self-esteem, in addition to the different roles and tasks entrusted to the individual and the resulting interaction and communication with others according to the different age stages an individual with speech disorder undergoes, individuals of less than 18 years old, who represents the age of the school, have different tasks and interactions compared to those of the later age stages in which the effects of speech disorders become more obvious, which is negatively reflected on their self-esteem, this result is consistent with the results of the study of Wadman et al. (2008), which pointed out the low self-esteem scores among adults with speech disorders.

Considering the results related to the severity of the disorder variable, it is evident that individuals with mild and moderate speech disorders had more self-esteem than those with severe and very severe disorders, researchers attributed this rational result to the fact that the higher the degree of the severity of the speech disorders, the lowest individual's self-esteem, Severe and very severe speech disorders are considered more visible to the listener, and thus weaken the self-confidence of individuals and make them feel afraid of, ashamed, and confused from social interaction situations, which greatly affect low self-esteem among individuals with mild and moderate speech disorders whose speech problems are less clear and affect self-esteem, therefore, these results concurred with the study of Melli and Afra (2010) which showed a statistically significant relationship between the severity of speech disorders and self-esteem, besides, they disagreed with Sikandar et al. (2019) study, which did not find a difference in the levels of self-esteem among individuals with or without speech disorders according to the severity of stuttering.

Finally, the study concluded that there were no statistically significant differences at the significance level of ($\alpha \leq 0.05$) in the degree of self-esteem among individuals with speech disorders according to the variables of gender, social status, and the monthly income of the family, this could be clarified by the fact that although the incidence of speech disorders in general among males is higher than females (EL-Zraigat, 2018), both genders suffer from the same negative psychological effects resulted from verbal problems such as shyness, fear, anxiety, avoiding verbal situations, etc. which lead to low self-esteem, regardless of gender, these results, on the one hand, concurred with those of Lindsay et al. (2002) and Wadman et al. (2008), on the other hand, they differed with the results of Hindiyah (1997), Bloodstein and Ratner (2008), Sheehan (1970), Zelen (1955), and Graham-Bethea et al. (2012) studies which found a direct relationship between effective communication and self-esteem according to the gender variable.

Besides, the results indicated that there were no statistically significant differences in the level of self-esteem according to the variable of the social status of the individual, the impact of speech problems of a single or married person do not significantly differ in their low self-concept, single person is obsessed with creating a family or meeting a life partner who accepts his problem, and the married person has problems imposed on him by the nature of speech disorders, such as problems in pronunciation or articulation, voice, or fluency, a married person, then, continuously avoids socializing and forming relationships, which are the basic requirements of marriage, generates the feeling of inferiority this in turn, leads to the low self-esteem. Therefore, these results concurred with those of Hindiyah (1997) and Kathard et al. (2010), which did not find differences in the social level of people with speech disorders, specifically stuttering, similarly, they accorded with Sikandar et al. (2019) study, which was conducted on individuals of the marriage age from (17-35) years, where self-esteem did not differ between those with stuttering and those with no stuttering, moreover, the results acceded with the study of Nang et al. (2018) which confirmed that stuttering has extended effects on all aspects of women's life.

Furthermore, the results showed that there were no statistically significant differences according to the variable of the family income or the economic situation in the level of self-esteem among individuals with speech disorders, whether the income was high, medium, or low, all individuals with speech disorders, of different levels of income, found different financial and economic problems, represented in obtaining an appropriate work usually without verbal requirements or intensive and costly training sessions, this in turn, negatively affects the quality of life of the individual and lack of satisfaction and stability, thus leading to a low self-esteem, similarly, results accorded with those of Hindiyah (1997) study which indicated that there were no statistically significant differences between the concept of self-esteem and the economic level of the individual with stuttering, in addition to their accordance with those of the study of Daniel and McLeod (2017) that focused on the financial challenges faced by school students with speech disorders represented in the needs for additional rooms and specialized services.

7. Conclusion and Recommendations

Based on the foregoing discussion of the results, researchers found that the nature and problems of speech disorders of all kinds, such as articulation disorders, voice disorders, or fluency disorders, cast heavily on the individual's ability to communicate orally with others in a clear sounds and pronunciation, or smooth fluency, consequently, this would expose individuals to mockery or bullying by other listeners, causing them to feel embarrassed when speaking, as a result, this may lead to the lack of confidence and the fear of facing verbal situations which change individual's perception and judgment of himself and lessen one's self-esteem especially among individuals with fluency disorder (stuttering), as individuals grow up, the severity of their disorder increases. Accordingly, researchers suggest the following educational and research recommendations that would raise the average self-esteem among individuals with speech disorders:

- 1) Encouraging self and support groups to improve self-esteem among individuals with speech disorders.
- 2) Planning training programs that implement strategies enhancing self-esteem.
- 3) Distribution awareness and educational brochures that stimulate the individual with speech disorders' self-view.
- 4) Conducting further studies and research related to self-esteem among people with speech disorders.
- 5) Awareness the needs to build and enhance a good communicative language environment with the individuals with speech disorders by parents and teachers.

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