Assertiveness Training to Improve Self Esteem Among School-Age Children with Speech and Language Disorders

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Abstract

Background: Speech and language disorders negatively affects the children's self-confidence and self-esteem during school age and make their response more anxious, aggressive, passive, and unassertive behaviors. **Aim:** This study aimed to examine the effects of assertiveness training program on self-esteem among school-age children with speech and language disorders. **Design:** A quasi-experimental research design (single group pre/post-test) was utilized. **Sample**: A purposive sample of 44 school-age children with speech and language disorders who receive a follow-up visit to the speech clinics, affiliated to Ain shams university hospitals, and met the inclusion criteria**. Tools for data collection include; 1)** Children's Interviewing Questionnaire, 2**)** Self Esteem Scale for Children with Speech Disorders, and 3**)** Children's Assertive Behaviors Scale (CABS) to assess what level of assertive behaviors among children**: Results:** This study showed that there was a highly statistically significant relationship between the levels of assertive behaviors pre and post-program implementation, where 50% of the children under study reported an assertive behavior in the post-program implementation phase, meanwhile around two-third of them was reported partially aggressive and very aggressive responses in the preprogram implementation phase, representing 39% and 32% respectively , also, this study illustrated that there was a reported improvement regarding the main score of self-esteem domains of children understudy in the post-program implementation phase compared to the preprogram phase $p<0.001$, including the efficiency of language communication, social interaction, independence, physical appearance, and positive self-acceptance representing 26.35 ± 6.18, 21.21 ± 5.86, 20.44 ± 4.92, 18.25 ± 4.46 and 15.69 ± 3.03 respectively. **Conclusions:** Assertive behaviors of children with speech and language disorders have improved post-program implementation phase compared to the pre-program implementation phase. Improving assertive behaviors leads to a remarkable improvement in the children's levels of self-esteem post-program implementation compared to the pre-program implementation. **Recommendations:** Development of psychiatric nursing intervention program to improve psychosocial stressors, coping, and resilience among children with speech and language disorders. Also, this study recommend to conduct further studies to investigate the level of depression and anxiety among children with speech and language disorders

Keywords: Assertive behaviors, self-esteem, speech and language disorders, school age, children**.**

Introduction:

Speech or oral language is the main means of interaction and communication with others. It is affected by several factors including antenatal care, premature delivery, birth order, children's psychological condition, head injury, trauma or structural brain damage, vocal cord trauma, parental education, environmental factors, sex of the children, and family history of specific language impairment (SLI) **(Theunissen, et al. 2014).**

Speech and language disorders were classified **by the American Speech-Language-Hearing Association, (2020),** as apraxia of speech, stuttering & stammering, dysarthria, lisping, spasmodic dysphonic disorder, cluttering, muteness/selective mutism, aphasia, orofacial myofunctional disorders and alalia **(speech delay).** From this perspective, **Cherif (2018)** added that young children with cognitive delays, autism, and other general developmental disabilities almost always experience general delays in their language development. The severity of these language disorders usually varies according to the severity of the child's primary disability.

Through spoken language, self-esteem and assertive behaviors among school-age children and young adolescents can only be achieved through interaction with others in the family, school, or community groups **(Tambyraja, Farquharson, & Justice, 2020)**. Likewise, assertive behaviors and self-esteem have an

important role in a child's life, as they are important factors in practicing life and overcoming all difficulties children encounter during school age **(Novom, 2017). National Institute of Health and Other Communication Disorders (2016)** reported that among children who have a voice, speech, language, or swallowing disorder, 34% of those ages 10-14 have multiple communication disorders.

As mentioned by **Fitriyani, Sumantri, & Supena (2019),** that self-esteem is fundamental at all stages of the human department and it can affect one's accomplishments, interaction with others, ability to adjust to environmental demands, level of mental health, and general state of wellbeing. Given that, self-confidence is the extent to which the children perceive their competency skills, psychological, social, physical, linguistic, and behavioral development.

Self-esteem was described by **St John, et al, (2020),** as the value component held toward the self. It's the evaluative assessment of self-descriptive perceptions. In Short, self-esteem refers to self-worth. Assertive behavior was broadly defined by **Morgan, Fisher, Scheffer & Hildebrand, (2017),** as the social competency, behavioral strategies, and skills necessary to adapt to the individual's social reality. Although, lack of assertive behaviors was originally conceptualized by **Avşar, & Alkaya, (2017),** as a deficit in behavior associated with low self-esteem due to inability to express oneself due to language and speech disorders.

Assertive behaviors were classified by **Speed, Goldstein, & Goldfried, (2018)** into four abilities that were posed by the assertive child: a) the ability to openly communicate about own desires and needs, B) the ability to say no, C) the ability to openly communicate about one's own positive and negative feelings and D) the ability to establish contacts and to begin, maintain and end the conversation. In this perspective, there is limited research available to examine the relationship between assertiveness training, self-esteem, and speech and language disorders during childhood **(Garner, 2012).** According to **Mohamed, Rizzek, and Hassan, (2010),** a child with speech and language disorders usually suffers from psychological disorders such as anxiety, feeling of social inadmissibility, lack of self-confidence, sense of shame, feeling of inferiority, feeling of social inadmissibility which generates a sense of isolation and introversion accompanied by psychological tension due to inability to express his feelings and needs through spoken language and lack of assertive behaviors **(Raghavan, et. al. 2018),** found that children with lower self-concept had a higher rate of speech disabilities. Moreover, **Scott, (2020),** was also reported that the most common attitudes expressed by the children with speech disorders were anxiety, helplessness, victimization, and low self-esteem. Indeed, this is consistent with the research conducted by **Sitota, (2018)** who indicated that such clinical problems as anxiety, depression, lack of self-esteem, and relationship problems were associated with unassertive behavior and aggressive pattern of communication between the child and the surrounding others.

According to **Befi-Lopes, et al. (2014),** unassertive behaviors were associated with other trans-diagnostic factors that were broadly related to psychopathology as language disorders, low self-esteem, and poor self-concept. Furthermore, **Speed, Goldstein, & Goldfried, (2018),** were also found that many children's, assertive behaviors were positively correlated with measures of self-esteem, and unassertive adolescents reported both lower self-esteem in social domains and lower quality of life.

As suggested by **Adebayo, & Mabuku, (2014),** a lack of assertive behaviors among school-age children with speech and language disorders may negatively impact their perceptions of their worth and deteriorate their self-esteem. Accordingly, assertiveness training improves general self-esteem, self-concept, internal locus of control, and decreases hostility and aggression **(Tohidast, Mansuri, Bagheri & Azimi, 2020)**

Moreover, **Scirocco, Recchia, Wainryb, & Pasupathi, (2018),** explained that the implementation of techniques that improve assertive behaviors among children with speech and language disorders was found to have a progressive impact on psychological, social, academic features of the child's life. Notably, assertiveness training has been found to improve ratings of self-esteem and self-concept among children with speech and language disorders, as the children become less worried about the opinion of others and are more comfortable in

asserting themselves, they also seem to become more self-confident in the legitimacy of what they want, think and feel.

Add to that, **Major, Seabra Santos & Martin, (2015)** clarified that a certain, amount of skills training is often required in helping children with speech and language disorders to learn an effective way to interact assertively with others. Providing information, modeling assertive behaviors, and rehearsing assertive interaction with audio or video feedback can help the children with speech and language disorders express their needs in a socially acceptable way.

In this perspective, **Uysal & Tura, (2019),** emphasized the importance of educating children with language impairment on strategies that facilitate fluency of speech and self-expression through the implementation of home programs whether directly or indirectly. These techniques may increase the child's self-worth and assertive behavioral response. Parents can thus modify their interactions and educate siblings, teachers, and others about suitable ways to facilitate communication with their children who are diagnosed with speech disorders. Such knowledge might lead to more interaction with significant others in a way that positively affects the child's self-worth.

Moreover, **García-López, & Gutiérrez, (2015)** explained that assertiveness training may involve behavioral skills training that targets skill deficits (e.g., behavioral rehearsal, modeling, or cognitive restructuring, which targets anxious thoughts that leads to avoidance behaviors. Notably, behavioral skill training may also be viewed as a form of exposure that may function to reduce anxiety and improve assertive behaviors.

Significance of the Study:

Children with speech and language disorders suffer from anxiety, feeling of social isolation, lack of self-efficacy, low self-esteem, sense of shame, and feelings of inferiority that lead to scholastic deterioration, aggressive behaviors, passivity, or unassertive behavioral response due to inability to express their feelings and needs through spoken language **(Sitota, 2018).**

Accordingly, assertiveness training helps children with speech and language disorders to become better able to openly verbalize what they want, in various life situations using all possible ways like; writing, using body language, and other ways to express their feelings, emotions, and ideas in assertive way that improve their self-esteem **(Kulkarni, & Sullivan, 2019)**. Although a core intervention at one time, assertiveness training has positively improved the treatment of several clinical problems, including anxiety, depression, speech disorders, self-esteem, and relationship satisfaction **(Goulart, Chiari, & Almeida, 2017)**. Hence, the development of a psychiatric nursing intervention program becomes an important element of the nursing care plan of care to improve assertive behavioral response and improve self-esteem among children with speech and language disorders.

Aim of the Study:

The current study aimed to examine the effects of assertiveness training on self-esteem among school-age children with speech and language disorders.

This aim was achieved through:

1) Assessing the level of assertiveness among children with speech and language disorders.
2) Assessing the level of self-esteem among children with speech and language disorders.
3) Accordingly, developing and implementing an assertiveness training program to improve self-esteem among school-age children with speech and language disorders.
4) Evaluating the effects of the assertiveness training program on self-esteem among school-age children with speech and language disorders.

Research Hypothesis:

Assertiveness training program for school-age children with speech and language disorders will improve their self-esteem.

Subjects and Methods

Research design

A quasi-experimental research design (single group pre/posttest) design was used to explore the effect of assertiveness training program on self-esteem among school-age children with speech and language disorders.

Sample technique:

A purposive sample of 44 out of 62 children with speech and language disorders who completed the assertiveness training program represents approximately 40-50% of the average number of children who receive treatment and follow up services in the speech and language clinics affiliated to Ain Shams University hospitals and met the study inclusion criteria during the study period.

Inclusion criteria:

- Age Range: 10-18 years (school-age children)
- Study in primary, elementary, and secondary school
- Written consent for participation in the study for six months from their family caregivers.
- Child willing to participate in the study
- Partially able to prod speech during the study period.

Exclusion Criteria:

- Speech disorders due to severe psychiatric illness.
- Cognitive & intellectual disabilities.
- Speech disorders that lead to complete inability to speak e.g. (Aphasia due to structural brain damage, Oro-facial myofunctional disorders).
- Selective mutism /Muteness.

Study Setting:

The present study was conducted in speech clinics, affiliated to Ain Shams University hospitals. Speech clinics were divided into 2 daytime examination rooms working from 8 am to 12 pm, 2 days per week (Sunday & Tuesday). These clinics received approximately 10-15 school-age children with speech and language disorders per month. These clinics provide all examination and investigation services to the children who suffered from speech and language disorders including treatment and rehabilitative services along with the others 3 days of the week (Monday, Wednesday & Thursday) through a qualified multidisciplinary team.

Data Collection Tools:

The data was collected using a self-administered questionnaire sheet that included four sections as follows:

1) **The First Section: Children's Interviewing Questionnaire:** It contains two parts. 1) Data pertinent by child's age, sex, level of education, type of school, child's educational progress, order of the child among siblings, family monthly income, 2) duration of speech disorders, types of speech and language disorders, history of other chronic physical illness (e.g., DM, hypertension, etc.), history of bullying due to speech disorders, and loneliness and social isolation due to speech disorders.

2) **The Second Section: Children's Assertive Behaviors Scale (CABS):** It has been originally developed by **Michelson & Wood, (1982)** in English language to assess the level of assertive behaviors such as giving and receiving compliments, complaints, empathy, requests and initiating conversations, CABS was translated into the Arabic language by the researchers. CABS has 27 items rated on five points Likert scale where; A very aggressive response was scored (1). A partially aggressive response was scored (2), A very passive response was scored, (3), passive response was scored (4), and an assertive response was scored (5).

CABS classified the behaviors of the children under study into five categories including:

1. Very Passive
2. Passive
3. Assertive
4. Partially Aggressive
5. Aggressive responses

This scale provides information reflecting whether the subject's understudy was deficient in assertive responses due to a passive or an aggressive repertoire. CABS was completed within 10-15 minutes.

The total score ranged from (27-to 135) where the higher score indicates the assertive behaviors as follows:

- 0- <27(Very aggressive)
- <28-54 (Partially Aggressive)
- <55-81 (Very passive)
- <82-108 (Passive)
- <109-135 (Assertive)

The internal reliability of CABS was ranged from 0.912 to 0.913 and **the content validity** of the scale was 0.90 as rated by children with speech and language disorders under study, which

is considered significantly high, the coefficient given was 0.899

3) **The Third Section: Self Esteem Scale for Children with Speech Disorders:** This scale was developed by **Mohamed, Rizzek, and Hassan (2010),** in the Arabic language to measure self-esteem among children with speech and language disorders.

The Self Esteem Scale focuses on the following measurement areas:

1. Efficiency of language communication (11 items)
2. Physical Appearance (8 items)
3. Social Interaction (9 items)
4. Positive Self-Acceptance (7 items)
5. Independency (9 items).

The Self-esteem Scale has 44 items rated on 3 points Likert scale that were always rated (3), sometimes was rated (2), and never was rated with (1). The self-esteem scale can be completed within 10-15 minutes.

The total score ranged from (44-to 132) where the higher score indicated higher self-esteem in each domain. The level of self-esteem was categorized into the following measures:

- < 44 (Mild Self Esteem)
- 44< - 88 (Moderate Self Esteem)
- 88-132 (Higher Self Esteem)

The internal reliability of the scale was ranged from 0.862 to 0.910, and **the content validity** of the scale was 0.94 as rated by children with speech and language disorders understudy which is considered significantly high, the coefficient given was 0.914

Operational Design

The operational design for this study included preparatory phase, pilot study, fieldwork, and ethical considerations.

Preparatory phase:

It included reviewing past, current, local, and international related literature and theoretical knowledge of various aspects of self-esteem and assertive behaviors among children with speech and language disorders, and the role of psychiatric nurse by using books, articles, periodicals, and other available resources through the Internet search. The researchers modified the standardized tools to accommodate the current study. Then the standardized tools were translated into the Arabic language and back-translated into the English language by language experts, and any discrepancies found between the back translation and the original tools were taken as an indication of a translation error.

Pilot Study:

A pilot study was carried out on (5) children with speech and language disorders as representing around 10% of the total sample before conducting the actual study to ensure clarity of the question's validity, the applicability of data collection tools, and the time needed to complete them. All subjects who were involved in the pilot study were excluded from the main study sample. The tool was finalized based on the results of the pilot study.

Fieldwork:

- The assertiveness training program was conducted for six successive months for all program phases (pre-program assessment, program intervention, and post-program evaluation).
- To assess the effectiveness of the assertiveness training program, (44) participants' understudy completed baseline assessment in the preprogram implementation phase during the whole month of June 2019. The researcher visited the selected setting 3 days per week (Sunday, Tuesday & Thursday) from 8 am to 12 pm to implement the assertiveness training program. Children with speech and language disorders were interviewed during their visits to the speech clinics to receive treatment and follow-up services for their speech disorders. The researchers met each child individually and introduced themselves; explained the purpose and nature of the study; and ensured the confidentiality of data. Children were asked if they were interested and agreed to participate in the study. After that, the questionnaire forms were distributed to each child individually, they were asked to complete them by selecting only one response that reflects the actual situation. The researchers asked the children about any difficulties that faced during answering the questionnaires and offered help. The questionnaires took about (20-30) minutes.
- Based on the assessment findings, the assertiveness training program was developed by the researchers and revised by a specialized psychiatrist and professor of psychiatric/mental health nurse, before its

application to children with speech and language disorders.

- For the implementation of the assertiveness training program, the children were integrated into six subgroups, each group consisting of 5-7 members, two groups on Sunday, one group on Tuesday, and the third group on Thursday according to the agreed time between the researchers and the group members which ranged between 8-12 am. Each group received a total of 8 training sessions (2 introductory & theoretical sessions and 6 practical sessions), each session took from 45 minutes up to one hour during their follow-up visits.
- Approaches that the researchers followed during the sessions included leaving them expressed feelings, listening attractively to every subject, controlling the sessions, encouraging and involvement, constructive criticism, and appraisal of achievements, encouraging speaking or stopping speaking to listen without interruption.
- The researchers used different teaching methods and media such as small group discussions, brainstorming discussions, demonstration and re-demonstration, real-life situations, and colored handouts during the implementation of assertiveness training program to improve self-esteem among children with speech and language disorders.
- Implementation of the assertiveness training program took around 4 months from the first week of July to the last week of November 2019. The researchers informed the participants that their progress, home assignments, and any faced difficulties will be followed up through phone contact until the next meeting. Post-test was done in the period from the beginning of the first week of June to the last week of December 2019.

Contents of the Psychiatric nursing intervention Program:

The assertiveness training program was conducted in (12) sessions divided into two main parts:

Part I: Introductory & Theoretical Part (2 sessions);

This part includes an introductory session, orientation about the aim of the assertiveness training program, and general information about speech and language disorders as the meaning of speech and language disorders, types of speech and language disorders, causes & risk factors of speech and language disorders, signs and symptoms of speech and language disorders, the effect of speech and language disorders on the children self-esteem and assertive behaviors, treatment for speech and language disorders.

Part I: Practical Training Part (10 sessions):

The assertiveness training program was used to train children with speech and language disorders on skills needed to improve their assertive behaviors and self-esteem through the following psychoeducational sessions:

1. Effective communication skills (assertive communication skills training, using of nonverbal communication skills) (2 sessions).
2. Management of criticism and disagreement and how to say no assertively) (**one** session).
3. Building positive self-concept & improving self-esteem skills (**2** sessions)
4. Management of negative emotions & anger management skills includes relaxation training (guided imagery, deep breathing exercises, progressive muscles relaxation) (**2** sessions).
5. Problem-solving skills, cognitive restructuring (**2** sessions).
6. Review all the program contents and filling post-test interview questionnaires (**one** session)

Ethical Considerations:

During the initial interview, each child was informed about the aim and nature of the study, and the researchers emphasized that participation would be voluntary; hence every child had the right to participate or refuse to participate in the study, and they were informed about the right to withdraw at any time without giving any reasons, and without any consequences. The consent for participation was taken written. In addition, the confidentiality of any gathered data was assured, explained, and printed in the data collection tools.

Administrative Design

An official letter was issued from the dean of faculty of nursing, Ain Shams University, to the medical director of speech clinics explaining the aim of the study, and requesting his permission for data collection and program implementation.

Statistical Analysis:

Data entry and statistical analysis were done using SPSS 23.0 statistical software package. Data were presented using descriptive statistics in the form of frequencies and percentages for the categorical data and means and standard

deviations (SD) paired-sample t-test and Pearson correlation p-value <0.05 that were used to identify the significance in a group before and after the assertiveness training program, the significant value was set as <0.05.

Results:

Table (1) revealed that the mean age of children with speech and language disorders understudy was 13.14+2.23. More than two-thirds of them were males representing 65.9%, nearly half of them (43.2%) in primary education, more than two two-thirds of them (68.2%) in a public school, and more than half of them (52.3%) had superior educational level. This. This study's results also showed that more than half (54.5%) of the participants understudy was the first child of the family and more than two-thirds of children understudy had a family monthly income of less than 1200 L. E representing 68.2%.

Table (2): represented that nearly two-thirds of the children understudy had a duration of speech disorders ranging from (1-3 years) and had a positive history of chronic illness representing 63.6%. and 61.4% respectively. This table also showed that the highest percentage of participants understudy was diagnosed with stuttering & stammering and dysarthria, representing 38.6% and 22.7% respectively. Moreover, the current study reported that the entire study sample (100%) reported a positive history of bullying due to their speech and language disorders, and nearly two-thirds of them usually suffer from loneliness and social isolation due to bullying representing 63.6%.

Concerning levels of assertive behaviors among children understudied, **Table (3)** illustrated that there was a highly statistically significant relationship between the levels of assertive behaviors pre and post-program implementation, where 50% of the children under study reported assertive behavior in the post-program implementation phase, meanwhile the majority of them has reported partially aggressive and very aggressive responses in the preprogram implementation phase, representing 39% and 32% respectively.

Figure (1) represented that there was a remarkable improvement in the studied children's self-esteem in the post-program implementation phase compared to the preprogram level, where the majority of children under study reported high self-esteem in the post-program implementation phase representing 70.5% compared to zero percent in the preprogram phase.

Table (4) illustrated that there was a remarkable improvement in the main score of self-esteem domains among children understudy in the post-program implementation phase compared to the preprogram phase p<0.001, including the efficiency of language communication, social interaction, independence, physical appearance, and positive self-acceptance representing (26.35+6.18, 21.21+5.86, 20.44+4.92, 18.25+4.46 and 15.69+3.03 respectively.

As indicated by **table (5),** there was a correlation between the categories of children's assertive behaviors and total level of self-esteem post-program implementation compared to the preprogram phase (p<0.001)

Table (6) showed that there was a highly statistically significant relationship between age group, level of education of children with speech disorders under study, and their assertive behaviors before and after program implementation p<0.001**. Meanwhile, the current table revealed that there was no statistically significant relationship between the type of school, order of child among his sibling, or monthly income and their level of self-esteem before and after program implementation p >0.05.

Table (7) illustrated that there was a highly statistically significant relationship between the age group among children with speech and language disorders understudy and their self-esteem before and after program implementation p<0.001**. Meanwhile, the present table revealed that there was no statistically significant relation between sex, type of school, order of child among his siblings, or monthly income, and their level of self-esteem before and after program implementation p >0.05.

Table (1): Frequency Distribution of children with speech and language disorders understudy according to their socio-demographic characteristics (n.=44):

Items	Children with Speech and Language Disorders	
	No.	%
Age (years):		
10-12	17	38.6
>12-14	12	27.3
>14-16	10	22.7
>16-18	5	11.4
Mean ± SD	**13.14±2.23**	
Sex:		
Males	29	65.9
Females	15	34.1
Level of education:		
Primary Education	11	25.0
Preparatory Education	19	43.2
Secondary/technical Education	14	31.8
Type of School:		
Public	30	68.2
Private	14	31.8
Children's educational progress:		
Superior	23	52.3
Average (just pass)	15	34.1
Normal	6	13.6
Order of the child among his siblings:		
First	24	54.5
Average	13	29.5
Smallest/Last	4	15.9
Monthly Family Income (L. E):		
Less than 1200 L. E monthly	30	68.2
1200 - 3000 L. E monthly	7	15.9
>3000-<5000 L. E monthly	7	15.9

Table (2): Distribution of children with speech and language disorders under study according to their medical history (n.=44):

Items	Children with Speech and Language Disorders	
	No.	%
Duration of the Disorder (years):		
>one year		
1-3 years	11	25.0
> 3 years	28	63.6
	5	11.4
Type of Speech & Language Disorder:		
Apraxia of Speech	3	6.8
Stuttering & stammering	17	38.6
Dysarthria	10	22.7
Lisping	6	13.6
Spasmodic dysphonic disorder	1	2.3
Cluttering	2	4.5
Alalia (speech delay)	5	11.4
History of Chronic Physical Illness:		
Positive	27	61.4
Negative	17	38.6
History of bullying due to Speech & Language Disorders:		
Positive	44	100
Negative	0	0
loneliness and social isolation due to speech disorders?		
Usually	28	63.6
Sometimes	12	27.3
Never	4	9.1

Table (3): Frequency and percentage distribution of children with speech and language disorders under study regarding their level of assertive behaviors pre and post-program implementation (n=44):

Categories of Children's Assertive Behaviors	Children with Speech and Language Disorders (N=44)				$\bar{X}$	p-value
	Pre-Program		Post-program			
	No.	%	No.	%		
Very Passive	10	23.0	4	9.1	26.38	<0.0001**
Passive	3	6.0	11	25.0		
Assertive	0	0.0	22	50.0		
Partially Aggressive	14	32.0	7	15.9		
Very Aggressive responses	17	39.0	0	0.0		

*(*) Statistically significant at p<0.05, (**) Statistically highly significant at p<0.001, non-Significant at p >*0.05

Figure (1): Percentage distribution of the studied children with Speech and language disorders regarding their level of self-esteem pre and post-program implementation (n=44):

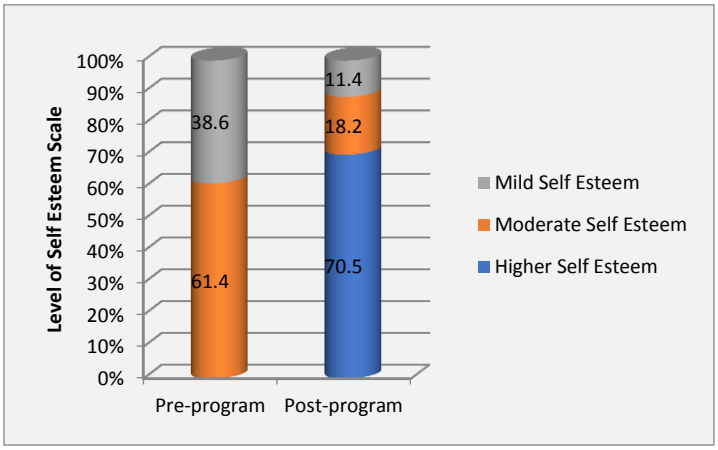

Table (4): Mean score of children with speech and language disorders under study according to their domains of self-esteem pre and post-program implementation (n=44):

Domains of self-esteem	Pre-Program		Post-program		T-test	p-value
	$\bar{X}$	± SD	$\bar{X}$	± SD		
The efficiency of language communication	14.1	4.36	26.35	6.18	17.626	<0.0001**
Social Interaction	12.45	4.89	21.21	5.86	11.152	<0.0001**
Independency	11.66	5.26	20.44	4.92	9.626	<0.0001**
Physical Appearance	11.04	4.34	18.25	4.46	13.719	<0.0001**
Positive Self-Acceptance	8.65	3.41	15.69	3.03	17.002	<0.0001**

*(*) Statistically significant at p<0.05, (**) Statistically highly significant at p<0.001, non-Significant at p >*0.05

Table (5): Comparison of the studied categories of children's assertive behaviors and total level of self-esteem pre and post-program implementation (n=44).

Categories of Children's Assertive Behaviors	The total level of self-esteem		p-value
	Pre (n=44)	Post (n=44)	
	r value	r value	
Very Passive	0.126	0.442	<0.001**
Passive	0.184	0.258	<0.001**
Assertive	0.167	0.232	<0.001**
Partially Aggressive	0154	0201	<0.001**
Very Aggressive responses	0137	0.198	<0.001**

*(*) Statistically significant at p<0.05, (**) Statistically highly significant at p<0.001, non-Significant at p >*0.05

Table (6): Relation between total score of child assertive behaviors scale and socio-demographic characteristics of participants understudy pre and post-program implementation (n=44).

Socio-demographic data	Pre-Program			Post-program		
	X̄	± SD	p-value	X̄	± SD	p-value
Age (years):						
10-12	77.35	4.91		123.82	7.19	
>12-14	77.75	4.56	0.694	119.92	5.63	p<0.001**
>14-16	76.70	5.19		121.70	6.15	
>16-18	74.80	4.32		117.60	3.91	
Sex:						
Males	77.24	4.79	0.675	121.76	6.52	p >0.05
Females	76.60	4.78		121.20	6.45	
Level of education:						
Primary Education	77.27	5.12		121.82	7.88	
Preparatory Education	77.37	4.61	0.822	122.58	6.34	p<0.001**
Secondary/technical Education	76.36	4.89		120.00	5.36	
Type of School:						
Public	77.37	4.57	0.487	122.13	6.04	
Private	76.29	5.17		120.36	7.26	p >0.05
Order of the child among his siblings:						
First	77.50	4.64		122.17	6.98	
Average	76.92	4.70	0.646	120.15	6.6.58	p >0.05
Smallest/Last	75.57	5.53		122.14	4.02	
Monthly Family Income (L. E):						
Less than 1200 L. E monthly	77.67	4.40		122.30	6.15	
1200 - 3000 L. E monthly	75.86	5.21	0.422	118.14	5.34	p >0.05
>3000-<5000 L. E monthly	75.43	5.77		121.86	8.25	

(*) Statistically significant at p<0.05, (**) Statistically highly significant at p<0.001, non-Significant at p >0.05

Table (7): Relation between total score of self-esteem scale and socio-demographic characteristics of participants understudy pre and post-program implementation (n=44).

Socio-demographic data	Pre-Program			Post-program		
	X̄	± SD	p-value	X̄	± SD	p-value
Age (years):						
10-12	68.94	5.38		93.41	3.32	
>12-14	68.08	5.57	0.833	96.00	4.16	p<0.001**
>14-16	67.30	3.92		94.90	3.31	
>16-18	67.20	4.82		94.40	2.97	
Sex:						
Males	68.38	4.60	0.657	94.00	3.01	p >0.05
Females	67.67	5.73		95.67	4.37	
Level of education:						
Primary Education	69.55	5.96	0.538	92.82	3.34	p<0.05*
Preparatory Education	67.89	5.25		95.58	3.79	
Secondary/technical Education	67.36	3.67		94.57	3.11	
Type of School:						
Public	68.23	4.82	0.852	94.44	3.06	p >0.05
Private	67.93	5.43		94.14	4.59	
Order of the child among his siblings:						
First	68.46	4.96	0.893	93.96	3.07	p >0.05
Average	67.85	6.01		95.92	4.17	
Smallest/Last	67.57	2.94		94.14	3.85	
Monthly Family Income (L. E):						
Less than 1200 L. E monthly	67.73	5.00		95.07	3.47	
1200 - 3000 L. E monthly	70.57	5.00	0.371	93.43	3.05	p<0.05*
>3000-<5000 L. E monthly	67.43	4.72		93.57	4.47	

(*) Statistically significant at p<0.05, (**) Statistically highly significant at p<0.001, non-Significant at p >0.05

Discussion:

Speech and language disorders negatively affect the children's self-perception, leading to the development of feelings of inferiority, a sense of shame, aggressive/passive behaviors, and deterioration of their self-esteem, which in turn enforce them to exhibit unassertive behaviors due to their inability to express their needs and feelings through spoken language **(Longo, et al, 2017)**. The current study aimed to examine the effects of assertiveness training on improving self-esteem among school-age children with speech and language disorders.

Concerning to socio-demographic characteristics of the children under study, the current study found that the mean age of children with speech and language disorders were from age groups ranging between10-13 years. This could be due to the children's desire to search for health support to manage their speech disability and improve their scholastic competency and social acceptance/interaction. These study results were supported by **Ahmed, Mohamed, Ali, & Ahmed, (2019)** who studied "the documentation of delayed language development in Upper Egypt" and found that children with speech and language disorders in the age range between 10-14 years are more interested to access to medical and psychological care, participating in the treatment programs to improve their academic performance, self-perceived competency, and acceptance among peer groups and family members, and enhance their social interaction.

This study's results revealed that there was no statistically significant relationship between gender and self-esteem $p > 0.05$. It could be explained due to the equal desires between both males and females to socialize and interact with others using language and speech. This result was greed by **Lindsay, Dockrell, & Palikara, (2010)** who reported on his study titled "the self-esteem of adolescents with specific language impairment as they move from compulsory education" that both gender (male /females) and self-esteem were similarly negatively affected by speech disorders due to the inability to socialize with others using spoken language.

This study revealed that nearly half of the children under study in elementary school. It may be due to the increased desire of the children in this important developmental stage to get improvement and achieve an academic promotion that is impaired due to their speech disorders which make them feel Shye, introverted, loses their self-confidence when they cannot answer questions, even if they know the answer. This result was in a harmony with **Nnadi, et al, (2020)** who studied the effect of assertiveness training on social withdrawal among adolescents in secondary schools in Owerri Municipal IN IMO State, NIGERIA, and found that children with speech and language disorders aged between 10-14 years have a deficiency in carrying out the tasks of their daily life and their disorders in social fluency and inability to use speech in communicating with others, and complains from deterioration in their psychological formation, self-esteem, and behavioral response.

This study revealed that most children with speech and language disorders experience bullying from peers due to their disability. This study result was agreed by **Avşar & Alkaya, (2017),** who explained that children with speech disorders are expected to suffer from the negative response from peers, experience one or more types of bullying e.g., disparaging verbal comments, shunning, spreading rumors, stealing, and verbal or physical abuse, and threats, which leads to negative sensitization and poor self-esteem. From this perspective, **Garaigordobil & Machimbarrena, (2019),** reported in their study of victimization and perpetration of bullying/cyber bullying that the correlation between emotional and behavioral problems and childhood stress that children with speech and communication disorders were at high risk of being bullied as they are perceived as different from peers. they were described as unassertive, insecure, more sensitive, anxious, passive, withdrawn, and less likely to interact and speak with other children as they felt shammed, embarrassed, and concerned with identification as victims of bullying.

In relation to assertiveness training among children with speech and language disorders under study, the current study illustrated that there was a highly statistically significant relationship between the levels of assertive

behaviors pre-and post-program implementation. This study results may be due to training children with speech and language disorders on skills that improve self-efficacy and self-esteem, which in turn can affect one's accomplishments, interaction with other children, ability to adjust to environmental demands, level of mental health, and general state of wellbeing. This study result was agreed with **Schirinzi, et. al. (2020),** who indicated that targeting assertiveness through behavioral and/or cognitive means e.g. (cognitive structuring) increases assertive behaviors and decreases symptoms of depression, anxiety, and improves self-esteem and relationship satisfaction with family, friends, and teachers. Furthermore, **Sari, Sugiyo, & Awalya, (2018),** supported the utility of assertiveness training as a useful standalone treatment for a variety of clinical problems and lack of interpersonal behaviors associated with lack of assertiveness.

The general strategy used in facilitating assertive behaviors most typically focused on the cognitive moderator accounting for inhibiting anxiety (e.g., the feared guilt of expressing a child's own needs and desires). In this context of skill deficits, the actual behavioral component associated with more assertive interactions is the primary focus of the intervention programs. **(Ali, & Adeniyi, 2019)**.

In relation to assertive behaviors among children with speech and language disorders, this study revealed that there was a remarkable improvement in assertive behaviors among children understudy post-program implementation compared to the preprogram level. It might be because the intervention program enables the children to understudy to receive training on effective listening skills, use of nonverbal communication, anger management skills, conflict resolution skills, management of negative people & management of bullying from their disorder through avoidance and assertive communication, self-exploration skills that enabled them to express their needs, emotions, and feelings. This study result was in a harmony with the findings of **Lee, (2014,)** who explained that assertiveness training and techniques including nonverbal communication, self-disclosure, fogging and dealing with bullying with criticism, agreement with principle and truth, conflict resolution skills could enhance the assertive behaviors among children with language disorders. These study results were also agreed by **Khodeir, (2019)** who clarified that children with speech and language disorders suffering from psychological disturbances associated with their inability to express thoughts due to their impairment, seem to be shy, introverted, tense, anxious, fearful, and passive, aggressive, or unassertive. such behaviors interfere with forming and maintaining friendships and hinder entering peer group conversation, which gives them less opportunity to learn, develop more social isolation, academic deterioration, aggressive/unassertive behaviors, and low self-esteem.

Regarding self-esteem among children with speech and language disorders, the current study showed that there was a reported improvement in the total level of self-esteem in the post-program implementation phase compared to the preprogram phase. This could be attributed to the positive impact of the intervention program that trained the children with speech and language disorders on effective communication skills according to their disability, using body language, writing, signage language, anger management skills, self-exploration, self-perception, management of anxiety, social withdrawal, and relaxation training. This study result was supported by **Durkin, et al, (2017)** who found that intervention for children with speech and language disorders to train them on skills related to self-exploration, nonverbal communication, and usage of signage language untimely improve their self-efficacy and self-esteem. Moreover, this study's results were agreed by **Yuliani, Etika, Suharto & Nurseskasatmata, (2020),** was illustrated that severe speech and language disorders associated with lower self-esteem while moderate language and speech disorders associated with a better level of self-concept and self-esteem due to restricted ability of the children to express their needs through speech. In addition, **Paul, & Norbury, (2012)** was clarified that self-esteem adversely affected children with speech and language disorders due to psychological disturbances such as anxiety, helplessness, and victimization

associated with their inability to complete sentences in verbalization and restricted verbal experience. These study results were also supported by **Law, Dennis, & Charlton, (2017),** who suggested that improved self-esteem among children with speech and language disorders was linked to the development of self-concept, body image, social status, social identity, and self-control.

The current study results showed that there was a statistically significant relation between assertiveness training and increase self-esteem in the pre and post-program implementation phase. It can be because of the development of children's ability to express their needs in different ways other than speech through nonverbal communication i.e., use of body language, limited verbal expression, gesture, signage language, drawings, writing, etc. display a more positive attitude regarding their communication and directly improve their self-worth, self-perception, and self-esteem. This result is supported by the study findings conducted by **Hollo, (2012)** who assess the language and behavior disorders in school-age children and emphasized the importance of training children with speech disorders on assertive techniques to improve their communication skills and enhance their self-esteem.

Conclusions:

- Assertive behaviors of children with speech and language disorders have improved post-program implementation phase compared to the pre-program implementation phase.
- Improving assertive behaviors leads to a remarkable improvement in the children's levels of self-esteem post-program implementation compared to the pre-program implementation phase.

Recommendations:

- Development of psychiatric nursing intervention program to improve psychosocial stressors, coping, and resilience among children with speech and language disorders.
- Conduct further studies to investigate the level of depression and anxiety among children with speech and language disorders.
- Development of training program for school teachers to improve their knowledge, and communication skills with children with speech and language disorders.

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