



Socio-demographic variables related to self-concept among school-aged children who stutter and their normal peers

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ARTICLE INFO

Article history:

Received 16 August 2022

Received in revised form

9 November 2022

Accepted 11 February 2023

Keywords:

Self-concept

School-aged children

Stutter

Normal peers

ABSTRACT

The aim of this study is to compare levels of self-concept among school-aged children who stutter and their normal peers according to Socio-demographic variables. Sixty school-aged children (30 stuttering children, and 30 non-stuttering peers) were purposively sampled through the snowball approach. 10 persons out of the 70 were subsequently pulled out of the study because of their history of hearing difficulties. Hence, 30 stuttering children, and 30 non-stuttering peers were finally selected for the study. A descriptive study was designed to compare levels of self-concept among school-aged children who stutter and their normal peers according to Socio-demographic variables. Using IBM SPSS v.26, the study utilized a t-test to determine the difference between the two groups. A p-value level of statistical significance of $<.05$ was likewise considered. Results showed that there was a statistically significant difference at the significance level of 0.01 between the mean scores of the stuttering ($M= 19.57, SD=4.54$) and normal children ($M=24.37, SD=1.92$) with higher rates for the normal. There was no statistically significant difference between the mean score of the male ($n=15, M=19.57, SD=1.54$) and female ($n=15, M=19.67, SD=1.03$) stuttering children.

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1. Introduction

Childhood-onset speech fluency disorder (stuttering) is a communication disorder beginning in childhood, and characterized by interruptions to speech flow, sound prolongations, and pauses produced by repetition of a particular (Özgür and Özgür, 2019). There is evidence that stuttering is more common in children who also have concurrent speech, language, learning, or motor difficulties (Saad and Kamel, 2019). Stuttering can appear in different guises: It can be in the form of repeating a particular sound or word, prolonging a sound, interjecting, pausing within words, filled or unfilled pauses in speech, circumlocutions, excessive word stress and repetition of words consisting of a single syllable (Özgür and Özgür, 2019).

The intensity and frequency of stuttering may vary in different contexts, or depending on whom a child is talking to (Özgür and Özgür, 2019). Overall, 95% of stuttering cases begin before the age of 5

years. About 5% of all children go through a period of stuttering that lasts six months or more. Three-quarters of those who begin to stutter will recover by late childhood, leaving about 1% of the population with a long-term problem (Saad and Kamel, 2019).

Guitar (2013) and Ramig and Dodge (2009) claimed that stuttering is 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, in addition to negative feelings of fear and anxiety during speech (Bdour et al., 2022).

Previous research has indicated that self-concept is an important factor in the understanding and clinical treatment of stuttering sounds or words (Cherif et al., 2018). The self-concept of the stutterers includes observing their listeners' reactions. Many stutterers report that when they commence speaking, they feel that they are inferior to those they are talking to, and other stutterers feel

that the shame and embarrassment of seeing their listeners' reactions are painful, causing them to close their eyes. With inferiority, distrust, and anxiety, the stutterer takes one of two responses to the situation: maintain the attitudes of positive self-consideration and self-acceptance by resisting the feelings of inferiority imposed by the environment as a "social" member or accept the personal and social attitudes of the normal people around them and compromise their respect and self-acceptance (Fathalla, 2018).

Stuttering has a direct effect on the stutterer's self-concept, especially in late childhood, which is the most appropriate stage for the process of social normalization. Children's sense of worth and feelings of love, kindness, and tenderness increase, and they attempt to enhance their image in the eyes of others. Their capacity to express themselves in mental and social activities is enhanced. The ideal self-concept develops, and the social framework expands and leads to the development of a positive self-concept and self-acceptance, or vice versa (Cherif et al., 2018). Stuttering children need more care and attention as a result of the consequent unmet psychological or social needs related to this disability, which affect their sense of value, acceptance, and appreciation. Furthermore, this affects the extent of their sense of social isolation and lack of social acceptance (Cherif et al., 2018). Self-concept is a social product where children acquire their experiences in the first social environment-their family-which plays the primary role in children's acquisition and formation of their self-concept, whether positive, which acts as a driving force for their behavior to confront their life, or negative, which has a direct impact on their personalities. 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 (Bdour et al., 2022). Wadman et al. (2008) determined whether low self-esteem, shyness, and the lack of socializing with others are 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 (Rosenberg, 1965) and the Cheek & Buss scale (Cheek, 1983) for shyness and mixing with others. However, their degrees in terms of socializing, gender, and age showed no difference compared to their normal peers. Byrd 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, the study indicated that females were less able to reveal themselves compared to the males.

Nang et al. (2018) investigated the effect of stuttering on the development of self-independence, relationships, and quality of life among female stutterers, in particular, in light of the few previous studies on females. The study found that stuttering has extended effects on all aspects of a woman'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 negative. 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, and 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.

Results of Bdour et al. (2022) 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 fewer 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, the 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.

1.1. Problem statement

Self-concept affects the individual in several aspects and fields. It is a sense of value and a concept that reflects the individual's attitude towards himself, positively or negatively, so that the individual feels valued and respects himself. Those with high self-esteem who are confident in themselves, take responsibility, have an understanding and optimism for life, are flexible in dealing with situations, have independence in many situations, and are more productive; happy; and satisfied with their lives. While those with low self-esteem feel that they are unqualified and incompetent in getting things done and have a negative view of themselves and see themselves as unloved. Social and psychological factors are closely related to articulation and physiological disorders, especially with regard to several variables, including age variable. The current study attempted to provide a theoretical and reference framework on levels of self-concept among school-aged children who stutter

and their normal peers according to Socio-demographic variables. This study seeks to give answers to the following questions:

1. Are there differences in the level of self-concept between stuttering and normal children?
2. Are there differences in the level of self-concept among stuttering children in late childhood, according to gender?

The aim of this study is to compare levels of self-concept among school-aged children who stutter and their normal peers according to socio-demographic variables.

2. Methods

A descriptive study was designed to compare levels of self-concept among school-aged children who stutter and their normal peers according to Socio-demographic variables. Sixty school-aged children (30 stuttering children, and 30 non-stuttering peers) were purposively sampled through the snowball approach. 10 persons out of the 70 were subsequently pulled out of the study because of their history of hearing difficulties. Hence, 30 stuttering children, and 30 non-stuttering peers were finally selected for the study. The snowballing sampling method is a chain sampling method that allows a study participant to recruit other participants of similar target characteristics who are very difficult to locate. The snowball sampling method affords the researcher to access school-aged children through school teachers, friends, and neighbors, who have contact with school-aged children until the sixty children were reached.

The researcher designed a self-concept questionnaire for stuttering and normal children aged 9–12 years. The questionnaire consisted of 75 items distributed equally between five dimensions:

- Physical
- Linguistic
- Social
- Academic
- Self-confidence

The independent variables included the gender of stuttering children and its effect as an independent variable that had an impact on self-concept. The study tool was verified by establishing face validity, and internal consistency was verified through Pearson correlation coefficients. Reliability was calculated using Cronbach’s alpha coefficient (0.861) and the split-half (0.867). Upon approval, data were collected from 10th March to 15th April 2022. Sixty school-aged children participated voluntarily to answer a standardized questionnaire for at least 15 minutes. The author distributed, collected, and validated completely accomplished the questionnaire prior to data processing.

Using IBM SPSS v.26, the study utilized a t-test to determine the difference between the two groups. A

p-value level of statistical significance of <.05 was likewise considered.

3. Results

To answer the first question of the study—Are there differences in the level of self-concept between stuttering and normal children?—the t-test was used as a parametric statistic to delineate the differences in the stutterers–normal sample. The responses of the stutterers (n=30) and the normal (n=30) were processed on the Self-Concept Scale using a t-test. As shown in Table 1. There is a statistically significant difference at the significance level of 0.01 between the mean scores of the stuttering (M=19.57, SD=4.54) and normal children (M=24.37, SD=1.92) with higher rates for the normal (T-value=5.16, P<0.01) (Fig. 1).

Table 1: T-test results on the self-concept scale

Sample	N	M	SD	T-value	Significance
Stuttering children	30	19.57	4.54	5.16	0.01
Normal children	30	24.37	1.92		

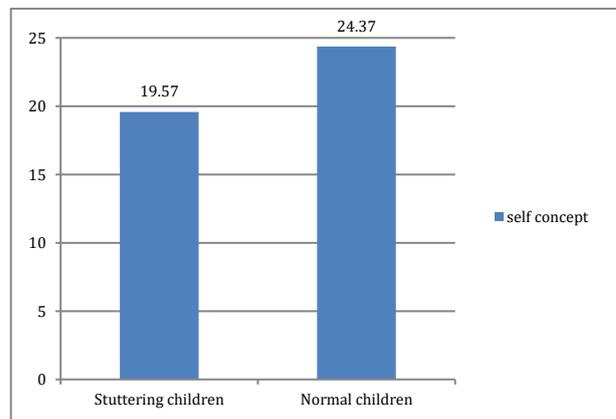


Fig. 1: Mean differences between stuttering children and normal ones on the self-concept scale

To answer the second question of the study—Are there differences in the level of self-concept among stuttering children in late childhood, according to gender?—the responses of the members of the stuttering group were processed on the Self-Concept Scale using the t-test as a parametric statistic to delineate the differences between them. The responses of the male stuttering children and the female stuttering children were processed on the Self-Concept Scale using a t-test to delineate the differences based on gender. Table 2 shows no statistically significant difference between the mean score of the male (n=15, M=19.57, SD=1.54) and female (n=15, M=19.67, SD=1.03) stuttering children (Fig. 2).

Table 2: T-test results on the difference between male and female stuttering children

Sample	N	M	SD	T-value	P
Male stuttering children	15	19.57	1.54	0.099	insignificant
Female stuttering children	15	19.67	1.03		

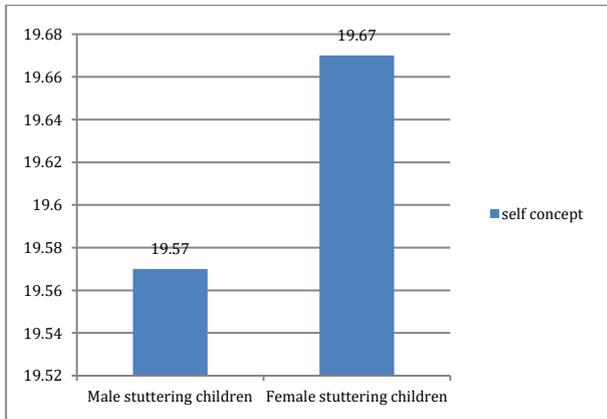


Fig. 2: Mean differences between male and female stutterers on the self-concept scale

4. Discussion

The results of the study indicated a statistically significant difference between stuttering and normal children in the level of self-concept, with higher rates for normal children. The difference between stuttering and normal children may be ascribed to the effect of stuttering on the level of self-concept. Stuttering children find it difficult to communicate with others due to speech disorders. This forces them to stay away from the company of others, and the circle of social relations is reduced. The speech process of stuttering children turns into a burden that exhausts their power. This finding goes in the same line with those of previous research studies in the literature (Bdour et al., 2022).

Anxiety is created out of stuttering in terms of words, letters, or the order of words in sentences or situations that involve some difficulty, which encourages the occurrence of stuttering. This anxiety causes children to fall into a state of confusion and hesitation between their desire to speak and establish communication and their decision to be silent for fear of stuttering. This leads to a general feeling of inadequacy or an inability to participate effectively with others. Stutterers feel ashamed and unwilling to have verbal conversations with those around them for fear of being ridiculed or receiving offensive remarks. While stuttering is not caused by nervousness or anxiety, people who stutter (PWS) are often mischaracterized as unintelligent, less confident, and less outgoing than people who do not stutter (Croft and Byrd, 2021).

This situation leaves them between two paths: to resort to complete isolation from the company of others and to avoid entering interactive relationships with them or interacting with them within the narrowest limits (Boyle et al., 2018). In both cases, the circle of their social relations suffers from turmoil, which negatively affects their self-concept. Furthermore, this may also be due to the fact that stuttering children live under the pressure of their own psychological and social factors, which puts them in a position of paradox with their peers at the same age and hinders them from integrating into social relations (Boyle, 2013). Psychological and

social pressures within the family environment and the lack of opportunities for good interaction may negatively affect the self-concepts of stuttering children.

Likewise, the negative impact of stuttering on self-concept is a logical consequence. The more disturbed children's linguistic and communication skills in terms of making correct pronunciation, expression, explanation, and interpretation; giving information; clarifying the point of view; and understanding the other's point of view, the more disturbed their positive self-concept in terms of the ability to adjust, have self-control, realize psychological and social adaptation, and make friends with others (Cherif et al., 2018).

The results of the study also affirmed the absence of any statistically significant differences in the level of self-concept between male and female stuttering children, which may be due to the negative impact of stuttering on the self-concept of stutterers.

Several studies (Bdour et al., 2022; Cherif et al., 2018; Nang et al., 2018; Sikandar et al., 2019) have argued that the continuation of stuttering and the increase in its severity make children socially introverted, shy, and anxious, with a feeling of rejection toward others, introversion, withdrawal from social situations, and a sense of failure, inferiority, and aggression toward self and others, all of which are reactions to the disorder rather than being factors causing it. These actions worsen the problem of stuttering, and the result is that self-concept is negatively affected, as stuttering children perceive their speech stuttering as a physical impairment. Self-development depends on the extent to which individuals benefit from the experiences they go through or the extent of their interactions with others to gain experiences, understand themselves, and predict the behavior of others. Those who fail to interact socially enough with those around them due to a verbal disability will not be able to identify themselves or understand their strengths and weaknesses, and this leads to the creation of a negative self-concept.

5. Conclusions

Based on the results of the study, the researcher concludes avoiding forcing stuttering children to modify their speech strictly, interrupting them, or criticizing their speech. Families should accept their stuttering children and abstain from correcting their speech all the time. In addition, courses, seminars, and workshops should be held for families on how to treat their children who suffer from stuttering disorders, encourage them to be involved in social participation and social interaction with those around them, and make sure not to compare them to others, taking into account their individual differences and different abilities.

The researcher suggests conducting further studies on the relationship between parenting treatment styles and the self-concept of stuttering children in late childhood, the effectiveness of a

multi-pronged program to treat stuttering and its impact on the self-concept of stuttering children, a clinical study of cases of stuttering, the effectiveness of a counseling program for parents and its impact on the self-concept of stuttering children, and, finally, a study on the effectiveness of a speech program for developing negative self-concept and its impact on reducing the psychological loneliness of stuttering children.

Acknowledgment

The author would like to thank the children who voluntarily and willingly participated in the study.

Compliance with ethical standards

Informed consent

Informed consent was obtained from all children's parents for the purpose of maintaining their rights to anonymity and confidentiality.

Conflict of interest

The author(s) declared no potential conflicts of interest with respect to the research, authorship, and/or publication of this article.

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