



Evaluation of Speaking Self-Efficacy and Social Anxiety in Secondary School Students

Rıza Korhan Sezin ¹, Sema Sal ²

Abstract

Speaking skills are an important element in gaining a place in one's community. These skills are very valuable for children as they create their sense of self, try to acquire a social environment for themselves, and participate in social life, allowing them to be more successful, assertive, and self-confident. This study aimed to evaluate the relationship between secondary school students' self-efficacy in speaking and social anxiety levels. The research was carried out in Samsun, Turkey, with data collected from four different schools selected by a simple random sampling method. The sample of the study included 595 students who agreed to participate in the research and answered all questions. Data were collected using a sociodemographic data collection form, the Speaking Self-Efficacy Scale for Secondary School Children, and the Social Anxiety Scale for Adolescents. The findings revealed a significant correlation between speaking self-efficacy and the social anxiety levels of the participants. Simple regression analysis showed that the speaking self-efficacy levels of the participants explained 16% of the variance in social anxiety levels ($F=113.243$, $p<0.001$). A statistically significant weak inverse relationship was revealed between speaking self-efficacy and social anxiety. Accordingly, it may be beneficial to increase the activities for the development of speaking skills in educational institutions.

Keywords

Self-efficacy
Speaking self-efficacy
Social anxiety
Social skills
Speaking skills

Article Info

Received: 27.06.2023
Accepted: 11.11.2024
Published Online: 04.24.2025

DOI: 10.15390/EB.2025.13011

Introduction

Social anxiety is the fear of being judged or finding oneself in situations where one could be ridiculed or humiliated. The cognitive results of social anxiety are an excessive focus on oneself and self-criticism in social environments, which may lead to physiological symptoms such as blushing, sweating, and trembling. Clinical studies have revealed the difficulties experienced by individuals with social anxiety in their professional, academic, and social lives (Aydın & Sütçü, 2007; Aysel, 2018; Schmidt, Poole, Hassan, & Willoughby, 2022). Although different scientific approaches and models have been proposed to explain social anxiety, the explanations of these different approaches are generally similar. For example, the cognitive approach argues that social anxiety stems from a lack of belief in the possibility of making a good impression in social environments despite one's desire to do

¹ Ondokuz Mayıs University, Faculty of Health Sciences, Department of Speech and Language Therapy, Türkiye, korhansezin@yahoo.com

² Ondokuz Mayıs University, Faculty of Health Sciences, Department of Child Development, Türkiye, semasal3555@gmail.com

so. The “Social Skills” model puts forward a similar view and argues that the basis of social anxiety is the lack of social skills. Many definitions of social skills have been proposed, but communication skills and therefore speaking skills are common elements of all definitions. Speaking skills are among the key requirements for effective communication and many studies have highlighted this close relationship (Barbot, Safont-Mottay, & Oubrayrie-Roussel, 2019; Bariaud, 2006; Biemans, Halteren, Dijk, Rijckenberg, & Poortinga, 2008; Blöte, Kint, Miers, & Westenberg, 2009).

Studies also show that social anxiety is most common in adolescence, with 9-12% of adolescents displaying symptoms of social anxiety disorder (Blöte, Miers, Heyne, & Westenberg, 2015). Early adolescence as a developmental period coincides with the beginning of secondary school or middle school, which constitutes a fundamental educational shift after primary school. Although development is a lifelong process for individuals in many regards, there are certain periods such as early adolescence in which the pace of development is incomparably faster than others. This period, encompassing the ages between 10 and 14, is a period of rapid physical, cognitive, and social changes. Cognitive patterns and behaviors acquired during early adolescence have significant effects in the later years of life (McNeeley & Blanchard, 2010; Spear, 2010). Based on the literature addressing the fundamentals of healthy development, Blum, Astone, Decker, and Mouli (2014) proposed main goals for the early adolescence period, one of which was a positive sense of self or, in other words, self-efficacy.

An individual’s perceptions of his or her skills and capabilities in specific tasks can be described with the term “self-efficacy.” Self-efficacy is the inner answer to the question of whether someone has the necessary skills to handle a particular task. This belief is a predictor of an individual’s motivation and stability; thus, it also determines an individual’s intentions (Carroll et al., 2009; Cheung, Siu, & Brown, 2017). The theory of self-efficacy argues that a person’s belief in his or her abilities is largely determinative of that person’s actions and the maintenance of those actions (Dewi & Jimmi, 2018). Some researchers have even suggested that it is not possible to predict functions such as learning, motivation, or academic achievement without examining the individual’s perceptions of self-efficacy (Gosselin & Maddux, 2003). Individuals with high self-efficacy are not easily discouraged in areas in which they feel competent, displaying resistant behavior against obstacles and coping with emotional difficulties more easily (Grigorenko & O’Keefe, 2004). Self-efficacy is related to an individual’s limited specialized domains and is not a general reflection of one’s self-belief, in contrast to self-esteem or self-confidence. However, these concepts are closely related because they all reflect a positive impression of self (Heslin & Klehe, 2006; Lightsey, Burke, Ervin, Henderson, & Yee, 2006).

There has been growing interest in the concept of self-efficacy in the field of education in the past twenty years because self-efficacy is understood as a determining factor for academic achievement. Even if an individual’s actual skill level is low, a high level of self-efficacy will foster a high level of motivation for and dedication to a given task, thus facilitating a higher level of success (Gürsoy & Karaca, 2018).

Negative self-efficacy beliefs are also closely related to social anxiety among all age groups, including adolescents. Social anxiety has a significant impact on self-esteem and self-efficacy, with the correlation being mutual. Self-evaluative negative thoughts due to an adolescent’s low self-esteem and self-efficacy can cause the development of social anxiety. In turn, social anxiety further deepens self-evaluative negative thoughts and lowers self-efficacy (Rudy, Davis, & Matthews, 2012).

Many studies in the literature have addressed the definitions of social anxiety, self-efficacy, and speaking skills. However, the scarcity of studies specifically exploring the relationship between speaking self-efficacy and social anxiety among secondary school students is noteworthy. At the same time, many researchers examining related concepts have emphasized that personal characteristics such as self-confidence, speaking skills, and social anxiety levels may differ from culture to culture according to various factors (Khanlou, 2004; Koç & Dündar, 2018; Little, Swangler, & Akin-Little, 2017; Maharani, 2016). These potential cultural variations suggested by the literature highlight the ongoing need for regional investigations of the correlation between speaking self-efficacy and social anxiety. This study accordingly aimed to evaluate speaking self-efficacy and social anxiety among Turkish secondary school students.

Research Questions

1. Are sociodemographic characteristics predictive of speaking self-efficacy?
2. Is speaking self-efficacy predictive of social anxiety level?

Method

Type of Study: This study was conducted with a cross-sectional, descriptive, and relational design to evaluate the effects of secondary school students' speaking self-efficacy levels on their social anxiety levels.

Place and Time of the Research: After obtaining official permission from the District Directorate of National Education, communication was established with 22 secondary or middle schools in the Atakum district of Samsun, Turkey. Fifteen of these schools were available for cooperation on the planned dates of the study and four of those schools were randomly selected for data collection. The randomization process was carried out using the computer-based Research Randomizer program available at randomizer.org. The research was conducted in Samsun, a province located in the north of Turkey, between December 2022 and January 2023.

Sample of the Study: The sample size required for the study was calculated using the G*POWER 3.1.0 statistical analysis program. For a significance level of 0.05, power of 80%, and effect size of 0.1, the sample size for linear regression analysis was determined as 595 students. Secondary/middle school students between the ages of 11 and 14 from four different schools who agreed to participate in the research and answered all of the questions were included in the study. Descriptive characteristics of these students are presented in Table 1.

Data Collection Tools: Data were obtained using a sociodemographic data collection form, the Social Anxiety Scale for Adolescents, and the Speaking Self-Efficacy Scale for Secondary School Children.

Sociodemographic Data Collection Form: This form, completed by the children, included questions addressing the ages and educational statuses of their parents, economic status, number of children in the family, age and gender of the child, and how the child evaluated his or her academic success.

Social Anxiety Scale for Adolescents: This scale was developed by La Greca and Lopez (1998) to measure the social anxiety levels of adolescents. The scale items are scored with a five-point Likert-type self-report measurement tool between 1 ("never") and 5 ("always")(La Greca & Lopez, 1998). The Turkish validity and reliability study of the scale was conducted by Aydın and Sütçü (2007). The Turkish scale contains a total of 18 items and three factors. The first factor, "fear of negative evaluation," is evaluated using items 6, 8, 9, 12, 14, 17, and 18; the second factor, "fear and unrest in new social situations," is evaluated using items 1, 3, 4, 5, 10, and 13; and the third factor, "fear and unrest in general social situations," is evaluated using items 15, 19, 20, 21, and 22. A minimum of 18 and a maximum of 90 points can be obtained from the scale, with higher scores reflecting higher levels of social anxiety. The total Cronbach alpha coefficient of the scale was found to be 0.88 and the split-half reliability coefficient was 0.85. Thus, it was concluded that this scale is valid and reliable for assessing social anxiety among children aged 10-14 in Turkey (Aydın & Sütçü, 2007).

Speaking Self-Efficacy Scale: This scale was developed by Hasırcı Aksoy, Arıcı, and Kan (2021) to evaluate the speaking self-efficacy of secondary school students. It is a Likert-type scale consisting of 24 items. For each item, respondents are asked to assign a score between 1 and 5 in response to the following question: "How much do you agree with each of the items below?" A score of 1 signifies "strongly agree," 3 "undecided," and 5 "strongly disagree." The lowest possible score is 24 and the highest is 120, with higher total scores reflecting decreases in the level of speaking self-efficacy. The total Cronbach alpha coefficient of the scale was found to be 0.81 and the Cronbach alpha coefficients of the scale's factors vary between 0.72 and 0.85. These factors are "affective," "content," "translingual," and "influence." "Affective" consists of eight items (items 1-8), "content" consists of seven items (items 9-15), "translingual" consists of six items (items 16-21), and "influence" consists of three items (items 22-24). The confirmatory factor analysis results and internal consistency coefficients reported by the authors of the scale confirmed that it is valid and reliable (Hasırcı Aksoy et al., 2021).

Data Collection and Evaluation: Data were collected face-to-face in the selected schools. To evaluate these data, IBM SPSS Statistics 25.0 was used (Mehta & Patel, 2011). Descriptive data were evaluated as percentages and means. The compliance of the data to normal distribution was examined by calculating kurtosis and skewness coefficients. To determine the internal consistency of the scales used in the study, Cronbach alpha coefficients were calculated. Linear regression analysis was used to evaluate how sociodemographic characteristics predicted speaking self-efficacy levels and how speaking self-efficacy levels predicted social anxiety levels. Whether or not the scale scores would be included in the regression model was determined by multicollinearity analysis. Accordingly, scale scores with a variance inflation factor of less than 10 and a tolerance value above 0.2 were included in the model. The significance level was determined as 0.05.

Ethical Dimensions of the Research: Permission to conduct this research was obtained via email from the owners of the scales that were used. Written permission was also obtained from the affiliated institution's Social and Human Sciences Research Ethics Committee with date 05.27.2022 and decision number 2022-487. Written permission numbered E-67180656-604.01-64332254 was obtained from the Provincial Directorate of National Education to conduct the research in the selected secondary schools. Finally, written consent was obtained from all participating children and their parents before the scales and the sociodemographic data collection form were administered.

Results

The mean age of the children participating in the study was 12.71 ± 0.73 years, 51.1% of the children were girls, 48.4% were the oldest child of the family, and 46.4% belonged to families with two children. The education level of 33.1% of the mothers and 34.8% of the fathers of the participating children was high school. While 52.9% of the children evaluated their family income status as "income equal to expenses," 56.6% evaluated their academic achievement as "moderate" (Table 1).

Table 1. Sociodemographic characteristics of the participating students (n=595)

Descriptive characteristics		n	%
Gender	Female	304	51.1
	Male	291	48.9
Number of children in the family	1 child	71	11.9
	2 children	276	46.4
	3 children	184	30.9
	4 or more children	64	10.8
Birth order of the child	1st child	288	48.4
	2nd child	205	34.5
	3rd or later child	102	17.1
Mother's educational status	Primary school	133	22.4
	Secondary/middle school	107	18.0
	High school	197	33.1
	University	158	26.6
Father's educational status	Primary school	103	17.3
	Secondary/middle school	109	18.3
	High school	207	34.8
	University	176	29.6
Income status	Income less than expenses	65	10.9
	Income equal to expenses	315	52.9
	Income greater than expenses	215	36.1
Academic achievement status	Good	218	36.6
	Moderate	337	56.6
	Poor	40	6.7

When the internal consistency coefficients of the scales used in this study and their factors were evaluated, it was found that the Speaking Self-Efficacy Scale had a Cronbach alpha coefficient of 0.906 while the coefficients of its factors varied between 0.678 and 0.799. The Cronbach alpha coefficient of the Social Anxiety Scale for Adolescents was 0.900 while those of its factors varied between 0.707 and 0.881. Mean scores and kurtosis and skewness coefficients were also calculated for the total scales and their factors. The kurtosis-skewness ratios ranged between -2.5 and +2.5 and so it was concluded that the data were normally distributed (Table 2).

Table 2. Mean scores and kurtosis and skewness coefficients for the total scales and their factors

		Mean	SD	Min.	Max.	Kurtosis	Skewness
	Total KOO	57.2134	15.75720	24.00	120.00	0.422	0.325
Factors	Affective	20.3462	6.09889	8.00	40.00	-0.082	0.319
	Content	16.2134	5.25637	7.00	35.00	0.379	0.487
	Translingual	13.2437	4.57516	6.00	30.00	0.529	0.643
	Influence	7.4101	2.87505	3.00	15.00	-0.226	0.461
	Total ESK	44.1445	14.45098	18.00	87.00	-0.212	0.572
Factors	ESK_ODK	17.2353	7.32358	7.00	35.00	-0.475	0.627
	ESK_YSDKH	15.9176	4.99781	6.00	29.00	-0.298	0.342
	ESK_GSDKH	10.9916	4.38834	5.00	25.00	0.032	0.738

KOO: Speaking Self-Efficacy Scale; ESK: Social Anxiety Scale for Adolescents; ODK: Fear of Negative Evaluation; YSDKH: Fear and Unrest in New Social Situations; GSDKH: Fear and Unrest in General Social Situations

The ability of the participants' sociodemographic characteristics to predict speaking self-efficacy levels was evaluated with simple linear regression analysis. It was determined that the considered sociodemographic characteristics significantly predicted levels of speaking self-efficacy ($F=9.737$, $p<0.001$). The sociodemographic characteristics of the participants explained 11.7% of the variance in levels of speaking self-efficacy ($R^2=0.117$) (Table 3).

Table 3. Prediction of speaking self-efficacy levels by sociodemographic characteristics (n=595)

Independent variables*	Unstandardized coefficients		Standardized coefficients	t	p**	95.0% CI
	B	SE	β			
(Constant)	59.579	4.379		13.60	0.000	50.97 to 68.18
Gender: Female	0.300	1.243	0.010	0.24	0.810	2.14 to 2.74
Number of children in the family	1.012	0.760	0.054	1.33	0.184	-0.48 to 2.50
Mother's educational status	-1.587	0.647	-0.111	-2.45	0.014	-2.86 to -0.32
Father's educational status	-0.746	0.661	-0.050	-1.13	0.259	-2.04 to 0.55
Income: Less than expenses	-0.263	2.189	-0.005	-0.12	0.904	-4.56 to 4.04
Income: Equal to expenses	1.784	1.365	0.057	1.31	0.192	-0.90 to 4.46
Academic success: Moderate	7.141	1.314	0.225	5.43	0.000	4.56 to 9.72
Academic success: Poor	14.963	2.579	0.238	5.80	0.000	9.90 to 20.03

Durbin-Watson statistic=1.541; $F=9.737$, $p<0.001$; $R=0.343$; $R^2=0.117$; adjusted $R^2=0.105$

CI: Confidence interval; SE: standard error; β : standardized regression coefficient

*: Dependent variable=level of speaking self-efficacy; **: significance was accepted at $p<0.05$

The ability of the participants' speaking self-efficacy levels to predict social anxiety was also evaluated with simple linear regression analysis. It was determined that speaking self-efficacy levels significantly predicted social anxiety levels ($F=113.243$, $p<0.001$). The speaking self-efficacy levels of the participants explained 16% of the variance in their social anxiety levels ($R^2=0.160$) (Table 4).

Table 4. Prediction of social anxiety levels by speaking self-efficacy levels (n=595)

Independent variable*	Unstandardized coefficients		Standardized coefficients	t	p**	95.0% CI
	B	SE	β			
(Constant)	23.134	2.048		11.297	0.000	19.11 to 27.15
KOO_Top	0.367	0.035	0.400	10.642	0.000	0.29 to 0.43

Durbin-Watson statistic=2.059; F=113.243, p<0.001; R=0.400; R²=0.160; adjusted R²=0.159

KOO_Top: Speaking Self-Efficacy Scale total score; CI: confidence interval; SE: standard error; β : standardized regression coefficient

*: Dependent variable=level of social anxiety; **: significance was accepted at p<0.05

Decreases in the total score and factor scores of the Speaking Self-Efficacy Scale led to an increase in the level of social anxiety. The factor of affective speech self-efficacy explained 27.7% of the variation in social anxiety level (β =0.526, F=226.849, p<0.001). The content factor of the Speaking Self-Efficacy scale explained 6.6% of the variation in social anxiety level (β =0.257, F=42.059, p<0.001), while the translingual factor explained 6.4% of the variance (β =0.252, F=40.345, p<0.001) and the factor of influence explained 4.3% (β =0.027, F=26.451, p<0.001) (Table 5).

Table 5. Predictive power of the total Speech Self-Efficacy Scale and its factors for social anxiety levels (n=595)

Independent variable*	KOO_Top	Affective	Content	Translingual	Influence
β	0.400**	0.526**	0.257**	0.252**	0.207**
R	0.400	0.526	0.257	0.252	0.207
R ²	0.160	0.277	0.066	0.064	0.043
Adjusted R ²	0.159	0.275	0.065	0.062	0.041
F	113.243	226.849	42.059	40.345	26.451
p	<0.001	<0.001	<0.001	<0.001	<0.001
Durbin-Watson	2.059	2.028	2.103	2.102	2.117

KOO_Top: Speaking Self-Efficacy Scale total score; β : standardized regression coefficient

*: Dependent variable=Speaking self-efficacy; **: significance was accepted at p<0.05

Discussion

Speaking skills, defined as a subtype of social skills, are among the most important requirements for effective communication (Barbot et al., 2019; Bariaud, 2006; Biemans et al., 2008; Blöte et al., 2009). An individual's perceptions of his or her skills in given subjects and the belief that he or she will be successful in particular tasks are defined as self-efficacy (Carroll et al., 2009), and it has been demonstrated that people with high self-efficacy cope with emotional difficulties more easily (Grigorenko & O'Keefe, 2004). One such emotional difficulty is social anxiety, which is widely prevalent in adolescence (Jazaieri, Morrison, Goldin, & Gross, 2015). This study aimed to evaluate the speaking self-efficacy and social anxiety status of secondary school students. It was hypothesized that the sociodemographic characteristics of secondary school students affect their speaking self-efficacy levels and that speaking self-efficacy is a predictor of social anxiety level.

The first research question of the present study was whether sociodemographic characteristics are predictive of speaking self-efficacy. Our findings showed that the educational statuses of participants' mothers significantly explained the participants' perceptions of speaking self-efficacy. Previous studies have similarly demonstrated that maternal education has positive effects on children in many areas. According to American sociologist James S. Coleman (1988), the education level of the mother creates potential within the framework of the theory of social capital by providing a suitable cognitive environment for the child's development and learning (Oettingen & Hagenah, 2005). Developmental studies have also consistently shown strong correlations between children's cognitive development and mothers' education levels (Magnuson, 2007; Sirin, 2005). According to Jaffee, Caspi,

Moffitt, Polo-Tomas, and Taylor (2007), a possible explanation for this could be that more highly educated mothers provide more supportive home environments for their children by creating better learning opportunities. However, this support may vary from indirectly modeling learning behaviors for the child to directly engaging in the child's learning activities. Another frequent finding in the literature is the correlation between maternal education and children's self-confidence. For example, in a study conducted by Şahin, Barut, and Ersanlı (2013) in Turkey with 2213 secondary school students (mean age: 12.76 years), the mother's education level was found to positively affect the self-confidence levels of the children. Another example is the study conducted by Khanlou (2004) with 550 secondary school students in Canada. Khanlou (2004) examined the relationships between maternal and paternal education levels and children's self-confidence levels and found a significant relationship between the mother's education and self-confidence. These findings appear to be consistent with the findings of the present study in light of the documented significant relationship between self-efficacy and self-confidence (Lane, Lane, & Kyprianou, 2004). More precisely, speaking self-efficacy is a source of self-confidence for adolescents and it reflects a positive impression of the self (Desmaliza & Septiani, 2017; Heslin & Klehe, 2006). This relationship between maternal education and the child's level of speaking self-efficacy could be due to the interactions between mother and child. Mothers generally spend the most time with children before they enter school; therefore, the extent of the mother's vocabulary has considerable influence on the child's early language development. As the number of words used by the mother increases, so does the number of words to which the child is exposed, which may directly influence the vocabulary of the child and positively affect speaking self-efficacy (Singh, Yeung, Cheng, & Heng, 2023).

In this study, it was determined that the child's gender, number of siblings, father's education, and family's socioeconomic status had no effects on speaking self-efficacy. Similarly to our findings, Porter, Smart, Hennessey, and Cocks (2024) determined that gender had no effect on speech status. In contrast, Liu and Chung (2022) determined that fathers were as effective as mothers in the language development of their children and that language development increased as socioeconomic level increased. No previous study investigating the effect of the number of siblings on speaking self-efficacy was found in the literature.

Another significant finding of the present study was the relationship between academic achievement and speaking self-efficacy. One of the determining factors of academic success is the perception of self-efficacy (Phan, 2012). Many studies have confirmed the connection between these two phenomena (Reed, McLeod, & McAllister, 1999). For example, Ahmadi (2020) demonstrated a strong relationship between academic self-efficacy and academic achievement in a study with 365 high school adolescents. In another study, Phan (2012) found that the self-efficacy perceptions of 252 upper-level primary school students regarding science were a determining factor that positively affected their academic achievement. Consistent with the previous research, the findings obtained in the present study confirmed that self-efficacy is an important factor in academic achievement. Strong academic achievement may be attributed to increased speaking self-efficacy leading to increased motivation in oral classroom activities. Self-efficacy has been described as being closely related to motivation, thus inspiring adolescents to participate in oral classroom activities more willingly and persistently (Gosselin & Maddux, 2003). In addition, research has been conducted to improve students' reading skills based on findings that as students' speaking proficiency and reading levels increase their academic success also increases (Angshana, 2020). In light of such findings, it can be assumed that increasing the number of practices aimed at improving reading skills in schools will improve children's vocabulary and, thus, their speaking and expression skills will improve.

The second research question of the present study asked whether speaking self-efficacy is a predictor of social anxiety. In the study conducted by Iancu, Bodner, and Ben-Zion (2015), the Liebowitz Social Anxiety Scale (LSAS) and the Depressive Experiences Questionnaire were administered to participants with and without a diagnosis of social anxiety disorder to assess self-efficacy. The results showed that LSAS scores correlated negatively with self-efficacy and positively with negative self-

evaluations and self-criticism. Similarly, our findings revealed a significant relationship between levels of speaking self-efficacy and levels of social anxiety. Decreases in speaking self-efficacy significantly predicted increases in social anxiety. Similar conclusions can be found in the literature. For example, in a study conducted with 124 university students with high social anxiety levels, it was determined that the students' levels of speaking self-efficacy were low (Dewi & Jimmi, 2018). In another study that included a total of 595 students from 10 different schools, the academic self-efficacy and speaking anxiety levels of secondary school students were examined and a moderate negative correlation between speaking anxiety and academic self-efficacy was observed (Şahin et al., 2013). In another study of secondary school students, 382 students were included and the relationship between communication skills and social anxiety levels was examined. The researchers reported a strong inverse relationship between social anxiety and communication skills (Stein & Stein, 2008). Self-impression seems to have a decisive influence on social anxiety in both general and specialized fields. As expected, the findings of the present study are consistent with previous findings in the literature.

Another noteworthy finding of this study was that the relationship between speaking self-efficacy and social anxiety was significant for all factors of the Speaking Self-Efficacy Scale. As to be expected, the strongest relationship was observed for the factor of influence. This factor includes affective components such as anxiety. However, the other factors of the scale also seem to significantly predict social anxiety (Morrison & Heimberg, 2013). Due to the lack of previous studies exploring the factors of this scale, further comparisons of our findings with the literature are not possible.

This study has some limitations. Although previous studies have addressed related concepts such as self-confidence, which reflects a more general perception of the self and one's speaking ability, studies directly focusing on the speaking self-efficacy and social anxiety of secondary school students are limited. The lack of previous findings with which to compare the findings of the present study posed a challenge in the interpretation of our results. Another limitation is that variables such as academic achievement and parental education levels were evaluated based on students' statements. Although some studies in the literature suggest that these self-reports could be trustworthy, the possibility of misleading or inaccurate answers should not be ignored (Anaya, 1999; Vahab, Shahim, Oryadizanjani, Jafari, & Faham, 2012; Willemse, 2008). Finally, the study is limited to the province in which it was conducted and the results are not generalizable to the country as a whole.

Conclusion

In this study, it was determined that sociodemographic characteristics were predictive of the speaking self-efficacy levels of the participants. The findings also showed a significant inverse relationship between speaking self-efficacy and social anxiety. Speaking self-efficacy appeared to be a predictor of the participants' social anxiety levels, with a decrease in speaking self-efficacy leading to an increase in social anxiety.

Suggestions

The findings of this study have confirmed that social anxiety is a common problem among adolescents. Therefore, establishing effective intervention strategies is of great importance. Although some research has yielded inconclusive results regarding its usefulness for social anxiety, social skills training including verbal communication and public speaking is generally considered one of the most appropriate interventions for adolescents with social anxiety, and a considerable body of research supports the improvement of the communication skills of adolescents following such training (Bowles, 2017). Based on these results, it is recommended to devote more space in educational curricula to activities designed to improve the speaking skills of adolescents. In this regard, it should be noted that the primary target audiences of this study are educational institutions, teachers, and parents. Future studies may include participants of different age groups and different sociocultural backgrounds. In addition, it is recommended that the data to be collected in future studies be based not only on the statements of students but also the statements of teachers and parents, which will make the data collection process more reliable.

References

- Ahmadi, S. (2020). Academic self-esteem, academic self-efficacy, and academic achievement: A path analysis. *Journal of Forensic Psychology, 5*(1), 155.
- Anaya, G. (1999). Accuracy of self-reported test scores. *College and University, 75*(2), 13-19.
- Angshana, B. (2020). *An analysis on students' reading behavior through extensive reading in drama class at sixth semester students of TBI IAIN Bengkulu academic year 2019/2020* (Doctoral dissertation). Bengkulu State Islamic Institute, Bengkulu.
- Aydın, A., & Sütçü, S. T. (2007). Ergenler için sosyal kaygı ölçeğinin (ESKÖ) geçerlik ve güvenilirliğinin incelenmesi. *Çocuk ve Gençlik Ruh Sağlığı Dergisi, 14*(2), 79-89.
- Aysel, A. (2018). Investigation of secondary school students' reading anxiety and academic self-efficacy beliefs in terms of various variables. *International e-journal of Educational Studies, 2*(3), 26-43.
- Barbot, B., Safont-Mottay, C., & Oubrayrie-Roussel, N. (2019). The multidimensional scale of self-esteem (EMES-16): Psychometric evaluation of a domain-specific measure of self-esteem for French-speaking adolescents. *International Journal of Behavioral Development, 43*(5), 436-446.
- Bariaud, F. (2006). Le Self-perception profile for adolescents (SPPA) de S. Harter. Un questionnaire multidimensionnel d'évaluation de soi. *L'Orientation Scolaire et Professionnelle, 35*(2), 282-295.
- Biemans, M., Halteren, A., Dijk, B., Rijckenberg, J., & Poortinga, R. (2008). We'll stay in touch: intuitive communication means for social connectedness. In *Proceedings of the 11th International ACM SIGACCESS Conference on Computers and Accessibility* (pp. 179-186). Pittsburgh: ACM.
- Blöte, A. W., Kint, M. J., Miers, A. C., & Westenberg, P. M. (2009). The relation between public speaking anxiety and social anxiety: A review. *Journal of Anxiety Disorders, 23*(3), 305-313.
- Blöte, A. W., Miers, A. C., Heyne, D. A., & Westenberg, P. M. (2015). Social anxiety and the school environment of adolescents. In K. Ranta, A. La Greca, L. J. Garcia-Lopez, & M. Marttunen (Eds.), *Social anxiety and phobia in adolescents* (pp. 151-181). Cham: Springer.
- Blum, R. W., Astone, N. M., Decker, M. R., & Mouli, V. C. (2014). A conceptual framework for early adolescence: a platform for research. *International Journal of Adolescent Medicine and Health, 26*(3), 321-331.
- Bowles, T. V. (2017). The focus of intervention for adolescent social anxiety: Communication skills or self-esteem. *International Journal of School & Educational Psychology, 5*(1), 14-25.
- Carroll, A., Houghton, S., Wood, R., Unsworth, K., Hattie, J., Gordon, L., & Bower, J. (2009). Self-efficacy and academic achievement in Australian high school students: The mediating effects of academic aspirations and delinquency. *Journal of Adolescence, 32*(4), 797-817.
- Cheung, P. P., Siu, A. M., & Brown, T. (2017). Measuring social skills of children and adolescents in a Chinese population: Preliminary evidence on the reliability and validity of the translated Chinese version of the social skills improvement System-Rating Scales (SSIS-RS-C). *Research in Developmental Disabilities, 60*, 187-197.
- Coleman, J. S. (1988). Social capital in the creation of human capital. *American Journal of Sociology, 94*(1), 95-120.
- Desmaliza, D., & Septiani, T. (2017). Student's self-efficacy and their speaking skill at lower secondary school. In *International Conference on Education in Muslim Society (ICEMS 2017)* (pp. 122-127). Atlantis Press.
- Dewi, N., & Jimmi, J. (2018). The correlation between vocabulary mastery and self-esteem on students' speaking skill. *Wanastra, 10*(1), 78-83.
- Gosselin, J. T., & Maddux, J. E. (2003). Self-efficacy. In M. R. Leary, & J. P. Tangney (Eds.), *Handbook of self and identity* (pp. 218-238). New York: Guilford Press.

- Grigorenko, E. L., & O'Keefe, P. A. (2004). What do children do when they cannot go to school? In R. J. Sternberg, & E. L. Grigorenko (Eds.), *Culture and competence: Contexts of life success* (pp. 23-53). Washington: American Psychological Association.
- Gürsoy, E., & Karaca, N. (2018). The effect of speaking anxiety on speaking self-efficacy of children in a FLL context. *International Journal of Language Academy*, 6(3), 194-210.
- Hasırcı Aksoy, S., Arıcı, M. A., & Murat, K. A. N. (2021). Speaking Self-Efficacy scale development study for secondary school students. *OPUS International Journal of Society Researches*, 18(41), 3631-3653.
- Heslin, P. A., & Klehe, U. C. (2006). Self-efficacy. In S. G. Rogelberg (Ed.), *Encyclopedia of industrial/organizational psychology* (2nd ed., pp. 705-708). Thousand Oaks: Sage.
- Iancu, I., Bodner, E., & Ben-Zion, I. Z. (2015). Self esteem, dependency, self-efficacy and self-criticism in social anxiety disorder. *Comprehensive Psychiatry*, 58, 165-171.
- Jaffee, S. R., Caspi, A., Moffitt, T. E., Polo-Tomas, M., & Taylor, A. (2007). Individual, family, and neighborhood factors distinguish resilient from non-resilient maltreated children: A cumulative stressors model. *Child Abuse & Neglect*, 31(3), 231-253.
- Jazaieri, H., Morrison, A. S., Goldin, P. R., & Gross, J. J. (2015). The role of emotion and emotion regulation in social anxiety disorder. *Current Psychiatry Reports*, 17, 1-9.
- Khanlou, N. (2004). Influences on adolescent self-esteem in multicultural Canadian secondary schools. *Public Health Nursing*, 21(5), 404-411.
- Koç, M., & Dündar, A. (2018). Research on social anxiety level and communication skills of secondary school students. *Asian Journal of Education and Training*, 4(4), 257-265.
- La Greca, A. M., & Lopez, N. (1998). Social anxiety among adolescents: Linkages with peer relations and friendships. *Journal of Abnormal Child Psychology*, 26(2), 83-94. doi:10.1023/a:1022684520514
- Lane, J., Lane, A. M., & Kyprianou, A. (2004). Self-efficacy, self-esteem and their impact on academic performance. *Social Behavior and Personality: An International Journal*, 32(3), 247-256.
- Lightsey Jr, O. R., Burke, M., Ervin, A., Henderson, D., & Yee, C. (2006). Generalized self-efficacy, self-esteem, and negative affect. *Canadian Journal of Behavioural Science*, 38(1), 72.
- Little, S. G., Swangler, J., & Akin-Little, A. (2017). Defining social skills. In J. L. Matson (Ed.), *Handbook of social behavior and skills in children* (pp. 9-17). Cham: Springer.
- Liu, C., & Chung, K. K. H. (2022). Effects of fathers' and mothers' expectations and home literacy involvement on their children's cognitive-linguistic skills, vocabulary, and word reading. *Early Childhood Research Quarterly*, 60, 1-12.
- Magnuson, K. (2007). Maternal education and children's academic achievement during middle childhood. *Developmental Psychology*, 43(6), 1497.
- Maharani, S. (2016). The use of puppet: Shifting speaking skills from the perspective of students' self-esteem. *Register Journal*, 9(2), 170-186.
- McNeeley, C., & Blanchard, J. (2010). *The teen years explained: A guide to healthy adolescent development*. Baltimore: Johns Hopkins Bloomberg School of Public Health.
- Mehta, C. R., & Patel, N. R. (2011). *IBM SPSS exact tests*. Armonk: IBM Corp.
- Morrison, A. S., & Heimberg, R. G. (2013). Social anxiety and social anxiety disorder. *Annual Review of Clinical Psychology*, 9, 249-274.
- Oettingen, G., & Hagenah, M. (2005). Fantasies and the self-regulation of competence. In A. J. Elliot & C. S. Dweck (Eds.), *Handbook of Competence and Motivation* (pp. 647-665). New York: Guilford Press.
- Phan, H. P. (2012). Relationship between informational sources, self-efficacy, and academic achievement: A developmental approach. *Educational Psychology*, 32(1), 81-105.

- Porter, K., Smart, S., Hennessey, N., & Cocks, N. (2024). Chewing skills in two and three year old children: Gender and age comparisons on an adapted version of the Test of Mastication and Swallowing (TOMASS-C). *International Journal of Speech-Language Pathology*, 26(1), 38-44.
- Reed, V. A., McLeod, K., & McAllister, L. (1999). Importance of selected communication skills for talking with peers and teachers: Adolescents' opinions. *Language, Speech, and Hearing Services in Schools*, 30(1), 32-49.
- Rudy, B. M., Davis, T. E. 3rd, & Matthews, R. A. (2012). The relationship among self-efficacy, negative self-referent cognitions, and social anxiety in children: A multiple mediator model. *Behavior Therapy*, 43(3), 619-628.
- Schmidt, L. A., Poole, K. L., Hassan, R., & Willoughby, T. (2022). Frontal EEG alpha-delta ratio and social anxiety across early adolescence. *International Journal of Psychophysiology*, 175, 1-7.
- Singh, L., Yeung, W. J. J., Cheng, Q., & Heng, E. Y. T. (2023). The home literacy environment mediates the effects of socioeconomic status on infant vocabulary development. *Developmental Science*, 26(4), e13349.
- Sirin, S. R. (2005). Socioeconomic status and academic achievement: A meta-analytic review of research. *Review of Educational Research*, 75(3), 417-453.
- Spear, L. (2010). *The behavioral neuroscience of adolescence*. London: W. W. Norton.
- Stein, M. B., & Stein, D. J. (2008). Social anxiety disorder. *Lancet*, 371(9618), 1115-1125.
- Şahin, E., Barut, Y., & Ersanlı, E. (2013). Parental education level positive affects self-esteem of Turkish adolescents. *Journal of Education and Practice*, 4(20), 87-97.
- Vahab, M., Shahim, S., Oryadizanjani, M. M., Jafari, S., & Faham, M. (2012). The relationship of expressive language development and social skills in 4-6-year-old Persian-speaking children. *Audiology*, 21(4), 28-36.
- Willemse, M. (2008). *Exploring the relationship between self-efficacy and aggression in a group of adolescents in the peri-urban town of Worcester* (Doctoral dissertation). Stellenbosch University, Stellenbosch.