

Access this article online
Quick Response Code:

Website: www.jehp.net
DOI: 10.4103/jehp.jehp_1844_21

Investigating the effect of cognitive-behavioral educational intervention on the development of female teenagers' social skills in Khomeini Shahr

Masoomeh Kazemi, Maryam Amidi Mazaheri¹, Akbar Hasan Zadeh²

Abstract:

BACKGROUND: Social skills are necessary for teenagers to have good interactions, accept roles, and adapt to conditions in the community. The present study investigated the effect of cognitive-behavioral educational intervention on students' social skills.

MATERIALS AND METHODS: This experimental study was completed on 102 female students in Khomeini Shahr, Isfahan. Fifty-seven students participated in the online cognitive-behavioral educational program of social skills for five sessions, and 57 students were assigned to the control group. The data from the Matson Evaluation of Social Skills with Youngsters (for subjects aged 4–18 years old) were collected before and 1 month after the interventional program. The data were analyzed using SPSS 25, independent *t*-test, Mann–Whitney test, and Chi-squared test.

RESULTS: The independent *t*-test showed that before the intervention, the total mean score of social skills and its variables were not significantly different between the intervention and control groups ($P > 0.05$). However, after the intervention, the total mean score of social skills and the variables of appropriate communication skills, relationship with peers, and impulsive behaviors in the intervention group was significantly more than the control group, but the mean scores of antisocial and arrogant behaviors (haughtiness) were not significantly different between the two times in the intervention and control groups.

CONCLUSIONS: The results show that participation in educational intervention significantly increased student's social skills development; it is suggested to incorporate cognitive-behavioral intervention in educational programs for adolescents.

Keywords:

Adolescent, cognitive-behavioral therapy, emotion, social skills

Department of Health Education and Promotion Student Research Committee, School of Health, Isfahan University of Medical Sciences, Isfahan, Iran, ¹Department of Health Education and Promotion, School of Health, Isfahan University of Medical Sciences, Isfahan, Iran, ²Department of Biostatistics and Epidemiology, School of Health, Isfahan University of Medical Sciences, Isfahan, Iran

Address for correspondence:

Dr. Maryam Amidi Mazaheri, Departments of Health Education and Promotion, School of Health, Isfahan University of Medical Sciences, Isfahan, Iran. E-mail: maryamamidi@hlth.mui.ac.ir

Received: 22-12-2021
Accepted: 07-02-2022
Published: 26-11-2022

Introduction

Social skills refer to skills applied to interpersonal interactions and to communicate with others and, unlike behaviors that are accidental or unintentional, are purposeful, valuable, and following customs, so that they are beneficial for the individual and family and cause positive interactions and warm and intimate

relationships with others and prevent them from being excluded from the society, leading to a sense of trust, peace, and security in individuals.^[1] Social skills as a predisposition to interaction and communicating with others include verbal and nonverbal behaviors, which is a basic need in human beings.^[2]

It is a part of social skills to know how to behave in different situations; the person

This is an open access journal, and articles are distributed under the terms of the Creative Commons Attribution-NonCommercial-ShareAlike 4.0 License, which allows others to remix, tweak, and build upon the work non-commercially, as long as appropriate credit is given and the new creations are licensed under the identical terms.

For reprints contact: WKHLRPMedknow_reprints@wolterskluwer.com

How to cite this article: Kazemi M, Amidi Mazaheri M, Hasan Zadeh A. Investigating the effect of cognitive-behavioral educational intervention on the development of female teenagers' social skills in Khomeini Shahr. *J Edu Health Promot* 2022;11:378.

with social skills communicates with others in a way to achieve a reasonable level of rights, requirements, satisfaction, or fulfillment of his/her duties. Such a person does not ignore others' rights, requirements, or duties and can have an open and free interaction with others.^[3] Social skills as complex processes enable the person to behave in a way that others know him/her as a competent person and are a set of behaviors whose development and improvement cause useful and effective performance in society.^[4]

Social skills are the capacity to develop satisfying social relationships, influence the social environment, and solve social life problems.^[5]

Since adolescence is of great importance in the life cycle of human life, it is necessary to pay attention to the skills adolescents need, including social skills that are influenced by cultural and environmental contexts and play a decisive role in the quality of behavior. Adolescents should learn such skills to achieve success and progress, identification, interactions and relationship with peers, making decisions, and resolving conflicts. On the other hand, interaction and effective communication with others require the perception of one's and others' feelings, and the ability to empathize with others is a big step toward success in social communication.^[6,7]

Lack of social skills in adolescents affects their efficiency and dynamism and prevents them from forming a normal identity and flourishing talents and intellectual and emotional abilities.^[8] Consequences of poor social skills in adolescents include bullying, loneliness, poor empathy, and violence, among others.^[9]

Furthermore, researchers have confirmed that recently students spend a lot of time with the media especially the digital form of media and engage in social media.^[10,11] This situation leads to decreasing face-to-face social interaction and communication. Therefore, it is necessary to pay attention to strengthening their communication and social interaction.

Elementary school is a sensitive period in which the foundations of fundamental cognitive and socioemotional competencies are established.^[12]

Numerous previous studies indicated that school-based approaches to promoting social-emotional skills have been effective in increasing children's social competencies and behavioral outcomes.^[6-9]

Compared to research conducted in other countries, less evidence on the impact of educational interventions on social-emotional development has emerged in elementary schools in Iran.

Furthermore, most of the Iranian studies have been focused on training social skills for children with disabilities, students with mental disorders, or mental retardation,^[13,14] and there are limited studies on the development of these skills in normal students. Despite the existence of varied educational techniques and strategies such as storytelling and role playing, few studies have evaluated the impact of educational interventions on children's cognitive and social-emotional skills in the normal Iranian elementary school students.

Given the importance of social skills in adolescents' health and wellbeing, the fundamental role of schools in providing effective training in this regard, and lack of research evidence that specifically examines educational technique and strategies, the present study investigated the effect of cognitive-behavioral educational intervention on female teenagers' social skills.

Materials and Methods

Study design and setting

The present experimental study had randomized control groups with a pretest-posttest design.

Study participants and sampling

The population consisted of female students aged 10–13 years old in the elementary schools of Khomeini Shahr in the academic year 2019–2020. Obtaining a license from Khomeini Shahr Education Department, two elementary schools for girls were randomly selected and assigned into a test and a control group. Using the cluster sampling method, two classes (57 students) were selected from the fifth and sixth grades and, according to the inclusion criteria, were included in the study. Consents of students and their parents and students' physical and mental health based on the health record were taken for participation in the study. The students with the absence for more than one training session for any reason or were not willing to continue the study for any reason were excluded from the study. Given the sample size formula used in the previous interventional studies^[15] and the confidence level of 95% and power test of 80%, the sample size was considered to be 44 people in each group. Considering the 30% probability of attrition, 57 students were selected for each group, of which six students in the test group were excluded due to the absence of more than one session. Similarly, in the comparison group, six students were excluded because of their refusal to participate.

Data collection tool and technique

Data collection tools were the Matson Evaluation of Social Skills with Youngsters (for subjects aged 4–18 years old) consisting of 62 items describing social skills for children and five subvariables of social skills^[16]:

1. Appropriate communication with others, including visual communication with others, being polite, calling others by name, and effective and efficient interaction with others. This subvariable includes 18 items of the scale.
2. Antisocial behaviors such as lying, beating, making abnormal, and annoying noises (11 items).
3. Impulsive and aggressive behaviors such as becoming angry easily, stubbornness (12 items).
4. Haughtiness includes behaviors such as admiring oneself, showing off, pretending to know everything, and regarding oneself as more intelligent and better than others (six items).
5. Relationship with peers, which includes jealousy and loneliness (nine items).

The subjects read each item and rated it according to a five-option Likert scale (from 1 = never to 5 = always). The reliability of the scale was calculated by Cronbach's alpha as 0.85 and was confirmed by Yousefi et al.^[17] (2002). The validity of the scale was confirmed by experts as follows: appropriate social skills (0.81), antisocial behaviors (0.80), aggressive and impulsive behaviors (0.73), haughtiness (0.34), and relationships with peers (0.87).^[18]

Educational intervention

At the beginning of the study, a virtual group was created for both test and control groups on the Iranian Student Education Network (Shaad). It should be noted that online education in Iran is performed via this network, which has the potential to create a group, send educational videos, and online training. The link of the social skills questionnaire on the electronic website of Press Online was provided to the participants via the virtual group. The volunteer students' information was collected.

The training content focused on recognizing emotions, and the emotion-focused cognitive-behavioral method^[19-21] was held for students in the test group in five sessions (1-h session a week) via the virtual space network (Shaad).

A trained instructor was responsible for training. In the cognitive dimension, the storytelling method was used to increase students' understanding of their own and others' emotions, as well as knowledge about communication and social skills. Thus, according to the content and subject of the session, a short story was told and the students were asked to present their conclusions as an assignment for the next session. The role-play technique was used in the behavioral dimension to use verbal and nonverbal reinforcement methods, apply three response styles (assertiveness, nonassertiveness, and aggression) in social interactions, and how to control

emotions in different situations.^[22,23] In this regard, a scenario related to the subject was presented to the students and they were asked to imagine themselves in the scenario and play the role, record their role play, and share it with others in the group.

Table 1 presents the details about the training sessions. The control group received no training.

One month after the intervention, the students in both groups answered the same questionnaire to evaluate the effect of the cognitive-behavioral intervention.

The data were analyzed by SPSS 25 and an independent *t*-test to compare the mean scores of quantitative variables. Fisher's exact test was used to examine the nominal qualitative variables. Mann-Whitney test was used to examine ordinal qualitative variables, an independent *t*-test was used to compare the mean of the total score of social skills, and its variables between the two groups before the intervention and analysis of covariance and paired *t*-test were used to compare the total score of social skills and its variables before and after the intervention in the two intervention and control groups. The scores were balanced from 100 to ease comparison and understanding.

Ethical consideration

The present study was approved by the Vice-Chancellor for Research (no. 399035). The Ethics Committee of Isfahan University of Medical Sciences approved the study protocol (ethics code IR.mui.RESEARCH.PEC.1399.199). The participants were first explained about the goals of the study and the informed consent forms (student and parent version) were sent to them. In addition, the participants were informed that their responses would be only used for research purposes.

Result

The students' age ranged between 10 and 13 years old. The independent *t*-test showed that there was no significant difference between the two groups in the mean age ($P = 0.14$) and the number of family members ($P = 0.60$). Fisher's exact test indicated that the frequency of living with both parents was not significantly different between the two groups ($P = 0.50$). The likelihood-ratio Chi-square test showed no significant difference in the frequency distribution of fathers' occupation between the two groups ($P = 0.25$). Also, the Chi-squared test showed no significant difference between the two groups in the frequency distribution of the mother's occupation ($P = 0.51$).

Paired *t*-test showed that the mean of total scores of social skills ($P = 0.006$) in the test group, and variables

Table 1: Summary of cognitive-behavioral training sessions regarding social skills of adolescents aged 10-13

Session	Cognitive-behavioral goals	Learning domain	Educational technique
1	The students, in the online group under the supervision of the trainer, acquired the required knowledge and attitude toward various emotions (fear, anger, sadness, hatred, surprise, happiness), as well as the importance of understanding them and their application	Cognitive-affective	story telling
2	The students, in the online group under the supervision of the trainer, acquired the required knowledge and attitude toward a variety of antisocial behaviors	Cognitive-affective	story telling
3	The students, in the online group under the supervision of the trainer, acquired the required knowledge, attitudes, and skills toward communication skills and verbal and nonverbal reinforcement	Cognitive-affective psychomotor	story telling role playing
4	The students, in the online group under the supervision of the trainer, acquired the required knowledge and attitude toward the three response styles (assertiveness, nonassertiveness, and aggression) in social interactions	Cognitive-affective psychomotor	story telling role playing
5	The students, in the online group under the supervision of the trainer, acquired the required knowledge and attitude toward controlling emotions in different situations	Cognitive-affective psychomotor	story telling role playing

of appropriate communication skills ($P < 0.001$) and relationship with peers ($P = 0.02$) after the intervention were significantly higher than those before the intervention. Also, the mean score of impulsive behaviors obtained after the intervention was significantly lower than that before the intervention ($P = 0.03$). The mean scores of antisocial behaviors ($P = 0.50$) and haughtiness ($P = 0.20$) were not significantly different before and after the intervention.

The independent *t*-test showed that before the intervention, the means of the total score of social skills and its variables were not significantly different between the two test and control groups. After the intervention, the mean of total scores of social skills, appropriate communication skills, and relationship with peers significantly increased in the test group, and the mean score of impulsive behaviors increasingly decreased. The mean scores of antisocial behaviors and haughtiness were not significantly different before and after the intervention. None of the variables showed significant differences before and after the intervention in the control group. Table 2 presents the comparison of the total scores means of social skills and its variables in the two test and control groups before and after the intervention.

Discussion

The findings showed that after the emotion-focused cognitive-behavioral intervention, the total score mean of social skills in the adolescents of the test group increased significantly compared to that obtained before the intervention and that of the control group. This finding was in line with the previous studies.^[24]

The development of social skills is a part of socialization processes so that the person needs to learn the appropriate social behavior and proper communication with others to reach his/her goals and satisfy desires and wants. The person needs to adapt to society which is only achieved by consciously recognizing and internalizing

the norms, values, customs, principles, and laws of society and acquiring social skills.^[6,22]

As the previous study on the relationship between emotions and social skills has indicated,^[25] the present study could change the total score of social skills and the three variables of appropriate communication skills, impulsiveness, and relationship with peers by affecting the processes of recognizing one's and others' emotions (emotional awareness), proper attitude toward communication and social skills, self-regulation, sympathy, reinforcing social skills by verbal and nonverbal methods in communication, attention to the three response styles (assertiveness, nonassertiveness, aggression), controlling emotions in different social situations by changing the situation, calming, and bold behaviors through the emotion-focused cognitive-behavioral approach.

The present study used the two methods of role playing and story telling. In these methods, engaging emotions and changing attitudes lead to behavioral changes.

Use of the role-play scenarios in educational interventions is particularly promising. Role playing enables learners to explore new situations and train how to act and react in these situations (22) and can be effective on learners' attitudes, emotions, values, and changing their behaviors through active participation of learners.

According to many scholars, this model is effective to change interpersonal and social interactions by putting individuals in a simulated environment;^[26,27] previous study showed that emotion-social training for Spanish high school students led to reduced conflicts among them.^[28]

Inconsistent with the results of the present study, the results of a study by Rezaei *et al.*^[29] showed no significant effect of social skills training on preschool children's aggression and impulsive behaviors.

Table 2: Comparison of total scores means of social skills and its variables in the two test and control groups before and after the intervention

Variable	groups	Time (Mean±SD)		P ^a
		Before intervention	After intervention	
Total score of social skills	Intervention (n=51)	76±12.2	81.4±9.5	0.006
	Control (n=51)	75.8±9.9	75.9±9.9	0.930
P		0.92	0.003	
Appropriate communication	Intervention (n=51)	78.4±10.1	86.3±11.1	0.001>
	Control (n=51)	79.2±9.9	79.5±10.5	0.840
P		0.68	>0.001	
Antisocial behaviors	Intervention (n=51)	14.4±2.3	12.7±1.4	0.50
	Control (n=51)	16±1.8	15.8±2.1	0.92
P		0.59	0.29	
Impulsive and aggressive	Intervention (n=51)	21.2±2.5	15.6±1.9	0.03
	Control (n=51)	22±2.1	21.4±1.9	0.74
P		0.80	0.03	
Haughtiness	Intervention (n=51)	47.8±19.3	44±16.2	0.20
	Control (n=51)	48.1±16	47.8±18.4	0.89
P		0.92	0.25	
Relationship with peers	Intervention (n=51)	70.8±20	77.3±16.7	0.02
	Control (n=51)	71.1±18.4	70.1±17.9	0.51
P		0.93	0.008	

The present study indicated no significant change in the mean score of antisocial behaviors in the test group and control group before and after intervention, which is inconsistent with the results by McDaniel study among southeast American students.^[15]

Research evidence has confirmed that various factors such as peer group and the effect of parental knowledge and quality of family relationships are influencing the development of antisocial behavior in youth.^[30]

All of these factors must be considered in preventing and addressing antisocial behavior. Future research will need to examine mechanisms of change in antisocial behaviors in teenage girls.

Likewise, this study showed no significant change in the mean score of haughtiness dimension of social skills includes behaviors such as admiring oneself, showing off, pretending to know everything, and regarding oneself as more intelligent and better than others. This was similar to the evidence provided by Rajaby study among girl's students of elementary schools at Gheshm.^[25]

Arrogant attitudes or behaviors have been associated with a range of personal characteristics, cultural, and intrapersonal factors. Future researches will need to consider other variables that may shed more light on the effectiveness of the educational intervention for arrogant and haughtiness behaviors in adolescent girls.

The achievement of this training program is of great importance for two reasons: first, studies of social skills have been performed on disabled people and were less

focused on early adolescence and healthy students.^[31,32] Second, the present study used the emotion-focused cognitive-behavioral method to affect social skills, while the previous studies used other methods.

Limitations and suggestions

Limitations of the study were the duration of the program and the method that was used, that is, the cognitive-behavioral method. It is suggested that methods such as group discussion and critical thinking be used in future studies. Another limitation was the participants' gender since the study was performed only on female students. It is suggested to consider both genders in future studies. In addition, the present study selected the subjects of the intervention group from one school, which might affect the results due to the friendly relationships and local acquaintances, despite homogenous academic performance and social welfare. Thus, it is suggested to select the samples from several schools in the same district with similar social welfare levels.

Conclusion

It is concluded that training emotions recognition and appropriate behaviors in different situations have positive effects on adolescents' social skills. Since schools are the basis of students' education and training, it is suggested to incorporate these special education programs for adolescents to the current educational programs.

Declaration of patient consent

The authors certify that they have obtained all appropriate patient consent forms. In the form, the patient(s)

has/have given his/her/their consent for his/her/their images and other clinical information to be reported in the journal. The patients understand that their names and initials will not be published and due efforts will be made to conceal their identity, but anonymity cannot be guaranteed.

Acknowledgements

This study has been driven on a Master's thesis in Health Education at Isfahan University of Medical Sciences (code: 399035). The authors hereby express their gratitude to the Vice-Chancellor for Research at Isfahan University of Medical Sciences and the Education Authority in Khomeini Shahr and all students who participated in the study, appreciation comes into action.

Financial support and sponsorship

Vice-Chancellor for Research and Technology of Isfahan University of Medical Sciences (design code: 399573).

Conflicts of interest

There are no conflicts of interest.

References

1. Salimi M, Dardiri A. The Profile of Students' Social Skills of Bengawan Solo Elementary Nature School. *Eur J Educ Res* 2021;10:211-26.
2. Poorbaferani Z, Mazaheri MA, Hasanzadeh A. Life satisfaction, general self-efficacy, self-esteem, and communication skills in married women. *J Educ Health Promot* 2018;7:173.
3. Gilani R, Motaghi M. The relationship between social skills and misconduct with their teachers in high school students in the City Aligudarz 2018. *Int J Adolesc Med Health* 2019;33. doi: 10.1515/ijamh-2018-0242.
4. Gökel Ö, Dağlı G. Effects of social skill training program on social skills of young people. *Eur J Math Sci Technol Educ* 2017;13:7365-73.
5. Sinaga RM, Maydiantoro A, Ochayi OA, Yulianti D, Arif S, Basri M, *et al.* Reasoning model and moral simulation to improve students' social skills: A focused look at emotional intelligence. *J Educ Soc Res* 2022;12:335.
6. Vuattoux D, Castiglia D, Chabane N. Considerations and perspectives on interventions to improve social cognition in adolescents with ASD without ID: Involving parents in social skills groups. *Front Psychiatry* 2021;12:629761.
7. Keshavarzpour Z, Safari M. The effect of social skills training on adolescent girls' self-efficacy. *Biquart J Stud Psychol Adolesc Youth* 2021;1:16-33.
8. Kaya İ, Deniz M. The effects of life skills education program on problem behaviors and social skills of 4-year-old preschoolers. *Element Educ Online* 2020;19:612-23.
9. Makinde B, Adeyinka T, Olusakin A. Effects of acceptance-commitment therapy and social skills training on depression of adolescent students from father-absent families in lagos state. *KIU J Soc Sci* 2021;7:253-64.
10. Bahramian E, Mazaheri MA, Hasanzadeh A. The relationship between media literacy and psychological well-being in adolescent girls in Semirom city. *J Educ Health Promot* 2018;7:148.
11. Khoshgoftar M, Amidi Mazaheri M, Tarrahi MJ. The effect of educational intervention based on health belief model to decrease and prevent mobile phone addiction among female high school students in Iran. *Int J Pediatr* 2019;7:10175-87.
12. Factor RS, Rea HM, Dahiya AV, Albright J, Ollendick TH, Laugeson EA, *et al.* An initial pilot study examining child social skills, caregiver styles, and family functioning in the PEERS® for preschoolers program for young autistic and their caregivers. *Res Dev Disabil* 2022;121:104152.
13. Cheung W, Meadan H, Yang H. Effects of powered mobility device interventions on social skills for children with disabilities: A systematic review. *J Dev Phys Disabil* 2020;32:855-76.
14. Moody CT, Laugeson EA. Social skills training in autism spectrum disorder across the lifespan. *Child Adolesc Psychiatr Clin* 2020;29:359-71.
15. McDaniel SC, Bruhn AL, Troughton L. A brief social skills intervention to reduce challenging classroom behavior. *J Behav Educ* 2017;26:53-74.
16. Matson JL, Neal D, Fodstad JC, Hess JA, Mahan S, Rivet TT. Reliability and validity of the matson evaluation of social skills with youngsters. *Behav Modif* 2010;34:539-58.
17. Yousefi F, Khayyer M. Reliability and validity of matson social skills scale and comparison of high school girls and boys performance. *J Educ Sci* 2002;18:147-58.
18. Ahmadi SNS, Hejazi E, Babakhani N. Investigating the impact of interpersonal communication skills on social development among female students. *TENDENZEN*. 2017;25 (3):1098-111
19. Gresham F, Elliott S, Metallo S, Byrd S, Wilson E, Erickson M, *et al.* Psychometric fundamentals of the social skills improvement system: Social-emotional learning edition rating forms. *Assess Eff Interv* 2020;45:194-209.
20. Afshari A, Amiri S, Neshat Doost HT, Rezaie F. Comparing effectiveness of group emotion-focused cognitive-behavioral therapy and group cognitive-behavioral therapy on children with social anxiety disorder. *Stud Med Sci* 2015;26:194-204.
21. Suveg C, Jones A, Davis M, Jacob ML, Morelen D, Thomassin K, *et al.* Emotion-focused cognitive-behavioral therapy for youth with anxiety disorders: A randomized trial. *J Abnorm Child Psychol* 2018;46:569-80.
22. Othlinghaus-Wulhorst J, Hoppe HU. A technical and conceptual framework for serious role-playing games in the area of social skill training. *Front Comput Sci* 2020;2:28.
23. Desai S. Digital collage-as a pedagogical tool for effective learning of immunological concepts. *J Eng Educ Transform* 2018;32:44-8.
24. Aksoy P, Baran G. The Effect of Story Telling-Based and Play-Based Social Skills Training on Social Skills of Kindergarten Children: An Experimental Study. *Education and Science*. 2020;45 (204):157-83.
25. Rajabi S, Alimoradi K. Effectiveness of curriculum theater in social skills and learning of basic courses in elementary students. *New Educ Approach* 2018;12:98-113.
26. Espelage DL, Rose CA, Polanin JR. Social-emotional learning program to reduce bullying, fighting, and victimization among middle school students with disabilities. *Remedial Spec Educ* 2015;36:299-311.
27. Shankar PR, Piryani RM, Singh KK, Karki BMS. Student feedback about the use of role plays in Sparshanam, a medical humanities module. *F1000Research* 2012;1:65.
28. Vila S, Gilar-Corbí R, Pozo-Rico T. Effects of student training in social skills and emotional intelligence on the behaviour and coexistence of adolescents in the 21st century. *Int J Environ Res Public Health* 2021;18:5498.
29. Rezaei F, Abedin A, Falsafie P. The Effectiveness of Social Skills Training on Aggression and Impulsive among Kindergartens Children. *Int J Pediatr* 2021;9:14023-32.
30. Cutrín O, Gómez-Fraguela JA, Maneiro L, Sobral J. Effects of parenting practices through deviant peers on nonviolent and violent antisocial behaviours in middle-and late-adolescence. *Eur J Psychol Appl Leg Context* 2017;9:75-82.
31. Helbig, K.A., Radley, K.C., Schrieber, S.R. *et al.* Vocational

Kazemi, *et al.*: Development of female teenagers' social skills

Social Skills Training for Individuals with Intellectual and Developmental Disabilities: A Pilot Study. *J Behav Educ* (2021). <https://doi.org/10.1007/s10864-021-09445-2>.

32. Powell LA, Parker J, Weighall A, Harpin V. Psychoeducation intervention effectiveness to improve social skills in young people with ADHD: A meta-analysis. *J Attent Disord* 2022;26:340-57.