

Enhancing students' social abilities via cooperative learning and project-based teaching methods: Pedagogical approaches and beneficial outcomes



Abstract The period of education in secondary educational institutions is deemed fundamental for instilling essential skills in students, as defined by recent legislation as competencies, upon which the overall quality of education hinges. These competencies, upon transition to higher education, evolve into professional qualities and specialized characteristics critical for career advancement. Social and civic competencies attained by education seekers determine an individual's communicative potential, ability to foster relationships, diplomatic prowess, understanding of equality, accountability for commitments and obligations, critical thinking aptitude, readiness to compromise, and teamwork proficiency. The adolescent and youth stage is perhaps the most pivotal for grasping the significance of these competencies. Consequently, educators must concentrate on devising constructive strategies for engaging with student and youth populations to cultivate fundamental social skills, facilitated through cooperative activities, group projects, collective interaction, and similar approaches. The study's outcomes affirm the imperative of nurturing social competences among education seekers and delineate effective collaboration methods. The article underscores that integrating group cooperation into the educational process expedites and fosters the development of social skills in teenagers and students.

Keywords: civic competence, adolescents, cooperation, orientation, social-communicative competence

1. Introduction

Social skills are developed through social interactions and are reinforced by family upbringing, peer groups, extracurricular activities, and events. These interactions shape an individual's behavioural patterns and communication styles, which ultimately determine his or her standard of living and future. It is important to note that social skills are influenced by various factors in an individual's environment, including role models and teachers. Adolescence is widely considered a sensitive period during which socialization plays a crucial role in the development of maturity, independence, and understanding of one's own necessity for others. However, for older adolescents, the process of socialization takes on different deeper features, such as the possibility of realizing a professional life in the future, creating their own family comfort and self-development, searching for their own self, expanding the boundaries of hobbies or talent, and gaining financial independence and confidence in the future. Therefore, it is worth considering the impact of group work on the formation of social skills in older adolescents.

According to the New Ukrainian School Concept (NUS) (2019), older adolescence is defined as the period between 17 and 19 years of age. It is important to note that, as of 2018, students applying for general secondary education will study for 12 years, meaning that the upper limit of this age range will correspond to high school. Today, it is necessary to analyse the formation of social skills in high school students aged 16-17 and first-year students and the positive pedagogical strategies that involve high-quality cooperation among older adolescents and group work. The learning process in a modern school always involves interaction, joint activities, collective projects, and project activities.

Bulakh (2016) noted that our society has undergone significant changes that have had a profound impact on adolescent development and maturation. These changes have affected common human values and behavioural norms, as well as adolescents' perspectives on life and their place in it.

According to UNICEF research conducted in 2019, uncertainty and fear regarding the education system's ability to equip young Ukrainians with modern skills and prepare them for future employment is a feature of modernity that affects the state of older adolescents and their adaptation to adulthood. One-third of adolescents in high school in 2017 believed that the

^aPrivate School "Athens", Kyiv, Ukraine.

Department of State and Legal Disciplines and Ukrainian Studies, Faculty of Law, Sumy National Agrarian University, Sumy, Ukraine.

Department of National Security of the Institute of Security, PJSC Higher Education Institution «Interregional Academy of Personnel Management», Kyiv, Ukraine.

^dDepartment of Social Work, Management and Social Sciences, Lviv State University of Life Safety, Lviv, Ukraine.

Department of Fundamental and Special Disciplines, Chortkiv Educational and Scientific Institute of Entrepreneurship and Business of West Ukrainian National University, Chortkiv, Ukraine.

education system was imperfect in this regard. It is expected that the results of this survey will improve with ongoing education reform. Moreover, it should be noted that the fundamental social skills required by the modern educational system are developed through group work and cooperative methods.

Psychologists Averianova, Baidarova, Bilous, Vlasova, Honchar, Diachok, and Shvalb, among others, confirm the positive value of social skills in older adolescents. They emphasize the importance of forming these skills through various forms of cooperation. Diachok (2020) noted that there are many training courses and programs available for both adults and adolescents that focus on developing skills in cooperation, teamwork, negotiation, management, and responsibility.

Considering the aforementioned points, it can be concluded that social skills play a crucial role in shaping the future of adolescents and students. These skills aid in building self-assurance, fostering relationships, maintaining friendships, and developing positive personal traits and are acquired through school and proven pedagogical strategies for working with students.

2. Research Purpose

The aim of this study is to investigate the impact of collaboration and group projects on the development of pupils' and students' social skills. Additionally, effective pedagogical strategies for working with adolescent students in this area will be analysed. Objectives of the study:

- to analyse the perspectives of scientists and educators regarding the impact of group work on the social skill development of older adolescents and students to explore positive pedagogical strategies for such activities;
- to conduct and summarize the results of a survey of adolescents on groups;
- to systematize qualitative social skills that arise from group activities.

3. Literature Review

According to Gornostai et al. (2017), optimizing group interaction and improving a team's microclimate can enhance the creative potential of each education seeker, facilitate the establishment of individual cooperation mechanisms, and promote social mutual assistance and support skills. Additionally, group methods are effective for teachers and can prevent professional burnout. Saloid and Kalinichenko (2020) suggested that group learning can provide older adolescents with opportunities to collaborate with their peers and friends and help them develop their communication skills. Group projects can also be beneficial for adolescents who are not very active in their studies, who feel unsafe, who are hesitant to establish communication, or who have poor academic performance. Participation in different forms of cooperation offers an opportunity to enhance knowledge, as each member of the group strives to keep up with the others.

Buryak (2020) also supports the opinions of previous authors on the effectiveness of introducing group work to improve communication and relationships within a class or group. In group activities, the teacher has the opportunity to indirectly coordinate the work of each participant through the proposed tasks and their regulation of the group's work. Such projects promote mutual assistance, cooperation, support, and understanding while also developing sensitivity to the needs of others. They do not isolate pupils from each other.

According to Kompanovich (2016), training and group work with adolescents and youth are crucial for the development of self-confidence. This is demonstrated by their ability to identify and express desires, needs, love, and criticism. Undoubtedly, a person's confidence can be most effectively developed through cooperation with peers who are actively performing a task. Healthy competition can provide positive emotions and energy and an opportunity to feel the support and importance of each group member.

Gurtovenko (2020) suggested that group forms of cooperation, from a psychological point of view, are effective methods for combating bad habits and deviant behaviour and are often manifested in many adolescents, both younger and older. The researcher suggested training work aimed at older adolescents, as training is precisely the kind of active learning that is used today not only in education but also in many areas of activity to support employees, encourage them, and strengthen their skills. At the same time, the prevention of negative behaviour is the key to the socialization of the individual and the development of necessary social skills that will make him or her an important member of the desired environment. Among the most effective training methods, the author identifies public speaking, art therapy, acting and directing training that will help older adolescents actively exchange roles and learn to think dynamically and creatively.

Gerten (2017) also argued that it is important for the socialization of older adolescents and students to build teams to play with adolescents, not against them. Adolescents tend to be self-focused, so group cooperation for the development of social skills should be centred around them. Specifically, the following teamwork exercises can be employed: 'Hear me' (focusing on communication skills), 'Teach adults' (encouraging constructive exchange of information, demonstrating mobility and organization), and 'Challenge' (a realistic task with an element of competition, promoting mutual support, responsibility, and dynamism).

According to Bronson (2019), the group cooperation activity 'Icebreaker' is effective. It requires the involvement of all members of the adolescent team. The 'Icebreaker' or joint work task is a group method for working on a common objective

that enhances communication quality among all participants. It helps teachers establish a comfortable environment in which adolescents feel involved, needed, and important. For instance, a teacher may suggest that high school students independently prepare a celebration of the Day of Ukrainian Writing and Language. The primary objectives are to create a celebratory wallpaper, perform a skit from a beloved Ukrainian author, recite original poetry and prose, and showcase traditional Ukrainian attire alongside contemporary clothing. Due to the complexity of these tasks, it is recommended that they be completed in groups. Four groups can be formed for each area of work. The teacher should assess the collaborative work of each group, inquire about the progress of specific tasks, and evaluate the contribution of each group member to the completion of the tasks. Rewards such as surprise outings to the theatre, museums (which adolescents may not be initially interested in but should be encouraged to attend), hikes or other engaging activities can also be beneficial.

Bronson (2019) suggested that teachers work with older adolescents to develop their social skills by focusing their activities on a specific object, thought, experience, or creation. For instance, students could create a family tree, discuss issues from a novel (preferably not from the school curriculum), or design their own puzzles. An important pedagogical strategy for communicating with high school students is to demonstrate full trust in them and show interest in their lives, experiences, desires, hobbies, and vision for their future profession. It is important to regularly ask adolescents which topics they would like to discuss during joint class meetings, parent-teacher conferences, or extracurricular activities. For older adolescents who struggle with communication and tend to be reserved, it is recommended that they invite engaging speakers who can share their personal experiences of successful career advancement, talent development, and overcoming challenging life circumstances. Examples of such speakers may include journalists, psychologists, poets, writers, public figures, volunteers, and doctors.

According to Raus (2022), a representative of the Boys and Girls Clubs of America, the quality of communication among older adolescents and their peers depends on their level of social skills. This is because teenagers' social skills encompass a wide range of abilities, from making eye contact and engaging in conversation to resolving conflicts and showing empathy. During their schooling and studentship, pupils develop social skills such as empathy, friendliness, responsibility, and sincerity. These skills can be helpful in various activities, such as group work, joint projects, collective work, and greeting new classmates. The importance of social adaptation for adolescents and students in general, as well as pupils and students in general, has become particularly apparent during the COVID-19 pandemic. This crisis has forced everyone to switch to distance learning, radically change their usual way of life, and adapt to a different pace of activity. Unfortunately, epidemics, military conflicts, natural disasters, and other negative phenomena hinder adolescents from acquiring and developing social skills such as communication, interaction, empathy, and teamwork. Raus (2022) emphasizes that developing social skills in older adolescents can help them envision their own bright future and how to achieve it.

This can be achieved by:

- creating and maintaining healthy friendships;
- effective cooperation with peers and teachers and tutors;
- participation in extracurricular activities;
- professional orientation;
- forming a peer support network at school and beyond, activities
- for pupils, students and teachers, and tutors;
- maintaining good mental health and positive self-esteem.

Adolescents should develop constructive communication skills not only within but also outside of school. This includes the ability to communicate effectively in various situations with unfamiliar individuals outside their usual environment. This helps to foster the development of both social and emotional skills. Additionally, the significance of emotional intelligence is becoming increasingly important. Opportunities for such communication can be found in extracurricular education, activities, and social groups. In extracurricular activities, participation in a team does not necessarily imply competition but rather cooperation. It is important to note the communication habits of older adolescents on social media and other online platforms, which requires a careful balance between the physical and digital worlds (Popovych et al., 2021).

Smetana et al. (2015) emphasize the acquisition of social skills by adolescents in light of the fact that modern upbringing is increasingly remote for various reasons, such as significant technological advances, pandemics, and adolescents' strong desire for independence and self-reliance. The authors agree that this desire is becoming more pronounced among modern adolescents. It is believed by scientists that younger and middle-aged adolescents are more flexible in their development. For older adolescents, these skills are essential because they are more closely related to adulthood, career choices, relationship building, and self-realization.

Orben et al. (2020) confirmed the acquisition of social skills by adolescents, highlighting their importance for the future. It is necessary to consider the needs of sensitive and vulnerable adolescents while laying the social foundation in the most natural way possible by working in groups. Similar ideas are also expressed by Andrews and Foulkes (2020) and Stark and Pellis (2020).

Filippova (2014) identified three crucial areas in adolescent socialization: activity, communication, and self-determination. These spheres shape adolescents' identity and perception of the world and their role in it.

Trifanina (2016) emphasizes the importance of information culture in developing social skills. She noted that a gradual and conscious introduction to the information space is crucial for facilitating adaptation to adult life. Information culture can serve as a protective measure against the harmful effects of media and can be an effective strategy for teachers working with pupils. Given the importance of information culture, teenagers become more attentive to the information they receive and disseminate, more sensitive to the opinions of their peers, and more responsible in expressing their own opinions.

Mann et al. (2020) suggested that activities aimed at informing older adolescents about future professional self-determination, career guidance, personal development, and talent are the most valuable. These statements are also supported by Musset and Kurekova (2018) and Ashby and Schoon (2010). Professional self-determination is considered to be the most important issue for older adolescents. Adolescents may feel pressure from various sources, including parents, peers, and societal expectations, which can lead to a loss of personal identity. To address this issue, teachers can offer classes focused on developing specific professional skills and abilities. These physical education lessons for boys include elements of physical activity used by rescuers and firefighters (Popovych et al., 2022). Additionally, a teacher can organize a holiday with related classes, where one group is responsible for stage performances and costumes, and another is responsible for the holiday table.

Bhattacharya and Liang (2019) found that adolescents work effectively in remote online groups for certain tasks. Online classes enable the involvement of peers from different institutions, positively impacting the development of social skills.

McGee et al. (2006) support the use of group methods when working with older adolescents. According to scientists, joint activities can foster positive communication, increase self-esteem, and promote respect for others. These skills are essential for building healthy relationships within families, professional circles, and society as a whole.

According to Lobodynska and Gridzhuk (2020), the system of social skills acquired through group work is the foundation of competitiveness and a high level of professional competence. Research by scholars has demonstrated that students always strive to reveal their own socially active traits and self-realize in their future professions. Therefore, researchers consider student self-government, student clubs, youth initiatives, and active participation in community life to be optimal group collaboration methods for students.

However, et al. (2021) are confident that education, academic abilities, and the success of education seekers are crucial foundations for the development of students' basic social competencies. It is impossible not to agree with this statement, as quality knowledge greatly contributes to students' mastery of social skills and professional characteristics, opens up new opportunities for interaction with various social circles, and promotes the development of confidence, proper self-assessment, etc.

Given the in-depth research conducted by scientists Climent-Galarza et al. (2022) and Stafford et al. (2015) on the impact of various group techniques and pedagogical behavioural strategies on the development of social skills of older adolescents and their undeniable effectiveness, it is important not to underestimate the role of family and parents. The personality of a young adolescent undergoes significant changes based on the level of development of their parents' social skills. Therefore, teachers should consider the family social experience of each pupil to form a necessary model for the development of social qualities.

4. Methods

The following methods were used in the research:

- theoretical (analysis, synthesis, generalization): to work with scientific materials, research, social networks;
- empirical (survey, description of the survey): to analyse the results of the pedagogical survey;
- generalization to examine group forms of cooperation in the development of social skills among older adolescents.

5. Results

Several factors contribute to the development of an adolescent's personality. Among these factors, the organization of the educational process, educational cooperation, and teachers' pedagogical strategies play a significant role in fostering the social skills of students. To investigate the effectiveness of group projects and other forms of joint activities in developing social skills among older adolescents, a survey was conducted among 20 11th-grade students at Ulanivka Lyceum, Ulanivka Village Council, Khmilnyk District, Vinnytsia Region.

When analysing the responses of older adolescents to the question about the use of group work in education, all respondents answered positively and confirmed that teachers at the school use various methods of cooperation in groups and pairs. Additionally, students complete some tasks in groups online, such as searching for information about the 1960s in the history of Ukraine class in electronic sources and discussing it together in a class chat (Masyk et al., 2023).

Seventeen out of twenty adolescents surveyed agreed that working in groups is better and more interesting for them. However, they also noted that joint activities do not necessarily lead to friendship with those who were not previously friends. The focus is on achieving a team result. Sixteen boys and girls believe that they will require support from others, including

parents, close friends, classmates, and teachers, for their future self-affirmation and professional fulfilment. Another 14 people are convinced of the importance of the skills they learn at school, which they use when choosing a profession and in their professional life.

The survey results suggest that adolescents (12 participants) identify communication, support, and civic responsibility as key social skills. They also recognize the need to work systematically to improve these skills, particularly through group activities with older adolescents. The results of this survey indicate that social skills depend on group forms of work with older adolescents.

6. Discussion

The use and development of strategies based on cooperation, interaction, and group work for adolescents and students are justified and effective for the development of social skills. A number of modern scientists are convinced of this (Climent-Galarza et al., 2022; Popovych, 2022; Raus, 2022). However, individual researchers (Bhattacharya et al., 2019; Buryak, 2020) note that group work requires more time for the preparation and analysis of completed tasks. Teachers must clearly explain to students the instructions for the tasks and the conditions of group work. According to the studies of Kalinichenko and Saloid (2020) and Trifanina (2016), a teacher cannot always positively influence the development of social skills of teenagers without the necessary parental support, interest, help and interaction from both the child and the teacher. Therefore, further research is needed to understand the role of parents in the development of social skills in older adolescents. These conclusions justify the results obtained in the current study.

According to Lobodynska and Gridzhuk (2020), Orben (2020), and Stark and Pellis (2020), the period of study in general educational institutions is fundamental for the formation of necessary skills and abilities for students. Scientists emphasize that the latest legislation defines these skills as competencies, and the overall quality of education depends on the level of acquisition of these competencies. In the future, during studies at a higher educational institution, competences are transformed into professional qualities and specialized characteristics that are decisive for career growth—assure Ashby & Schoon (2010) and Mann (2020). The results of the scientific research of the cited scientists explain the essence of the current study.

As modern researchers assure (Dyachok, 2020; Gerten, 2017; Stafford et al., 2015), social and civic competences acquired by education students determine the level of communicative potential of an individual, his ability to build relationships with the environment, diplomacy, awareness of equality, responsibility for one's promises and obligations, ability to think critically, willingness to compromise, and ability to work in a team. At the same time, the authors emphasize that the most important stage for understanding the importance of these competencies is adolescence and young adulthood; therefore, educators need to pay attention to the search for constructive strategies for cooperation with student and youth audiences to develop fundamental social skills that will be effective through joint activities, group projects, collective interaction, etc. The results of the scientists' work confirm the conclusions of this study, particularly in the aspect of prioritizing the development of social competences of education seekers and indicating effective methods of cooperation with them.

7. Conclusion

The study of the influence of group activities on the development of social skills in older adolescents allows us to formulate the following conclusions:

- 1. The teacher should use group forms of work with adolescents (projects, collective creative work, training, games and role-playing methods that allow working in groups, teams, etc.).
- 2. Social skills are largely formed through group forms of cooperation. The main social skills that are formed through group work are as follows: the ability to cooperate, support, take responsibility, be organized, be mobile, show empathy, be aware of equal rights and responsibilities, feel civic responsibility, communication, diplomatic skills, creativity, emotional intelligence, etc.
- 3. For students and young people, it is important to communicate not only with peers but also with different environments, which will strengthen the desire for self-realization and professional self-determination. Cooperation with parents of older adolescents is needed, particularly for the development of social competences. Since then, basic social skills have begun to form in family circles.
- 4. The study of the formation of social skills in student and youth populations requires further analysis and research on scientific sources, as well as the exploration of additional pedagogical strategies for collaboration. This is necessary to identify the conditions under which the preparation of young people for life in society will yield positive results.

The above statements allow us to draw conclusions about the need to develop the social competences of education seekers and indicate effective methods of cooperation with them. The study demonstrated that the inclusion of group cooperation in the educational process accelerates and stimulates the development of social skills in adolescents and students.

Ethical considerations

Not applicable.

Conflict of interest

The authors declare no conflicts of interest.

Funding

This research did not receive any financial support.

References

Andrews, J. L., Foulkes, L., & Blakemore, S.-J. (2020). Peer Influence in Adolescence: Public-Health Implications for COVID-19. *Trends in Cognitive Sciences*, 24(8). https://doi.org/10.1016/j.tics.2020.05.001

Ashby, J., & Schoon, I. (2010). Career success: The role of teenage career aspirations, ambition value and gender in predicting adult social status and earnings. *Journal of Vocational Behavior*, 77(3), 350–360. https://doi.org/10.1016/j.jvb.2010.06.006

Bhattacharya, A., Liang, C., Zeng, E. Y., Shukla, K., Wong, M. E. R., Munson, S. A., & Kientz, J. A. (2019). Engaging Teenagers in Asynchronous Online Groups to Design for Stress Management. *Proceedings of the 18th ACM International Conference on Interaction Design and Children* (p. 26–37). Boise. https://doi.org/10.1145/3311927.3323140

Bronson, M. (2019). Starting a Support Group for Children and Teens. Phoenix Society. https://www.phoenix-society.org/resources/starting-a-support-group-for-children-and-teens. Accessed on March 28, 2024.

Bulakh, I. (2016). Psychology of personal growth of teenagers: realities and prospects. Vinnitsa: Nilan-LTD. https://enpuir.npu.edu.ua/bitstream/handle/123456789/35277/Bulakh%20Iryna%20Serhiivna.pdf?sequence=1. Accessed on March 28, 2024.

Buryak, O. (2020). Modern methods of group work with students (pp. 5–12). Kharkiv: Madrid. https://lebedyn.cprpp.org.ua/news/1642592570/. Accessed on March 28, 2024.

Climent-Galarza, S., Alcaide, M., Garcia, O. F., Chen, F., & Garcia, F. (2022). Parental Socialization, Delinquency during Adolescence and Adjustment in Adolescents and Adult Children. *Behavioral Sciences*, 12(11), 448. https://doi.org/10.3390/bs12110448

Dyachok, O. (2020). Socialization of teenagers in educational institutions. *Actual Problems of Psychology*, 42, 77–87. http://www.appsychology.org.ua/data/jrn/v7/i42/10.pdf. Accessed on March 28, 2024.

Filippova, I. (2014). Role socialization of a teenager as the assimilation of social experience. *Actual Problems of Modern Psychology: A Collection of Scientific Articles*, 204–215. https://core.ac.uk/download/pdf/153585612.pdf. Accessed on March 28, 2024.

Gerten, K. (2017). Go With the Flow: 10 Ways to Easily Engage Teenagers. Youth Dynamics. https://www.youthdynamics.org/go-flow-10-ways-easily-engage-teenagers/. Accessed on March 28, 2024.

Golovina, O. (2019). Fasten your seat belts. Or how to survive adolescence. NUS. https://nus.org.ua/articles/prystebnuty-remeni-bezpeky-abo-yak-perezhyty-pidlitkovyj-vik/. Accessed on March 28, 2024.

Gornostai, P., Gorbunova, V., & Korobanova, O. (2017). Methods of group work in the education system. Kyiv: Milenium.

Gurtovenko, N. (2020). Correction of value-semantic orientations of teenagers prone to deviant behavior by means of training work. *Personality Psychology*, 17, 69–72. https://doi.org/10.32843/2663-%205208.2020.17.12

Kalinichenko, N., & Saloid, K. (2020). Forms of group study work. Materials of the international scientific and practical Internet conference "Strategies of innovative development of natural sciences: experience, problems and perspectives". http://surl.li/pshth. Accessed on March 28, 2024.

Kompanovich, M. (2016). Peculiarities of using psychocorrective techniques in working with teenagers with psychosomatic cardiovascular diseases. *Actual Problems of Psychology: A Collection of Scientific Works of the H.S. Kostyuk Institute of Psychology of the National Academy of Sciences of Ukraine, 8*, 263–272. http://www.appsychology.org.ua/data/jrn/v9/i8/30.pdf. Accessed on March 28, 2024.

Lobodynska, O., & Gridzhuk, O. (2020). Formation of students' social skills: problems and prospects. *Scientific Bulletin of UNFU*, 30(3), 116–121. https://doi.org/10.36930/40300320

Mann, A., Denis, V., Schleicher, A., Ekhtiari, H., Forsyth, T., Liu, E., & Chambers, N. (2020). *Teenagers' Career Aspirations and the Future of Work*. https://www.oecd.org/berlin/publikationen/Dream-Jobs.pdf Accessed on March 28, 2024.

Masyk, M., Buryk, Z., Radchenko, O., Saienko, V., & Dziurakh, Y. (2023). Criteria for governance' institutional effectiveness and quality in the context of sustainable development tasks. *International Journal for Quality*, 17(2), 501–514. http://dx.doi.org/10.24874/IJQR17.02-13

McGee, R., Williams, S., Howden-Chapman, P., Martin, J., & Kawachi, I. (2006). Participation in clubs and groups from childhood to adolescence and its effects on attachment and self-esteem. *Journal of Adolescence*, 29(1), 1–17. https://doi.org/10.1016/j.adolescence.2005.01.003

Musset, P., & Kurekova, M. (2018). Working it out. OECD Education Working Papers, 175. https://doi.org/10.1787/51c9d18d-en

Orben, A., Tomova, L., & Blakemore, S.-J. (2020). The effects of social deprivation on adolescent development and mental health. *The Lancet Child & Adolescent Health*, 4(8), 634–640. https://doi.org/10.1016/s2352-4642(20)30186-3

Paz, T. R. U., Mosqueira, M. A. A., & Ugarte, M. G. M. (2021). Systematic review of strategies for developing social skills in education. *Sinergias Educativas*, 5(3), 48–64. http://portal.amelica.org/ameli/jatsRepo/382/3821677005/html/. Accessed on March 28, 2024.

Popovych, I., Pavliuk, M., Hrys, A., Sydorenko, O., Fedorenko, A., & Khanetska, T. (2021). Pregame expected mental states in men's mini-football teams: A comparative analysis. *Journal of Physical Education and Sport*, 21(2), 772-782. https://doi.org/10.7752/jpes.2021.02096

Popovych, I., Semenov, O., Hrys, A., Aleksieieva, M., Pavliuk, M., & Semenova, N. (2022). Research on mental states of weightlifters' self-regulation readiness for competitions. *Journal of Physical Education and Sport*, 22(5), 1134-1144. https://doi.org/10.7752/jpes.2022.05143

Raus, E. (2022). How To Improve Social Skills in Teens. BGCA. https://www.bgca.org/news-stories/2022/September/how-to-improve-social-skills-in-teens. Accessed on March 28, 2024. https://psycnet.apa.org/record/2015-05080-003. Accessed on March 28, 2024.

Stafford, M., Kuh, D. L., Gale, C. R., Mishra, G., & Richards, M. (2015). Parent–child relationships and offspring's positive mental wellbeing from adolescence to early older age. *The Journal of Positive Psychology*, *11*(3), 326–337. https://doi.org/10.1080/17439760.2015.1081971

Stark, R., & Pellis, S. M. (2020). Male Long Evans rats reared with a Fischer-344 peer during the juvenile period show deficits in social competency: a role for play. *International Journal of Play*, *9*(1), 76–91. https://doi.org/10.1080/21594937.2020.1720142

Trifanina, L. (2016). Information culture as an aspect of adolescent personality socialization. *Bulletin of the Lviv State University of Life Safety, 13*, 226–231. https://media.neliti.com/media/publications/313999-the-information-culture-as-an-aspect-of-e79ff228.pdf. Accessed on March 28, 2024.

UNICEF (2019). 21st century skills for young people who are changing Ukraine for the better. https://www.unicef.org/ukraine/upshift. Accessed on March 28, 2024.