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Evaluation of Socialization Technology Effectiveness in Motor-Play Activity of **Preschoolers**

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> Abstract---Motor-play activity is the basis for the social experience recreation and development among older preschoolers, a condition for positive socialization. The relevance of the research is conditioned by the need to comprehend the potential of socialization technology in motor-game activity of preschoolers. The use of technology in the educational process at kindergartens contributes to the complex impact on a child, the development of his physical, social, communicative and personal potentials. The purpose of the study is to assess the effectiveness of socialization technology in motor-play activity among 5-7-year-old children. Study methods: theoretical: synthesis, generalization; empirical: observation and assessment of independent motor activity among children, game diagnostic situations, conversation; the methods of mathematical

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statistics: Wilcoxon t-test. The study involved 120 senior preschool children attending the kindergarten No. 78 in the city of Belgorod, No. 15 in the village of Razumnoe, Belgorodsky District, Belgorod Region. The analysis of the study results showed that in the process of socialization technology implementation in motor-play activity among preschoolers, 95% of children who participated in the experiment use successfully the social experience in motor-play activity and show the optimal and sufficient level of its recreation. The results of the experimental group significantly (p≤0.05) surpassed the results of the control group in all the studied criteria and indicators. It has been proved experimentally that the socialization technology in motor-play activity of preschoolers ensures the formation of social values, the creation of conditions that provide the successful adaptation and selfrealization of a child in motor-play activity, and increase the independence and activity of children. The focus on social norms of behavior in communication with peers increased by 43% among children, the range of games, play tasks and exercises expanded in the process of motor-play interaction.

Keywords---5-7-year-old children, assessment, criteria and indicators, motor-play activity, social experience, technology.

Introduction

The preschool period of childhood is the most active phase of social experience development. The domestic psychological and pedagogical studies by Avdulova (2020); Voloshina (2020); Feldstein (2013); Galimskaya (2018); and the foreign studies by Schlechter et al. (2017); Dankiw et al. (2020); Niemistö et al. (2020); note the presence of problems among preschoolers associated with the formation of an active life position and the use of personal potential abilities in real social conditions. Scientists note the manifestation of volition deficit, energy decrease both in mental and motor activity, the helplessness of 25% of 5–7-year-old children in building the relationships with peers.

Our preliminary studies indicate that 57% of preschool children have an insufficient level of social experience recreation in motor-play activity [14, pp. 1961-1966]. All this negatively affects both their psychoemotional state and the indicators of health and physical development (the decrease in strength, longitudinal growth) (Eisenberger et al., 2010; Epitropakis et al., 2012). The facts of physical development retardation of a preschool child are presented in the works by Bezrukikh & Terebova (2009); and Feldshtein (2013). All of the above determines the relevance of research at the socio-pedagogical, scientific-theoretical and scientific-methodological levels. We believe that one of the ways to solve these problems is the introduction of socialization technology among preschoolers, which ensures the integrated development of the game, motor, cognitive, communicative activities of children and their social adaptation (Selwyn, 2003).

The technology is a dynamic system in which the interconnection and interaction of the basic components is ensured: conceptual, including the goal, subordination of tasks, description of socialization principles among preschool children; procedural, revealing the systemic mechanisms of motor and game activity integration in the process of socialization; managing element providing control of socialization process in motor-game activity; coordinating element, determining the compliance of the goal with its final result and differentiating the direction of the means and methods at the next stage of its functioning (Seryh, 2020; Seryh, 2020). The content of the technology is based on game tasks and exercises, outdoor and sports games; integration of play, cognitive, communicative, motor activity of preschoolers; the use of different-age interaction of children in motorplay activity.

The main goal of socialization technology in motor-play activity of preschoolers is the formation of social values, the creation of conditions that ensure the successful adaptation and self-realization of a child in motor-play activity, the increase of child independence and activity (Finn et al., 2002; Håkstad et al., 2017). Every day, when organizing motor-play activities for walks and physical education, the following elements were used:

- situations of choice, problem-search situations, volunteer actions in order to form positive behavior and communication among children;
- self-assessment, evaluation of results with the aim of emotional and volitional development of preschoolers;
- the methods of behavior culture development in conditions of collective interaction (performance of exercises in a playful form, using dramatization, assignments, and competitions);
- the methods of pedagogical support (demonstration of samples, examples, creation of success situation, demonstration of achievements to parents);

A detailed description of the technology implementation algorithm and methods is presented in the teaching aid (Seryh, 2020). The technology was implemented in experimental groups of children (120 senior preschool children) for 10 months from September 2020 to June 2021. In each preschool institution, one control group and one experimental group were formed by randomization. *The purpose of our study* at this stage was to assess the effectiveness of socialization technology in motor-play activity among 5-7-year-old children (Halford et al., 2007; Farzan et al., 2021).

Materials and study methods

Theoretical: analysis, synthesis, generalization; empirical: observation and assessment of independent motor activity among children (according to V.A. Shishkina, M.N. Dedulevich), diagnostic methodology "Studying the ability to restrain one's immediate impulses" (by G.A. Uruntaeva), the methods for interaction level determination in game situations (by L.N. Voloshina); the methods of mathematical statistics: Wilcoxon t-test (Lucenko, 2014; Uruntaeva & Afon'kina, 1995).

Study results and their discussion

Based on the methodological foundations of the study (system-activity, axiological, culturological, personality-oriented approaches), the essential components of socialization (motivational, activity, reflective-evaluative), planned results, they set the main parameters to measure the effectiveness of technology, and diagnostic tools. They are presented in Table 1.

Table 1
Criteria and indicators of socialization technology effectiveness in motor-play activity among 5-7-year-old children

	_ .	
Criterion	Indicator	Methods
The level of social experience recreation in	 the ability to negotiate and plan joint actions, 	observation of children in the process of motor-
motor-play activity among children(communicative component)	 the child's ability to assess the results of play actions, attitude to their own role in a game 	play activity (according to V.A. Shishkina, M.N. Dedulevich), the author's method to determine the level of
The level of motor-game	- interaction in the	interaction in game
experience recreation (activity component)	fulfillment of game tasks, - the variety and quality of movements with the ball among older preschoolers in independent motor activity	situations (according to L.N. Voloshina)
The level of emotional-volitional regulation of behavior (personality component)	 focus on social norms of behavior in communication with peers and adults during motor-play activity, the ability to follow the rules, the ability to act on a signal 	Methodology "Studying the ability to restrain one's immediate impulses" (the game methodology "Sly Fox" by G.A. Uruntaeva)

Let's note that each of the indicators is evaluated from 1 to 3 points (it is rarely manifested in a child's behavior - 1 point, sometimes - 2 points, often or always - 3 points), the behavior of each child is analyzed separately. The sum of points scored by a child for all indicators makes it possible to determine the level of preschooler socialization in motor-play activity (Kravtsov et al., 2021).

The optimal level (19-24 points). In the course of free independent activity, a preschooler actively interacts with other children, uniting in microgroups for the

activities of interest (Bocheliuk et al., 2021). The preschooler adequately understands the meaning of interaction situations, the emotional state of the participants, correctly gives a moral assessment of behavior in motor activity and game situations, demonstrates the ability to apply social norms and rules of behavior in the course of motor activity (Pope et al., 2004; Jay et al., 2007). The preschooler intelligently performs movements, uses a variety of objects (balls, hoops, jump ropes). The movements of the preschooler are accurate, they are distinguished by their confidence in execution. He shows a creative attitude to the performance of game tasks, shows his movements, combines them with the movements of his comrades. The preschooler knows cultural norms and rules of social behavior, actively manifests them in motor activity, correlates them with game situations. The child evaluates motor-play activity, correlates actions and play rules.

Acceptable level (11-18 points) - the child observes with interest the activities of his comrades, he is involved in joint free activities with other children for a short time. The logic of the game action is determined by the life sequence, the game roles in motor activity are not named, the rules of interaction are not always observed. The child correctly understands most situations, but does not always give a moral assessment of behavior correctly. The movements of the preschooler are accurate, differ in the confidence of execution, but minor flaws are possible. The preschooler knows cultural norms and rules of social behavior, but does not relate them to game situations. He can assess an individual situation, but does not always cope with difficult situations during the game.

Insufficient level (1-10 points). The child makes mistakes in situation evaluation, finds it difficult to determine the emotional state of children. He cannot justify the choice of moral positions independently; he needs the help of an adult or a peer. Game actions are monotonous, game rules are absent, the logic of the game is easily violated. A child is inattentive, inactive in motor activity and little talkative when communicating with children. He treats peers indifferently. He cannot apply social norms of behavior correctly in the course of motor activity, he needs the help of an adult or peers. The movements of the preschooler are monotonous (he copies the movements of their comrades). The child performs them uncertainly, without interest.

Let us turn to the comparative analysis of the results obtained in the experimental and control groups. In the experimental group, the optimal level increased by 26.67%, the permissible level increased by 15%, and the insufficient level decreased by 41.67%. Verification of the results obtained by Wilcoxon's t-criterion testifies to the reliability of their growth in the experimental group at the end of the experimental work on the introduction of preschooler socialization technology in motor-game activity.

There were also positive changes in the control group. The number of children with an optimal level of socialization increased by 6.7%, an acceptable level - by 6.67%, an insufficient level decreased by 13.33%. However, the increase of indicators according to the Wilcoxon t-test is insignificant. The levels of preschooler socialization in motor-play activity from the experimental and control groups are presented in Table 2.

Table 2 Evaluation of socialization technology effectiveness among preschoolers during motor-play activity

	Experimental group, (%)		Control group, (%)	
Levels	Ascertaining	Control	Ascertaining	Control
	stage	stage	stage	stage
Optimal	13,33	40	11,67	18,33
Acceptable	40	55	43,33	50
Insufficient	46,67	5	45	31,67

A graphical comparison of the results obtained at the control stage of the experiment is shown on Figure 1.

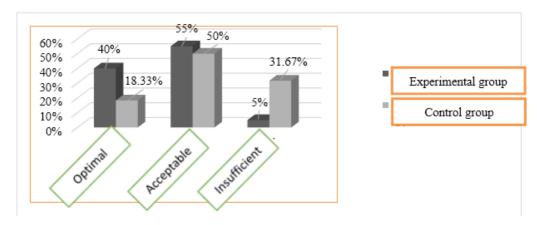


Figure 1. Comparison of the study results concerning the level of preschooler socialization in the experimental and control groups during motor-play activity

Table 3
Analysis of indicators from the experimental and control groups (Control stage)

Т	$T_{ m cr}$		T
1 emp	p≤0,01	p≤0,05	1 emp
243	397	466	T _{emp} <t<sub>cr</t<sub>

Statistical processing of the indices of differences between the samples of paired measurements according to the Wilcoxon t-test showed that in the presented methodology in the experimental and control groups of preschoolers $T_{\rm emp} < T_{\rm cr}$, ($T_{\rm cr} = 397~p \le 0.01~\mu$ 466 $p \le 0.05$), that is, the obtained the indicator $T_{\rm emp}$ according to this method is in the zone of significance, therefore, the obtained results of the experimental group of the control stage are reliable and higher in comparison with the results of the control group of the control stage. It should be noted that at the ascertaining stage of the experiment, no significant differences were found when comparing the socialization level of children.

Further, the increase of the indicators concerning the recreation level of the motor-play experience of each child was assessed using the formula by V.I. Usakov. The analysis of the results obtained indicates the increase of the variety and movement quality indicators with the ball by 46% among the children of the experimental group, which is 34% higher than in the control group (12%). This testifies to the effectiveness of socialization technology implementation during motor-play activity of preschoolers.

In the process of independent motor-play activity, 83% of preschoolers showed confidence in the fulfillment of motor actions, a variety of movements with the use of various balls and other sports equipment (throws, passes, beats, strikes), the unification of children into microgroups for play interaction. It should be noted that in independent activity, children chose game tasks and exercises that were offered as the part of socialization technology of preschoolers during motor-game activity: "Ball towards the ball", "Ball into a hoop", "Throw - catch".

The observations allowed us to note the positive influence of socialization technology in motor-play activity on the development of preschooler social potential, the expansion of the play space of childhood in connection with the use of more than 200 outdoor games in educational activities and during leisure time. 87% of the older preschoolers from the experimental groups demonstrated attention and readiness to follow game rules throughout the entire game, physical activity, respect for the opinion of their peers, and the need to discuss the results of game interaction. It should be noted that in the process of socialization technology introduction for preschoolers during motor-play activity, much attention was paid to enrich the motor experience of children with new movements and consolidate the technique of basic movement performance, which contributed to the development of a stable interest in outdoor games among children, the emergence of positive emotional experiences during the game, and the focus on positive interaction with gaming partners (Hacke, 2019).

Result Discussion

The relevance of the study is confirmed by foreign authors in a number of studies. Schlechter et al. (2017); Dankiw et al. (2020), argue that a child needs to gain social experience in order to become a full member of society. As many experts note, it is necessary to use a diverse range of universal means for the successful socialization of a child, the choice of which is determined by the requirements of modern society, social stratum and age (True et al., 2017; Dankiw et al., 2020). We have chosen motor-play activity as such means.

Summarizing the opinions of experts, we can state that the introduction of a child to social norms is carried out in the main spheres of his life: during communication, play, and cognition (Niemistö et al., 2020; Dankiw et al., 2020; Sääkslahti & Niemistö, 2021). According to the results of numerous studies by L.V. Abdulmanova, A.G. Komkov, I.A. Krivolapchuk, L.I. Lubyshev and our own research, we believe that today the possibilities of motor-play activity are implemented in the socialization tasks of a preschool child only partially, without covering his entire social-communicative sphere.

Conclusions

The use of technology and the presented pedagogical tools, special game exercises contributed to the enrichment of the social experience among children. The optimal and permissible levels in the experimental groups increased by 16% and 9%, respectively, and significantly exceeded the indicators of the control group.

Summary

The criteria and indicators proposed in the study allowed to evaluate objectively the resulting effects of socialization technology among preschoolers during motorgame activity (Mendoza & Prabhu, 2000; Orsi et al., 2011). In the process of socialization technology introduction among preschoolers during motor-play activity, much attention was paid to enrich the motor experience of children with new movements and consolidate the technique of basic movement performance, which contributed to the development of a stable interest in outdoor games among children, the emergence of positive emotional experiences during the game, and the focus on positive interaction with gaming partners. The results of observation, the use of diagnostic game situations showed the technology orientation to increase the activity, independence, initiative of children, which is confirmed by the ball movement variety and quality increase (by 46%), which indicates the purposeful and effective use of technology.

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