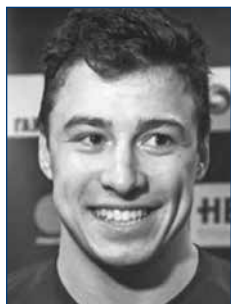




Positive functions of socialisation and the development of social relations in ice hockey

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Abstract

Objective of the study is to characterise the prerequisites for the realisation of the positive functions of socialisation and the development of social relations in ice hockey.

Methods and structure of the study. Analysis of the literature, pedagogical observation, questionnaire survey, testing, correlation and factor analysis, interpretation. The series of studies were conducted on a contingent of hockey players from 2022 to 2025 at the following stages: initial preparation and training – National Hockey Center, Moscow; the stage of higher sports mastery – Saint Petersburg.

Results and conclusions. The following were revealed: the factor weights of the qualities and abilities relevant in hockey – the criteria of the intellectual and motor adequacy to the social situation of development within the contours of the conjugated interaction of scientific approaches; the resources of the mutual complementation of effective game actions by hockey players under conditions of cooperation with partners and competitive counteraction to the opponent; the characteristic features of the socio-cultural influence of ice hockey on the social development of the personality.

Keywords: *sports improvement, ice hockey, socialisation, real functions, effective cooperation, criteria and conditions of development.*

Introduction. The conjugation of the components of sports preparation in the training process of young and qualified hockey players is conditioned not merely by the formalisation of the general ideas – the effective, economical, proportionate development of the athlete's potential, his functional, physical, technical, tactical, and theoretical preparedness – but, above all, by the determination of the system-forming principles of the actualisation of the potential of the developing hockey player under the conditions of his socialisation. Here, “the substantiation of the regularities of the dynamics of the development of the systems ‘athlete’ and ‘team’ is the basis for the forecast and planning of the training process” [4, p. 425], whereas “the linear application of scientific approaches does not make it possible

to reveal the ways... of teaching and upbringing in sports, requiring the assessment of the integrative influence of the components of sports preparation” [1, p. 730] on the socialisation of the growing personality in sports activity.

Objective of the study is to characterise the prerequisites for the realisation of the positive functions of socialisation and the development of social relations in ice hockey.

Methods and structure of the study. Analysis of the scientific-methodological literature, pedagogical observation, questionnaire survey, testing, correlation and factor analysis, interpretation. The series of studies were conducted on a contingent of hockey players from 2022 to 2025 at the following stages: initial preparation (n=30), training (n=30) –



National Hockey Center, Moscow; the stage of higher sports mastery (n=21) – Saint Petersburg.

Results of the study and discussion. Pedagogical observations and experimental studies in the field of constructing the dialectical methodology of functional analysis in the scientific study of ice hockey, conducted earlier [2, 3] and covered by us in the 2026 publications, make it possible to determine the features of the realisation in modern society of the positive functions inherent in ice hockey in the process of socialisation in the system of social relations.

1) Over the long time of the development of ice hockey, through the efforts of scientists, coaches, and athletes, a pedagogical technology has been formed that purposefully develops physical qualities and abilities, motor skills, and the components of tactical, theoretical, and psychological preparedness and of the orientation of the personality: interests, needs, value orientations of bodily culture – having great significance for raising the level of sports mastery.

The social approach in structural interrelation with the system and other scientific approaches makes it possible to reveal the socially significant manifestations of the personality in training-competitive activity – the simultaneous cooperation with partners and counteraction to the opponent, where social interaction is conditioned by the influence of factors actualising or minimising the effects of a technical-tactical combination with a certain partner, taking into account the (preceding) effectiveness of team interactions (Table 1).

The high factor weights of the abilities relevant in hockey (the criteria of the intellectual and motor adequacy to the situation) act as a resource of social interaction in the groups of initial preparation (IP) and training (TTG). The character of cooperation with partners is conditioned by the prerequisites of functional readiness for joint activity in the system of individual-maximal requirements for the parameters of their realisation.

The figure 1 depicts the probabilistic areas of the mutual complementation and compensation of

System approach to constructing the control of the process and results of the sports preparation and preparedness of young hockey players									
Qualities and abilities relevant in hockey and their integrative formations					Criteria of intellectual and motor adequacy to the situation				
Social approach	Cognitive approach	Manifestation of the athlete's intelligence: in the system of social relations	social: interpersonal, intrapersonal intelligence (I)	spiritual-moral qualities	Integrative approach	SPEED OF PERCEPTION (as a prerequisite for action),			
						of one object, factor weight (FW): IP – 0.712; TTT 0.730		of a number of important objects, FW: IP – 0.785; TTT – 0.810	
						of the spatio-temporal and dynamic characteristics of activity during confrontation with the opponent(s), FW: 0.748; 0.783			
						CONCENTRATION OF ATTENTION			
						in a game moment, FW: 0.746; 0.759		in game activity (interference-resistant behaviour), FW: 0.712; 0.752	
						permanent concentration on the game, fixation of threats, instantaneous determination of possibilities, FW: 0.784; 0.795			
						EFFICIENCY OF THINKING			
						of the receptive:		of the rational:	
						“No time to think” – intuitive, receptive thinking, FW: 0.734; 0.758		“There is time to think” – rational interpretation of the conditions of activity, FW: 0.711; 0.726	
						ensuring situational dominance over the opponent when solving an intellectual task, FW: 0.759; 0.814			
TACTICAL FLEXIBILITY OF THINKING									
ensuring the re(sub-)structuring of technical-tactical schemes to fit the situation, FW: 0.738; 0.795									
Acmeological and personal-activity approaches									

Table 1. Factor weights of the qualities and abilities relevant in hockey – the criteria of the intellectual and motor adequacy of the athlete to the social situation of development within the contours of the conjugated interaction of scientific approaches



the situationally relevant (in competitive activity) functional, physical, motor-coordination, technical-tactical, and mental abilities of qualified hockey players of the game five, where the following are characterised: 1 – morphometric indicator: Quetelet index; 2 – maximum anaerobic power; 3 – power

of work at VO_{2max} ; 4 – power of work at VO_{2max} relative to body weight; 5 – power of work at the anaerobic threshold; 6 – speed-strength abilities (explosive strength); 7 – absolute strength; 8 – relative strength; 9 – speed abilities (A) and speed endurance (the tempo of movements against the back-

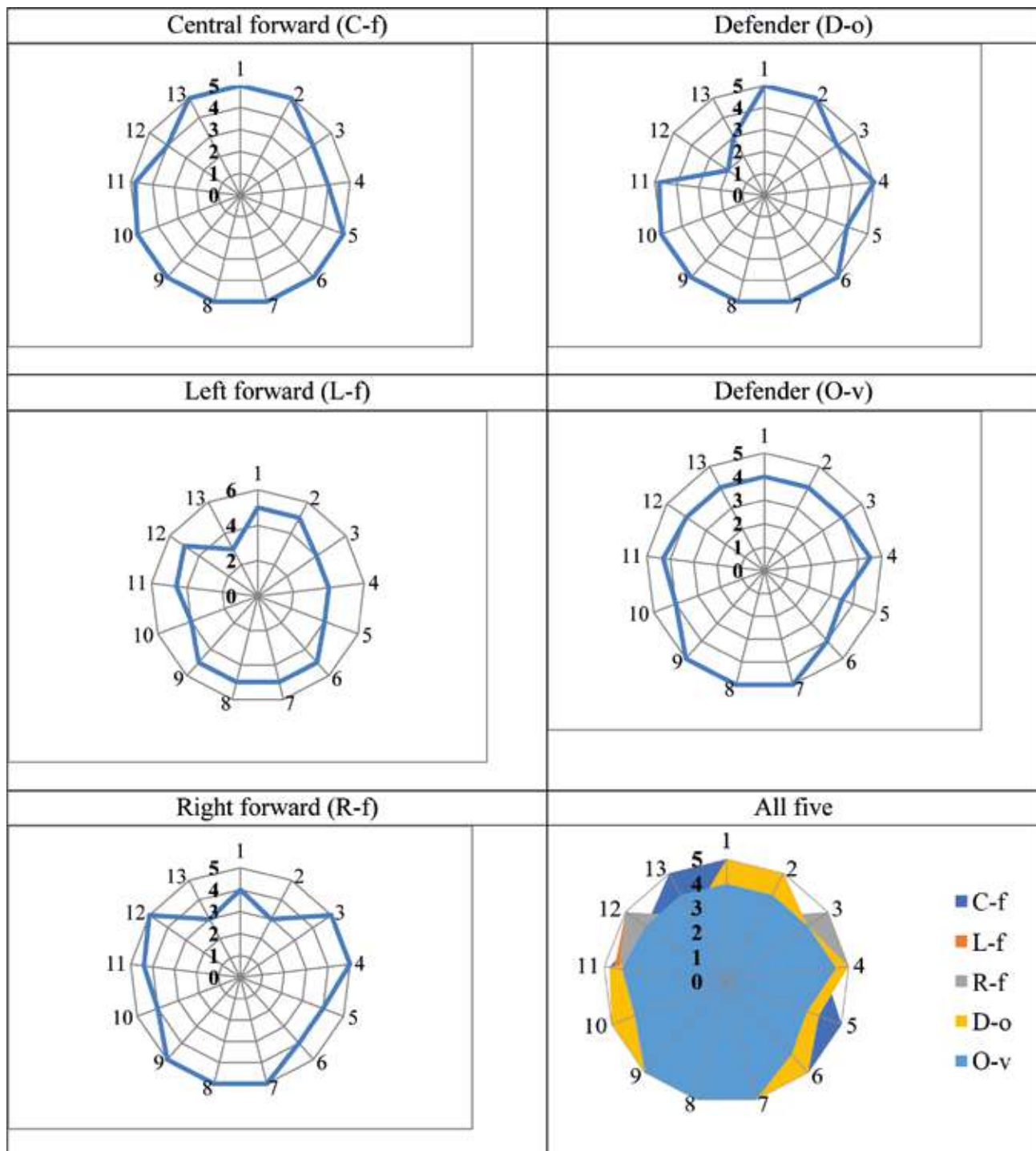


Figure 1. Resources of the mutual complementation of effective game actions by qualified hockey players in cooperation with partners and competitive counteraction to the opponent



ground of increasing fatigue); 10 – coordination A at the maximum tempo of the realisation of technical actions; 11 – average total indicator of functional, conditioning, and coordination A; 12 – effectiveness of intellectual decisions in attacking play when realising functional, conditioning, and coordination A; 13 – effectiveness of intellectual decisions in defensive play when realising functional, conditioning, and coordination A. The first weighty factor, including that of social activity – the combinatorial realisation of A – is absolute strength (0.810) and coordination A at the maximum tempo of the execution of technical actions (0.787).

Functional A characterise the second factor: power of work at VO₂max (0.890), power of work relative to body weight (0.704), power of work at the anaerobic threshold (0.761). The third factor unites the indicators of “maximum anaerobic power” and “explosive strength of the leg muscles” (0.852; 0.864), which speaks of the weight of the anaerobic mode of functioning and actualises the vector of training activity “under conditions of advancing fatigue.” The fourth factor is “play in attack” (0.863), where “points per season” are connected with “total time on the ice” (0.74) and reflect (Correlations, $p < 0.5000$, $N = 21$) the weight of the factor of teamwork and social communication in training-competitive activity.

2) Sports training and sports competitions in ice hockey place high demands on the athlete’s manifestation of volitional qualities and self-regulation: to achieve success, the hockey player is required to make constant efforts, restrictions, and the observance of a strict regimen over many years, and, moreover, until the very last minute there is no guarantee of full success. This contributes to the formation and improvement of mental qualities and abilities (will, attention, discipline, operational thinking, creative abilities) – his mental culture. Thereby ice hockey acts as a “school of will,” a “school of emotions,” a “school of character”; the sport makes it possible to satisfy a person’s need for self-realisation and self-affirmation. Super-complex competitive situations require the taking of creative decisions, which contributes to the development of creative abilities in the social environment.

3) The important socio-cultural significance of ice hockey – especially for children and adolescents – consists in the fact that sports training and sports competitions introduce them to socially significant

roles and models of behaviour, form important cognitive skills (the observance of rules, the consideration of the consequences of their (non-)fulfilment), which is of great importance in the process of the socialisation of the growing person and in the system of social relations.

4) Ice hockey is characterised by emotionality, free self-disclosure, positive emotions, the communication of the participants of the activity, and the simplicity and sameness for all athletes of the requirements and rules, which contributes to the communication of athletes regardless of their race, skin colour, religion, or ideological views. Thereby ice hockey makes an important contribution to introducing a person to the values of the culture of peace and the culture of social relations as a whole.

5) Modern ice hockey demonstrates a high level of mastery of hockey players, an important element of which is the ability to act “according to the laws of beauty” when performing various technical-tactical actions and techniques, which testifies to the realisation of aesthetic potential. The real aesthetic functions of ice hockey should also include the beauty of the ceremonies of the opening of competitions and the awarding of athletes, and the aesthetics of public performances.

6) Performing in various sports competitions, hockey players defend the interests of their team, and at international competitions – of their country. This, undoubtedly, cultivates in athletes a culture of cooperation, civic consciousness, patriotism, and love for the Motherland.

7) Many people, in their free time, for the purposes of active rest, entertainment, and communication, directly participate in sports competitions in ice hockey or watch these competitions. This testifies to the important significance of this sport in the sphere of leisure.

8) In modern society, under the conditions of a market economy, ice hockey as a certain variety of elite sport, by virtue of its popularity, occupies an important place in the structure of show business, and therefore many people make engaging in this sport their professional activity, a means of satisfying their material needs.

Conclusions. Thus, in modern society many important possibilities of ice hockey for the fulfilment of positive functions are practically realised, the basic foundations of which are socialisation and the development of social relations by means of ice



hockey – the intellectual and motor adequacy to the requirements of team interaction in the game.

The non-standardised character of competitive activity and the multiplicity of the manifestations of its success, revealed by us in the illustrative material, condition the determination of the spectrum of supporting qualities, abilities, and possibilities of the personality for the fulfilment of important positive functions of socialisation in the system of social relations, and above all this concerns the formation of the values of spiritual-moral culture, ensuring the constructiveness of interaction with partners in game combinations and the regulated counteraction to the opponent.

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