

Psychological safety of the learning environment in sports school as a factor of achievement motivation development in young athletes

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Abstract:

The article is dedicated to studying the influence of psychological safety of the learning environment in sports school on manifestation of achievement motivation in young athletes.

The aim is to determine an interdependence of indicators of social and psychological safety of the learning environment in sports school with indicators of sport motivation in young athletes. An empirical research was performed with a sample of young athletes studying and training at a sports school (n=61, the age of 15-16 years). Such psychodiagnostic techniques are applied: “Socio-psychological Safety of Subject» (“SSS”) (Eksacusto, 2009), “Sport Motivation Scale” (“SMS”) (Vallerand, 1997, adapted by Kasatkin, Vykhodets & Kvitchasty, 2012), “Motives for Playing Sports” (“MPS”) (Shaboltas, 2004).

Results. The interrelations between the indicators of social and psychological safety of the learning environment in sports school and structural components of sport motivation in young athletes have been revealed. A significant tie-in between a motive to achieve success in sports and safety (.284; $p < .05$), motive for social self-assertion and satisfaction (.308; $p < .05$); civil and patriotic motive and safety (.356; $p < .01$) has been determined. Differences in manifestations of sport motives among athletes with high ($p < .05$) and low ($p < .05$) level of social and psychological safety, proving the influence of social and psychological safety of the learning environment in sports school on manifestations of motives for achievement of individual success and orientation towards the interests of team and collective, have been found. The results obtained can be considered in the psychological training of athletes.

Keywords: sport motivation, motives for playing sports, achievement motivation, sports school, social and psychological safety of the learning environment.

Introduction

Modern sports activities have to solve many psychological problems: mobilization of spirit of victory before start, overcoming of doubts and fears after defeat, stress release during training and competition, etc. It is relevant to study an issue of psychological safety in sports, as present-day realities and practical experience point at the presence of certain threats to mental and psychological health of a person in modern learning environment (Vardanyan, 2014). Destructive influence leads to personality deformations, promotes development of psychological helplessness, restrains positive impact of psychological safety on the implementation of life strategy, in particular, on the development of achievement motivation, desire to win and to overcome excitement, stress release in the course of training and competitions.

Success in any activity, including sports, depends not only on the abilities and skills of a person, but also on the social environment, relations between athlete and coach, relationships in the sports team, on recognition, respect of significant persons.

The issues of psychological safety of athletes and coaches, namely, study of stability of psychological functions, competitiveness, ability to work in team, moral stability, emotional control, positive attitude, satisfaction of need for well-being, are considered in the works (Jones, Neuman, Altmann & Dreschler, 2001; Baeva, 2005; Symanyuk, 2005; Eksacusto, 2009; Tsareva, 2012; Kipp & Weiss, 2013; Vardanyan, 2014; Holovkova & Sheviakov, 2018 et al.).

The psychological safety of a subject of education and a subject of sports activity means a state of protection and psychological well-being, which is achieved as a result of mastering the methods of prevention, neutralization and overcoming of danger and threat related to the inner world of a pupil, athlete, teacher, coach in the course of training and competitions (Vardanyan, 2014: 10).

A special place in the psychological support of sports activities has motivation that encourages a person to play sports. Motivation in sports activities is determined by both internal and external factors that change their value throughout the whole sports careers. E. Ilyin distinguishes the following sport motives: 1) Pursuit of perfection, i.e. health promotion, development of physical and volitional qualities; 2) Pursuit of self-expression and self-affirmation, pursuit of social recognition; 3) Social preferences, i.e. trend of sports, pursuit of preservation of family sports traditions, desire to be ready for work; 4) Satisfaction of spiritual and material needs lies in desire to feel in oneself as a part of reference sports team, to communicate with mates, to get new impressions of trips to the towns, cities and countries, desire to get material benefits (Ilyin, 2000).

From Yu. Portnykh's perspective, the main motive is a motive to achieve success. In doing so, an athlete is at a competition not only with the opponents, but also with himself/herself, with a force of nature, time and space, in other words: with external obstacles and internal difficulties (Portnykh, 2002). Every athlete, even if he/she has not won the prize in the competitions, is always focused not only on winning over the opponent, but also on his/her own result. G. Babushkin suggests paying attention to the motives that shall be actualized in young athletes, namely a need for safety (protection against physical and psychological danger) to develop achievement motivation. To satisfy this need, the author considers it necessary to: maintain confidence and mutual support between the athletes in the course of training; create conditions that will contribute to the reduction of anxiety, disturbance, lack of confidence before start, fear of possible mistakes or failure; to provide mental and technique readiness to perform complicated exercises and to participate in the competitions. Next motive is a need for social ties (a sense of social interaction, affection and support). For young athletes at the age of adolescence it is very important to be in a team where they feel respect for themselves and feel themselves comfortable. The needs for respect (needs for self-respect, personal achievement, competence, respect from others, recognition, approval and authority) are important. Further, according to the researcher, follow needs for self-actualization, that is, need to realize potential capabilities and abilities, goals and growth, as well as understanding and comprehension (Babushkin, 2014). We come to the conclusion that athletes, who have kept their achievement motivation, are more active, less anxious, they are confident in their abilities, ready to mobilize all the forces for victory, they fully use their functional and special readiness to achieve results, they are ready for significant emotional tension, demonstrate high reliability in competitive activities. Athletes train together with their mates, compete with the opponents, gain experience in communication and learn to understand other people. By achievement motivation the authors mean a person's orientation toward the successful completion, perseverance in case of failure, and feeling of pride, if objective is achieved.

It is determined that negative emotional states with significant psychological consequences are often occurred in the course of training and competitions, and it is proved that this directly leads to decrease in the level of motivation and performance of sports activities (Stewart & Nandkeolyar, 2007; Lacroix & Perreault, 2012; Fry, Guvernau, Kim, Newton, Gano-Overway & Magyar, 2012). There is a research of dependence between success of future athletes and prevailing expected mental states (Nagla, 2015; Popovych & Blynova, 2019; Popovych et al., 2019a; 2019b; 2019c).

Researches of tennis players proved that the vast majority of psychological difficulties could be related to the fear of failure, which resulted from a significant discrepancies between the practical and psychological consequences of winning versus losing and the inherent uncertainty of outcome in any sports competition (Fox, 2008). Therefore, some athletes are able to manage a stress that precedes the competition by means of actualization of pursuit avoiding defeat, which significantly reduces their real psychological safety.

Another research examines factors that impact the satisfaction of psychological needs and trigger (or slow down) the action of motivational processes in the structure of personality of young athletes. It is proved that variations in the psychological environment created by significant others (such as the coach) and their impact on athletes are key determinants of the quality of sports engagement and whether participation leads to positive and / or maladaptive outcomes (Balaguer, Gonzalez, Fabra, Castillo & Duda, 2012). Besides, the issue of environmental impact on the sport motivation is considered in the system of education. J. Allen and K. Hodge emphasize that exactly coach plays a leading role not only in the process of preparation and training for sporting achievements, but also, through interaction with athletes, in creation of positive environment that provides a motivational climate that may have an impact on thoughts, feelings and actions of athletes (Allen & Hodge, 2006).

The research of nature of interpersonal influence in sports teams is interesting from the point of view of science. Based on the obtained results it is determined that team members are the main source of motivation, social support, social comparison and teamwork (Evans, Eys & Wolf, 2013). They affect each athlete in team through cohesiveness and competitiveness, as they are determinants of interpersonal influence. It is proved that group environment is one of the main determinants of sport motivation. The group, from the athletes' point of view, is a source of social ties that satisfies the basic human need for belonging to the group. They emphasized that isolation or exclusion from social groups lead to decrease in psychological well-being and, in particular, sense of psychological safety. N.M. LaVoi notes that the growing interest in interpersonal relations in sports, importance of warm, trustful and close interpersonal relations for wellbeing – all this emphasizes the need for in-

depth research of psychological safety in sports teams, in particular, in the dyad of coach and athlete (LaVoi, 2007).

Hypothesis. The authors assume that 1) social and psychological safety of the learning environment in sports school has an impact on sport motivation and motivation to achieve success in sports in young athletes; 2) there are differences in the manifestations of sports motivation in athletes with high and low level of social and psychological safety.

Purpose. To determine the interdependence of indicators of social and psychological safety of the learning environment in sports school and their impact on motivation in young athletes.

Material & Methods

Participants. The sample of the examined subjects was made by the senior pupils of the general specialized sports school attached to Kherson High School of Physical Education in the number of 61 persons engaged in the following sports: table tennis – 4 people; shotgun – 5 people; canoeing – 4 people; rowing – 7 people; trampolining – 4 people; track and field athletics – 6 people; sports gymnastics – 3 people; kayaking – 4 people; handball – 10 people; free-style wrestling – 14 people, including 33 (54.1%) boys and 28 (45.9%) girls. The age of the respondents is 16-17 years. Participation in the research was voluntary. The research is conducted in accordance with the ethical standards of the committee on the rights of the Helsinki declaration (WMA Declaration of Helsinki, 2013).

Organization of research. To conduct the empirical research, we applied the modified methodology based on the “Socio-psychological Safety of Subject (SSS)” (Eksacusto, 2009) research. Some aspects of social and psychological safety of the learning environment are considered: referential significance of environment (attitude to the learning environment), satisfaction with personal-trustful communication, relations with other pupils, relations with teachers and coaches, ability to express their point of view, bestow respect, preserve dignity, opportunity to seek assistance, to take the initiative, to be protected from psychological violence (from humiliation, threats, neglect and abusive treatment). The methodology contains 3 main scales: “Satisfaction”, “Harmony”, “Protection”; primary processing of results is made using key to the methodology, and the obtained quantitative indicator allows making conclusion about the level of manifestation of each parameter of social and psychological safety.

The basic conditions for social and psychological safety of educational sports establishment are the following: 1) satisfaction with interpersonal relations is understood as an indicator of positive relations, which allows to realize needs and interests of the subjects of relations. The criterion is satisfaction/dissatisfaction; 2) harmonious nature of relations is understood as a conformity of opinions, judgments of a subject in his/her relations with others. The criterion is harmony/disharmony of relations; 3) protection, which, on the one hand (objective indicator), is understood as absence of violations and difficulties in relations, and on the other hand (subjective indicator), implies the strength of a person to adverse influences (insults, threats, ignoring, manipulation, etc.). Tolerance/intolerance may be one of the criteria for protection (Eksacusto, 2009).

The questionnaire created by the collaborative writing team under the guidance of R. J. Vallerand – “Sport Motivation Scale” (“SMS”) (Vallerand, 1997, edited by Kasatkin, Vykhodets & Kvitchastyy, 2012) was used to determine the characteristics of structure of sport motivation. The questionnaire allows to determine the peculiarities of the structure of motivation by seven components: internal motives – learning new things (LN), experience of positive emotions (PE), improvement of one’s own skills (IS) and external – goal shifting (GS), strong sense of duty (SD), social approval (SA) and demotivation (D), which is a combined impact of external and internal factors that reduce the motivation to play sports.

“Motives for Playing Sports” (MPS) (Shaboltas, 2004) methodology, which is intended to determine the dominant goals (personal senses) to play sports and contains 10 motives-categories: motive for emotional satisfaction (MES); motive for social self-affirmation (MSS); motive for physical self-affirmation (MPS); social and emotional motive (SEM); social and moral motive (SMM); motive to achieve success in sports (MASS); sports and cognitive motive (SCM); rational-volitional (recreational) motive (RVM); motive to be prepared for professional activity (MPPA); civil and patriotic motive (CPM), is used to determine motives to play sports.

Statistical analysis. Statistical processing of the empirical data was performed by means of the statistical program “SPSS” v. 23.0 and «MS Excel». Spearman’s correlation coefficients (rs) were used to find and determine the correlation between the indexes obtained; to prove the statistical difference between the groups the criterion ϕ of Fisher’s angle-transformation is applied.

Results and Discussion

According to the results of the method “Socio-psychological Safety of Subject» (“SSS”) (Eksacusto, 2009) the following data were obtained (see Table 1).

Table 1. Average arithmetic means and mean square deviations by the scales of the method “Socio-psychological Safety of Subject» (“SSS”) (Eksacusto, 2009) (n=61)

Scale	Arithmetic mean, M	Mean square deviation, SD
Satisfaction with Interpersonal Relations	15.42	2.17
Harmony of Relations	8.57	1.82
Sense of Protection in Interpersonal Relations	12.58	2.09
Integral Indicator of Social and Psychological Safety	38.74	3.61

Comparing results with the test norms of methodology, we can make a conclusion that the average group indicator according to the integral scale “SSS” (M = 38.74; SD = 3.61) in the sample of young athletes studying at sports school exceeds a normalized arithmetic mean, which indicates mainly high and average level of assessment of social and psychological safety of the learning environment in the sports school.

“Satisfaction with Interpersonal Relations” scale (M = 15.42; SD = 2.17) has mainly high and above the average indicators, which indicates that young athletes demonstrate satisfaction with their relations with teachers, coaches and other pupils; they highly evaluate their emotional comfort in the process of communication with the subjects of educational process. In addition, social and psychological safety demonstrates pupils' satisfaction with the possibility to express their point of view, bestow respect, preserve dignity, opportunity to seek assistance, to take initiative and activity, besides, it shows that surrounding significant people consider certain difficulties in communication and are attentive to the opinions and suggestions of group members.

According to the “Harmony of Relations” scale, the questioned pupils demonstrate above the average results (M = 8.57; SD = 1.82), that is, the overall assessment of relations within the learning environment in sports school is positive. It is about certain conformity of opinions, views and actions of young athletes with the attitudes and evaluations of other subjects.

“Sense of Protection in Interpersonal Relations” parameter most clearly reflects a construct of “psychologically safe learning environment” and contains a specific list of answers to the question “How safe do you feel at school?: humiliation, contempt, threats, neglect or disrespectful, unfriendly attitude”. Moreover, the answers to each question are divided separately “by teachers” and “by other pupils”. While processing, we take the overall indicator, since the results of the sample revealed no significant differences in the assessments. Under this scale, results are similar to the results under the previous scales - mostly we observe high and average level of assessment (M = 12.58; SD = 2.09).

While processing results, indexes were calculated under all the scales, the quantitative values of which varied from 0 to 1. Determined: harmony index – .72; satisfaction index – .69; protection index – .61. Such data strengthen the previously obtained indicators and points attainably above the average level of social and psychological safety of the learning environment in sports school.

According to the results of the “Motives for Playing Sports” (“MPS”) (Shaboltas, 2004) method, results are presented in the Table 2. Each scale of the method contains 9 questions; answers to each question vary from 1 to 3, so the variation in the test indicator ranges from 9 to 27 points.

Table 2. Average arithmetic means and mean square deviations by the scales of the questionnaire “Motives for Playing Sports” (“MPS”) (Shaboltas, 2004) (n=61)

Scale	Arithmetic mean, M	Mean square deviation, SD
MES	18.57	2.08
MSS	22.84	1.89
MPS	16.41	2.11
SEM	19.06	1.78
SMM	17.83	1.94
MASS	25.34	2.23
SCM	17.06	1.68
RVM	18.22	1.92
MPPA	24.17	2.21
CPM	18.65	1.74

Analyzing obtained results, we can distinguish motives that are leading for playing sports in this sample. First of all, this is a motive to achieve success in sports (M = 25.34; SD = 2.23), i.e. pursuit of success, improvement of personal sports results, judgment sample: “I’m training on a regular basis to maintain and increase the achieved results, to achieve goal set before me”. Besides, motive to be prepared for professional activity (M = 24.17; SD = 2.21) is high too, pursuit playing sports in order to be prepared for the requirements of chosen professional activity; judgment sample: “It will be possible to achieve good results in training and work if I am healthy and physically fit. Sports contributes to this”. In addition, a motive for social self-affirmation (M =

22.84; SD = 1.89) shall be distinguished too, pursuit proving oneself, which is expressed in the fact that sports and successes achieved in doing so are considered and experienced from the point of view of personal prestige, respect by the acquaintances and spectators. Judgment sample: “I play sports because I soar to success in it. My friends at school and sports team, as well as the spectators, respect me for this. It is a pleasure to be in the high light and increase your prestige during the competition”.

Among the motives that are less expressed in the sample are the following: motive for physical self-affirmation (M = 16.41; SD = 2.11), desire to be physically fit, to build character, for example, “I actively play sports because I want to be physically fit and to build character. I don't want to be lazy, I want to be healthy”; social and moral motive (M = 17.83; SD = 1.94), pursuit of success of his/her team, and to train a lot to achieve this; to have good relations with partners, coaches, for example, “My sports team should be in a leading position. I want to put some skin in the game. I do not want to let my coach and friends down, it drives me to train more”; sports and cognitive motive (M = 17.06; SD = 1.68), pursue of learning technical and tactical training, scientifically-based training principles, for example, “I want to understand the issues of technique, tactics, principles of the training process, to know how to train properly”.

The psychological content parameters of sample are presented in the form of structure of sport motivation in young athletes of sports school (see Fig. 1).

The used type of diagram (see Fig. 1) allows making a clear visualization of area formed by the connected points of the measured ten parameters of motivation. The area of diagram, indicated by the red line, points at the motivational resource of young athletes in the context of sports.

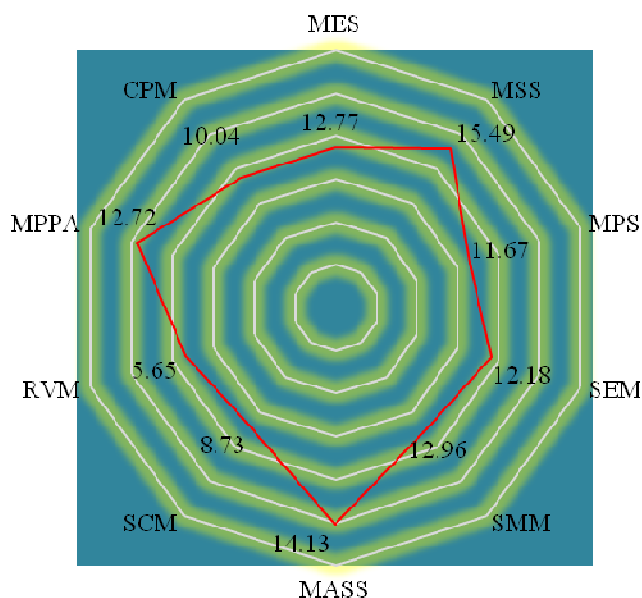


Figure 1. Structure of sport motivation in young athletes

The results of the “Sport Motivation Scale” (“SMS”) (Vallerand, 1997, adapted by Kasatkin, Vykhodets & Kvitchastyy, 2012) method is presented in Table 3.

Table 3. Average arithmetic means and mean square deviations by the scales of the questionnaire “Sport Motivation Scale” (“SMS”) (Vallerand, 1997, adapted by Kasatkin, Vykhodets & Kvitchastyy, 2012) (n=61)

Scale	Arithmetic mean, M	Mean square deviation, SD
LN	19.47	4.12
IS	21.83	4.52
PE	21.56	3.92
SG	18.94	4.81
SD	19.58	4.94
SA	17.86	4.63
D	7.05	3.57

Comparing obtained results with the average normalized values, we emphasize only leading motives in young athletes of researched group. First of all, we shall note the internal motive “Need to improve skills and achieve success” (M = 21.83; SD = 4.52), under which we obtained above the average results. This motive

determines a pursuit performing certain activities for the sake of enjoying significant achievements and realizing one's own capabilities. This need for sport is satisfied while performing a challenging task, achieving a high score, and improving skill levels.

Internal motives also include "Experience of positive emotions", under this scale we obtained mainly high and above the average results in young athletes ($M = 21.56$; $SD = 3.92$); this motive is expressed in pursuit stimulating experience of positive emotions and vivid impressions. The predominance of this type of motive in the structure of motivation of young athletes indicates that experience of positive emotional states is of the utmost importance.

High results were obtained under the scale related to external motivation. "Need for social approval" ($M = 17.86$; $SD = 4.63$), that is, athlete's behavior is mostly controlled by material rewards, coercion, and praise. A person plays sports in order to be able to earn the respect of others, for the sake of prestigious reasoning, to satisfy his/her ambitions, to be able to show others his/her physical achievements.

"Demotivation" shall be noted among the types of motives that are least significant in the structure of motivation in young athletes ($M = 7.05$; $SD = 3.57$), when an athlete experiences a sense of his/her own incompetence, when he/she feels that has no control over many of the things that happen. We believe that the low results under this scale are sufficiently explained by the young age of the athletes, who are mainly focused on a successful sports future. partially, the parameter of demotivation (D) in the research of junior group is excluded. A demotivated athlete does not see a connection between his/her actions and what happens as a result of his/her actions (Vallerand, 1997). This motivational mental state maybe experienced by the athletes, usually at the end of their careers.

For comparison, the psychological content parameters of researched group using the "Sport Motivation Scale" ("SMS") (Vallerand, 1997, adapted by Kasatkin, Vykhodets & Kvitchasty, 2012) method are presented in the form of the structure of sport motivation in young athletes (see Fig. 2).

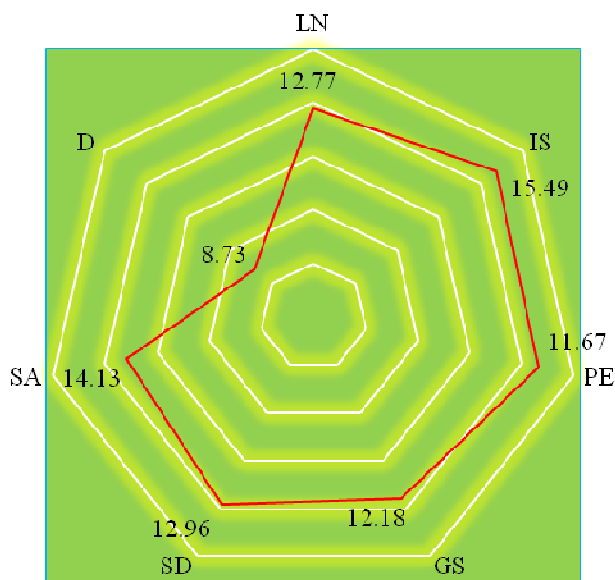


Figure 2. Structure of sport motivation in young athletes

We can clearly see the area formed by seven parameters of the structure of sport motivation in young athletes (see Fig. 2). The peculiarity of analysis of area of motivational capacity of the subjects lies in the fact that the motive for demotivation (D) is an integrated factor of external and internal impacts that reduce motivation to play sports and "D" performs a compensatory function, that is a kind of protective mechanism in sports activities. Comparison of the presented structures (see Fig. 1 & Fig. 2) makes it possible to make a clearly assessment of peculiarities of motivation in each athlete at any stage of his/her professional career not only in the context of investigation of psychological safety of the learning environment in sports school. To compare the structure of motivation at different stages of sporting activities, including at start and at the end, we recommend using all the scales of the "Sport Motivation Scale" ("SMS") (Vallerand, 1997, edited by Kasatkin, Vykhodets & Kvitchasty, 2012) method.

Correlation analyzes show the following results (see Table 4).

Table 3. Correlation connections of sport motives with indicators of social and psychological safety of the learning environment in sports school (n=61)

Variables	Satisfaction	Harmony	Protection	Integral index
Motive for Emotional Satisfaction (MES)	.247	.213	.236	.239
Motive for Social Self-Affirmation (MSS)	.308*	.198	.225	.267*
Motive for Physical Self-Affirmation (MPS)	.156	.194	.243	.227
Social and Emotional Motive (SEM)	.331*	.106	.229	.242
Social and Moral Motive (SMM)	.232	.219	.269*	.246
Motive to Achieve Success in Sports (MASS)	.271*	.239	.284*	.263*
Sports and Cognitive Motive (SCM)	.019	.261*	.178	.164
Rational-Volitional (Recreational) Motive (RVM)	.121	.217	.192	.201
Motive to be Prepared for Professional Activity (MPPA)	.213	.272*	.249	.282*
Civil and Patriotic Motive (CPM)	.132	.178	.356**	.317*
Learning New Things (LN)	.237	.262*	.123	.169
Need to Improve Skills and Achieve Success (IS)	.347**	.211	.235	.246
Experience of Positive Emotions (PE)	.179	.109	.012	.207
Goal Shifting (SG)	.247	.231	.348**	.291*
Strong Sense of Duty (SD)	.176	.033	.119	.165
Need for Social Approval (SA)	.238	.216	.324*	.315*
Demotivation (D)	.106	.073	.089	.145

Note: * – $p < .05$; ** – $p < .01$. The loadings of the significant variables are given in bold type.

Correlation analysis showed existence of statistically significant correlations between the indicators of sport motivation of pupils of sports school and indicators of social and psychological safety of the learning environment of the educational establishment. It is revealed that the “integral sense of social and psychological safety” determines the following sport motives: “Motive for social self-affirmation” ($r_s = .267$; $p < .05$); “Motive to achieve success in sports” ($r_s = .263$; $p < .05$); “Motive to be prepared for professional activity” ($r_s = .282$; $p < .05$); “Civil and patriotic motive” ($r_s = .317$; $p < .05$). These motives are associated with a sense of responsibility for sporting achievements, as they directly affect both the overall performance of team and sporting achievements of coach and the whole school, i.e. psychological well-being and psychological comfort of being in a sports school is a guarantee of orientation towards not only one’s personal high sporting achievement, but also towards the result of a team. This preliminary conclusion is confirmed by the existence of correlative links between social and psychological safety and the “Goal shifting” ($r_s = .291$; $p < .05$) and “Need for social approval” ($r_s = .315$; $p < .05$) motives, i.e. young athletes tend to consider sports as a means of achieving other goals, such as meeting new people, maintaining good relations with friends, gaining valuable life experience and useful information.

Under the separate scales of social and psychological safety, we obtained the following: “Satisfaction with interpersonal relations” indicator correlates with such motives as “Motive for social self-affirmation” ($r_s = .308$; $p < .05$); “Social and emotional motive” ($r_s = .331$; $p < .05$); “Motive to achieve success in sports” ($r_s = .271$; $p < .05$), “Need to improve skills and achieve success” ($r_s = .347$; $p < .01$). This proves that at a young age, the pursuit of success, achievement, winning in sports competitions is very closely linked to social motives, communicative needs, pursuit taking a rightful place in team, need for social support, respect, recognition, therefore, satisfaction with interpersonal relations directly impacts the actualization of motive to achieve success in sports in young athletes. Thus, we can assume that desire to communicate in a team of like-minded people, to develop in it, to be useful to other people, while enjoying pleasure, are the main elements that in the complex contribute to the pursuit playing sports and achieving high results. This fact should be taken into account when making the training process, since asymmetrical balance between training activities and process of communication can cause negative emotions in young athletes.

“Harmony” scale, as a cognitive component of social and psychological safety of the learning environment in sports school, has correlation ties at a high level of statistical significance with the following indicators of sport motivation: “Sports and cognitive motive” ($r_s = .261$; $p < .05$); “Motive to be prepared for professional activity” ($r_s = .272$; $p < .05$); “Learning new things” ($r_s = .262$; $p < .05$). Such data demonstrate coherence of thoughts, positions, intentions, plans, pursuits between all the participants of the educational and training process with other pupils, teachers, coaches; it enhances the understanding of requirements imposed to the training process, combining technique and tactics of training, requirements to preparation for competitions, understanding that sports skills are necessary for success in the future profession.

“Protection” scale, as a behavioral component of social and psychological safety, shows the correlation with sport motives: “Social and moral motive” ($r_s = .269$; $p < .05$); “Motive to achieve success in sports” ($r_s = .284$; p

<.05); “Civic and patriotic motive” ($r_s = .356$; $p < .01$); “Goal shifting” ($r_s = .348$; $p < .01$); “Need for social approval” ($r_s = 0.324$; $p < .01$). The analysis of the obtained data allows making conclusion that a sense of psychological protection, which implies resilience of a person to adverse impacts, in particular, insults, threats, coercion, ignoring, manipulation arising in the process of relations with other people, ability to consider other opinions, views, values of other people, communicative tolerance of a person, contributes to the formation of orientation towards the common interests of a team, pursue defending the honour of their school, team, city, and in addition, encourages to consider sports as an opportunity to communicate with like-minded and interesting people, to get more information and to enjoy the process of interaction.

To demonstrate the differences in sport motivation in young athletes with high and low levels of social and psychological safety, the sample was divided into 2 subgroups according to the median of the ordered series by the integrated indicator of social and psychological safety: group 1 – athletes with high level of psychological safety ($n_1 = 31$), Group 2 – athletes with low level of psychological safety ($n_2 = 30$).

In order to prove the statistical difference between two samples, the criterion ϕ of Fisher’s angle-transformation is applied (see Table 5). For comparison, the percentage of individuals from each subgroup with a high level of manifestation of the under study indicator is taken. The table shows indicators of sport motivation with statistically significant differences between the groups.

Table 5. Differences between groups according to the indicators of sport motivation ($n_1=31$; $n_2=30$)

Name of the indicator	Group 1 ($n_1=31$)	Group 2 ($n_2=30$)	Fisher’s criterion	Level of significance
Motive for Social Self-Affirmation (MSS)	35.4%	16.7%	1.68	$p < .05$
Motive to Achieve Success in Sports (MASS)	41.9%	20.0%	1.87	$p < .05$
Motive to be Prepared for Professional Activity (MPPA)	45.1%	23.3%	1.81	$p < .05$
Civil and Patriotic Motive (CPM)	38.7%	13.3%	2.32	$p < .05$
Learning New Things (LN)	32.2%	13.3%	1.79	$p < .05$

Differences between group 1 and group 2 in a number of parameters have been determined. Group 1 (with a high level of social and psychological safety) has higher indicators than group 2 under “Motive for social self-affirmation” ($\phi_{emp} = 1.68$; $p < .05$); in group 1 the “Motive to achieve success in sports” is more distinguished ($\phi_{emp} = 1.87$; $p < .05$), which indicates that the social and psychological safety of the learning environment in the sports school directly influences the desire to win and to achieve high sports result in young athletes. Besides, statistically significant differences on such motives: “Motive to be prepared for professional activity” ($\phi_{emp} = 1.81$; $p < .05$), “Civil and patriotic motive” ($\phi_{emp} = 2.32$; $p < .05$), are very interesting too. In other words, young athletes are more able to focus on the success and achievement of the whole collective, team, and to plan their future through the achievement of sports, when they feel satisfaction, harmony and protection in relationship with teachers, coaches and other pupils.

Conclusions

1. The correlation between the indicators of social and psychological safety of the learning environment in sports school and sport motivation, in particular, motives for playing sports and motivation to achieve high results in young athletes, have been established. The indicator of social and psychological safety “Satisfaction” impacts the Social Self-Affirmation Motive and Motive to Achieve Success in Sports ($p < .05$); “Harmony” scale determines the development of Sports and cognitive motive and Motive to be Prepared for Professional Activity ($p < .05$); “Protection” scale provides Social and Moral Motive and Civic and Patriotic Motive ($p < .05$).

2. The differences in manifestations of sport motives between young athletes with high and low level of social and psychological safety have been determined; it proves the impact of social and psychological safety of the learning environment in sports school on the manifestations of motives to achieve success and orientation towards the interests of collective and team.

3. The first and second hypotheses have been confirmed. The results of the research may be interesting to the principals of sports schools, psychologists, educators, coaches, who organize educational, sports, training and competitive processes of young athletes, as well as researchers in the field of psychology and pedagogy of physical education and sports.

4. Considering the urgent need of young people for social ties, attachment and support, the formation of social and psychological safety of the learning environment in sports school should be an important task of modern sports psychology.

Conflict of Interest. The authors declare that there is no conflict of interest.

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