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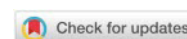
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Basic Needs Satisfaction and Conscious Motives for Sports Activities of Juniors

Alla Belousova^{1*} , Svetlana Gorshkova² , Yulya Tushnova¹ 

¹Faculty "Psychology, Pedagogy and Defectology", Department of educational psychology and organizational psychology, Don State Technical University, Rostov-on-Don, Russian Federation,
e-mail: belousovaak@gmail.com; trubulya@yandex.ru

²Rostov Regional School (College) of the Olympic Reserve, Rostov-on-Don, Russian Federation,
e-mail: lanka876@mail.ru

Abstract: Athletic motivation is actively studied in the sports psychology. The study of the juniors' motivation is crucial for exploring the reasons to quit the sport, the factors that reduce an athlete's productivity, the principles of building support programs for young athletes. The purpose of the study was to study the basic needs satisfaction and the hierarchy of young athlete conscious motives. The study involved juniors, in the amount of 133 people aged 13-16 years ($M=15.1$; $SD=1.6$; 59.4% men). The following methods were used: the essay "Why I came into sports", "Method of paired comparisons" by V.V. Skvortsov (modified by I.A. Akindinova), as well as statistical methods (descriptive statistics, W - Kendall, Chi-squared test, Kruskal-Wallis H - test). Personal, professional and status conscious motives were found out to form a complex motivation for sports activities. Conscious motives for sports activities differ among juniors in various sports. The least satisfied needs are those for acceptance needs and self-expression. The type of sport does not determine the satisfaction of the junior needs. The prospect of the study is to create a model of motivation for a young athlete. The results can be used in the activities of sports institutions.

Keywords: need, motivation, motive, conscious motives, sport, junior.

Introduction

The motivational sphere occupies a special place in sports psychology. The term motivation in sports can also be defined in a broad and narrow sense. In a broad sense, it means factors and processes that encourage people to act or non-act in various situations. In a narrower sense, the motives study involves a detailed analysis of the reasons that explain why people prefer one type of activity to another (Dautov, 2020; Kozhukhar et.al., 2020; Uvarova et.al., 2016). Leidl D. (2009) described the traditional and modern motivational constructs of sports trainers.

Djurovic D. et.al. (2020) they point out that motivation is the most important psychological factor for achieving success in sports. The authors conducted a systematic analysis of motivational theories and identified the most significant ones from the point of view of sports psychology (Djurovic D. et.al., 2020): theory of goal achievement, theory of attribution, theory of self-efficacy, theory of self-determination, theory of the value of the expected result. In this article, we will not stop at a detailed description of motivational theories, but will move on to research on the motivation of young athletes.

Motivation in sports activities is considered as an adaptation factor. At the same time, motivation is distinguished between personality and activity. Gaudreau P. and Braaten A. (2016) investigating the relationship between sports results and goals of the approach to mastery and the approach to performance, showed the relationship of these goals with the goal intended achievement. Beckman J. (2020) describes the place of the classical theory of achievement motivation in sports psychology.

Matej T. (2007) and co-authors describe a social-cognitive perspective in the motivation model of

*Corresponding author: belousovaak@gmail.com



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young athletes. [Monacis L. and co-authors \(2014\)](#) presented a trajectory model of an athlete's development using self-determined motivation as a mediating variable and sports orientation as remote determinants.

There are many classifications of sports activity motivation ([Guedes, Netto, 2013](#)). Researchers name different motives, for example, physiological, personal and social motives, training and competitive motives, direct and indirect motives, all classifications include the division into internal and external motivation of sports activity. Athletes' achievement motivation is of great importance ([Beckmann, 2020](#); [Ong, 2019](#)). In the process of playing sports, an athlete has a shift in the activity motives.

Therefore, it is legitimate to ask about the peculiarities of the athlete motivation over the stages of their sports career. Conditionally, it is possible to distinguish the stages of a professional sports career. At the stage of specialized basic training, work will be carried out to form a sustainable interest of the future athlete in professional sports. At the stage of maximum realization of one's capabilities, achievement motivation will play the most significant part, directly aimed at achieving a sports result. At the stage of maintaining achievements, achievement motivation will also be relevant, but its emphasis will be shifted towards the development and improvement of the athlete's skill level. The most relevant motivation becomes at the specialization stage as there arises a strong interest not only to going in for sport but also to its specific type, cognitive interest in technique and tactics in this sport, the desire for achievements in this type ([Dyatlova, 2013](#)). Mizuno M. and the co-authors point out that career intervention for professional athletes should be performed before the turning point of the career (transition to a career), and it is also important to monitor the processes when professional athletes independently open their careers ([Mizuno et.al., 2012](#)). [Martynova V.A. et.al. \(2022\)](#) write that the problem of motivation in sports activities is far from being resolved, and it is necessary to study motivation at specific stages of preparation. [Schmid M.J. et.al. \(2021\)](#) indicated that in order to provide psychological assistance to a young athlete, it is necessary to study the dynamics within the motivational subsystem and its predictive value. This fact determines the problem of our research, what conscious motives and basic needs young athletes have before the turning point of their careers (given by [Mizuno M., 2012](#)), whether the chosen sport determines the motivation of a young athlete, what conscious motives and basic needs modern young athletes have. The study of the above-mentioned tasks will expand the possibilities of psychological support for modern young athletes.

The relevance of the study of the junior motivation is determined by the need to understand the reasons to quit the sport, the factors that reduce the athlete productivity, the principles of building support programs for young athletes. These practical tasks determined the vector of our research interest aimed at studying the conscious motives of young athletes and the basic need satisfaction.

Materials and Methods

The survey sample consisted of students from the Rostov Regional School (College) of the Olympic Reserve. A total of 133 athletes enrolled in the 1st and 2nd courses took part in the study ($M=15.1$, $SD=1.6$; men 59.4%).

The sample includes athletes from various sports. Sports represented in the sample only by men: boxing, judo, gymnastics, shooting, football. Types of sports represented in the sample only by women: handball, rhythmic gymnastics, synchronized swimming, triathlon. Sports represented in the sample by both men and women: rowing (men 62.86%, woman 37.14%), athletics (men 37.5%, woman 62.5%), wrestling (men 83.3%, woman 16.7%), swimming (men 77.7%, woman 22.2%), cycling (men 60%, woman 40%), fencing (men 25%, woman 75%), pentathlon (men 66.6%, woman 33.3%), sailing (men 50%, woman 50%).

In the empirical study, the following methods were used: a survey, the method of paired comparisons, content analysis, scientific assessment, statistical analysis (descriptive statistics, W - Kendall, Chi-squared test to compare two empirical distributions, Chi-squared test to compare empirical and theoretical distributions, Kruskal-Wallis H - test). Computer data processing was carried out using the statistical package SPSS 20.0 (trial version). The following methodological tools were used in the study: 1) the study of conscious motives for sports activities - the essay "Why I came into sports"; 2) a study of the basic needs satisfaction - "Method of paired comparisons" by V.V. Skvortsov (modified by I.A. Akindinova).

In the essay "Why I came into sports," the respondents were given the following instruction: "Tell me what motivates you to play sports." Next, a content analysis procedure was carried out, the category "motivation (reason) for sports activity" was singled out in the texts, we take this category as the conscious

motivation of athletes. The resulting array of semantic units of content analysis ($n = 376$) underwent an expert evaluation procedure. 2 experts were involved. The task for the experts was to evaluate the semantic units of content analysis by status, professional and personal motives groups. The assessment was carried out on the Likert scale. Further, the expert opinion agreement degree (W - Kendall) was revealed, which showed a high degree of expert opinion agreement by status groups ($W=0.199$; Chi-squared test $=53.564$, $p=0.001$), professional ($W=0.203$; Chi-squared test $=53.972$, $p=0.000$), personal motives ($W=0.219$; Chi-squared test $=54.672$, $p=0.000$). The resulting semantic units of content analysis, understood by us as conscious motives for the sports activities of the respondents, were divided into three groups of status, personal and professional motives.

The following assumptions were tested: 1) the conscious motives of juniors are equally divided into categories of personal, professional and status motives, and form a complex motivation for sports activities; 2) conscious motives (personal, professional, status) can be distributed unevenly among athletes of different sports groups; 3) the junior motives, aimed at satisfying basic needs, can be distributed unequally; 4) the junior motives, aimed at meeting the basic needs, may differ among athletes of different sports groups.

Results

Conscious motives of junior sports activity

An empirical study of the conscious motives for going in for sports was carried out with the help of an essay on the topic "Why I came into sports". The content analysis of the essays made it possible to identify various conscious motives for going in for sports among the respondents. The following groups of motives (semantic units of content analysis) were identified: I want to gain high sports achievements (52.15%), I like to play sports (44.38%), I want to become an Olympic champion (36.78%), I want to have good health, a trained body (25.09%), build a sports career (21.86%), I want to become a member of the Russian national team, to defend the honor of the city / country (20.02%), I want to become a champion (15.29%), I want to meet the expectations of a coach and parents (13.58%), my family members are athletes (12%), I want to bring people pleasure, a beautiful sport (10.46%), to become a coach (6.23%), I want to be a professional athlete (6.16%), I want to play in elite sports (6.07%), I want to play in a famous team (5.63%), I want to get a gold medal (4.39%), I want to play in other countries (3.31%).

After the procedure of expert evaluation of semantic units of content analysis, the conscious motives of athletes were divided into 3 groups of personal, professional and status motives (Table 1).

Table 1. *Personal, professional and status conscious athlete motives*

Group of conscious motives	Semantic units	Frequency (in%)
Personal motives	I like to play sports, good health, a trained body, meet the expectations of parents and a coach, family members are athletes, bring people pleasure, a beautiful sport	38.1
Professional motives	achieve high sports achievements, sports career, become a coach, to be a professional athlete, to play in other countries,	30.1
Status motives	to become an Olympic champion, to become a member of a national team to become a champion, to play in an elite sport, to play in a famous team, to get a gold medal	31.8

To test assumption (1), Chi-squared test was chosen to compare empirical and theoretical distributions. It was found that the empirical and theoretical distribution of personality, professional and status motives were found not to differ (Chi-squared test $=6.557$; $df=2$; $p = 0.741$), that is, the frequency of occurrence of these groups of conscious motives in juniors is equiprobable.

Bearing in mind the results described above, it seems important to us to consider the correlation of the three identified groups of conscious motives in the motivational sphere of young athletes from different sports groups. To test assumption (2), Chi-squared test was chosen to compare several empirical distributions. It was found that the personal, professional and status motives of athletes from various

sports groups are different (Chi-squared test =25.787; df =15; p = 0.013) (in %): Rowing (33.78, 42.56, 23.66), Football (36.72, 27.58, 35.70), Athletics (35.29,35.29,29.41), Wrestling (39.37, 36.02, 24.61), Artistic Gymnastics (37.95,49.40,12.65), Swimming (44.14, 26.44, 29.42), Handball (36.47,36.47, 27.07), Cycling (35.29, 35.29, 29.41), Fencing (35.97, 23.98, 40.05), Judo (43.86, 43.86, 12.28), Pentathlon (39.06, 39.06, 21.88), Sailing (53.59, 10.72, 35.69), Artistic swimming (62.11, 20.70, 17.18), Shooting (66.67, 33.33, 0.00), Triathlon (0.00, 54.55, 45.45).

Junior motives aimed at meeting basic needs

To test assumption (3), Chi-squared test was chosen to compare empirical and theoretical distributions. The results of the statistical analysis showed that the junior motives, aimed at meeting basic needs, are distributed unevenly (Chi-squared test =5.087; df =3; p =0.002).

The leading motives are self-expression needs, material needs and social (interpersonal) needs are the least expressed (Table 2).

Table 2. Juniors' motives aimed at satisfying basic needs

Sports group	Material needs (average rank)	Security needs (average rank)	Social (interpersonal) needs (average rank)	Acceptance needs (average rank)	Needs for self- expression (average rank)
The whole sample	15.4	16.2	15.1	22.5	29.3
Kruskal-Wallis H - test	25.687	31.840	31.384	28.43	18.159
df	2	2	2	2	2
p	0.581	0.243	0.413	0.069	0.073

To test assumption (4), the Kruskal-Wallis H - test was used, since the methodology procedure involves ranking needs. It was found that the motives aimed at meeting the athlete basic needs from different sports groups do not differ. The above trends are fully consistent with the results in each individual sport group. The hierarchy of needs is structured as follows: 1 – needs for self-realization, 2 – needs for recognition, 3 - needs for safety, 4 – material needs, 5 – social needs.

Discussions

The conducted study of basic needs satisfaction and conscious motives of junior sports activities allows us to determine the features of the young athlete motivational sphere.

The ranking list of conscious motives for juniors' going in for sports shows that the leading component of the conscious motivation for going in for sports is meaningful, aimed at results in sports achievements, emotional and satisfaction, reflecting the highest level of reward for these achievements.

In the conscious motives expressed at the average level, there is a mixture of personal motives (health, a beautiful body; to meet the expectations of parents and a coach; family members – athletes; the desire to bring people pleasure, a beautiful sport), professional (sports career,) and status (membership in the national team, to become a champion). In general, at this level, personal motives for going in for sports dominate, while it can be distinguished as a positive motivation: health, a beautiful body, the desire to bring people pleasure; and motivational trends, which in the future can provoke certain problematic situations in the development of the young athlete personality. For example, the conscious motive "I came to play sports because my family members are athletes" can only be an external motivation, not expressing the personal choice of an athlete. The motive "to meet the expectations of the parents and the coach" is also ambiguous. In general, such motivation may long encourage a teenager to play sports with great effort. This motive is external, and, in the absence of stimulation from the coach / parents, the absence of internal motives for sports, can neutralize all previous sports achievements of a teenager.

Discussing the personal motives "health" and "beautiful body", it is interesting to study Homan K.J. and co-authors, who consider the relationship between the motivation for going in for sports and the risk of eating disorders among female athletes (Homan et.al., 2019). The authors showed that the risk of eating

disorders is not associated with a specific sport, but with the external motivation of athletes to engage in sports, with high physical/ cardiovascular stress and requirements for leanness (Homan et.al., 2019).

The ratio of status and professional conscious motives in this category shows a clear dominance of the former. Kovacs K. and Kovacs K. E. (2021) showed that a higher social status of boys and girls contributes to the internal motivation for sports, and a lower socioeconomic status contributes to external motivation and absence of motivation for sports.

Zernova T.I. (2017) points out that the formation of sports skills is more influenced by internal motivation than external. The author calls the destructive components of responsibility in the formation of sports skills passivity in the realization of responsibility, personally significant motivation, personally significant result, applying responsibility for the result to others (Zernova, 2017). Znamenskaya E.V. notes the advantages for the sports development of sports and business motives over personal and prestigious ones (Ilyinsky, 2013). Pronounced personal prestige motivation leads to inadequate self-esteem and emotional instability in competition conditions (Ilyinsky, 2013).

Caglar E. and Asci F.H. (2010) indicate that juniors with high and moderate sports motivation are focused on sports competence, physical condition and positive physical self-esteem.

Comparison of the junior conscious motives of various sport groups allows us to conclude that personal motives prevail among athletes in the groups of shooting, artistic swimming, sailing, swimming, wrestling and football. For these groups, the most crucial orientation is towards a significant adult (to meet the expectations of a coach and parents, family members are athletes), the emotional component of sports (I love sports, bring people pleasure, a beautiful sport), the physical component (health, a trained body). Gucciardi D. F. (2010), exploring the motivational sphere of junior football players, notes that a group with high mental stability prefers both skill goals and achievements, as well as external motivational trends.

Professional motives are dominated by juniors in the triathlon, artistic gymnastics and rowing groups. In these groups, the motivation to go in for sports is most associated with the professional sphere: direct professional motives (professional sports achievements, sports career, becoming a professional athlete) and indirect (becoming a coach, playing in other countries) motivation for sports activities is the most productive and will contribute to the active development of the chosen type of sports.

It is especially necessary to highlight the groups of juniors, in which personal and professional motives are equally expressed. Applicants of judo, pentathlon, handball, athletics, cycling, boxing groups. In these groups, productive professional motivation is expressed, supported by personal motives, which expresses the presence of external and internal motivation of future athletes, doubling its motivating force.

Status motives prevail among athletes in the fencing group, which shows the greatest fixation on the qualification assessment of achievements, which can be designated as the predominance of external motivation. Status motives are fully absent in the shooting group.

Features of the motivational sphere of athletes from different sports groups are actively considered by researchers (Liao, 2013; Martinent et.al., 2014; Jung et.al., 2021).

Motives aimed at satisfying basic needs are not determined by the sport. Needs for self-realization are leading in the group. This means a positive trend in the future sports career, as it indicates the need for achievements, in this case, sports, which will encourage the athlete to improve in the chosen sport. Similar results were obtained by Nurgalieva A.G. (2018).

Material and social needs are the most satisfied ones. Partial satisfaction of these need groups is explained both by the change in the social situation of the adolescent development studying in a sport's educational institution, and by the age characteristics of the respondents.

Kuzmin M.A. et.al. (2016) in the study of motivation of sports activity indicates that in cyclic sports, motivation for results, motivation of duty and awareness of the purpose of sports are most formed. In game sports, motivation for communication in sports is more pronounced, and motivation for financial reward is equally expressed in all groups.

Partially satisfied are the security needs. That is, for athletes, the need for protection from outside physical and psychological dangers and the confidence that physiological needs will be satisfied in the future are relevant.

Babushkin E. G. and Antipin V. B. (2006), in a study of the motivation of boxer athletes, describe the dynamics of actual needs: physiological needs are actualized as athletic achievements grow, and safety needs lose their relevance in the process of professional skill growth. The need for social connections,

respect and self-actualization remain significant at different stages of a professional career. These results are consistent with this study conducted in a sample of different sports groups. Babushkin E. G. and Antipin V. B. (2006) It is noted that satisfaction of the actual needs of athletes contributes to an increase in the level of sports motivation and the preservation of the contingent at the stage of initial sports specialization.

Acceptance needs are located closest to the dissatisfaction zone. In general, this is consistent with the dissatisfaction of the needs for self-realization. The development of a sports career at a professional level ensures the satisfaction of this need group, due to past sports achievements. In general, dissatisfaction with the needs for acceptance and self-realization corresponds to conscious motives. Thus, the leading conscious motives were the Olympic championship, belonging to the national team, a gold medal, which describes the juniors' ideas about the goals of sports activities and corresponds to a low level of satisfaction of the group's needs for acceptance and self-realization.

In connection with the above, the study of Sari I., who studied sports images, self-efficacy and sports motivation, is of interest (Sari, 2015). The author points out that there are no differences in these variables depending on gender and the presence of a medal. However, images of general skill and cognitive images are associated with the internal motivation of athletes (Sari, 2015).

Conclusions

The study results of basic need satisfaction and conscious motives of junior sports activities allow us to draw a number of conclusions.

1. Conscious motives of junior sports activities are equally distributed by categories: personal, professional, status, and form a complex motivation for sports activities.

2. Conscious motives differ among juniors in various sports, namely: personal motives prevail in the groups of shooting, artistic swimming, sailing, swimming, wrestling, football; professional motives prevail in the triathlon, artistic gymnastics, rowing groups; status motives prevail in the fencing group; mixed groups, where personal and professional motives are equally expressed athletes of the judo, pentathlon, handball, athletics, cycling and boxing groups are observed.

3. The motives of juniors, aimed at meeting the basic needs, are unevenly distributed, the groups of needs for acceptance and self-expression are predominant. The sports group does not determine the satisfaction of motives aimed at satisfying basic needs.

The prospects for further development of this topic are the creation of a model for the motivational profile of a young athlete, mathematical and statistical verification of this model. The study results can be used in the practical part of sports educational institutions to adjust motivational programs.

Conflict of interests

The authors declare no conflict of interest.

Author Contributions

Conceptualization, B.A., G.S., T.Yu.; methodology, B.A., G.S., T.Yu.; formal analysis, T.Yu.; writing—original draft preparation, B.A., G.S., T.Yu.; writing—review and editing, B.A., G.S., T.Yu. All authors have read and agreed to the published version of the manuscript.

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