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ABSTRACT

of the dissertation for the degree of Doctor of Philosophy

**THE IMPACT OF SOCIO-PSYCHOLOGICAL
CHARACTERISTICS ON THE SUCCESS OF GYMNASTS**

Speciality: 6114.01 – Social Psychology

Field of science: Psychology

Applicant: **Nigar Eyvaz Yusifova**

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The dissertation work was performed at the Department of Social and Pedagogical Psychology of the Baku State University.

Scientific supervisor: Doctor of Science in Psychology, professor
Kamila Ramiz Aliyeva

Official opponents: Doctor of Science in Psychology, professor
Gulnara Kazim Gurbanova



Doctor of Philosophy in Psychology,
Shafag Ismayil Shahmammadova

Doctor of Philosophy in Psychology,
Parvane Ilyas Mammadova

Dissertation council FD.2.43 of Supreme Attestation Commission under the President of the Republic of Azerbaijan operating at Baku State University.

Chairman
of the Dissertation Council:

Doctor of Science in Psychology,
professor

Kamila Ramiz Aliyeva

Scientific secretary
of the Dissertation Council

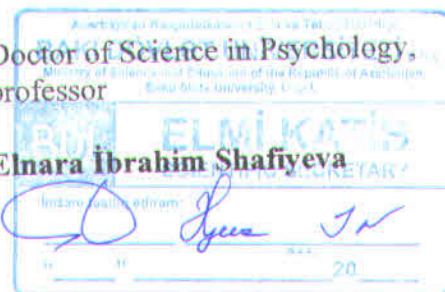
Doctor of Philosophy
in Psychology, associate professor

Mushvig Huseyn Mustafayev

Chairman
of the Scientific Seminar:

Doctor of Science in Psychology,
professor

Elnara İbrahim Shafiyeva



INTRODUCTION

Relevance of the topic and degree of elaboration. In recent years, there has been a significant increase in attention toward informational processes that define the personal qualities of athletes and coaches, group dynamics, team formation, and the nature of interpersonal relationships within teams.

The growing importance of psychology in athlete training today needs no further emphasis. Psychological knowledge and achievements are effectively applied across all areas of social practice, including the psychological preparation of athletes.

Studying the role of psychology in addressing various issues in athlete training is among the most relevant contemporary challenges. Unfortunately, simplistic views still persist, suggesting that physical training alone ensures athletic success. It must be noted that psychological readiness cannot be seen merely as a factor that contributes to success during competitions. Although psychological factors are most visible in competitions, their influence extends far beyond. For example, well-prepared athletes may fail to fully demonstrate their abilities in high-pressure situations.

As gymnastics is a branch of sports psychology, these observations are directly applicable to it as well.

Sports psychology is responsible for the scientific and methodological development of all aspects related to organizing the training-competition process and the athlete's education and instruction.

Achieving success in technical, physical, and tactical training is only possible by effectively addressing the athlete's psychological makeup. Athletes cannot be successfully trained without considering the psychology of the individual and the team — a factor especially vital in gymnastics.

Often, young gymnasts who lack well-formed character traits or stable moral and volitional qualities engage in this sport. Despite their high motor potential, these qualities alone are not sufficient for performance. Therefore, it is crucial to strengthen the development process, ensure proper organization of required resources, monitor progress, and prepare athletes for collaborative activity.

Additionally, the gymnast's education and overall development depend on understanding their individual psychological characteristics, especially the typological traits shaped by their nervous system.

According to J. Cretti, research shows that gymnasts characterized by high mobility and dynamic nervous processes learn complex gymnastic movements more quickly. They perceive the training process more adequately and refine their technical skills faster. However, when it comes to major competitions, it becomes evident that some coaches overlook psychological imbalances or weaknesses in their athletes during training. Therefore, knowing an athlete's broader psychological traits is equally essential.¹

In recent years, the role of psychology in gymnastics has seen a dramatic increase. One cannot passively wait for personality development or expect experience alone to yield results. Through competition, gymnasts acquire not only experience but also psychological skills such as ideomotor tuning, behavioral self-regulation, and more.

Given the younger age of today's gymnasts and the shortened timeline of peak performance, actively shaping personality has become essential — not only through psychological training but also with attention to social-psychological factors.

Research indicates that while the psychological factors influencing a gymnast's success are relatively well-studied, social-psychological aspects — such as family dynamics, the care they receive, their social status within the team, communication skills, and group integration — have not been systematically explored.²

Naturally, psychological traits and behavior in specific sports activities are governed by psychological mechanisms. Therefore, along with psychological factors, social-psychological influences on success in gymnastics must also be systematically researched. This makes the topic both timely and necessary.

The study of psychological issues that enable gymnasts to achieve success has existed since the inception of this sport. Research

¹ Кретти, Дж. Психология в современном спорте / Дж. Кретти. — М.: Физкультура и спорт, 1978. 234 с. (Psychology in Modern Sports, 1978)

² Basler, M.L. Arousal and anxiety correlates of gymnastic performance / M.L. Basler, A.C. Fisher, N.L. Mumford // Research Quarterly. 1976. - V. 47. - № 4.-P. 43-46.

in this area can be regarded as an attempt to examine various aspects of the problem from a psychological perspective. The psychological state of gymnasts, as well as the impact of fear and anxiety they experience on their performance, have been studied by a number of researchers, including White and Bennie [R.L. White, A. Bennie, (2015)], C. Thelwell [C. Thelwell (2010)], S. Hessell, C. Hocking, and S. Graham Davies [S. Hessell, C. Hocking & S. Graham Davies (2010)]. The studies conducted show that the psychological challenges and personal experiences athletes face may affect their perception of the relationship between participation in sports and physical health, as stated by C. Theberge [Theberge, 2008: National Athletic Trainers, 2011]. Research in various directions indicates that information about the gymnast's personality, the situation, and the interaction between the gymnast's personality and the situation predicts performance better than analyzing personality or the situation alone, according to Vanden Auweele et al. [Vanden Auweele et al., 2001], Spink [Spink 1990], Cox [Cox, 2007], and Lavalle and Robinson [Lavalle and Robinson 2007]. According to several scholars, gymnasts are often driven by the need for progress, which can hinder the development of their personality (Lavalle and Robinson, 2007; Turocy, DePalma, Horswill, Laquale, Martin, & Perry, 2011).

V.B. Kornberg and T.M. Lebedikhina [V.B. Kornberg, T.M. Lebedikhina, 2017], V.M. Smolevskiy [V.M. Smolevskiy, 2014], and others believe that behind every successful or unsuccessful performance of a gymnast stands the work of a coach-teacher, whose professional characteristics place certain demands on their personality, the quality of their training, knowledge, skills, and attitude toward the work.

Research shows that the personality traits of gymnasts correspond to the qualities identified in the five-factor personality questionnaire (Skinner and Brewer [Skinner N. & Brewer N., 2004]; Bhambri E., Dhillon P.K. & Sahni S.P. [Bhambri E., Dhillon P.K. & Sahni S.P., 2005]; Bali A. [Bali A., 2015]; Kaplanova A. [Kaplanova A., 2018]; Duda J.L. [Duda J.L., 1995]; Bandura A. [Bandura A., 1997]; Braun [Braun, 1998]).

Many psychologists argue that cultivating personality traits through sport enhances an athlete's likelihood of competitive success

(Popov & Siovitski, 2008; Shishkareva & Orlov, 1954; Ilyin, 2004; Kelishev, 1972; Palaima & Cretti, 2012).

Studies on the main motives behind sports participation (Melnikov, 1987; Dimitrienkova, 1980; Volkov, 2002; Singer, 1980; Rodionov, 2004; Rudik, 1964; Stanbulova, 2005; Weinberg, 2005) show that it is difficult to clearly determine which motivation acts as the success factor in gymnasts.

Some Azerbaijani psychologists (E.Huseynov, E.Abbasov, E.Aliyev, etc.) have also examined certain aspects of sports psychology. However, systematic research in this area remains limited, highlighting the need for deeper investigation.

The object and the subject of the research. The object of the study is social-psychological aspects of athletic success.

The subject of the study is investigation of social-psychological issues affecting success in gymnastics, with a focus on identifying the directions of gymnasts' social relations in this context.

The purpose of the research is to identify the social-psychological problems influencing gymnasts' success through specific methodologies and experiments, uncover key factors in their psychological preparation, and clarify influential elements.

Based on the research hypothesis and goal, the following objectives are defined:

- Analyze relevant literature to assess the extent to which the problem has been studied;
- Systematize studies focusing on gymnasts' characteristics, challenging situations during competition, and coach-athlete relationships;
- Identify the role of various factors in psychological preparation;
- Determine which factors influence success in gymnastics;
- Identify gymnasts' social-psychological characteristics and how group dynamics affect their performance;
- Conduct experiments and surveys to measure the impact of social-psychological factors on success;
- Identify and address factors that hinder gymnasts' success.

Hypothesis of the study. Gymnasts' success in competitions is influenced not only by physical and psychological preparation, or the coach's guidance, but also by the quality of their social-psychological

relationships — including interactions within the team, family, and peer groups.

Research methods. The methodological basis of the study is the main provisions of sports psychology, the role of psychological preparation in sports activities, general regularities about personality and its self-assessment. The study referred to the methodological approach of I.N.Lipiridin. The study was conducted on 110 gymnasts. Gymnasts belonging to two age groups - teenagers and seniors were selected.

The study used T. Elers`s "Success Motivation Diagnostics" test, H. Eysenck's "Mental State Assessment Test" to assess the mental states of athletes, and Y. L. Khan's "Attitude to the upcoming competition" test. Statistical analysis of the test results was performed using the application.

The main provisions defended:

- Psychological preparation is a fundamental part of overall readiness and enables gymnasts to fully demonstrate their skills during training.

- A social-psychological foundation underlies psychological readiness. Low or exaggerated self-esteem negatively affects psychological preparation, while adequate and high self-esteem has a positive effect.

- Communication within the group, peer relationships, and a supportive family environment increase the likelihood of success and form the basis for effective performance.

- Adequate self-perception enhances psychological readiness, fosters appropriate social positioning, and lays the groundwork for success in competition.

Scientific novelty of the research.

Unlike previous studies, this research study systematizes the research on the problem, identifies the role of socio-psychological factors in the psychological preparation of athletes, and reveals the degree to which the context of intra-group and interpersonal relationships affects the success of gymnasts.

Theoretical and practical significance of research. Identifying the role of social-psychological factors in gymnasts' preparation enriches sports psychology as a field of knowledge. Establishing social relations as a primary factor in psychological preparation enhances the

methodological basis of the field and provides valuable recommendations.

The research findings can be used to improve athletes' pre-competition preparation and correct negative psychological conditions. They can also serve as methodological guidance for coaches and support gymnasts in self-development and effective social interaction.

Research approval and implementation. The main propositions were discussed in academic seminars at Baku State University, reflected in the author's published articles and conference theses, and thereby validated through academic approval.

The name of the institution where the dissertation work was performed. Department of Social and Pedagogical Psychology, Baku State University

The total volume of the dissertation in terms of marks, indicating the volume of the structural sections of the dissertation separately. The dissertation consists of an introduction, three chapters, a conclusion, a list of used literature and appendices. The Introduction part of the dissertation is 7 pages, 12262 marks, Chapter I is 34 pages, 61615 marks, Chapter II is 54 pages, 97824 marks, Chapter III is 20 pages, 21690 marks, and the Conclusion part is 5 pages, 7919 marks. The total volume of the dissertation, excluding the list of used literature and appendices, is 201309 marks. The total volume of the dissertation is used.

THE MAIN CONTENT OF THE DISSERTATION.

The Introduction justifies the relevance of the research, explains its object and subject, purpose, scientific hypothesis, tasks and methodological basis, and also provides brief information about the research methods used, scientific novelty of the research, theoretical and practical significance, the provisions put forward for defense, and its results.

The first chapter of the dissertation is called “**The Problem Statement and Research Directions**”. This chapter includes two paragraphs. The first paragraph, called “**The Statement of the Problem**”, clarifies the essence of this concept from a psychological point of view.

It is noted that the mechanisms of athletes' success are not entirely determined by their physical preparation, psychological preparation, including the ability to assess the opponent, self-confidence, adequate determination of one's goals, the existing state of volitional qualities, etc., play an important role in this process. Also, studies show that psychological preparation is more likely to be based on socio-psychological preparation. Studies have shown that good coaches are able to develop the performance of gymnasts in accordance with their personal qualities. A suitable coach-gymnast duo is characterized by effective and open communication and two-way free interaction with rewarding behavior for effort and performance. Also, for a comprehensive study of the socio-psychological issues of gymnasts' success, it is necessary to study the mechanisms of using psychological methods in this process, such as relaxation techniques, focusing, simple verbalization, etc.

The second paragraph of the first chapter, entitled "**Directions of Research of the Problem**", is intended to identify the conceptual directions of the problem, to reveal the directions of solving existing problems in this area and the relevance of the problem. We can note the studies devoted to the problem in four directions - psychological preparation, personality traits, the study of motivation and the analysis of social relations.³

Studies show that psychosocial development, the formation of self-esteem, relationships with parents and peers, the development of social cognition, etc. are among the main factors in the success of gymnasts. There is a serious need to identify motivation, which is one of the main psycho-social factors that determine success. These include educational and social motives, achievement motives. The activation of these motives is the basis of the process of gymnasts' success. Also in this paragraph, concise information is given about the history of the sport of gymnastics.⁴

³ Ashmarin, B.A. Theory and methods of physical education / B.A. Ashmarin. M.: Physical education and sports, 1990. - 245 p.

⁴ Bogomolov, A.P. Psychological preparation of gymnasts / A.P. Bogomolov, K.S. Karakashyanc, E.G. Kozlov. - M.: Physical education and sports, 1974.80 p.

The second chapter, entitled “**The Factors Affecting the Success of Gymnasts,**” consists of three paragraphs. **The first paragraph** studies “**Socio-psychological issues of gymnasts’ training.**” Note that preparation for a particular activity is the process of creating a person’s readiness to participate productively in it. A person must be mentally prepared for any activity. In all cases where mental preparation for action is required, psychological preparation is also required beforehand. It is also important to note that it is often invisible as a process. Because it is not specifically organized, but is carried out spontaneously. However, in activities that require people to be focused, mobilized, energized, and highly professional, psychological preparation is organized and systematically implemented in advance and during the activity itself. When studying the psychological structure of activity, it is necessary to take into account all its specific types, including sports activity, which is becoming increasingly important in the life of contemporary society. An analysis of the socio-psychological structure of sports activity cannot be conducted unless relevant research is based on an analysis of human activity in general. Therefore, the proposition of this research also includes the task of identifying the structural and psychological disposition of human activity.

Three aspects of psychological stability come to the fore in interpersonal relationships. strength, stability, balance

A number of researchers believe that the occurrence of dramatic changes in psychological states acts as one of the potential prerequisites for the occurrence of movement errors and injuries in gymnasts. In order to manage the stress state that a gymnast exhibits during a competition, attention should be paid to the emotions that cause stress. Autogenic training and muscle relaxation can be used as a method of managing the mental state.

It is necessary to develop social psychological intervention programs to increase the socio-psychological readiness of gymnasts in competitions. In addition, the presence of good family relationships, the sincere attitude of parents to their children and their support for them in this regard have a positive effect on the results of the competition.

The second paragraph of the second chapter is called “**The Factors that determine the success of gymnasts.**” Considering the

demands of the modern era, there is a great need for new development and progress in sports and sports training, as in other fields. This becomes even more important, especially considering the high interest in Olympic sports. Gymnastics is considered one of such sports. Given the high development of gymnastics in our country today and the interest of young people, it is substantial to approach this type of training even more seriously. Nonetheless, attaining optimal performance in training and competitive settings requires more than mere physical, technical, and tactical preparedness on the part of athletes. In order to create high peaks, great hopes are placed on the improvement and development of the psychological preparation of managers, and these tools require the economic security of psychological work. Gymnastics affects the development of certain aspects of the athlete's psyche, and at the same time, the difficulties inherent in gymnastics require the development of mental qualities and functions in gymnasts that have their own specific characteristics. This makes it significant for the coach to study the psychological characteristics of gymnasts. This, in turn, will allow us to identify specific tasks and methods of psychological preparation of athletes, and to develop the qualities and functions necessary for successful competitive activity. Currently, sports require athletes to significantly increase their training loads. As a result, the gymnast's mental load increases, and the state of apathy caused by overload increases. This requires training in the athlete's psychological preparation and self-control techniques. The manifestation of any psychological barrier occurs due to reasons based on the athlete's poor physical preparation, responsibility for athletic performance, health status, past performance results in such competitions, anxiety, fear, lack of confidence in his strength, as well as the strength of the competition, the objectivity of the athletes, the organization of the jury, the judges.

It is noted that, although the volume of research on sports psychology has increased in modern times, there are very few studies on the social psychological analysis of gymnasts. An individual approach is important for gymnasts. For this purpose, the compilation of a psychological characteristic or psychological map for each gymnast plays an important role. The characterological section of the gymnast's psychological map can be divided into three semi-sections: a) moral characteristics of the personality; b) volitional personality characteristics;

c) emotional manifestations. One of the important issues affecting the success of gymnasts is related to their emotional stability. It also turned out that gymnasts should master special methods of regulating their own situations, which are part of the psychological preparation system.⁵

The second paragraph of the chapter is called “**Directions for the implementation of psychological training in gymnasts**”. In the psychological training of gymnasts, their coaches have a special role. A number of professional qualities are required for coaches.

1. Business qualities
2. Reflective qualities
3. Communicative qualities
4. Empathetic qualities

It is important to develop a model of psychological support for gymnasts during a long training process. In order for gymnasts who are new to gymnastics to succeed, psychodiagnostics of the gymnast's personal characteristics should be carried out. It is important to know the characteristics of the personality for effective learning. The second block of psychological support for athletes includes studying their psychological preparation and self-regulation methods during the training process. Psychological management of competitive activity is divided into two parts: pre-competitive and competitive management. The third block consists of psychocorrection of negative emotional states of gymnasts during and after competitions, rehabilitation of athletes who have suffered sports defeats or physical injuries during competitions. In this paragraph, although coaches and gymnasts know the role of psychological preparation, they cannot implement it in practice. This directly affects the gymnast's performance.

The third chapter of the dissertation is called “**The Research of factors that determine the success of gymnasts**”. **The first paragraph**, called “**Description of research methodology and organization of research**”, explains the methodology of studying the problem. The study was conducted on gymnasts who formed the basis of

⁵ Kaplánová, A. (2018). Individual differences of sensitivity of tennis players to injustice situations from the perspective of the five-factor model of personality / A.Kaplánová// Big Five Theory. Acta Gymnica. -2018. - 48(1), -p. 21-26

various Sports Academies and the National team of Baku. During statistical processing, questionnaire data of 110 people were analyzed. During the study, several parameters, including age, gender, interpersonal and intra-team relationships, were analyzed.

The following methodologies were used during the study:

1. Motivation methods for success (T. Ehlers methodology).
 2. G. Eysenck's "Self-assessment of mental states" methodology
 3. The athlete's attitude towards the upcoming competition methodology
- A quantitative and qualitative analysis of the results obtained during the study was carried out, including the mathematical-statistical calculation of the data.

During the study, the SPSS computer program was used and the adequacy of the results was seriously considered. The study covered December 2022 and October 2023. The purpose of the study was to identify the social psychological factors that determine the success of gymnasts with the help of psychological methods.

In the second paragraph, entitled **"The Processing of the Results"**, the socio-psychological aspects of success became the object of experimental-psychological research.

110 athletes were involved in the study and they answered questionnaires consisting of various methodologies (Motivation methods for success (T. Ehlers) and G. Eysenck's "Self-assessment of mental states" methodology and psychological diagnostics methodology.

Table 1

Respondents' indicators by gender

		Gender			
		Frequency	Percent	Valid Percent	Cumulative Percent
Valid	Male	12	10.9	12.2	12.2
	Female	86	78.2	87.8	100.0
	Total	98	89.1	100.0	
Missing	Ommited	12	10.9		
Total		220	100.0		

Table 1 shows that although 98 respondents answered the gender question, 12 did not. Of the respondents who answered the gender question, 86 (87.8%) were girls and 12 (12.2%) were boys.

Table 2

Age distribution of respondents

Descriptive statistics				
	N	Minimum	Maximum	Mean
Age	108	7.00	25.00	12.1
Valid N (listwise)	108			

Table 2 shows that the average age of the respondents was 12.1, the minimum age was 7, and the maximum was 25. 2 respondents did not answer the age question.

Table 3

Indicators of the relationship between anxiety, frustration, aggression, and rigidity of gymnasts

Correlations					
		Anxiety	Frustration	Aggression	Rigidity
Anxiety	Pearson Correlation	1	.545**	.140*	.550**
	Sig. (2-tailed)		.000	.039	.000
	N	110	110	110	110
Frustration	Pearson Correlation	.545**	1	.146*	.292**
	Sig. (2-tailed)	.000		.030	.000
	N	110	110	110	110
Aggression	Pearson Correlation	.140*	.146*	1	.405**
	Sig. (2-tailed)	.039	.030		.000
	N	110	110	110	110
Rigidity	Pearson Correlation	.550**	.292**	.405**	1
	Sig. (2-tailed)	.000	.000	.000	
	N	110	110	110	110
**. The relationship between variables is significant at the 0.01 level (2-tailed).					
*. The relationship between variables is significant at the 0.05 level (2-tailed).					

Table 3 shows that various psychological factors affecting the respondents' social activity and professional (sports) achievements were studied. In particular, mental states such as anxiety, frustration, aggressiveness, and rigidity were studied using G. Eysenck's "Self-assessment of mental states" test. Here, since $\text{Sig} \leq 0.05$, we can say that

the relationship between the variables is statistically significant at the 0.01 and 0.05 levels.

As seen in Table 4, the obtained results indicate an inverse relationship between achievement motivation and the anxiety factor.

According to the correlation table, the statistical relationship between achievement motivation and anxiety is significant at the 0.01 level ($P = 0.000$), and the negative value of the Pearson coefficient indicates the existence of a negative correlation between these two variables.

Table 4

Indicators of the relationship between gymnasts' success motivation and anxiety

Correlations			
		Achievement Motivation	Frustration
Achievement Motivation	Pearson Correlation	1	-.234**
	Sig. (2-tailed)		.000
	N	110	110
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 5

Indicators of the relationship between gymnasts' achievement motivation and frustration

Correlations			
		Achievement Motivation	Frustration
Achievement Motivation	Pearson Correlation	1	-.232**
	Sig. (2-tailed)		.001
	N	110	110
**. Correlation is significant at the 0.01 level (2-tailed).			

As seen in Table 5, the data analysis also indicates the presence of a relationship between achievement motivation and frustration.

To clarify this, the results of the correlation analysis reveal a statistically significant relationship between achievement motivation and frustration ($P = 0.001$).

Moreover, the negative value of the Pearson coefficient indicates an inverse relationship between the two variables.

As can be seen from Table 6, during the study of the relationship between variables, it was observed that there was no serious and meaningful relationship between success motivation and the level of aggression. Thus, $P=0.306$ was found between these two variables, which does not satisfy the condition of $Sig \leq 0.05$. Since $P=0.306$, we can say that the relationship between success motivation and aggression is not statistically significant. Also, the level of success motivation is not accompanied by a decrease or increase in aggression.

Table 6

Indicators of the relationship between gymnasts' achievement motivation and level of aggressiveness

Correlations			
		Achievement Motivation	Frustration
Achievement Motivation	Pearson Correlation	1	-.069
	Sig. (2-tailed)		.306
	N	110	110
**. Correlation is significant at the 0.01 level (2-tailed).			

Table 7

Indicators of the relationship between success motivation and toughness of gymnasts

Correlations			
		Achievement Motivation	Frustration
Achievement Motivation	Pearson Correlation	1	-.192**
	Sig. (2-tailed)		.004
	N	110	110
**. Correlation is significant at the 0.01 level (2-tailed).			

As can be seen from Table 7, another issue we learned while examining the relationship between variables was the study of the relationship between achievement motivation and rigidity. Here, according to the data given in the correlation table, we can say that there is a

statistical relationship between the two variables ($P=0.004$), and this relationship is significant at the 0.01 level. The negative Pearson coefficient indicates that there is an inverse relationship between the variables.

Interpersonal relationships have a significant impact on various human activities, especially those that require teamwork. In this regard, the respondents' attitudes towards other people, especially team members (interpersonal relationships) were also studied. As can be seen from Figure 1, 65.45 percent of respondents have neutral attitudes towards their teammates, 32.73 percent have positive attitudes, and 1.82 percent have negative attitudes.

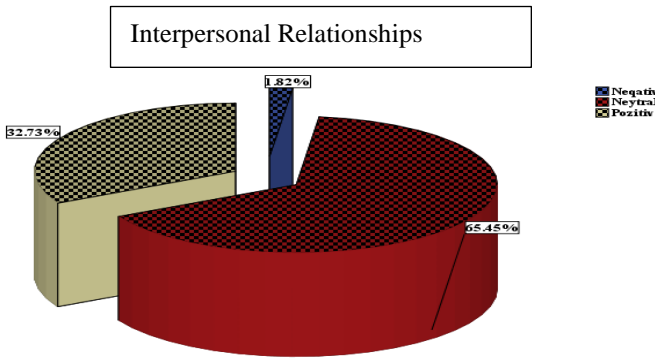


Figure 1. Indicators of gymnasts' interpersonal relationships

Table 8

Indicators of the relationship between negative interpersonal relationships and success motivation

Correlations			
		Achievement Motivation	Negative Interpersonal Relationship
Achievement Motivation	Pearson Correlation	1	-.185**
	Sig. (2-tailed)		.006
	N	110	110
Negative Interpersonal Relationship	Pearson Correlation	-.185**	1
	Sig. (2-tailed)	.006	
	N	110	110

***. Dəyişənlərəarası əlaqə 0.01 səviyyəsində (2-tailed) mənalıdır.*

As can be seen from Table 8, there is a statistical relationship between interpersonal negative attitudes and success motivation. High levels of interpersonal negative attitudes are accompanied by a weakening of success motivation. However, as interpersonal positive and neutral attitudes strengthen, success motivation increases. Given that $P=0.006$, it can be said that the statistical relationship between interpersonal negative attitudes and success motivation is significant at the 0.01 level. The lower the negative attitudes, the higher the success motivation. As a result of the analysis, it was determined that there is an inverse relationship between negative attitudes and success motivation.

Table 9

Indicators of the relationship between interpersonal negative attitudes and anxiety, frustration, aggression and rigidity

Correlations						
		Interpersonal Relationship	Anxiety	Frustration	Agression	Rigidity
Negative Interpersonal Relationship	Pearson Correlation	1	.748**	.637**	.657**	.802**
	Sig. (2-tailed)		.000	.000	.000	.000
	N	110	110	110	110	110
**. Dəyişənlərəarası əlaqə 0.01 səviyyəsində (2-tailed) mənalıdır.						

As seen in Table 9, there is a direct statistical relationship between interpersonal negative relations and increased levels of anxiety, frustration, aggressiveness, and rigidity. A preference for negative interpersonal relationships is accompanied by higher levels of anxiety, frustration, aggression, and rigidity. For all four variables, the correlation with the interpersonal negative relationship variable was found to be $P = 0.000$, indicating a strong and statistically significant relationship at the 0.01 level.

In addition, the study employed the "Assessment of Athletes' Attitude Toward Competition" methodology developed by Yu.L.Khanin (1989). This method allows for the identification of an athlete's perception of their pre-competition condition and helps to forecast their psychological state before a high-pressure performance.

As seen in Table 10, the self-confidence indicator among gymnasts is expressed at three levels: high, medium, and low (42.36%, 33.24%, and 24.4%, respectively). Only 42.36% of the gymnasts demonstrated a high level of self-confidence.

Another component of competition readiness is the indicator of the perception and evaluation of opponents' capabilities. Similar to the first component, 46.08% of gymnasts showed a high level of confidence relative to their competitors. This reflects a healthy perception of their own physical and psychological state. However, even this cannot fully determine an athlete's overall attitude toward the competition.

Table 10

**Indicators of athletes' attitudes toward competition
(expressed as a percentage)**

Scales	High (N=110)	Medium (N=110)	Low (N=110)
Indicator of Self-confidence	42.36	33.24	24.4
Indicator of the perception and evaluation of opponents' capabilities	46.08	28.22	25.7
Indicator of participation desire and competition significance	69.18	21.96	8.86
Indicator of the athlete's mirrored self-assessment	39.74	28.83	31.43

The third component of competition readiness is the indicator of participation desire and the perceived importance of the competition. If the motivational or stimulating component in an athlete's attitude toward the competition is low, then other positive qualities become less significant. This is the key element. In this component, gymnasts generally demonstrated an adequate understanding of the importance of the competition and a desire to participate. The percentage of those with a high level was 69.18%, while the lowest level was 8.86%.

The fourth component of competition readiness is the indicator of the athlete's mirrored self-assessment. The indicators for this component also manifest at three levels: high, medium, and low (39.74%, 28.83%, and 31.43%, respectively).

There are noticeable differences across all three levels of mirrored self-assessment. However, these findings suggest that gymnasts often prioritize their own self-worth above the evaluations and motivations

of spectators, teammates, and other groups. Naturally, this is a normal occurrence.

Nonetheless, this fact highlights the need to enhance psychological preparation. It indicates that the psychological aspects crucial to competition readiness must be restructured and strengthened accordingly.

Table 11

**Correlation indicators of athletes' attitudes toward competition
(expressed as percentages)**

Indicators of athletes' attitudes toward competition	Interpersonal Relationships	Achievement Motivation	Indicator of Psychological State
Indicator of self-confidence	0.696**	0.584**	0.704**
Indicator of perception and evaluation of opponents' capabilities	0.336*	0.218	0.802
Indicator of desire to participate and perceived importance of the competition	0.361*	0.347	0.326*
Indicator of the athlete's mirrored self-assessment	0.469*	0.360	-0.0438

As seen in Table 11, there is a bilateral relationship between athletes' attitudes toward competition and interpersonal relationships ($r = 0.696$, $p > 0.05$), achievement motivation ($r = 0.584^{**}$, $p > 0.05$), and indicators of psychological state ($r = 0.704^{**}$, $p > 0.05$). This finding confirms that, for effective pre-competition preparation, efforts should be directed toward improving interpersonal relationships, enhancing achievement motivation, and stabilizing the psychological state of gymnasts.

Statistical analysis of the gymnasts' self-assessment of their mental states shows that there is a direct relationship between the four variables studied (anxiety, frustration, aggression, and rigidity). Since $Sig \leq 0.05$ here, we can say that the relationship between the variables is statistically significant at the 0.01 and 0.05 levels. The study also showed that there is an inverse relationship between success motivation and anxiety factor.

It should be taken into account that interpersonal relationships have a significant impact on various human activities, especially those that require teamwork. The study shows that the majority of respondents (65.45% of 72 people) prefer a neutral attitude. While 36 people

(32.72%) prefer a positive attitude, 2 (1.81%) have a negative attitude.

The analysis and research conducted in the dissertation work have created the basis for obtaining the following generalizations and **conclusions**:

1. The conducted studies show that experiments conducted in the field of sports, including the study of the psychological preparation of gymnasts, cover relatively recent periods and there is a need for serious experimental research in this area.

2. It was determined that the creation of a favorable sports environment, the effectiveness of relationships between gymnasts, coaches and peers, and the exchange of training styles they encounter create the basis for psychological preparation, affecting the development of the athlete's self-efficacy.

3. It was determined that communication skills and communication needs are more developed in gymnasts, and the effectiveness of communication, convincing them of their own victory, and discussing social experience and psychological state are among the factors determining the success of gymnasts.

4. It became clear that the study of the role of socio-psychological factors in the success of gymnasts requires a review of numerous studies on their psychological preparation. Because the methodological direction, the analysis of individual sports situations and the system of relationships of gymnasts, denies a single-line approach and dictates a multidisciplinary methodological direction. From this aspect, if we apply the results of the current study to the requirements for gymnasts in this sport and its impact on their health, we can see that sports activity has a serious impact on the adequate perception of the psychological health of gymnasts.

5. It was determined that the study of the psychological problems of young gymnasts plays an important role in their success. The adequacy of the identification, targeting and timely intervention of existing psychological problems is important for the provision of adequate health services to athletes. However, this factor is a factor that determines the success of an athlete, while stress tolerance during failure is a factor that manifests itself.

6. It was found that psychological issues are the basis for the

emergence of successful situations, but in most cases they are also the basis and source of failure.

7. Various studies show that the influence of physiological and psychological factors on the behavior of gymnasts, as well as their performance, is inevitable.

8. Our research has shown that differences in the personality traits of athletes depend on factors such as their anatomical and biological qualities, as well as the type of sport they are engaged in, their level of skill, competencies, level of competition, gender and cultural background.

9. It became clear that the formation of successful performance is influenced by the adequate and coherent interplay of perceptual capabilities, cognitive skills, emotions and behavior.

10. Studies have shown that, despite various differences between elite gymnasts and their less skilled colleagues, it is necessary to take into account that the contribution of psychological characteristics covers only a certain part of the behavioral variability of athletes.

11. Studies have shown that effective coaches are able to develop gymnasts in accordance with their personal qualities. Also, the facts show that the work of coaches is a multidimensional and at the same time very dynamic process. They not only organize and manage training, but also support gymnasts before, during and after the competition and establish relationships with them.

12. Studies have shown that the socio-psychological relationships of gymnasts, including the appreciation of coaches, parents, spectators, are further optimized and have an effective effect on teamwork.

13. Analyses show that the socio-psychological aspects of gymnasts' success are not only determined by the effectiveness of relationships, but also by the suitability of the organization of these relationships for the sports field.

14. Studies show that studies that can be integrated in the field of psychology and other sciences can achieve more successful results in this area. Because an integrative approach allows for the creation of models necessary to address both the physical and psychological preparation of gymnasts. Such an integrative approach involves special methods such as measuring gaze behavior and movement behavior during the performance of complex skills.

15. Based on the analysis of the studies conducted, we can say that the relationship between psychological characteristics and the performance of gymnasts may depend on other factors such as gender, age, cultural background, etc. Therefore, investigating these relationships may be one of the effective ways for future research.

16. It is impossible not to agree that the demonstration of social support to gymnasts by coaches, team members, and spectators can be important in the development of their personality. However, the competitive environment created by them can create conditions for one-sided personality development, which can lead to gymnasts leaving the arena prematurely.

17. Our research has shown that gymnasts are often driven by the need to achieve ideality, which can hinder the development of their personality. It has been established that the sports environment causes constant pressure that participants perceive internally, and therefore creates a strong attachment to their sport.

18. The research conducted mainly focuses on the role of gymnastics in the development of the musculoskeletal system, coordination, and body development in the development of children and adolescents. However, the issues of cultivating the moral and volitional qualities of the personality, such as agility, strength, endurance, etc., necessary for gymnastics from a professional point of view, and the implementation of acrobatic movements, are emphasized, and little attention is paid to the issues of psychological preparation.

19. It was determined that types of communicative behavior significantly influence the nature of interpersonal relationships in gymnastics. Gymnasts who strive for leadership within the group and tend to solve problems by asserting control over others are generally more adaptable.

20. In interpersonal relationships, three key aspects of psychological stability come to the forefront: resilience and consistency; maintaining a stable mood and performance level; and sensitivity to various aspects of life. Having diverse interests and avoiding simplification in values, goals, and desires are also considered essential components of psychological stability in interpersonal dynamics.

21. It was found that dramatic shifts in psychological states often occur due to a lack of psychological preparation or as a result of

technical mistakes and injuries during performance.

22. A review of the scientific-methodological literature on the problem of gymnasts' socio-psychological preparation revealed that the foundations for targeted psychological preparation for specific competitions in artistic gymnastics are insufficiently explained.

23. Research showed that the use of various techniques to manage situational anxiety significantly contributes to gymnasts' psychological readiness, particularly in coping with stress that arises during performances.

24. Our study indicated that achievement motivation among gymnasts' manifests at different levels. In addition, results from the self-assessment method of psychological states revealed higher levels of aggressiveness and rigidity, while anxiety and disappointment appeared at relatively lower levels.

25. Statistical analysis of gymnasts' self-assessments of psychological states showed a direct correlation between the four variables (anxiety, disappointment, aggressiveness, and rigidity). The research also confirmed a negative correlation between achievement motivation and anxiety.

The main provisions of the dissertation are reflected in the following works of the author:

1. Возможности самоактуализации женщин при занятии спортом / За матеріалами V міжнародної конференції “Актуальні проблеми розвитку світової науки” Київ., 2019 сәһ. 71-74

2. İdman psixologiyasının inkişaf tarixinin təhlili / “Psixologiya jurnalı”, Bakı, 2019, № 4, сәһ. 98-103

3. İdmanda psixoterapevtik təsir imkanları / Təhsil: Klassik və müasir yanaşmalar Gənc tədqiqatçıların Respublika elmi-praktik konfransının materialları, Bakı, 2019, сәһ.89-91

4. İdmançıların uğur qazanmasında psixoloji hazırlığın əsas istiqamətləri / Dövlətçilik və Şəxsiyyət Ümumrespublika elmi-praktik konfrans materialları (3 noyabr 2021-ci il) Bakı, 2019, сәһ. 140-143

5. Gimnastların yarışlara psixoloji hazırlığının istiqamətləri / “Psixologiya jurnalı”, Bakı, 2021, № 1, сәһ. 21-28

6. Gimnastların uğur qazanmasını şərtləndirən amillər

istiqlamətləri / Bakı Qızlar Universiteti, Elmi əsərlər, Bakı, 2023, №4, Cild17, səh. 83-88

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9. Psycho-educational factors in athletes' performance, and interpersonal relationships / Futurity of social science, 2025, №2, Cild 3, səh . 97-117



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Address: AZ1148, Baku city, Akademik Zahid Khalilov Street 33, II educational building, room 203, e-mail: info@bsu.edu.az

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