

Research on risk inclination of young female athletes in the dimensions of life orientations

NATALIIA TAVROVETSKA¹, IHOR POPOVYCH², OLEKSANDR SAVCHUK³, LIYBOMYRA
PILETSKA⁴, VIOLETTA LAPPO⁵, NATALIYA ABRAMIAN⁶, LARYSA ZAHRAI⁷

^{1,2}Kherson State University, Kherson, UKRAINE

³Ivan Kozhedub Kharkiv National University of Air Force, Kharkiv, Ukraine

^{4,5,7}Vasyl Stefanyk Precarpathian National University, Ivano-Frankivsk, UKRAINE

⁶European University, Kyiv, UKRAINE

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Abstract:

Purpose of the study is to conduct empirical research and theoretically substantiate the impact of the parameters of life orientations (dispositional optimism, positive and negative expectations) on risk inclination of young female athletes. The sample of research participants involved representatives of six teams from different regions of Ukraine in team (Group 1) and individual sports (Group 2): handball (n=61; 59.80%) and track and field (n=41; 40.20%). The respondents included representatives of the Championship of Ukraine (Junior League) and regular participants of International, European and World sports competitions as members of the national team of Ukraine. **Methods:** valid psycho-diagnostic instruments, H-test of Kruskal-Wallis, Spearman's correlation coefficient (r_s) and Mann-Whitney U-test. **Results.** It was established that Group 1 has an advantage over Group 2 by the parameters of risk inclination: emotional inclination ($H=13.683$; $p<.001$), controlling-regulating inclination ($H=9.997$; $p=.002$) and by the parameter of life orientations – positive expectations ($H=3.998$; $p=.046$). It was established and substantiated that the parameters of life orientations of young female athletes are the factors determining the motive for achieving success and affecting risk inclination. The strongest positive correlations of negative expectations with the assessment of risk inclination ($r_s=.685$; $p\le.010$) and motivation for achieving success ($r_s=.425$; $p\le.010$) are an evidence of excessive, immoderate aspiration to achieve a desirable result, which can lead to instant, phenomenal success, or failure, disappointment and even physical and psycho-emotional traumas. On the contrary, moderate mindset, systemic training, improving tactical-technical actions and personal technical mastery reinforce positive expectations and boost dispositional optimism, contributing to young athletes' understanding that they are on the right track and their victory is inevitable. There were statistically significant differences in the respondents in the comparison of a low level (Group I) and a high level of dispositional optimism (Group II) in a number of parameters. The study substantiated that a high level of dispositional optimism is orientation towards cognitive and behavioral risk inclination accompanied by positive and negative expectations with dominance of motivation for achieving success. **Conclusions.** We generalized that the parameters of life orientations affect risk inclination of young female athletes. Motivation for achieving success and avoiding failure and risk inclination are predictors of life orientations of young female athletes, designing their career in sports. The obtained results should be taken into consideration by trainers working with young female athletes.

Key words: juniors, motivation for achieving success, motivation for avoiding failure, image of the expected future, designing a career in sports.

Introduction

Youth sports are a main link between children's classes in physical training, systemic sporting activities and adult professional sports of European, World and Olympic championships. A considerable proportion of victories in the Olympic Games belongs to juniors. Adolescence is an extremely important period for the formation of life orientations, worldviews, professional and personal growth of young female athletes. Representatives of this age category are characterized by adolescent idealism, self-assurance, courage, excessive sensitivity, willingness to take responsibility, aspiration to achieve a desirable result quickly (Popovych et al., 2021e). Adolescence is regarded as a sensitive period for developing life expectations of an individual (Zhebeleva, 2018). The issue of comparison of these complex processes in representatives of individual and team sports who decided to develop a career in sports is considered to be of special scientific interest. In sporting activities of young female athletes, optimism/pessimism is a dual personal construct determining content parameters of general expectations for the future (Popovych et al., 2021a; Popovych, 2009; 2019). Positive and negative life expectations affect the ability to adapt to training and competition conditions, overcome difficulties, cope with excessive psycho-emotional loads and heal from traumas.

Dispositional optimism has been examined and studied as a system of positive and negative expectations of an individual for the future (Carver & Gaines, 1987; Gordeeva et al., 2010). It is known that dispositional optimism in sporting activities manifests itself as confidence and willingness to surpass oneself and achieve goals in sports (Alekshev, 2006). Dispositional optimism is applicable to all life situations. There is a projection of positive or negative consequences of personal life onto sporting activities and vice versa. It was highlighted that dispositional optimism combines positive/negative emotional state, hope/hopelessness, availability/lack of volition, value-based orientations and a sense of control (Carver & Gaines, 1987).

Dispositional optimism affects efficiency of sporting activities, physical and mental health (Popovych et al., 2022d). This connection is realized through developed self-consciousness and a high level of self-regulating readiness of an athlete. Availability of this connection is discussed in the studies on dominating self-regulating mental states of athletes' readiness for competitions (Popovych et al., 2022b; 2022f). A key role in the formation of dispositional optimism is played by the components of an individual's self-consciousness including self-esteem, social-psychological expectations, the level of aspirations and the integrated components of an individual's self-consciousness "Self-conception". It was found that the above components are characterized by high assimilation ability (Popovych et al., 2022e) and have a crucial impact on the process and results of sporting activities (Popovych et al., 2021d).

The longitudinal research on optimism of the participants aged 26–71 years by T. Schwaba et al. (2019) analyzes the curve of latent growth demonstrating growth at an early and medium adult age and reaching a plateau at the age of 55. It was also found that dispositional optimism is a relatively stable generalized tendency of individuals to expect positive results in life. The longitudinal research by A. Josef et al. (2016), similar in formal characteristics, presents dynamics of risk inclination in adulthood. Risk inclination is presented by the researchers as a characteristic with moderate stability.

There were significant differences in medium levels over the course of life and there was a decrease in risk inclination with age. However, there are significant differences between domains and individual respondents that indicates personal nature of this phenomenon and connection with individual-typological characteristics. Athletes representing kinds of sport with increased risk and danger for life state that risk is a pleasure giving a boost, creating a vital physical and psycho-emotional uplift (Ilyin, 2012). Individual-typological characteristics determining content features of risky sporting activities include: temperament, emotional stability, decisiveness and motivational orientation (Ilyin, 2012). The researcher S. Bykova (2012) found that emotionality is a key trait of people with risk inclination. She substantiated that emotionality is a complex of bio-social characteristics combining body tympanum, specificity of neural processes (excitation/suppression) and features of ontogenetic development.

The scientist proves that emotionality determines inclination to risk, selection of methods and techniques for achieving a desirable result (Bykova, 2012). The researcher O. Sannikova (2003) highlights a social component as a key one in risk inclination, considering a social motive to be dominating and determining the behavior of an athlete who takes a risk (Sannikova, 2003). We took into consideration such an important and substantiated scientific fact when selecting psycho-diagnostic instruments. Motivation for achieving success/motivation for avoiding failure relevantly reflects the outlined dominant component of social orientation.

Another study emphasizes that risk inclination is a dynamic aspect of personality (Mata et al., 2016). The researchers' explanation of the correlation between respondents' risk inclination and important life events, which can speed up/slow down readiness to take a risk, is considered of scientific interest. Aspiration for developing a successful career in sports which is characteristic of juniors with their confidence that they will do it much better than their older teammates can be a powerful stimulus for risk inclination. Therefore, it seems to be highly topical to establish correlations between the parameters of optimism and risk inclination at such a very important stage of personal development as adolescence.

Risk inclination of young female athletes in the dimensions of life orientations such as dispositional optimism, positive and negative expectations is considered to be determination of significant differences in the research parameters. Significant differences and their substantiation will make up a list of scientific facts which should be taken into consideration by training staff working with juniors.

Hypothesis. We made the following assumptions: 1) there are significant differences between the research parameters in the representatives of team and individual sports; 2) the parameters of life orientations of young female athletes are the factors determining motivation for achieving success and affecting risk inclination; 3) the parameters of risk inclination of the respondents with different levels of dispositional optimism are significantly different.

Purpose. To conduct empirical research and theoretically substantiate the impact of the parameters of life orientations (dispositional optimism, positive and negative expectations) on risk inclination of young female athletes.

Material and methods

Methodology. Methodological foundations of young female athletes' risk inclination in the dimensions of life orientations include basic facts about sensitive age regularities of juniors' risk inclination in the dimensions of life orientation involving individual-typological characteristics. The key ones are as follows: dependence of risk inclination on emotional types of personality (Sannikova & Bykova, 2008); dominating motives for risk and motives for social approval in the behavior of an athlete taking a risk (Cheban et al., 2020; Popovych et al., 2022a); risk inclination is a complex psychological phenomenon combining formal-dynamic parameters and individual-typological characteristics of an athlete's personality (Bykova, 2012; Sannikova & Sannikov, 2018); dispositional optimism, positive and negative expectations as a projection onto a junior's sporting activities (Carver & Gaines, 1987); social expectations as a process of psychological regulation of an individual's behavior combining cognitive, conative, emotional and value-based manifestations (Popovych, 2005; 2014a; 2014b).

We consider measurement of the parameters and determination of significance of the impact of dispositional optimism, positive/negative expectations on young female athletes' risk inclination represented in our research to be of special scientific interest. Obviously, self-belief, positive attitude, support of teammates and training staff can create favorable atmosphere, encouraging to take a risk, motivating to achieve success for achieving a desirable (victory) result or, vice versa, can orient towards avoiding failure and unwillingness to take a risk and leave a comfort zone. In the latter variant, aspiration for avoiding traumas and protecting themselves can be a desirable result for athletes.

While developing empirical strategy of the research and selecting psycho-diagnostic instruments, we explored a number of modern empirical studies, directly or indirectly related to the outlined issue: 1) research on risk inclination, hardiness, mental and psychological health (Galan et al., 2018; 2021; Hatfield & Fernandes, 2009; Nazarenko, 2020; Popovych et al., 2021c; 2022c); 2) regularities of training and competition activities in youth sports (Popovych et al., 2021f; Strykalenko et al., 2021); 3) age and psycho-physiological regularities (Kozina et al., 2019; Paliichuk, 2018; Teslik, & Soldatenko, 2020) and rehabilitation aspects of a sample (Cretu et al., 2021; Staude & Radzyshevska, 2021); 4) adaption, anticipation and self-regulation potentials of an individual (Blynova et al., 2019; Khraban & Silko, 2022; Plokhikh, 2021; Plokhikh & Yanovska, 2022); 5) meaning-of-life and value-based orientations of an individual (Halian, 2022; Hulias, 2020; Hulias & Hoian, 2022); 6) impact of information space on psycho-emotional potential of respondents (Hudimova, 2021; Hudimova et al., 2021; Kobets et al., 2021a; 2021b); 7) the role of a risk factor in examination of ergatic (Nosov et al., 2021a; 2021b), semi-automatic (Mamenko et al., 2022; Solovey et al., 2020) and automatic systems (Zinchenko et al., 2021; 2022a; 2022b).

Participants. The sample of the research participants involved representatives of six teams from different regions of Ukraine in team (Group 1) and individual sports (Group 2): handball ($n=61$; 59.80%) and track and field ($n=41$; 40.20%). The age range of the research participants was 15–19 years ($M=16.28$; $SD=\pm 4.12$). The respondents represented the Championship of Ukraine (Junior League) and regularly participated in International, European and World sports competitions as members of the national team of Ukraine. The respondents were informed about the survey in advance and participated in the research voluntarily. The respondents were selected randomly that allowed creating a sample meeting the qualitative and quantitative requirements and reflecting the general population.

Organization of research. A considerable portion of the teams represented the average age group (15-17 years). The data were collected in November-December, 2021 in the representatives of team sports before the tournaments of the Championship of Ukraine (Junior League). The data were collected in the representatives of individual sports during the International tournament. Risk inclination in sporting activities acquired optimal conditions under such organization.

Procedures and instruments. The key parameters were identified with the psycho-diagnostic technique "Risk Traits" ("RT"), suggested and tested by O. Sannikova and S. Bykova (2008). The method allowed taking into account aspirations, self-control and self-regulation manifestations, verbal and non-verbal components, individual-typological characteristics and emotional experience of the respondents. We used all the five scales, four of which are basic and one is additional. The basic scales are as follows: emotional risk inclination (ERI), cognitive risk inclination (CRI), behavioral risk inclination (BRI) and controlling-regulating risk inclination (CRRI). The additional scale is represented as assessment of risk inclination (ARI), which is the average of the integrated level of emotional, cognitive and behavioral components of risk inclination. A four-point Stapel direct scale is used in the method. The registered value of α -Cronbach is at the level $\alpha_{RT}=.827$.

In order to determine the parameters of life orientations, in particular, dispositional optimism and positive/negative expectations, we used the test "Life Orientation Test" ("LOT"), designed and suggested by C. Carver and J. Gaines (1987). The test "LOT" was adapted (Gordeeva et al., 2010) and approved in sports studies (Popovych et al., 2022a). The test has three scales of the same name. Respondents evaluate the test statements using a five-point bipolar scale. The registered value of α -Cronbach is at the level $\alpha_{LOT}=.809$.

Taking into consideration that sporting activities have an obvious result-oriented component, a social motive, we used a paired testing methodology “Motivation for Achieving Success and Avoiding Failures” (“MASAF”) (Elers, 2002). The methodology combined two bipolar scales: motivation for achieving success (MAS) and motivation for avoiding failures (MAF). In order to determine homogeneity of responses, we used a distinguishing method which is suitable for bipolar methodologies. The following values of α -Cronbach were registered: $\alpha_{MAS}=.825$ and $\alpha_{MAF}=.893$. We can identify a medium level of α -Cronbach (from .8 to .9) by all the psycho-diagnostic methods.

Statistical analysis. Mathematical-statistical processing was performed using the computer programs “IBM SPSS Statistics” version 29.0.0.0 (241) and “MS Excel”. Graphical visualization is presented using “MS Word”. Statistical significance was established by: α -Cronbach, H-test of Kruskal-Wallis, Spearman’s coefficient (r_s) at the level $p \leq .050$ and $p \leq .010$ and Mann-Whitney U-test.

Results

Tabl. 1 presents the key descriptive frequency characteristics of the research empirical results by all the psycho-diagnostic scales of the methods applied: “RT” (Sannikova & Bykova, 2008), “LOT” (Carver & Gaines, 1987) and “MASAF” (Elers, 2002). It was established that the median (Me) and minimum (min) and maximum values (max) reflect the current empirical data in the most appropriate way. The data are presented taking into consideration distribution by the research groups: Group 1 – junior athletes of team sports ($n=61$; 59.80%) and Group 2 – junior athletes of individual sports ($n=41$; 40.20%). H-test of Kruskal-Wallis was used to establish differences between the obtained data of the two research groups.

Table 1. Comparison of the descriptive frequency characteristics between Group 1 and Group 2 by H-test of Kruskal-Wallis ($n=102$)

Groups	DFC	Psycho-diagnostic scales									
		ERI	CRI	BRI	CRRI	ARI	DO	PE	NE	MAS	MAF
Group 1	<i>Me</i>	13.00	13.00	14.00	15.00	13.00	21.00	12.00	8.00	25.00	18.00
	min	8.00	9.00	9.00	11.00	9.00	12.00	.00	.00	15.00	12.00
	max	20.00	15.00	17.00	16.00	15.00	32.00	16.00	15.00	27.00	24.00
Group 2	<i>Me</i>	11.00	12.00	13.00	14.00	12.00	28.00	13.00	3.00	24.00	18.00
	min	10.00	9.00	12.00	13.00	11.00	16.00	2.00	.00	20.00	16.00
	max	16.00	15.00	17.00	16.00	15.00	32.00	16.00	15.00	26.00	21.00
H-test of Kruskal-Wallis	H	13.683	.369	3.592	9.997	2.145	3.637	3.998	1.464	.022	.034
	p	<.001	.544	.058	.002	.143	.056	.046	.226	.881	.853

Note: DFC – descriptive frequency characteristics; Me – median (given *in italics*); min – minimum value; max – maximum value; ERI – emotional risk inclination; CRI – cognitive risk inclination; BRI – behavioral risk inclination; CRRI – controlling-regulating risk inclination; ARI – assessment of risk inclination; DO – dispositional optimism; PE – positive expectations; NE – negative expectations; MAS – motivation for achieving success; MAF – motivation for avoiding failures.

The obtained values are evenly distributed by the descriptive frequency characteristics. H-test of Kruskal-Wallis allowed establishing that Group 1 has an advantage over Group 2 by the parameters of risk inclination: ERI ($H=13.683$; $p<.001$), CRRI ($H=9.997$; $p=.002$) and by the parameter of life orientations – PE ($H=3.998$; $p=.046$). The rest of the differences are at the level of tendencies. There are no statistical significant differences with the suggested average values of the authors of the methods (Carver & Gaines, 1987; Sannikova & Bykova, 2008).

We did not manage to compare descriptive frequency characteristics in all the studies related to our research, since the authors presented a little different list of the parameters of frequency characteristics (Bykova, 2012; Gordeeva et al., 2010). We focus on an obvious tendency of the median indexes MAS: Group 1 (Me=25.00) and Group 2 (Me=27.00); the median MAF: Group 1 (Me=18.00) and Group 2 (Me=18.00) of the juniors with the sample of non-athletes (Popovych, 2017).

We state that there are no statistically significant differences between our research data and the data obtained in examination of risk inclination and life orientations in sports samples in other studies (Popovych et al., 2021b; 2022a).

Tabl. 2 presents correlations between the scales of life orientations and the parameters of risk inclination, motivation for achieving success/avoiding failure by Spearman's correlation coefficient (r_s).

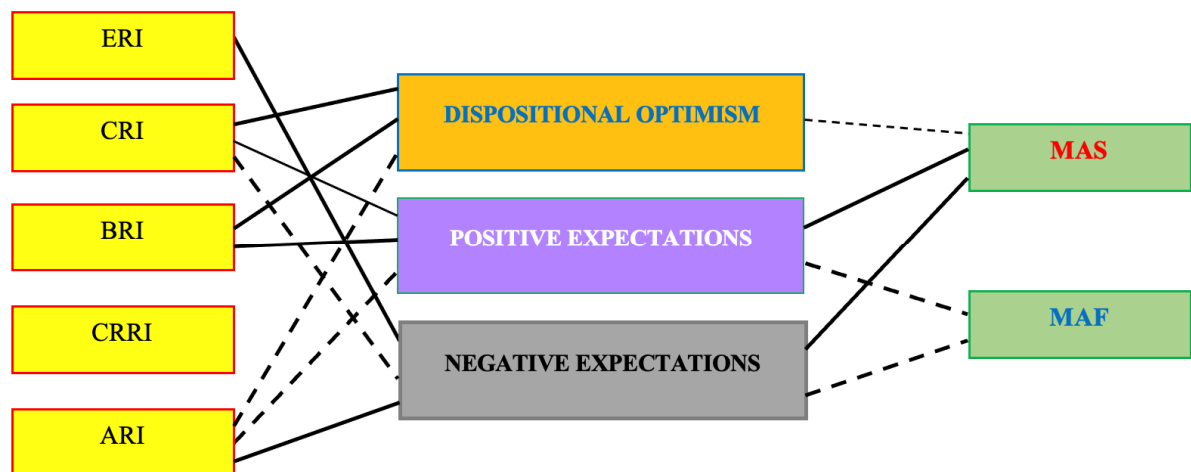
Table 2. Correlations between the scales of life orientations and the research parameters (n=102)

Scale	Statistical parameter	Scales of life orientations		
		DO	PE	NE
ERI	r_s	-.154	-.172	.269**
	p	.123	.085	.006
CRI	r_s	.268**	.244*	-.342**
	p	.006	.014	<.001
BRI	r_s	.424**	.325**	-.186
	p	<.001	<.001	.061
CRR1	r_s	.020	-.030	.098
	p	.845	.766	.326
ARI	r_s	-.709**	-.736**	.685**
	p	<.001	<.001	<.001
MAS	r_s	-.248*	.415**	.425**
	p	.012	<.001	<.001
MAF	r_s	.022	-.220*	-.196*
	p	.823	.026	.048

Note: DO – dispositional optimism; PE – positive expectations; NE – negative expectations; ERI – emotional risk inclination; CRI – cognitive risk inclination; BRI – behavioral risk inclination; CRR1 – controlling-regulating risk inclination; ARI – assessment of risk inclination; MAS – motivation for achieving success; MAF – motivation for avoiding failures; p – level of significance; * – $p \leq .050$ and ** – $p \leq .010$ (bold type).

We created and added a correlation pleiade aimed at qualitative analysis of the statistically significant correlations and their tendencies (Fig. I).

There are fourteen statistically significant correlations. Dispositional optimism has positive correlations with CRI ($r_s=.268$; $p \leq .010$) and BRI ($r_s=.424$; $p \leq .010$) and negative correlations with ARI ($r_s=-.709$; $p \leq .010$) and MAS ($r_s=.248$; $p \leq .050$). Positive expectations have positive correlations with CRI ($r_s=.244$; $p \leq .010$), BRI ($r_s=.325$; $p \leq .010$) and MAS ($r_s=.415$; $p \leq .010$) and negative correlations with ARI ($r_s=-.736$; $p \leq .010$) and MAF ($r_s=-.220$; $p \leq .050$). Negative expectations have positive correlations with ERI ($r_s=.269$; $p \leq .010$), ARI ($r_s=.685$; $p \leq .010$) and MAS ($r_s=.425$; $p \leq .010$) and negative correlations with CRI ($r_s=-.342$; $p \leq .010$) and MAF ($r_s=-.196$; $p \leq .050$).



Note: ——— positive correlations with $p \leq .050$; - - - - - positive correlations with $p \leq .010$; ERI – emotional risk inclination; CRI – cognitive risk inclination; BRI – behavioral risk inclination; CRR1 – controlling-regulating risk inclination; ARI – assessment of risk inclination; MAS – motivation for achieving success; MAF – motivation for avoiding failures.

Figure I. Pleiade of correlations between the scales of life orientations and the parameters of risk inclination and motivation for achieving success/avoiding failures (n=102)

The next stage of the empirical research is determined by the logic of a verifying strategy – finding the median of the sample of dispositional optimism. The median index equaled ($Me = 26.00$). The sample was divided by the median into two subsamples: Group I – the respondents with the median value lower than the identified value ($n_1 = 57$) and Group II – the respondents with the median value higher than the identified value ($n_2 = 45$). Statistical significance of the differences was established between Group I and Group II using Mann-Whitney U-test (Tabl. 3). All the respondents of the sample were selected to perform comparison by the distribution of the median values of dispositional optimism.

Table 3. Differences between Group I and Group II by the research parameters ($n_1 = 57$; $n_2 = 45$)

	Mann-Whitney U-test								
	ERI	CRI	BRI	CRRI	ARI	PE	NE	MAS	MAF
U	1012.000	624.500	837.000	1205.000	323.000	179.500	322.000	945.500	1230.500
p	.065	<.001	.002	.582	<.001	<.001	<.001	.021	.720

Note: Mann-Whitney U-test; p – level of significance; ERI – emotional risk inclination; CRI – cognitive risk inclination; BRI – behavioral risk inclination; CRRI – controlling-regulating risk inclination; ARI – assessment of risk inclination; PE – positive expectations; NE – negative expectations; MAS – motivation for achieving success; MAF – motivation for avoiding failures.

Statistically significant differences were registered in the following parameters: CRI ($U=624.500$; $p<.001$), BRI ($U=837.500$; $p=.002$), ARI ($U=323.000$; $p<.001$), PE ($U=179.500$; $p<.001$), NE ($U=322.000$; $p<.001$) and MAS ($U=945.500$; $p=.021$). The highest parameter of the statistical differences ($p<.001$) was registered in positive ($U=179.500$) and negative expectations ($U=322.000$) and general assessment of risk inclination ($U=323.000$).

Discussion

Scientific literature pays much attention to the issue of life orientations of adolescents, identifying content features, finding parameters, substantiating significance and sensitivity of the development of dispositional optimism, the impact of positive and negative expectations on personal growth of a young individual (Carver & Gaines, 1987; Nazarenko, 2020; Teslik & Soldatenko, 2020). There are studies on sports psychology, presenting the parameters found in empirical research (Popovych et al., 2022a). The significant statistical correlation of DO with the scale “Extraversion” ($r_s = .342$; $p < .01$) is of special scientific interest. This result is determined by openness to social contacts, aspiration for interaction with others (Popovych et al., 2021b). We highlight that this result is similar to the logic of our empirical results, and is also confirmed in the study by V. Plokhikh (2022).

We have not found studies on psychology of female juniors, combining the parameters of life orientations (dispositional optimism, positive/negative expectations) and the components of risk inclination. It allows stating that the suggested research is considered to be original. Some aspects of the results obtained are discussed further.

The statistical differences (see Tabl. 1) show the advantage of Group 1 over Group 2 in the parameters of ERI ($H=13.683$; $p<.001$) and CRRI ($H=9.997$; $p=.002$). These differences are statistically significant and allow stating that the first hypothesis is confirmed. The advantage of the juniors’ emotional risk inclination is mainly considered to be a regularity of the combination of age and psycho-physiological determinants. Obviously, emotional images in team pre-game mindset affect emotional readiness to take a risk. On the other hand, little social experience also determines dominance of emotional risk inclination. The advantage of controlling-regulating risk inclination is, obviously, a result of systemic team training and competition processes. Teamwork requires permanent agreement and consideration of actions of the participants of interaction. Athletes should develop skills of overlapping game zones of the nearest player, if the latter moves to attack or defense. Permanent interaction with teammates, collaboration in improving tactical-technical training and enhancing prepared game variations – all these are the reasons for and explanation of higher values of this parameter. We also registered an inconsiderable, but statistically significant advantage ($p<.050$) of positive expectations ($H=3.998$; $p=.046$) of Group 2 over Group 1. The value $p=.046$ is close to the level $p<.050$. We assume that the image of a desirable future victory result of juniors in individual sports is comprehensive and stable, since such an image is created in a female athlete’s imagination, determining the final performance in a competition program (in our research individual sports are represented by female gymnasts) and is accompanied by higher parameters of dispositional optimism and positive expectations. At the same time, taking into consideration that the obtained result is close to the level of statistical significance ($p=.046$), this advantage should be examined in a larger and more representative sample consisting of female juniors of different team and individual sports.

The second hypothesis is also confirmed since the parameters of young female athletes’ life orientations are the factors determining motivation for achieving success and affecting risk inclination. The strongest positive correlations (see Tabl. 1 and Fig. 1) were registered between NE and ARI ($r_s=.685$; $p\leq.010$) and MAS ($r_s=.425$; $p\leq.010$). It can be caused by juniors’ excessive, immoderate aspiration for achieving a desirable result correlating with negative expectations. It looks as though these respondents bet everything and were ready to

achieve their goal and gain a victory at all costs. It is obvious that it can result in either instant phenomenal success, or failure, disappointment or even physical and psycho-emotional traumas. Therefore, youth sports, in comparison with performances of professional athletes, are less stable and more unpredictable. The strongest negative correlations (see Tabl. 1) were registered between DO with ARI ($r_s = -.709$; $p \leq .010$) and PE with ARI ($r_s = -.736$; $p \leq .010$). An increase in the parameters of dispositional optimism and positive expectations contributes to a decrease in the assessment of risk inclination. The correlation pleiade (see Fig. 1) shows that both parameters – DO and PE – have a positive significant correlation with cognitive and behavioral readiness for risks. Obviously, moderate mindset, systemic training, improving tactical-technical actions and personal technical mastery instill positive expectations and boost dispositional optimism. In this variant, a considerable portion of female juniors understand that they are on the right track and they will definitely gain a victory.

Division of the athletes into two groups (Group I and Group II) by the median index allowed confirming the third hypothesis using Mann-Whitney U-test (see Tabl. 3) – the parameters of risk inclination of the respondents with different levels of dispositional optimism are significantly different. The registered statistically significant differences in the parameters of CRI ($p < .001$), BRI ($p = .002$), ARI ($p < .001$), PE ($p < .001$) and NE ($p < .001$) and MAS ($p = .021$) confirm the previous substantiations. Higher indexes of dispositional optimism of the juniors (Group II) have an advantage by most research parameters oriented towards cognitive and behavioral risk inclination, accompanied by positive and negative expectations with dominating motivation for achieving success. We assume that simultaneous statistically significant differences in the advantage of Group II over Group I and in PE and NE are an evidence of higher energy potential and a larger resource amplitude of the respondents in Group II, but it is an assumption requiring examination and can be the issue of our further research.

Conclusions

1. The research substantiates that risk inclination of young female athletes in the dimensions of life orientations should be regarded as determination of significant differences in the research parameters.

2. Using H-test of Kruskal-Wallis, the research found that Group 1 has an advantage over Group 2 by the parameters of risk inclination: ERI ($H = 13.683$; $p < .001$), CRRI ($H = 9.997$; $p = .002$) and the parameters of life orientations – PE ($H = 3.998$; $p = .046$).

3. The research discovered and substantiated that the parameters of life orientations of young female athletes are the factors determining motivation for achieving success and affecting risk inclination. The strongest positive correlations between NE and ARI ($r_s = .685$; $p \leq .010$) and MAS ($r_s = .425$; $p \leq .010$) indicate an immoderate aspiration for achieving a desirable result which correlates with negative expectations that can lead to either instant phenomenal success, or failure, disappointment and even physical and psycho-emotional traumas.

4. The study substantiates that moderate mindset, systemic training, improvement of tactical-technical actions and personal technical mastery instill positive expectations and boost dispositional optimism contributing to juniors' understanding that they are on the right track and will definitely gain a victory.

5. Statistically significant differences between the respondents with different levels of dispositional optimism (Group I and Group II) were registered in the parameters of CRI ($p < .001$), BRI ($p = .002$), ARI ($p < .001$), PE ($p < .001$), NE ($p < .001$) and MAS ($p = .021$). The obtained result was substantiated by orientation towards cognitive and behavioral risk inclination accompanied by positive and negative expectations with dominating motivation for achieving success. Motivation for achieving success and avoiding failure and risk inclination are the predictors of life orientations of young female athletes, designing their career in sports.

References:

- Alekseev, A. V. (2006). *Get over yourself! Mental preparation in sports*. Rostov on Don: Phoenix.
- Blynova, O., Popovych, I., Hulias, I., Radul, S., Borozentseva, T., Strilets-Babenco, O., & Minenko, O. (2022). Psychological safety of the educational space in the structure of motivational orientation of female athletes: a comparative analysis. *Journal of Physical Education and Sport*, 22(11), 2723-2732. <https://doi.org/10.7752/jpes.2022.11346>
- Blynova, O. Ye, Popovych, I. S., Bokshan, H. I., Tsilmak, O. M., & Zavatska, N. Ye. (2019). Social and Psychological Factors of Migration Readiness of Ukrainian Students. *Revista ESPACIOS*, 40(36), 4.
- Bykova, S. V. (2012). The specifics of risk appetite in people with different types of emotions. *Science and education*, 6, 41-45. https://scienceandeducation.pdpu.edu.ua/journals/2012/NiO_6_2012/1/Byk.htm
- Carver, C. S. & Gaines, J. G. (1987). Optimism, pessimism, and postpartum depression. *Cognitive Therapy and Research*, 11(4), 449-462. <https://doi.org/10.1007/BF01175355>
- Cheban, Yu. V., Chebykin, O. Ya., Plokhikh, V. V., & Massanov, A. V. (2020). Emotional factor of competitive self-mobilization of professional rowers. *Insight: the psychological dimensions of society*, 3, 28-43. <https://doi.org/10.32999/2663-970X/2020-3-2>
- Cretu, M., Borysenko, I., Ushmarova, V., Grynyova, V., & Masyh, V. (2021). Features of vascular regulation of students – future specialists in physical education and sports of different sports specializations with

- different body lengths. *Health, Sport, Rehabilitation*, 7(2), 29-44.
<https://doi.org/10.34142/HSR.2020.07.02.03>
- Elers, T. (2002). *Motivation for Achieving Success and Avoiding Failures*. St. Petersburg: Piter.
- Galan, Y., Yarmak, O., Andrieieva, O., Yuriy, M., Sukhomlynov, R., Zoriy, Y., Koshura, A., Ivanchuk, M., Vaskan, I., Bohdanyuk, A. (2021). Impact of football clubs on the recreational activities of preschoolers. *Journal of Physical Education and Sport*, 21(2), 803-812. <https://doi.org/10.7752/jpes.2021.02100>
- Galan, Y., Koshura, A., Moseychuk, Y., Paliichuk, Y., Moroz, O., Tsybanyuk, O., Yarmak, O. (2018). Characteristics of physical conditions of 7-9-year-old schoolchildren within the process of physical education. *Journal of Physical Education and Sport*, 18(SI 5), 1999-2007. <https://doi.org/10.7752/jpes.2018.s5297>
- Gordeeva, T. O., Sychev, O. A., & Osin, E. N. (2010). Razrabotka russkojazyčnoj versii testa dispozicionnogo optimizma (LOT). *Psihologičeskaja diagnostika*, 2, 36-64.
- Halian, I. M. (2022). Value contradictions in personal axiogenesis. *Insight: the psychological dimensions of society*, 7, 11-23. <https://doi.org/10.32999/2663-970X/2022-7-2>
- Hatfield, J., & Fernandes, R. (2009). The role of risk-propensity in the risky driving of younger drivers. *Accident; analysis and prevention*, 41(1), 25-35. <https://doi.org/10.1016/j.aap.2008.08.023>
- Hudimova, A. Kh. (2021). Psychological well-being and social media users' behavioral online patterns in everyday life and during COVID-19 pandemic. *Insight: the psychological dimensions of society*, 5, 133-147. <https://doi.org/10.32999/2663-970X/2021-5-9>
- Hudimova, A., Popovych, I., Savchuk, O., Liashko, V., Pyslar, A., & Hrys, A. (2021). Research on the relationship between excessive use of social media and young athletes' physical activity. *Journal of Physical Education and Sport*, 21(6), 3364-3373. <https://doi.org/10.7752/jpes.2021.06456>
- Hulias, I. (2020). Axiopsychological projection of life achievements of the personality. Kyiv: PH Lyudmila.
- Hulias, I. A., & Hoian, I. M. (2022). Explication of factors of the axiopsychological design of life achievements of modern youth. *Insight: the psychological dimensions of society*, 7, 41-57. <https://doi.org/10.32999/2663-970X/2022-7-4>
- Ilyin, E. P. (2012). *Psychology of risk*. St. Petersburg: Piter.
- Josef, A. K., Richter, D., Samanez-Larkin, G. R., Wagner, G. G., Hertwig, R., & Mata, R. (2016). Stability and change in risk-taking propensity across the adult life span. *Journal of Personality and Social Psychology*, 111(3), 430-450. <https://doi.org/10.1037/pspp0000090>
- Khraban, T. E., & Silko, O. V. (2022). Combat and military-professional stress: the influence of emotions and emotional states on the choice of coping strategies. *Insight: the psychological dimensions of society*, 8, 71-87. <https://doi.org/10.32999/2663-970X/2022-8-6>
- Kobets, V., Liubchenko, V., Popovych, I., & Koval, S. (2021a). Institutional Aspects of Integrated Quality Assurance of Engineering Study Programs at HEI Using ICT. In: Ivanov V., Trojanowska J., Pavlenko I., Zajac J., Peraković D. (eds). *Advances in Design, Simulation and Manufacturing IV. DSMIE 2021. Lecture Notes in Mechanical Engineering*. Springer, Cham. https://doi.org/10.1007/978-3-030-77719-7_30
- Kobets, V., Liubchenko, V., Popovych, I., & Koval, S. (2021b). Institutional Aspects of Integrated Quality Assurance of Study Programs at HEI Using ICT. *CEUR Workshop Proceedings*, 2833, 83-92.
- Kozina, Z., Cretu, M., Safronov, D., Gryn, I., Shkrebtiy, Yu., Shepelenko, T., & Tanko, A. (2019). Dynamics of psychophysiological functions and indicators of physical and technical readiness in young football players aged 12-13 and 15-16 years during a 3-month training process. *Physiotherapy Quarterly*, 27(3), 20-27. <https://doi.org/10.5114/pq.2019.86464>
- Mamenko, P., Zinchenko, S., Kobets, V., Nosov, P., & Popovych I. (2022). Solution of the Problem of Optimizing Route with Using the Risk Criterion. In: Babichev, S., Lytvynenko, V. (eds). *Lecture Notes in Computational Intelligence and Decision Making. ISDMCI 2021. Lecture Notes on Data Engineering and Communications Technologies*, 77. Springer, Cham. https://doi.org/10.1007/978-3-030-82014-5_17
- Mata, R., Josef, A. K., & Hertwig, R. (2016). Propensity for Risk Taking Across the Life Span and Around the Globe *Psychological Science*. Advance online publication. doi: [10.1177/0956797615617811](https://doi.org/10.1177/0956797615617811)
- Nazarenko, N. A. (2020). Psychological content of optimism in the context of the formation of constructive life mindset of an individual. *Bulletin of the National Aviation University*, 16, 172-179.
- Nosov, P., Zinchenko, S., Ben, A., Prokopchuk, Y., Mamenko, P., Popovych, I., Moiseienko, V., Kruglyj, D. (2021a). Navigation safety control system development through navigator action prediction by Data mining means. *Eastern-European Journal of Enterprise Technologies*, 2(9(110)), 55-68. <https://doi.org/10.15587/1729-4061.2021.229237>
- Nosov, P., Zinchenko, S., Plokhikh, V., Popovych, I., Prokopchuk, Y., Makarchuk, D., Mamenko, P., Moiseienko, V., & Ben, A. (2021b). Development and experimental study of analyzer to enhance maritime safety. *Eastern-European Journal of Enterprise Technologies*, 4(3(112)), 27-35. <https://doi.org/10.15587/1729-4061.2021.239093>

- Paliichuk, Y., Dotsyuk, L., Kyselytsia, O., Moseychuk, Y., Martyniv, O., Yarmak, O., Galan, Y. (2018). The influence of means of orienteering on the psychophysiological state of girls aged 15-16-years. *Journal of Human Sport and Exercise*, 13(2), 443-454. <https://doi.org/10.14198/jhse.2018.132.16>
- Plokhikh, V. V. (2021). Assessment of subject's readiness for urgent actions using the variations of sensorimotor response tasks. *Insight: the psychological dimensions of society*, 5, 46-65. <http://doi.org/10.32999/2663-970X/2021-5-4>
- Plokhikh, V. V. (2022). Limitation of psychological defenses on the formation of students' time perspective. *Insight: the psychological dimensions of society*, 8, 39-55. <https://doi.org/10.32999/2663-970X/2022-8-4>
- Plokhikh, V. V., & Yanovska, S. G. (2022). Sex differentiation in the organization of emergency sensorimotor action. *Insight: the psychological dimensions of society*, 7, 24-39. <https://doi.org/10.32999/2663-970X/2022-7-3>
- Popovych, I., Blynova, O., Nass Álvarez, J. L., Nosov, P., & Zinchenko, S. (2021a). A HISTORICAL DIMENSION OF THE RESEARCH ON SOCIAL EXPECTATIONS OF AN INDIVIDUAL. *Revista Notas Históricas y Geográficas*, 27, 190-217.
- Popovych, I., Blynova, O., Nosov, P., Zinchenko, S., & Kononenko, O. (2021b). Psychological factors of competitiveness of the women's youth handball team. *Journal of Physical Education and Sport*, 21(1), 227-235. <https://doi.org/10.7752/jpes.2021.01030>
- Popovych, I., Borysiuk, A., Semenov, O., Semenova, N., Serbin, I., & Reznikova, O. (2022a). Comparative analysis of the mental state of athletes for risk-taking in team sports. *Journal of Physical Education and Sport*, 22(4), 848-857. <https://doi.org/10.7752/jpes.2022.04107>
- Popovych, I., Halian, I., Halian, O., Nosov, P., Zinchenko, S., & Panok, V. (2021c). Research on personality determinants of athlete's mental exhaustion during the ongoing COVID-19 pandemic. *Journal of Physical Education and Sport*, 21(4), 1769-1780. <https://doi.org/10.7752/jpes.2021.04224>
- Popovych, I., Halian, I., Lialiuk, G., Chopyk, R., Karpenko, Ye., & Melnyk, Yu. (2022b). Research of young female handball players' self-actualizing mental states. *Journal of Physical Education and Sport*, 22(7), 1599-1607. <https://doi.org/10.7752/jpes.2022.07201>
- Popovych, I., Halian, I., Pavliuk, M., Kononenko, A., Hrys, A., & Tkachuk, T. (2022c). Emotional quotient in the structure of mental burnout of athletes. *Journal of Physical Education and Sport*, 22(2), 337-345. <https://doi.org/10.7752/jpes.2022.02043>
- Popovych, I., Hoi, N., Koval, I., Vorobel, M., Semenov, O., Semenova, N., & Hrys, A. (2022d). Strengthening of student youth's mental health using play sports. *Journal of Physical Education and Sport*, 22(6), 1384-1395. <https://doi.org/10.7752/jpes.2022.06174>
- Popovych, I., Kurova, A., Koval, I., Kazibekova, V., Maksymov, M., & Huzar, V. (2022e). Interdependence of emotionality, anxiety, aggressiveness and subjective control in handball referees before the beginning of a game: a comparative analysis. *Journal of Physical Education and Sport*, 22(3), 680-689. <https://doi.org/10.7752/jpes.2022.03085>
- Popovych, I., Pavliuk, M., Hrys, A., Sydorenko, O., Fedorenko, A., & Khanetska, T. (2021d). Pre-game expected mental states in men's mini-football teams: a comparative analysis. *Journal of Physical Education and Sport*, 21(2), 772-782. <https://doi.org/10.7752/jpes.2021.02096>
- Popovych, I., Semenov, O., Hrys, A., Aleksieieva, M., Pavliuk, M., & Semenova, N. (2022f). Research on mental states of weightlifters' self-regulation readiness for competitions. *Journal of Physical Education and Sport*, 22(5), 1134-1144. <https://doi.org/10.7752/jpes.2022.05143>
- Popovych, I., Shevchenko, A., Galvez, L. M., Klenina, K. (2021e). Research of the relationship between social desirability and value orientations of adolescents. *Revista Notas Históricas y Geográficas*, 26, 241-268.
- Popovych, I., Shcherbak, T., Kuzikova, S., Blynova, O., Nosov, P., & Zinchenko, S. (2021f). Operationalization of tactical thinking of football players by main game roles. *Journal of Physical Education and Sport*, 21(5), 334, 2480-2491. <https://doi.org/10.7752/jpes.2021.05334>
- Popovych, I. S. (2017). Psychology of social expectations of personality. Extended abstract of Doctor's thesis. Severodonetsk: Volodymyr Dahl East-Ukrainian National University.
- Popovych, I. S. (2019). Psychology of social expectations of personality: methodology, theory and practice. Kherson: OLDI-PLUS.
- Popovych, I. S. (2014a). Social expectations in primary school age. Proceedings of the 2nd International Academic Congress "Fundamental Studies in America, Europe, Asia and Africa", 27 Sept. 2014. USA. Vol. II. New York, 176-180.
- Popovych, I. S. (2009). Socio-psychological expectations in human relationships. Kherson: OJSC "KCPC".
- Popovych, I. S. (2005). The problem of social and psychological expectations in scientific theory and practice. *Practical psychology and social work*, 5, 8-13.
- Popovych, I. S. (2014b). Typological features of expectations. *KSU Scientific Bulletin. Series: Psychological Sciences*, 1, 64-70.
- Sannikova, O. P., & Bykova, S. V. (2008). Test-questionnaire of qualitative components of risk appetite ("risk traits") (psychodiagnostic technique). – № 24519; registration 22.05.2008

- Sannikova, O. P. (2003). Phenomenology of personality. Odessa: SMIL.
- Sannikova, O., & Sannikov, O. (2018). Adventurousness and risk in the decision-making structure. *Science and education, 9-10*, 111-119. <https://scienceandeducation.pdpu.edu.ua/articles/2018-9-10-doc/2018-9-10-st16>
- Schwaba, T., Robins, R. W., Sanghavi, P. H., & Bleidorn, W. (2019). Optimism Development Across Adulthood and Associations with Positive and Negative Life Events. *Social Psychological and Personality Science, 10*(8), 1092–1101. <https://doi.org/10.1177/1948550619832023>
- Solovey, O., Ben, A., Dudchenko, S., Nosov, P. (2020). Development of control model for loading operations on Heavy Lift vessels based on inverse algorithm. *Eastern European Journal of Enterprise Technologies, 5/2*(107), 48-56. <https://doi.org/10.15587/1729-4061.2020.214856>
- Staude, V., & Radzyshevska, Y. (2021). Influence of massage and selective gymnastics on roentgenometric parameters of the spinopelvic sagittal balance in patients with sacroiliac joint dysfunction. *Journal of Physical Education and Sport, 21*(SI 6), 3236-3245. DOI: 10.7752/jpes.2021.s6442
- Strykalenko, Y., Huzar, V., Shalar, O., Voloshynov, S., Homenko, V., & Svirida, V. (2021). Physical fitness assessment of young football players using an integrated approach. *Journal of Physical Education and Sport, 21*(1), 360-366. <https://doi.org/10.7752/jpes.2021.01034>
- Teslik, N. M., & Soldatenko, A. V. (2020). Experimental research on risk inclination and self-esteem of adolescents. *Bulletin of the National Defense University of Ukraine, 4*(57), 111-118. <https://doi.org/10.33099/2617-6858-2020-57-4-111-118>
- Zhebeleva, P. V. (2018). Dispersional optimization as one of the indicators of the success of social-psychological design of the life scenario of the student moloddy. *Theoretical and applied problems of psychology, 3*(3), 56-64.
- Zinchenko, S., Moiseienko, V., Tovstokoryi, O., Nosov, P., & Popovych, I. (2021). Automatic Beam Aiming of the Laser Optical Reference System at the Center of Reflector to Improve the Accuracy and Reliability of Dynamic Positioning. In: Hu, Z., Petoukhov, S., Dychka, I., He, M. (eds). Advances in Computer Science for Engineering and Education IV. ICCSEE 2021. *Lecture Notes on Data Engineering and Communications Technologies, 83*. Springer, Cham. https://doi.org/10.1007/978-3-030-80472-5_1
- Zinchenko, S., Tovstokoryi, O., Ben A., Nosov, P., Popovych, I., & Nahrybelnyi, Y. (2022a). Automatic Optimal Control of a Vessel with Redundant Structure of Executive Devices. In: Babichev S., Lytvynenko V. (eds). Lecture Notes in Computational Intelligence and Decision Making. ISDMCI 2021. *Lecture Notes on Data Engineering and Communications Technologies, 77*. Springer, Cham.
- Zinchenko, S., Tovstokoryi, O., Nosov, P., Popovych, I., & Kyrychenko, K. (2022b). Pivot Point position determination and its use for manoeuvring a vessel. *Ships and Offshore Structures, https://doi.org/10.1080/17445302.2022.2052480*