### **Original Article**

# Expectations of a winning result in women's handball team: comparison of different age groups

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#### Abstract

The aim of the article is an empirical study of the expectations of a winning result and its comparison in three age groups of women's handball club "Dniprianka" (Kherson, Ukraine). Study participants are: senior age group (n = 16; 19-27 years) – Championship of Ukraine (Super League); middle age group (n = 11; 15-17 years old) -Championship of Ukraine (Junior League); youngerage group (n = 9; 13-15 years) - Championship of Ukraine (Children's League). The influence of pre-start emotional states on the female handball players' expectations of a winning sports result is determined and substantiated. Methods. Clear of purpose observation, standardized and adapted psychodiagnostic methods with experimental scales, factor analysis by the method of principal components, rotation - Varimax are applied. Results. The influence of emotions "joy" and "interest" on the pregame expectations of handball players has been established. The connection of emotions with awareness of the foreseeable course of events, with the apprehended attitude to the participants of the game interaction, with the level of expected results from the game (p < .05) is determined. Factor analysis proved the existence of a set of variables aimed at the future outcome of the competition, as well as to obtain positive emotions from the game process, the desire to avoid defeat in a sports match. The differences between the female handball players of the main team and the female athletes of the youth and children's teams in terms of emotional states and psychological content parameters of pre-game expectations (p < .05) were clarified. The factor structure of prestart emotional states of the winning result expectancy of handball players is constructed. The factor structure consists (68.82%): F1 "Expectation of a winning result" (34.72%); F2 "Expectation of positive emotions from the game process" (21.84%); F3 "Expectation of an opportunity to avoid defeat" (7.51%) and F4 "Expectation of a negative scenario" (4.75%). It is advisable to implement the obtained empirical results in the tactical psychological training of athletes in game sports.

**Key words:** pre-game emotional state, juniors, women's national handball team, pre-start emotional states, expectancy of sports victory.

#### Introduction

The research actuality of the expected winning result is accompanied by high emotional mental states of athletes and is conditioned by the high significance of psychological factors in achieving sporting results. Overall, victorious factor (successfullness, performance, psychological compatibility, satisfaction) of athletes is determined by their individual peculiarities, in particular, their pre-game emotional states, value orientations (Ferrari et al., 2018; Erdogan et al., 2014; Popovych et al., 2020). The atmosphere of the competition stimulates the emergence of increased nervous and mental stress states, which significantly differ from the training state, and affect the behavior of athletes and the victorious factor in competitive activities.

Experts in the field of sports psychology (Babushkin, 2014; Bulynko, 2016; Ivanina,2012; Sopov,2010) affirm that the instability of athletes' performance indicators is direct consequence of emotional states during competitions. Emotions, that perform the function of balancing the body state with the environment, have great influence on winning sporting results. It is especially clearly monitored within athletes before the beginning of the competition, when it is necessary to make ready to intense physical and psychological work. Therefore, one of the main tasks is the emotional training of athletes for competitions (Cheban et al., 2020; Yakovlev et al., 2015). The current studies look at the correlation between competitive anxiety, hardiness, and coping strategies exemplified by the research on the national women's handball team (aged 22 to 35). The researchers established that escape-avoidance coping strategies and distancing were positively correlated with anxiety traits. A negative correlation between self-control and seeking social support recorded by our researchers in the sample of the women's national handball team is an interesting scientific fact in the context of this research. It is determined that the strength of competitive anxiety is not associated with coping strategies and hardiness (Ivaskevych et al.,

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In the process of direct training for the competition, the athlete is in state of uncertainty of future results, that is, in mental state of expectation of victory or defeat (Popovych et al., 2019b). The mental state of the respondent is accompanied by positive or negative expectations (Popovych et al., 2019a; Popovych & Blynova, 2019a). An athlete may be unsure of achieving the goal; this very negative state of expectation significantly reduces the likelihood of getting high sporting result. Izard C. finds in mental states close connection with the mental activity of individual. The need to act gets form of mental stress, which accompanies the process of achieving a result (Izard, 1991).

The competitive activity of athletes is connected with high level of responsibility for the result and high emotional tension. If there is a feeling of weakness or uncertainty in the athlete's mind, then this will probably be constraining force to his/her activity, sport improvement and will have an impact on the effectiveness of the competition. In order to succeedin the aspiration for improvement is necessary to form positive setting for the tasks and results. Thus, expectation of success in sports game is more likely to lead to success rather than the desire to avoid defeat, which is accompanied by negative expectations. Setting for victory, psychological readiness to compete in sports games is significant factor in its success (Bjørndal et al., 2018; Strikalenko et al., 2020). Romanian scientists examined and described the appropriateness of using specialized programs to train individual handball team players, a goalkeeper in particular. Their studies emphasize that a goalkeeper's qualification provided by certain programs is a key factor and can ensure a team's victory in 50.0% (Catalin et al., 2018).

One of the main areas of studying the emotional sphere in sports activities is the development of sports emotions and feelings (rivalry, excitement, sporting anger, sense of duty, responsibility, nobility, dedication), which are important motivations of the athlete. Emotions and feelings are very individual, and influence on the athlete's activities is also individual. Each athlete has his/her own set of emotions (with both positive and negative emotional experiences) that ensure successful performance in the competition (Kamilov, 2014; Ilyin, 2008; Granero-Gallegos et al., 2017).

The mental state of the athlete on account of the competition expectancy arises as an active-adaptive reaction of the organism to situations of pre-competitive and competitive activities. With great desire to win, which is accompanied by strong emotional excitement ("pre-starting fever") there is instability of (emotional) experiences in the emotional experience. Some experience is very rapidly changing by others. But there are other conditions for an athlete, such as: (apathy, general laxity, drowsiness, decrease in speed of reactions and deterioration of coordination, decrease of perception and attention) who is not interested in future activity and is willing not to participate in it. Thus, the emotional states that arise before the activities of the athlete do not always contribute to its effectiveness. This has also been confirmed in other areas close to sports (Popovych et al., 2019c). It is of scientific interest to establish a significant link between the motive for success in sports and the immunity of young athletes (Blynova et al., 2020b).

Determination of the interconnection of specific manifestations of emotional states with the success of solving various tasks of athletes' physical training, adequate management of emotional states ensure effectiveness increase of athletes' training and competitive activities. The state of mental preparedness for the competition is characterized by the expectation of a winning result or the maximum possible competitive success for the athlete. This is accompanied by a certain level of emotional excitement, which facilitates the manifestation of the necessary physical and volitional activity of an athlete.

**Hypothesis.**The authors assume that 1) emotional pre-game affect the expectations of the winning resultamong athletes; 2) there are differences in the manifestations of emotional states and expectations of a winning result within female handball players of the main women's youth handball teams and female handball players of middle and younger groups.

**Purpose.** To determine the peculiarities of emotional pre-starting conditions in women's national youth handball teams and their influence on the expectation of winning sporting results.

#### Material and methods

Participants. The research was conducted on the basis of women's handball teams of different age groups. The study involved 36 persons: senior age group (n = 16; 19-27 years) – Championship of Ukraine (Super League); middle age group (n = 11; 15-17 years old) – Championship of Ukraine (Junior League); younger group (n = 9; 13-15 years) – Championship of Ukraine (Children's League). These sports women are representatives of the permanent team of the women's handball club "Dniprianka" (Kherson, Ukraine). The team competes for prizes in the Women's Super League of the Ukrainian Handball Championship and is a regular participant and winner of many international tournaments. Respondents participated in the study voluntarily. The research is conducted according to ethical standards of committee on the rights of experiments of Helsinki declaration (WMA Declaration of Helsinki, 2013).

Organization of research. The research was conducted and completed 30-40 minutes before the start of the sports meeting. There was tension among female athletes before the game and it negatively affected the

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establishment of psychological contact. At the same time, we managed to achieve high ecological validity of the study. We believe that efforts justify the importance of information for both handball players and for our study.

To setting the pre-starting emotional states of sports women, a technique "Differential Emotions Scale" ("DES") (Izard, 1993, adapted by Leonova and Velichkovskaya 2004). This scale diagnoses dominant emotional state. In this case, by emotions we mean motivational processes with central importance for social communication, cognition and action. The method is designed to self-assess the intensity and frequency of the ten major emotions in accordance with the theory of K. Izard: interest (I), joy (J), surprise (S), grief (Gr), anger (A), disgust (D), contempt (C), fear (F), shame (Sh), guilt (G). In processing, the index of positive emotions (IPE), index of negative emotions (INE), and index of anxiety and depression emotions (IADE) is calculated.

To determine the degree of comprehension of sports women's life, namely, the availability of life goals, mission, intentions, interest in life and emotional saturation of life, satisfaction with self-realization, sense of ability to influence the course of their own lives, a questionnaire was applied "Purpose in Life Test" ("PIL") (Leontiev, 2006); goals of life (GL), process (P), result (R), locus of control – Self (LCS), locus of control – life (LCL), general sense of life (GSL). The questionnaire can reveal the internal motivation of athletes – the knowledge of the new, getting positive emotions, improving their own skills; external motivation - goal displacement, tense feelings of guilt, social approval. To define psychological content parameters of social expectations of female handball players, a modified questionnaire was used "Level of pre-game expectations" (LPGE) (Popovych, 2017): the level of pre-game expectations of personality (LPGEp), the level of awareness of the expected events (LAEEp), the level of the expected attitude to the participants of the game interaction (LEAIp), the level of expected results from the game (LERGp). "DES" the responses were evaluated by means of the unipolar semantic differential scale, its value was within the range of 1 (entirely inappropriate) and 4 (absolutely right). "PIL" and "LSE" the responses were estimated by means of the bipolar semantic differential scale, its value was within the range of -3 (not agree absolutely) to +3 (agree absolutely). The reliability indices obtained by means of Cronbach- $\alpha$  statistics were:  $\alpha_{DES} = .788$ ;  $\alpha_{PIL} = .801$ ;  $\alpha_{LPGE} = .712$ . The reliability indices of Cronbach- $\alpha$  were within the range of sufficient (.7) and high levels (.9).

Statistical analysis. Statistical processing of the empirical data was performed by means of the statistical program "SPSS" v. 23.0 and "Microsoft Excel". Spearman's correlation coefficients (rs) were used to find and determine the correlation between the indexes obtained. Factor analysis is performed by examination of the main components; to prove the statistical difference between the groups the criterion  $\phi$  of Fisher's angle-transformation is applied.

#### **Results and Discussion**

According to the "DES" method high rates of "interest" as prevailing emotion were observed in the majority (83.3%) of female handball players. In 19 team players (52.8%) we observe "joy". High or close to high indicators of fear were detected within 15 players (41.6%), which point out to "pre-starting fever", though these indicators are not critical. According to other scales, indicators are within the normal range or have level below average. According to the results of the method "Purpose in Life Test" (Leontiev, 2006) the following data were obtained (see Table 1).

**Table 1.** Average arithmetic means and mean square deviations by the scales of the method "Purpose in Life Test" (Leontiev, 2006) (n=36)

Scale	Arithmetic mean, M	Mean square deviation, SD
Goals in life	31.76	5.84
The process of life (interest and emotional saturation of life)	36.15	5.67
Effectiveness of life (satisfaction with self-realization)	22.83	4.81
Locus of control – Self	19.62	4.27
Locus of control – Life	26.48	5.96

Note: M – arithmetic mean; SD – mean square deviation.

Comparing the results with the test standards (according to the methods) it can be concluded that the mean-group indicator "Goals in life" (M=31.76; SD=5.84) of the researched sample of female handball players is higher than normalized arithmetic mean, indicating the availability of goals in sports women's life, time perspective, focus on the future. The scale of the "Process of Life" (M=36.15; SD=5.67) has predominantly high indicators and characterizes the orientation of the personality at the present moment of life, interest and emotional saturation of the life of subjects, the full value of life.

The "Effectiveness of Life" scale shows satisfaction with self-realization, reflects the evaluation of the passed period of life, the sense of productivity and comprehension of this period, in general, determines the orientation to the past. Mostly average and below average indicators (M = 22.83; SD = 4.81) were gotten in the researched sample of female handball players, which is believed to be entirely due to the young age of athletes. The mean indicators by the "Locus control – Self" scale (M = 19.62; SD = 4.27) of the researched sample are

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predominantly above the average, indicating that there is perception of oneself as strong individuality who has the freedom to choose and is able to build living on own plan and realizing personal goals. At the same time, according to the "Locus of Control – Life" scale (M = 26.48; SD = 5.96), there were too low indicators – handball players of women's national youth team do not consider life as being fully controlled by person. There is no certainty that the outside world is created rationally. It is reasonable that it is safe and manageable.

According to the questionnaire "Level of pre-game expectations" (Popovych, 2017)the following results were obtained (see Table 2).

**Table 2.** Average arithmetic means and mean square deviations by the scales of the questionnaire "Level of pregame expectations" (n=36)

Scale	Arithmetic mean, M	Mean square deviation, SD
The level of awareness of the expected events (LAEE <sub>p</sub> )	15.71	3.58
The level of the expected attitude to the participants of the game interaction (LEAI <sub>p</sub> )	14.48	2.32
The level of the expected results from the game (LERG <sub>p</sub> )	31.96	4.09

Note: M – arithmetic mean; SD – mean square deviation.

It was found that in the researched sample collection of handball team, the indicator "the level of awareness of the expected events" (M = 15.71; SD = 3.58) is lower than the average, that is, sports women do not feel their ability to predict the course of events based on knowledge, awareness about possible actions of partners and rivals, other participants in competitive activities. The scale "the level of expected attitude to the participants of the game interaction" found mean indicators (M = 14.48; SD = 2.32). Such data provide an opportunity to assume greater confidence in the adequacy of emotional and value characteristics of relationships with other people, including players of one team, with coaches, athletes who represent the team of rivals on the sports ground, that is about to begin.

The group's mean indicator "the level of expected attitude to the participants of the game interaction" (M = 31.96; SD = 4.09) is also in the mid-range zone and characterizes the confidence of female handball players in their abilities to predict the result of events, in particular, that sport game, which just starts.

Correlation analysis performed using the Spearman coefficient (rs) established relations between the studied parameters (see Table 3).

**Table 3.** Correlation connections of emotional states with indicators of sense and vital orientations and level of pre-game expectations of female handball players

Variables	Interest	Joy	Surprise	Fear	Blame	IPE	IADE
Goals in life	.312	.387*	.254	275	156	.372*	211
The process of life (interest and emotional saturation of life)	.413*	0.347	.409*	119	206	.318	194
Effectiveness of life (satisfaction with self-realization)	.301	0.342	0.296	364*	385*	.221	371*
Locus of control – Self	.296	.447*	.122	.203	.264	.452*	.278
Locus of control – Life	.317	.439*	.214	.196	.301	.381*	.276
LAEEp	.314	.417*	.279	.284	.113	.311	.008
LEAI <sub>p</sub>	.389*	.324	.412*	.186	.107	.405*	.116
LERG <sub>p</sub>	.279	.378*	.218	.165	.199	.346	.109

Note: \* the correlation is significant at the level p<.05 (two-way).

Correlation analyses displayed the following results. It was found that the "interest" ( $r_s = .413$ ; p < .05) and "surprise" ( $r_s = .409$ ; p < .05) at statistically significant level are related to the sense and vital orientations indicator "process of life". This characterizes the person for whom life is emotionally rich. The current moment makes sense, causes positive emotions, new in life attracts positive attention, causes wonder. Also, the dominant emotions of female handball players "interest" ( $r_s = .389$ ; p < .05) and "surprise" ( $r_s = .412$ ; p < .05) are interrelated with the level of social expectations of the individual, in particular, with the scale "the level of the expected attitude to the participants of the game interaction". More the female handball players are interested in playing sports, the more precisely they are able to pre-evaluate the relationships between the partners in their team and the relationships with the players of the rival's team.

The greatest number of positive statistically significant correlation relations was revealed by the dominant emotion of "joy", namely, the existing links with sense and vital orientations indicators "Goals in life"  $(r_s = .387; p < .05)$ , "Locus of control – Self"  $(r_s = .447; p < .05)$ , "Locus of control – Life"  $(r_s = .439; p < .05)$ . That is, "joy" as the brightest positive emotion is more common to sports women who are clearly aware of their

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vector of life, understand their purpose and prospects. At the same time, they take responsibility for the result of their own actions on themselves. This conclusion is confirmed by the correlation between the indicator of "joy" and the level of social expectations of the respondents, in particular, with the "level of awareness of the expected events" ( $r_s = .417$ ; p < .05), "the level of the expected results from the game" ( $r_s = .378$ ; p < .05).

Female handball players of the national youth handball teams, included in the game with dominant emotion "joy", are more able to understand the information about their training level and their resources, the training level and capabilities of rivals, the peculiarities of the game. This creates the necessary quality and the required level of psychological readiness for the game and provides it with winning sporting results. This is confirmed by the presence of statistically significant interrelationships of the "index of positive emotions" (IPE) with the indicator "Goals in life" ( $r_s = .372$ ; p < .05); "Locus of control – Self" ( $r_s = .452$ ; p < .05); "Locus of control – Life" ( $r_s = .381$ ; p < .05). There were interesting negative correlations of anxiety-depressive emotions, in particular, "fear" ( $r_s = -.364$ ; p < .05) and "blame" ( $r_s = -.385$ ; p < .05), with the scale of sense and vital orientations "Effectiveness of life (satisfaction with self-realization)". Suppose, that the focus on the past (perhaps on certain remembrance of defeats or unsuccessful sports meeting) cause the actualization of feelings of guilt for their actions during the game and certain fears, the expectation of possible negative results of the sports events. It should be noted that the group of negative emotions (grief, disgust, anger) did not reveal any statistically significant interrelations with the indicators of pre-game expectations of the individual in sample of female handball players.

Using factor analysis of data, we will try to confirm our assumptions about the influence of the emotional states of female handball players in the pre-game period on the expectation of winning results by studying the structure of the correlation of variables – each grouping of variables is determined by the factor by which these variables have the maximum loadings. Factor analysis was performed by out according to the traditional method of the main components, the method of rotation – Varimax. Four main components have been obtained, which together account for 69.82% of the dispersion of characteristics. After Varimax, the matrix has the following form (see Table 4).

**Table 4.** Matrix of factor loads of pre-start emotional states of expectations of a winning result of female handball players

Components	F1	F2	F3	F4
Interest	.342	.658	.257	.012
Joy	.713	.361	.194	.009
Surprise	.589	.614	.132	.021
Index of positive emotions	.658	.267	.211	.014
Disgust	.021	.176	.115	.314
Anger	.014	.131	.117	.401
Index of negative emotions	.018	.202	.108	.307
Fear	.218	.186	.375	.137
Guilt	.207	.154	.438	.026
Index of anxiety-depressive emotions	.176	.124	.426	.067
Goals in life	.596	.208	.135	.073
The process of life (interest and emotional saturation of life)	.212	.517	.148	.096
Life Efficiency (satisfaction with self-realization)	.235	.179	367	.078
Locus of control – Self	.558	.107	.256	.113
Locus of control – Life	.514	.128	.219	.017
The level of awareness of the expected events	.507	.118	.158	.097
The level of the expected attitude to the participants of the game interaction	.269	.512	.201	.102
The level of the expected results from the game	.494	.263	0.173	.078
Dispersion, %	34.72	21.84	7.51	4.75
∑ dispersion, %	34.72	56.56	64.07	68.82
Value	14.426	9.074	3.203	1.974

Note: The loadings of the significant variables are given in bold type.

Almost all signs after Varimax are correlated with high factor loadings with only one of the factors. Most features according to other factors have insignificant (less than .200) factor loadings. Thus, the factor structure is simple and easy to interpret.

In the analysis of the factors we observe that the first three of them (explaining 68.82% of the total dispersion) can be correlated with the orientation of the future, the present and the past in actualization of the pre-game expectations of women handball players.

Factor 1 has the greatest loadings or the greatest informational content. This factor can be identified as "Expecting winning sporting result". It is represented by the following variables "level of awareness of the

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expected events" (.507); "the level of the expected results from the game" (.494); "Goals in life" (.596); "Locus of control – Self" (.558); "Locus of control – Life" (.514); "Joy" (.713); "Index of positive emotions" (.658). Thus, positive emotional state of excitement, feeling of joy before the game characterize athletes who can clearly define their goal, take responsibility for its achievements. Planning their activities, they imagine the very positive consequences, tend to prepare themselves to the maximum possible result of the sports game. The more female handball players are aware of their role in the events, the more thoroughly they are able to think over ways to achieve their goal.

**Factor 2** "Expecting positive emotions from the process of game" is defined by the variables "Process of life" (interest and emotional saturation of life) (.517); "The level of the expected attitude to the participants of the game interaction" (.512); "Interest" (.658); "Surprise" (.614). Emotional state of interest and surprise is mainly related to the orientation directly on the process of game and to receive satisfaction from interpersonal coordinated interaction in their team and with rivals' players.

**Factor 3** "Expecting the opportunity to avoid defeat" includes the following variables: "Life Efficiency (Satisfaction with Self-Realization)" (-367). This variable characterizes the orientation to the past. An athlete, evaluating his/her results, victories and defeats, is able to make conclusions and take into account further sports activities. Since the youth team has been examined, including the middle and younger teams, we believe that the indicators of emotional states "Fear" (.375); "Guilt" (.438); "The index of anxiety-depressive emotions" (.426) are naturally combined with the orientation to the past and certain fears of possible defeat, which, in turn, raises the level of anxiety of female handball players before sports game.

**Factor 4** "Expecting negative scenario of events" (doomed to defeat) combines variables associated with negative emotions, namely, "Disgust" (.314); "Anger" (.401). "Index of negative emotions" (.307). These indicators do not have statistically significant relations with the level of pre-game expectations, therefore, we believe that negative emotional states do not directly affect athletes' expectations of winning results and partly lead to negative results. Admit exclusion, that negative emotions, through the compensatory function, can positively influence the course of events in sports meeting, particularly in handball. Usually negative expectations do not bring winning results.

The following factors have the load that is beyond the limits of the total dispersion of variables (less than .981). Therefore, the results of the statistical analysis allowed determining 4 basic factors (68.82%) determining the structure of emotional states of female handball players (Fig. 1).

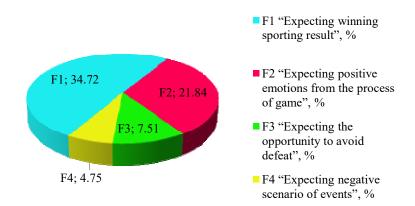


Figure 1. The structure of pre-start emotional states of expectations of a winning result of female handball players

As already mentioned, the sports women of the main handball team "Dniprianka", as well as juniors and younger age group playing in the Children's League of the Championship of Ukraine. Assumed, that there are differences in emotional mental states in the group of female handball players who take part in sports competitions at higher level (the main staff of the team; group 1, n=16) and young handball players (younger and middle groups, n=20). For convenience and more reliable results, the younger and middle age teams are combined into group 2. Group 1 consisted of female handball players of the main team. In order to prove the statistical difference between two samples, the criterion  $\phi$  of Fisher's angle-transformation is applied (see Table 5). For comparison, the percentage of individuals from each subgroup with a high level of manifestation of the under-study indicator is taken.

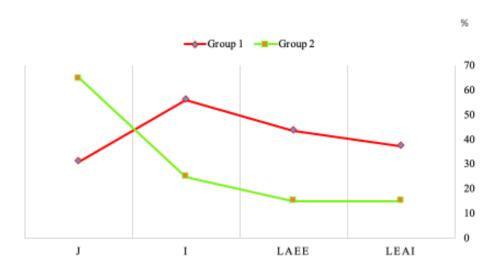
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Table 5. Differences between groups according to the indicators of emotional states and pre-game expectations (n1 = 16; n2 = 20)

The name of the indicator	Group 1 (n <sub>1</sub> =16)	Group 2 (n <sub>2</sub> =20)	Fisher's criterion	Level of significance
Joy	31.2%	65.0%	2.05	p < .05
Interest	56.2%	25.0%	1.93	p < .05
The level of awareness of the expected events	43.7%	15.0%	1.93	p < .05
The level of the expected attitude to the participants of the game interaction	37.5%	15.0%	1.56	_

Note: Group 1 – female handball players of the main team (n = 16); Group 2 – combined sample of junior and children's handball (female) teams (n = 20).

The diagram clearly shows the differences between Group 1 and Group 2 in the key parameters of the study (see Fig. 2).



Note: Group 1 - female handball players of the main team (n = 16); Group 2 - combined sample of junior and children's handball (female) teams (n = 20); J - joy; I - interest; LAEE - the level of awareness of the expected events; LEAI - the level of expected attitude to the participants of the game interaction.

Figure 2.Diagram of differences between group 1 and group 2 by key parameters of the study of the expected winning result of female handball players

Differences between Group 1 and Group 2 are revealed for some parameters. There are interesting differences in the emotional states of "joy" ( $\phi_{emp.} = 2.05$ ; p <.05) and "interest" ( $\phi_{emp.} = 1.93$ ; p <.05) between older female handball players who play in the main team and young female handball players of the Group 2. Moreover, "joy" in the pre-game period becomes more apparent within young female handball players; they feel pleasure, enthusiasm, happiness, which is associated with the process of the future game.At the same time, before the game begins the female handball players (Group 1) of the main team, first of all, display attentiveness, concentration, collection, adjustment to the result of the game.

It is established the statistically significant differences in the two scales of pre-game expectations of the personality are revealed: "the level of awareness of the expected events" ( $\phi_{emp.}$ = 1,93; p < .05) and "the level of the expected attitude to the participants of the game interaction" ( $\phi_{emp}$  = 1,56; p < .05). The last indicator is not yet within the range of statistical significance; however, its high value suggests tendency. Note that Group 1, which is the main staff of handball team, has higher indicators by the scale of knowledge, awareness of the course of events which allows relying on skills (experience) about the peculiarities of own team playing and rivals teams and more rationally predicting and building game strategy. The middle and younger groups of the handball team are mainly oriented towards emotional and value assessments regarding the expectation of future sporting event.

The empirical facts of our expectation of a winning result in the women's handball team in comparison with different age groups resonate with the empirical studies of the regulatory role of mental states in the structure of the person's cognitive and psychological resources (Silvia et al., 2009; Thoman et al., 2011; Chervinska, 2015; Prokhorov et al., 2015; Popovych & Blynova, 2019b; Blynova et al., 2020a).

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#### **Conclusions**

- 1) It is established that the interconnection between emotional states and pre-game expectations of a winning sporting result among the players of the women's handball team was revealed. Positive emotion "Joy" affects the level of awareness about the expected course of events, the level of results from the game (p < .05); "Interest" is interrelated with the level of prospective attitude towards participants of game interaction, that is, between the partners in their team and the players of the rivals' team (p < .05).
- 2) The factor structure of pre-start emotional states of the winning result expectancy of handball players is constructed. The interaction of emotional states and athletes' pre-game expectations is determined, depending on the meaning of sense and vital orientations. The following factors are obtained: F1 "Expecting the future result" (mainly due to the prevailing emotion "joy"); F2 "Expecting positive emotions from the game process" (related to "interest" and "surprise"); F3 "Expecting the opportunity to avoid defeat" (due to anxiety, fear, guilt); F4 "Expecting negative scenario of events" (doomed to defeat) combines variables associated with negative emotions, namely, "disgust" (.314); "anger" (.401); "index of negative emotions" (.307).
- 3) Differences in social expectations among sports women of the main handball team are determined, which are based mainly on knowledge of their advantages in the game and the features of the rival's team, and young female handball players of the middle and younger groups, who are more oriented towards the expectation of positive emotions from the sporting events.

Formation of positive expectations within women handball players for the before the game and victory in it should be one of the key components of the psychological training of athletes in game sports.

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

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