

## **Limits of Sports Ethics and Sports Competition: The Matter of Sports Humanity**

FENGJUN SHAN

*Department of Physical Education, Zhoukou Normal University, Zhoukou, China*

*This study is devoted to the analysis of changes in the moral competence of young athletes aged 18-26 immediately before and after a significant competition for them. It involved a total of 128 participants (66 males and 62 females) from different regions of China representing various summer Olympic sports. Moral competence and moral developmental stage were investigated using the Moral Competence Test administered three times: in a neutral setting, before the significant competition, and one week after the competition. The collected data unveiled that the level of moral competence of young athletes under 26 changes statistically significantly as a result of the pressure of competitive stress. More precisely, a temporary reduction in the level of moral competence and a possible lowering of the stage of moral reasoning, followed by a partial recovery for at least a week, were noted.*

**KEY WORDS:** Competition Psychology; Moral Competence; moral development; moral reasoning; sports ethics.

### **Introduction**

Modern sport, both professional Olympic and largely amateur, is based on the rhetorics and philosophies articulated by Pierre de Coubertin, the creator of the new Olympic movement (McFee, 2004). He put forward a concept of moral education in modern sport that can be extended to different

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*Correspondence to:* fengjunsan@yahoo.com / 15936091286 / Chuanbui District, Jinsbi Rd.  
All participants gave written consent to participate in the study and were guaranteed confidentiality of personal data and research.

*Competing Interests*

*Ethical approval:* All procedures performed in studies involving human participants were in accordance with the ethical standards of the institutional and/or national research committee and with the 1964 Helsinki Declaration and its later amendments or comparable ethical standards.

*Informed consent:* related data.

*Data availability:* The datasets generated during and/or analysed during the current study are available from the corresponding author on reasonable request

spheres of life and many independent fields of activity. Sport, thus, was seen by him as a means of education, which stems directly from the ideas that the ancient Greeks put into gymnastic activities as the founders of the Olympic Games. While competing with others, athletes improve their social virtues; While training, they develop fortitude, sensitivity, mindfulness, determination, and other personal virtues. In ancient Greece, and to a large extent in ancient Rome, gymnastics and physical education were seen as part of a young man's preparation for his role as a future warrior or as a citizen that is worthy and important for the community (Abanazir, 2022; Andrieu, 2020). Often the virtue acquired in sport was tested through its demonstration in behavior, communication, and presentation of one's community or city-polis before other peoples (Bilohur & Andriukaitiene, 2020a). To a large extent, modern sport has acquired a much broader connotation and is largely seen as a leisure activity. In this understanding, it may need moral justification, as it was historically seen more as a set of duties and challenges than as a form of entertainment or activity of choice (Bilohur & Andriukaitiene, 2020b; Boardley, 2018).

Modern sport has undergone a significant expansion in terms of its forms of existence. Even within Olympic and professional sports, its role has become far from as unambiguous, and so does its moral definition. Sport has been separated from military affairs and even opposed to them from a moral point of view. On the one hand, as far back as ancient Greece, the Olympic Games acted as a means of temporarily ceasing wars, making sport a form of replacing military competition with a peaceful competition that did not involve injury, deprivation, and murder. On the other, sport has even been contrasted with military activities because athletes train in ways that make the application of their skills within military affairs impossible or ineffective: military training and Olympic sports training have become radically separate forms of activity (Andrieu, 2020; Bredemeier & Shields, 2019). However, the professionalization of sport has made it more of a commercial phenomenon, and this influence is eroding the original moral tenets that were the basis of modern European sports.

Sports commercialization often does not involve the creation and transfer of virtue in its traditional form because this contradicts the main goal of commercial activity: to increase revenues from sporting events. Commercialization contributes to abuses of refereeing, collusion by team leaders or athletes, and the use of unfair and dishonest methods of competition, in particular stimulants (Barkoukis et al., 2021). Many sports are, to a large extent, moving toward spectacle and simplification of their arsenal for the sake of maximum efficiency in achieving victory following the rules (Bilohur & An-

driukaitiene, 2020b). Particularly affected by this are martial arts, where the number of high-level techniques used in Olympic and professional competitions is drastically reduced (Goldberg, 2019). During training, the athlete is forced to focus not on the harmonious development of the body and the development of virtues instilled by hard training but on the hypertrophied development of those functions, muscles, and body features that improve the chances of victory. In this way, sport becomes a form of health destruction for the sake of professional success, which goes beyond the traditionally understood morality of sport and is inhumane to athletes (Gentile et al., 2019; Neuhaus & Parent, 2019).

Although at the level of amateur athletics and fitness, the principles and ethics remain basically Olympic, moral issues are highly acute in professional competitive sports. Many researchers in the philosophy and psychology of sport have noted that the practice of psychological well-being, wellness, life extension, and improvement of one's body to achieve meaningful life goals remains generally applicable and unmodified at the level of sports schooling and amateur sport (Graham & Burns, 2020; Milanović et al., 2021). Moreover, this trend is equally characteristic of team and singles sports. Competitiveness in this domain may remain an invariably significant part of an athlete's training, but it rarely provokes the kind of results that characterize professional sports (Haugberg & Skogen, 2021). Professional sport lives in three contexts: human science, economic development, and politics. Therefore, it is more distinguished by the problem of effective moral choice or moral dilemma (Russell, 2018a). At the same time, the athlete's personal choices are heavily burdened by societal settings. It is society, coaches, and business agents who choose in what form to maintain the sport, what substances to use, to what degree the athlete's body needs to be exploited, and the athlete's own decisions reside within these limits. The only choice left for an athlete is to stay in professional sport or leave it, that is, to be outside the sporting life (Pennington, 2019).

The boundaries of sports ethics in relation to the competitive reality of professional sport are more of a sociological than a psychological or moral-philosophical phenomenon (Abanazir, 2022; Russell, 2018a). The athlete acquires their own moral competencies in the course of training and sporting activities and, in doing so, must implement them outside of sporting activities as well. This leads to the fact that the formed moral competence and level of moral reasoning or Kohlberg's stage of moral development achieved in one context or another will inevitably manifest in professional athletic activity (Biggs & Colesante, 2015; Boardley, 2020). This two-way process is still relatively understudied, although it has attracted much interest. The so-

ciology of sport has a wide research field, but, according to scholars, sport in it appears more as a kind of social product, a product of social consumption (McFee, 2004). This is the role in which sport can be viewed by sociology, but in doing so, it loses what makes it sport because sociological terms and methods apply to both sport and other phenomena distinct from it (Goldberg, 2019; McFee, 2004).

Despite the well-known gender criticism of Kohlberg's theory, as well as the consistent polemics with him by religious morality researchers (Moheghi et al., 2020), his theory of the stages of moral development has repeatedly confirmed its practical value in various cultures (AlSheddi et al., 2020). Being a follower of Piaget and a successor of his theory of the development of the cognitive and other abilities of the child, Kohlberg managed to create a cognitive theory of moral development, which is naturally dominant.

An athlete's moral reasoning and moral development level reveal themselves in numerous choices related to sporting activities. They often become evident in conflicting or unresolved situations during refereeing, attitudes and behaviors toward opponents in and out of competition, attitudes toward sports fans, personal image, etc. (Graham & Burns, 2020; Mirer, 2019). In this case, it is critical to distinguish between the athlete's persona and image, as a certain public and commercial product that sells and exists independently and the persona itself, which has specific moral orientations and behavioral criteria (Abeza et al., 2020; Barua & Das, 2020). Problems of the sport's humanity and humanization grow out of the relationship between an athlete and their competitive sporting activity understood as a kind of social action and manifested, among other ways, in the form of sport as a public good (Constandt et al., 2020; McFee, 2004).

## Literature Review

The practice shows that researchers are likely to closely relate studies on moral constraints in competitive sport to the philosophy of sport and the psychology of athletes (Bilohur & Andriukaitiene, 2020a, 2020b; McFee, 2004). The philosophy of sport regards ethical constraints as an essential part of the essence of sporting activity and a necessary component of the competitive confrontation between participants. The absence of limits or rules turns sport into a battle or ultimate terminal conflict since, in general, sport acts as both a substitute and a peculiar form of modeling conflict activity under actual moral constraints (Kavussanu & Al-Yaaribi, 2021; Simon et al., 2018). The presence of limited action is a defining feature of "agon," the opposition

of the parties involved embodied in competition. Participants possess different levels of excellence in one or another humanity aspect, so it is possible to talk about the humanity of sport and its competitive component (McFee, 2004). Ultimately, the goal of athletic victory is not the dominance of one competitor over another but the overall victory over imperfection, the increase of the orderly and perfect over chaotic (Andrieu, 2020).

Nevertheless, the psychological aspect of proving dominance, overcoming opponents' resistance, and presenting one's method of acting or training as more perfect is extremely important to an athlete (Boardley, 2020). Many researchers believe that the desire to win and dominate is the underlying motivation for awe-inspiring achievement, even though this type of worldview is unacceptable in most social ideologies based on Christian ethics (Boardley, 2018; Simon et al., 2018). Researchers note similar or close ideas about a fair duel or competition in the cultures of countries with a historically dominant Muslim ethic and in the countries of Southeast Asia and India (Furley, 2019; Hayward & Kemmelmeier, 2007). Geizinga noted that perhaps the basis of the Olympic ethics is a deeper understanding of the game (ancient Greek "agon"), which is understood as a confrontation controlled by certain norms and rules. This view is a unifying imperative for many ethnically diverse cultures (Huizinga, 2014).

The ethical constraints that affect an athlete's moral development derive from the ability to control and channel this motivational energy of dominance and social primacy into a necessary and encouraged direction. By demonstrating prosocial and ethically acceptable behavior stemming from a sufficiently high level of moral development, the athlete gains social acceptance and approval (Hanle, 2021; Shields et al., 2018).

The dichotomy of prosocial and antisocial behavior in sport is closely tied to competitive victory achievement and a willingness to maintain rule-imposed limits in the cases when they can be painlessly circumvented (Kavus-sanu & Al-Yaaribi, 2021). Moreover, what is important from a psychological point of view, is that an athlete can often be psychologically prepared for unethical actions, think about them and even justify them, but not commit such actions for various reasons (Graham & Burns, 2020; Milanović et al., 2021). Different scholars tend to assess the reasons for these behaviors differently, but testing often demonstrates a low level of moral competence and moral development in these athletes. Lack of misconduct is caused by fear of punishment or uncontrollable consequences rather than personal meaningful choice and understanding (Robertson & Constandt, 2021). Therefore, actual competitive behavior cannot serve as a reliable measure of an athlete's moral development and moral reasoning (Graham & Burns, 2020).

Modern sport exists in the context of the active development of science and the transformation of society. The most pressing issues facing the future of sport are the assessment of the use of doping, body transformations, cybernetic implants, and prostheses (Barkoukis et al., 2021; Juengst, 2020). Previously inaccessible forms of influence on an athlete's capabilities are fundamentally changing the notion of fair competition and the application of the rules underlying Olympic sport. The use of doping is condemned for many reasons: the destruction of athletes' health, the dehumanization of the athlete and the sporting contest, and the exclusion of the very purpose of the sporting spectacle - the contest of human characters and capabilities (Kanli et al., 2020). Professional sports may thus degenerate into a competition between pharmacists and neuroscientists, for whom the particular athlete will only act as a platform for the realization of competing technologies (Neuhaus & Parent, 2019; Xu, 2021). Dehumanization, in this case, manifests itself in the fact that the actual role of the individual and their personal qualities that can be developed by training recede into the background or lose importance, being replaced by technology. However, technology does not depend on the athlete's personality; the athlete is only a "carrier" in relation to it (Kanli et al., 2020; Xu, 2021).

In the philosophy of sport, there are active proponents of a positive view of the changes described. They argue that if performance enhancers (chemical, implanted, etc.) were permitted to everyone equally, there would be no unfair advantage. Quite the contrary, the one using such enhancers would get a more equal position with a stronger athlete because of natural ability, and thus inequality would even be eliminated, and the game would become fairer (Mirer, 2019; Murray & Chuan, 2020). From this point of view, sport as a spectacle and social action would also lose nothing because it would demonstrate capabilities beyond the average human (Murray & Chuan, 2020). However, the use of improvements also requires experience and skill; if the user is inexperienced, no benefit is to be expected.

Many researchers using various forms of measuring moral competence or determining the stage of moral development of athletes agree that students in physical education and sports coaching departments and institutions adhere to recommendations regarding physical activity levels, as well as methods and forms of training. Yet, over 70% of the athletes monitored maintained inferior moral competence throughout their training (Bronikowska et al., 2019). Regardless of the level of professional competence and gender, parents remained a key factor in moral development (Gentile et al., 2019). At the same time, the habit of proper physical activity is formed predominantly under the influence of teachers and coaches, with the modeling by

young athletes of the personal and moral performance presented to them by teachers (Bronikowska et al., 2019). In line with this, a number of long-term studies testify to a positive relationship between the athlete's moral development and long (multi-year) sports activities and training, with these patterns being better pronounced for young men (Graham & Burns, 2020; Shigeno et al., 2019; Torres & Hager, 2018). Accordingly, scholars point to the need to emphasize critical reflection and lifelong learning when the matter stands for moral competencies (Torres & Hager, 2018).

A review of studies on sports ethics, competitive activity, and the impact of sports on moral well-being and development of people of different ages unveiled a significant omission in the argumentation on stressful competitive activity, the moral dilemma the athlete faces, and the level of athlete's moral development and moral competencies. The question that this research seeks to answer is whether the level of moral competence - the level of moral reasoning - changes under the influence of competitive activity. It should be investigated whether competition can affect shifts in the level of moral competence in a marked and meaningful way or even in the competitors' moral development stage. It is assumed that certain changes in moral reasoning will be undoubtedly observed, and the stability of moral competence scores may indicate how high a level of moral development an athlete demonstrates.

The *null hypothesis* of the study can be formulated as follows: there are no significant changes in athletes' moral competence and moral reasoning before and immediately after the competitions important for them.

## Method and Materials

### RESEARCH PARTICIPANTS

The study sample was formed of 128 young athletes (age range was 18-26) representing a variety of individual and team summer sports: soccer, basketball, badminton, cycling, biathlon, track and field, archery, swimming, boxing, French wrestling, Greco-Roman wrestling, judo, fencing, artistic gymnastics, rhythmic gymnastics, and water polo. The sampling was random and was carried out among representatives of all summer sports included in the Olympic program, for which regular competitions at all levels, including national, are held in China. Thus, the selection of the specific sports was completely random as well. Research participants' gender and age proportions were also random and reflected the actual shares of Chinese athletes in the general sample.

Kohlberg's stages of moral reasoning development, according to many researchers, should not differ significantly in different cultures (AlSheddi et al., 2022; Moheghi et al., 2020). Therefore, the peculiarities of moral ideas and social morality that have developed in China should be taken into account in the results of this study in the sense that the results should be carefully extrapolated to samples of athletes from other countries and cultures.

Athletes enrolled came from different social groups, had similar education levels (secondary education; many received it in specialized sports training institutions), and had similar financial and social statuses. All participants were ensured to come from traditional two-parent families. Filtering of the initial sample on this parameter was done to exclude the influence of childhood stresses and family problems on moral reasoning in sports-related circumstances.

More detailed sample characteristics are presented in Table I.

TABLE I  
*Research Sample Data*

	18-21	22-24	25-26
Males	20	23	23
Females	20	21	21

## RESEARCH DESIGN

In accordance with the objectives set, this research benefited from the Moral Competence Test (MCT) and the classic Kohlberg's Theory of Moral Development, assessing moral development based on the corresponding scales of the aforementioned test (Biggs & Cole-sante, 2015; Lind, 2014).

The tests were administered three times to each participant individually and implied filling out a form sent by email and sending it back after completion. Within the first testing session, the materials were distributed simultaneously to all participants and at a time when they had no meaningful competition for them in the coming month. This allowed obtaining the level of moral competence and the current level of moral orientation during a sport-neutral period. The second testing session was carried out the day before a significant competition for a participant. The third testing session was exactly one week after the completion of that competition. Competition completion time point was the participant's final performance evaluation and/or the presentation of awards received (if any). The second session of testing presupposed measuring moral competence and reasoning at the most stressful moment when a moral choice is imminent or may in the near future be provoked at the most meaningful moment for the participant. The third session intended to study moral competence and reasoning after the psychological state has largely returned to normal, but the impressions and effects of recent events were still relatively fresh and continue to have a noteworthy effect on the assessments. The sessions' time was chosen in line with the findings on the assessment of changes in moral reasoning and in relation to stress and competition for athletes delivered in a number of already published research papers (Boardley, 2018; Bredemeier & Shields, 2019; Bronikowska et al., 2019).

Overall, the second and third testing sessions required more than three months for competitions significant to all study participants to be covered. The importance of these competitions for study participants was defined after interviewing athletes' personal coaches and collecting their objective conclusions. These data were also compared with the participant's own assessments and expectations, and only those competitions that received equally high significance from both the coach and the study participant were selected to determine the timing of the second and third tests.



The design of the study was built on the basis of the need to eliminate as much as possible the influence of possible non-sporting factors on the level of moral judgments and the level of moral development of the participants. Sports competitions, which were the defining checkpoint for the entire series of measurements described, are one of the most important events in the life of a young athlete. Their significance is likely to supersede most other factors that determine moral judgments. Also, moral judgments were measured in specific circumstances that are contextually closely related to sports, which also makes it possible not to take into account the influence of factors other than those measured on the moral judgments of the participants. The use of two types of tests and the search for correlations between their results indicates that the level of moral development does not change significantly with time and events, which also confirms that the influence of non-sporting factors on the measured values could be ignored.

For a more accurate analysis, by gender and by age participant subgroups in each test were considered separately. Comparison of testing outcomes in 9 subgroups ranging in age from 18 to 26 years (including). Each of the 9 groups included participants of the same year of birth, for example, at the age of 18 years. To determine the statistical significance of differences, Student's t-test was used to compare the mean values in pairs between each of the age groups. The significance level was taken as  $p \leq .05$ . Comparison demonstrated statistically significant differences in three cases: for 18-21, 22-24, and 25-26 age ranges. Therefore, precisely these subgroups were further used for research.

## DATA ANALYSIS

Testing results study was done by means of the Student's t-test. For its adequate calculation, the sample was checked for normality of distribution according to the results of the first test using the Kolmogorov-Smirnov statistical criterion. The choice of this nonparametric test is explained by the fact that it has high accuracy for samples of more than 50 items. The same method was used to conduct normality tests for the individual gender and age subgroups in the sample. Given that the same groups were compared at different times and circumstances, the requirement of equal numbers of participants in the comparison was maintained by default.

In the second step of the statistical analysis, Pearson's direct correlation coefficient was employed for both the sample as a whole and for individual subgroups to test whether there was a correlation between changes in moral reasoning and its level for the same participant.

A study of the correlation between the magnitude of change in moral thinking and its level for the same participant should demonstrate whether changes due to competition are a temporary marker of external pressure on the individual or a stable phenomenon. Pearson's direct correlation was chosen because, in this case, researchers expect only a direct correlation between the studied variables, and only if it is available, conclusions can be drawn about the relationship of these variables.

### *Statistical Processing*

Statistical data processing was done by means of the SPSS 26.0 specialized software package. Results' presentation and visualization were done via Microsoft Excel 2019.

## ETHICAL ISSUES

All participants gave written consent to participate in the study and were guaranteed confidentiality of personal data and research-related data. All participants' personal information was encrypted using a random code to which specially created email addresses were linked, ensuring maximum anonymity of participants and the inability to match data obtained from them with their identities. None of the personal details obtained by the researchers during the study was thereafter stored, used, or shared with third parties or institutions.

## RESEARCH LIMITATIONS

The study is limited to a group of young Chinese athletes, which requires a more cautious extrapolation of its findings to other peoples and cultures and certainly cannot be done to younger and older athletes due to the significant psychological differences associated with accumulated sports experience and the age change factor. Also, the study requires refinement due to significant factors influencing moral reasoning, such as background, regional or ethnic characteristics, and other socio-demographic aspects.

## Results

To confirm the possibility of using the Student's t-test to examine the availability of statistically significant differences in MCT results, the outcomes of the first of the tests were used to examine the normality of the distribution of values in the sample. Relevant data on the matter are given in Table II. As the values obtained for the Kolmogorov-Smirnov statistical normality test significantly exceeded  $p = .05$ , both the sample as a whole ( $p = .679$ ) and each of the studied gender and age groups were close to the normal distribution of values.

Sequential MCTs (Table III) showed marked differences in the level of moral competence and quality of moral reasoning across groups, as well as

TABLE II  
*Kolmogorov-smirnov sample normality testing results\**

	Males			Females		
	18-21	22-24	25-26	18-21	22-24	25-26
Mean	56.92	57.17	58.02	49.11	55.96	61.12
SD	2.76	3.01	2.16	2.19	1.99	2.06
Z	.758	.801	.415	.629	.799	.376
Asymp. Sig. (2-tailed) p-value	.621	.692	.098	.344	.899	.267

\*general p-value for the entire sample is  $p = .679$ .

TABLE III  
Results Of Three Consecutive Mcts

		Males			Females		
		18-21	22-24	25-26	18-21	22-24	25-26
Test 1	Mean	56.92	57.17	58.02	49.11	55.96	61.12
	SD	2.76	3.01	2.16	2.19	1.99	2.06
Test 2	Mean	46.18	44.92	45.32	47.12	46.29	49.22
	SD	2.9	2.16	3.49	3.02	3.1	3.14
Test 3	Mean	54.06	52.39	51.46	44.63	51.96	55.09
	SD	3.02	2.98	2.16	3.19	3.27	2.2

marked differences in the quality of moral reasoning in neutral situations, before and after meaningful competitions, when most of the emotional stress was removed.

The highest level of moral competence was observed for women aged 25-26 (61.12 points); it was significantly different from all other groups analyzed. Also, the group of females aged 25-26 demonstrated, as can be seen further, the greatest statistically significant stability in moral development and lower variability in moral competence scores under pressure. Both men and women aged 22-24 (44.92 and 46.29 points, respectively) and men aged 25-26 (45.22 points) showed minimal values in the second (“stress”) test, and the differences between the two groups were not statistically significant ( $p = .492$ ).

The third, “post-stress” test, explicated a return to scores closer to (but not entirely equal) neutral ones. Hence, men aged 18-21 demonstrated the greatest degree of convergence to pre-stress measures of moral competence (56.92 points in the “neutral” dimension (Test 1) and 54.06 points in the “post-stress” dimension (Test III)

Women of the same age range appeared least likely to change moral competence and moral reasoning in the pre-competition period (from 49.11 points to 47.12 points). They also appeared to be weaker recoverers (up to 44.63 points on the 3rd test). However, as evidenced by the Student’s t-test outcomes (Table IV), it is actually these values that do not capture statistically significant differences, so these observations cannot be considered relevant. In accordance with this, for the group of women aged 18-21, statistically significant differences in the level of moral competence and quality of moral reasoning can be inferred only between the first and third tests, that is, between the “neutral” and “post-stress” condition.

It should be noted that when examining the availability of correlation, only the correlation between the MCT values of the same people on different

TABLE IV  
*Comparison Of Results Of Three Consecutive Mcts And Student's T-Tests*

	Males			Females		
	18-21	22-24	25-26	18-21	22-24	25-26
p-value	18-21	22-24	25-26	18-21	22-24	25-26
Test 1-2	.000*	.001	.012	.169**	.041	.000
Test 2-3	.021	.003	.008	.229**	.516**	.034
Test 3-1	.046	.003	.021	.034	.047	.013

\* p-value <.001.

\*\* p-value >.05; the probability of error is above a certain minimum; the existence of a statistically significant difference cannot be claimed.

tests was established. Thus, the researchers attempted to test the claim that the observed changes are related by a certain pattern that appears the same for all participants (correlated for each participant and each group separately). Data in Table V demonstrate a strong correlation between the results of all three tests, with few exceptions.

The strength of the correlation for the groups of females aged 22-24 ( $r = .463$ ) for the second and third tests and those aged 18-21 ( $r = .416$ ) for the first and third tests should be considered "average" given on the theoretical foundations of the test used. Hence, a correlation should be recognized here, although much less pronounced than in the other cases. In parallel with this, the very significant strength of the correlation in all other observed cases questions the validity of these correlated pairs and their relevance. It should be noted, however, that the differences in the results of the first and third tests for females aged 18-21 are statistically significant (Table IV) although weakly correlated. This can be explained by the fact that the moral reasoning system of women of this age changed greatly after important competitions, but marked differences in certain types of moral reasoning were still present for each participant.

TABLE V  
*Pearson's Correlations For Responses Of The Same Participants In Three Consecutive MCTs*

	Males			Females		
	18-21	22-24	25-26	18-21	22-24	25-25
Test 1-2	.699	.781	.762	.82	.793	.881
Test 2-3	.648	.789	.698	.589	.463*	.806
Test 3-1	.778	.801	.811	.416*	.668	.816

\*Although results with  $r < .5$  correlate with average strength, they were regarded as insignificant compared to others.

Likewise, there is a strong correlation of changes in moral competence for the group of 18-21-year-old women, but no statistically significant differences between the test results (Table IV, cells highlighted in gray). Interpretation of these results requires much attention since the changes for each individual participant appear to be consistent, but they are still not meaningful enough to allow one to confidently say that the observed shifts in moral competence are significant and prominent for this group. In this respect, one can assume that the changes occur within the direction common to all participants (a general insignificant drop in the moral competence quality under the influence of competitive motivations and general stress). However, it does not change their overall moral competence in a meaningful way.

The collected data allow rejecting the *null hypothesis* about no significant changes in the moral competencies and moral reasoning of athletes aged 18-26 in connection with important competitions and after them for the vast majority of the demographic groups studied. Also, as a result of the study of the correlation of test results for the same participant, it should be recognized that, for the most part, there is a strong and direct relationship between test results. Thus, except for women aged 18-21 and 22-24, changes in moral competence under the pressure of the competitive process and against the background of recovery after it were found to be closely linked for each individual. That is, these transformations in the nature of moral evaluations and the level of moral competence proceed uniformly in most young athletes.

## Discussion

The existence of certain links between changes in athletes' mental condition and the stressful effects of vigorous competitive activity have already been pointed out by some studies (Boardley, 2018; Bredemeier & Shields, 2019; Bronikowska et al., 2019). Many of them note that, in fact, one should distinguish between the mental condition of the athlete before, during, and after a competition (Bronikowska et al., 2019; Gentile et al., 2019) and changes in the moral personality component. The latter concerns much deeper behavioral and motivational factors that determine long-term personality states and the ability to make some choice of conduct (Goldberg, 2019). While psychological states are related to anxiety, fear of losing, hopes of success, implementation and construction of activity plans, etc., moral states determine attitudes toward moral choices and assessment of situations in terms of ethical constraints and one's own selfish needs (Bilohur & Andriukaitiene, 2020a). Interviewing athletes shows increased lability in moral categories and

changes in evaluations under stress and primarily under the influence of the desire to win and the fear of not achieving the desired positive result (Boardley, 2020; Barkoukis et al., 2021).

The conducted search for studies on shifts in moral competence and moral reasoning at different moments of sports life can hardly be called successful. Some studies focusing on the specific impact of sport, particularly with its competitive aspects, and on the well-being of people of different ages have pointed to the possibility that moral choices arising during competition may be connected with participants' moral competence levels (Boardley, 2020; Shields et al., 2018). This very choice is markedly evident in psychological state transformation and may be particularly noticeable during prolonged sports participation (Bronikowska et al., 2019). Researchers have also noted marked differences in morale formation in a team and individual sports as well as emphasized the importance of the impact of competition in both cases (Hanle, 2021; Volkova et al., 2020). These findings are largely consistent with the inferences of the current work testifying to significant changes in moral competence during the stressful pre-competitive period compared to that athletes have in a neutral state of mind.

Worldwide research data on the matter demonstrate that moral transformation is more substantial and active in youth and young adults (Torres & Hager, 2018; Volkova et al., 2020). Older athletes exhibit less moral lability; their level of moral reasoning may be relatively stable and more dependent on accumulated personal experience (Russell, 2018b; Torres & Hager, 2018). Despite the fact that this issue has gained much attention from the academic field, it remains studied scantily. Grounding on data from the aforementioned studies, this research used a sample of younger athletes in an attempt to obtain more accurately manifested changes in moral competencies. However, pursuing a similar goal, some scholars argue that in athletes between the ages of 26 and 30, changes in moral competence could be beyond statistically significant (Shields et al., 2018).

Some evidence suggests that psychological changes are much more frequent and profound than moral ones. The level of moral reasoning in athletes, as in most people, does not tend to change markedly over short periods, so moral development and (particularly its evolution on Kohlberg's scale) can span decades (Lind, 2014; Milanović et al., 2021). Meaningful shifts in moral competencies can be associated either with a period of intensive special education related to philosophy, morality, and psychological training aimed at personal development or with highly stressful circumstances affecting the key personality components (Bronikowska et al., 2019). It is the competition that acts as the point at which moral choices most often present themselves to

the athlete in their professional life (Boardley, 2018; Campbell & McNamee, 2021). What is more, it is during the competition, the athlete encounters stress, which can act as a driver altering moral competence (Davis, 2018; Graham & Burns, 2020). Yet, it remains questioned how substantial such a transformation is and whether it can be temporary or will cover a significant period of time. It is now fairly well known that the moral competence level and moral development stage are not stable and immutable but can vary from sphere to sphere or change greatly over a lifetime, including being lowered by circumstances or psychological traumas (Hanle, 2021; Haugberg & Skogen, 2021). The carried-out research showed that changes can be noticeable and statistically significant within very short time intervals of three weeks to three months.

Humanity in sport can be seen as a manifestation of the stability of human qualities in the direction of moral development under the pressure of circumstances. In the great scheme of things, professional sport contributes to the dehumanization of sports activities and may negatively influence the moral competence of athletes, which, however, is not a critical part of professional sports activities (Bilohur & Andriukaitiene, 2020b; Juengst, 2020). For the most part, the willingness to follow established ethical constraints in sport is equivalent to the choice of prosocial behavior in other social behavioral frameworks consistent with athletes' humanistic choice of seeing their identity in sport (Graham & Burns, 2020; Hanle, 2021; Robertson & Constandt, 2021).

## **Conclusions**

The assessment of changes in moral competence and compliance with ethical regulations during competitive sports activities are among the most under-researched areas in sports philosophy and morality. Despite extensive study into the psychological aspects of competitive sports, the moral side of this matter has been little scrutinized using quantitative measurement means. This paper concentrated on how the moral competence of young athletes aged between 18 and 26 may change under the influence of competitive stress and immediately after it. The total number of participants engaged in the examination was 128 (66 males and 62 females). A study of statistically significant variation in testing allowed identifying three age groups between which statistically significant differences in test results were observed: 18-21, 21-24, and 25-26 years old. A comprehensive Moral Competence Test conducted three times (long before the competition, immediately before the

competition, one week after the competition) was used to examine the levels of moral competence and moral reasoning. The null hypothesis of no significant difference in test results for these three test understandings was rejected on the basis of the Student's t-test outcomes. Correlations in the results of all three tests for individual participants were examined through Pearson's direct correlation coefficient calculation. In summary, a strong direct correlation was found between the outcomes for the vast majority of the demographic groups examined, except for females aged 18-21. From this it follows that the level of moral competence of young athletes under the age of 26 can change statistically significantly due to the pressure of competitive stress. These shifts were noted to manifest themselves as a temporary marked decline in the level of moral competence and a possible drop in the stage of moral reasoning followed by a partial recovery. Of particular importance and interest here is the fact that although for the group of 18-26 years old females, the presence of changes was registered, their statistical significance was not proved. In practice, these inferences can be used within athletes' long-term personality development coaching, competition preparation, and youth training.

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