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## Pedagogical dimension of swim training as perceived by swimmers and their coach

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### Abstract

This article presents the educational benefits and drawbacks of competitive swimming training as assessed by the surveyed swimmers and their coach. The paper addresses issues concerning the formation of moral, aesthetic, intellectual and health attitudes in competitive swimmers through sports training. The purpose of this study is to identify their opinions regarding the impact of competitive swimming on the development of selected character traits. The study included 33 competitive swimmers (14 - women, 19 - men) and the coach of the competitive swimming section of the AZS Politechnika Lodzka sports club. The training seniority of the subjects is: 16 athletes - 6 - 10 years and 17 athletes 11 -17 years. The competitive section of the surveyed swimmers carried out training at the swimming pool of the ACS D sports complex "Zatoka Sportu" in Lodz. The study was conducted using a quantitative diagnostic survey method and qualitative focus interview technique. . The tools that were used in the study for the survey questionnaire and interview questionnaire. The article presents the results of our own research along with the results of other authors' research for discussion. The results of the study indicate that the practice of swimming by competitive athletes affects their educational process, where one of the important factors is the specificity of the sport. The article presents only a part of the pilot study, the results of which form the basis for the study proper.

**Keywords:** training, individual sport, swimming, activity, an educational process

### Introduction

Delving into the essence of this article requires a literature study of the relationship between sports and education. Sport is one of the components of physical culture, and according to the Sports Law of June 25, 2010, it means *any form of physical activity that, through ad hoc or organized participation, affects the development or improvement of physical and mental fitness, the development of social relations or the achievement of sports results at all levels. Competition based on intellectual activity with the goal of achieving a sports result is also considered sports* [15]. The development of social relations of sports participants can be achieved through educational dialogue. J. Nowocień writes that *particularly favorable circumstances for this are created in the course of sports activities; sports training, competition, sports training. This is because in sports there are strong, real authorities; a coach, a champion, an Olympian, a record-holder, which definitely influence attitudes, especially of young people* [7]. Training is carried out on similar principles to the educational and teaching process at school, the difference being the voluntary form of participation that characterizes sports activities. The basis of training is an atmosphere of co-partnership - *partnership in sports training includes the coach's perception and understanding of the player and his problems, and, above all, includes respect for him* [7]. The practice of sports influences nurturing in the area of educational domains (moral, mental-intellectual, aesthetic, health and physical) [10]. Sport seems to be an encouraging form of nurturing due to the creation of a sense of dignity and value of sports participants, rather than an atmosphere of external coercion and imposition of the same pace of work which, instead of supporting, negatively affects or blocks the development of children [3]. It is worth referring to the values derived from the principle of fair play, which is closely based on the

relationship between sports and education. The principle of fair play is a universal and attractive pole of values for young people [4]. The Olympic idea, is based on the principle of peace and the idea of fair play, and serves primarily as *...a load-bearing instrument in the education of youth, with opportunities for self-realization and socialization, partnership in educational interactions, deepened ethical reflection and an awakened need for self-improvement - not only in sports* [16]. It is important to note the essence of Olympism education in competitive sports. According to Ian Culpan, it is the one that is pedagogically consistent, based on various pedagogical theories [2].

In addition, J. E. Kowalska, believes that *fair play, as a pillar of sport and the basis of neo-olympism, is an extremely important educational value, and therefore should be much more strongly connected with the educational process* [5]. An athlete in competitive sports, while striving for the best possible result, is also aiming to compete at the Olympic Games, and so at the same time is part of the educational process of Olympism. Education in competitive sports acquires a holistic meaning thanks to the figure of the coach. Thus, according to Z. Naglak, *the coach is an educator who, based on the humanistic content of nurturing, education and ethics of his profession, prepares the athlete for life in society and for achieving sports success to the best of his ability* [13]. The development of the character traits of each athlete is influenced by the coach, these traits are formed not only for the sport practiced, but also the private and professional sphere in everyday life. Competitive swimming is considered a demanding sport due to the stresses that athletes are subjected to. In a standard week, swimmers complete about 11 training units (twice a day), the total duration of which is approximately 24 hours [11]. What's more, many Polish clubs implement training sessions at 6 am so that athletes can make it to participate in classes at school or university. Competitions of national rank are usually held on weekends, which makes athletes devote their free time to pursue their passions [10]. Training in individual sports is becoming increasingly individualized for each athlete, but in swimming it should be noted that training mainly takes place in a group. It therefore carries the hallmarks of team sports. This is because in athletics we will observe a completely different training in the case of a marathon runner and another in the case of a shot putter. Swimming training, on the other hand, in general has many common features, even if the athletes predispose specialization to other competitions (styles). The above-mentioned correlations indicate that the training process in different sports can affect differently the development of shaping athletes in both physical, social and educational aspects. Nowadays, more and more team-based forms of sports competition are being developed in individual disciplines, where examples include the ISL in swimming (International Swimming League) [8] or the Polish or European Team Athletics Championships [9].

#### Purpose and object of the research

The object of the research in this work is to present the educational role of sport in the opinion of the athletes and coach of the competitive swimming section of the KU AZS club of the Technical University of Lodz. The cognitive goal is to learn the opinion of the athletes and coach of the mentioned competitive section about the educational role of sport, including the formation of selected character traits. The following research questions were posed:

1. does swimming as a sport develop athletes in the context of nurturing?
2. what character traits develop dominantly in the process of swimming training?
3. what undesirable types of behavior does swimming induce?
4. whether and what differences exist in the statements of the surveyed swimmers with regard to gender and their coach?

This is only a section of the research project that is a prelude to the research proper.

#### Material and methods of the study

The study was conducted in 2018. The research material includes the opinion of 33 competitive swimmers and the coach of the KU AZS section of the Technical University of Lodz, carrying out training at the ACSD "Zatoka Sportu" sports complex in Lodz at al. Politechniki 10 (address). The section ceased its activities in 2020 for organizational reasons, and most of the swimmers continue training in other clubs in Lodz. The research sample was selected in a purposive manner. The surveyed players have many years of training experience: 16 of them are between 6 and 10 years, and 17 of the respondents are between 11 and 17 years. These data indicate that these are athletes experienced in practicing the sport. Many of them also present a very high level of sportsmanship: 1 athlete has an international master class, 6 athletes have a master class (men), and the rest of the respondents have a first, second or lower class. The surveyed coach has completed the second class course and has been coaching in competitive sports for 9 years. His high level of sportsmanship and experience in swimming training provides opportunities to determine his characteristics by the surveyed athletes.

The study was conducted using the diagnostic survey method. The techniques the researcher used were a questionnaire and an interview. The tools that were used in the study were a survey questionnaire and an interview questionnaire. The interview was conducted only with the trainer and was partially guided by the researcher. The analysis of the results of the study was done without statistical calculations given the low size of the research sample. The research hypothesis was also not set.

### Research results

The results of our own research represent part of the pilot study conducted as part of a master's thesis [6], which delved into the issue of, among other things, the educational role of the sport of swimming and the characteristics of training in swimming as perceived by the athletes surveyed. The results of the answers to the first question: do you think that practicing swimming develops you in the context of the educational process? are shown in Table 1.

**Table 1. Response of the surveyed athletes to the question: *Do you think that practicing swimming develops you in the context of the educational process?***

Specification			Sex		Total
			women	men	
Response	Yes	N	14	18	32
		%	100	94.7	97.0
	No	N	0	1	1
		%	0.0	5.3	3.0
	Total	N	14	19	33
		%	100.0	100.0	100.0

*Source: own research*

To question 1, the club's female athletes unanimously answered that swimming develops them in the context of the educational process. In total, of the 33 respondents, only one respondent (male) felt that swimming does not develop educationally.

The next question was selected due to the delineation of the relationship of the athlete's formative force to the specifics of the sport being trained (Table 2).

**Table 2. Response of surveyed athletes to the question: *Do you think swimming is a demanding sport?***

Specification			Sex		Total
			women	men	
Response	Yes	N	14	19	33
		%	100.0	100.0	100.0
	No	N	0	0	0
		%	0.0	0.0	0.0
	I don't know	N	0	0	0
		%	0.0	0.0	0.0
	Total	N	14	19	33
		%	100.0	100.0	100.0

*Source: own research*

All respondents (men and women) unanimously indicated that swimming is a demanding sport.

**Table 3. Response of surveyed athletes to the question: *What is the most characteristic of swimming training?***

Specification			Sex		Total
			women	men	
Features of swimming training	A	N	0	3	3
		%	0.0	15.8	9.1
	B	N	3	3	6
		%	21.4	15.8	18.2
	C	N	1	0	1
		%	7.1	0.0	3.0
	D	N	0	3	3
		%	0.0	15.8	9.1
	E	N	3	2	5
		%	21.4	10.5	15.2
	F	N	2	1	3

		%	14.3	5.3	9.1
	G	N	4	6	10
		%	28.6	31.6	30.3
	H	N	0	1	1
		%	0.0	5.3	3.0
	Total	N	14	19	33
		%	100.0	100.0	100.0

Source: own research

**Legend:**

**A** - It is monotonous

**B** - It is exhausting

**C** - It is confrontational

**D** - It is individualized

**E** - It shapes endurance

**F** - It shapes strength

**G** - It develops mentally

**H** - Other answer (is the sum of all these terms)

The respondents most often indicated, development of mentality - 4 (28.6%). 3 female athletes surveyed each indicated that swimming is exhausting and shapes endurance. 2 female athletes indicated that swimming shapes strength, while one respondent recognized that swimming is confrontational.

Men, like women, recognized that swimming develops mentally - 6 responses. 3 responses fell on: monotony of swimming training, exhausting nature and individualization. Two respondents indicated that swimming shapes endurance. One indication each was noted for shaping strength and "is the sum of all these terms."

Mental development was the most frequently selected answer, with 10, followed by 6 who indicated that swimming training is exhausting, and 5 respondents indicated that swimming shapes endurance.

Table 4 presents the answer to the question: what undesirable effects does swimming have?

**Table 4. Response of surveyed athletes to the question: *What undesirable effects does swimming practice cause?***

Specification			Sex		Total
			women	men	
Types of behaviour	Agression	N	0	0	0
		%	0.0	0.0	0.0
	Depression	N	3	1	4
		%	21.4	5.3	12.1
	Egoism	N	1	5	6
		%	7.1	26.3	18.2
	Possessiveness	N	0	0	0
		%	0.0	0.0	0.0
	Overzealousness	N	3	3	6
		%	21.4	15.8	18.2
	Nervousness	N	1	1	2
		%	7.1	5.3	6.1
	There are no adverse effects	N	5	7	12
		%	35.7	36.8	36.4
	Other (lack of distance from life, unfulfillment)	N	1	2	3
		%	7.1	10.5	9.1
	Total	N	14	19	33
		%	100.0	100.0	100.0

Source: own research

It is worth noting that the most frequently selected answer by respondents of both sexes is: "there are no adverse effects". 5 women and 7 men marked such an answer. Among women, however, there were indications of depression and overzealousness, with 3 responses each, and 1 response each for nervousness and "other"; 5 men marked a response indicating selfishness as a side effect, 3 respondents chose overzealousness, and two respondents answered that a side effect in swimming training is a lack of distance from life. One man indicated nervousness.

In summary, 6 respondents indicated the occurrence of selfish attitudes, 4 to the development of depression, and 3 to "other" ("lack of distance from life," "unfulfillment") as undesirable effects caused by swimming.

**Table 5. Response of surveyed athletes to the question: what character traits have you developed the most over the course of your sports career?**

Specification		Sex		Total	
		women	men		
Character traits	Responsibility	N	5	5	10
		%	35.7	26.3	30.3
	Striving for excellence	N	1	5	6
		%	7.1	26.3	18.2
	Sociability	N	2	4	6
		%	14.2	21	18.2
	Volitional values (fortitude, willpower)	N	7	1	8
		%	50	5.3	24.2
	Diligence	N	5	8	13
		%	35.7	42.1	39.4
	Persistence	N	5	7	12
		%	35.7	36.8	36.4
	Patience	N	1	2	3
		%	7.1	10.6	9.1
	Humbleness	N	5	4	9
		%	35.7	21	27.3
	Systematicity	N	9	9	18
		%	64.3	47.4	54.5
	Ability to work in a group	N	1	2	3
		%	7.1	10.6	9.1

*Source: own research*

*% do not add up to 100, as respondents could indicate up to 3 responses*

Table 5 shows the surveyed athletes' responses to the question: what character traits have you developed most over the course of your sports career? Among women, the most frequently mentioned character trait is "systematic," with 9 indications, followed by "volitional values," with 7; "humility," "perseverance" and "responsibility" were the traits indicated by 5 respondents; "sociability" was selected twice, and 1 response each was given to "striving for excellence," "patience" and "teamwork skills." 9 men also most often indicated "systematicity," followed by "diligence" with 8 responses, "perseverance" with 7, 5 respondents each answered that swimming develops "a sense of responsibility" and "excellence," 4 respondents marked "humility" and "sociability," 2 each indicated "patience" and "group work skills," and 1 chose the development of "volitional values."

In summary, the most frequently selected response was "systematic" with 18 indications, followed by "hardworking" with 13 responses, and followed by "perseverance" and "responsibility" with 10 indications each, "humility" with 9, "volitional values" with 8, and 6 respondents each indicated "striving for excellence" and "sociability." 3 each of the respondents chose "patience" and "ability to work in a group."

Training in an individual sport such as swimming, in the eyes of the surveyed athletes, is demanding and affects their education. At the same time, they believe that swimming training contributes to mental development and that it shapes endurance (motor ability). Among the dangers of swimming, the athletes mentioned the occurrence of selfish attitudes and depressive states. Among the character traits developed during their sports careers, the respondents most often mentioned "systematicity," "diligence" and "perseverance in pursuit of goals."

#### The coach's perspective

An interview with the coach of the study group allows to delve into the characteristics of swim training from his perspective. To the question: do you think that sports training is accompanied by education? In what dimension? he answered as follows:

*I believe that to the greatest extent, nurture is an appropriate slogan that accompanies sports training. An undisciplined or uninformed athlete does not shed an optimistic light on his person in terms of nurturing. This is usually due to the influence of an inadequate environment here or, more precisely, the community. Such players often spoil the atmosphere in the group, which results in a poorer quality of work performed during training. The task of the coach is to find ways, means of education to "reach" such people. In case of further insubordination, I believe that such a person should be removed for the good of the group.*

When asked the question, the coach spoke, referring to the experience he had developed over the years with competitive swimmers. The coach was then asked whether competitive swimming can have a negative impact on the educational process and why:

*Let me cite one behavior on the basis of which I argue that it can have a negative impact depending on how one perceives the trait. Not giving up, tenacity, fortitude. Anything that involves persistence of purpose. In the life of a normal person, sometimes you have to let go, while an athlete never gives up. Different people treat tenacity differently. Some call such a person overzealous in a negative context, while others call a person of extraordinary commitment to positive values. This is a top example of a trait that is the result of years of painstaking training by athletes. They struggle daily with the phenomenon of overcoming their own psycho-physical barriers. Aggression is extremely rare during training. I believe that it strictly collides with the environment in which the individual resides, or more precisely with the situation that prevails among the family. If I see a training participant displaying an act of aggression, I react. One can be belligerent, but not aggressive. Sports anger is also acceptable, but again until it does not transform into uncontrolled aggression against others. These are completely divergent topics. There are also cases of athletes who have fallen into depressive states as a result of sports unfulfillment. The role of the coach, in close correlation with his pedagogical skills, is to support such a player. This is a very sad phenomenon, since it happens that athletes prepare for one event for years. In case of failure, everyone asks themselves this fundamental question, why did they fail?*

The coach was then asked whether sports play an important role in nurturing. His answer referred to the specifics of the organization of a competitive swimmer's day, which is very dynamic in nature (overseas training camps, competitions, integration with new people, two workouts a day, school), his further answer was:

*Being an athlete also impinges on how one's character will be shaped in the future. Permanent lack of time, after the career is over, gives positive results. Such people are exceptionally organized, intelligent, clever, who tend to reach higher levels in their careers compared to people who had an excess of this time. A good athlete heralds much greater success in the future than people who did not train.*

As a result of the interview, the coach identified with the athletes' opinion, stating that there is a risk of depression as a result of striving hard for a chosen goal, often stemming from the inability to discharge emotions in free time. Swimmers are subjected to strong training stimuli which affects their mental development: not giving up, tenacity, fortitude. It can also be inferred from the interview that swimming training educates by shaping in athletes such qualities as diligence, organization, cleverness, perseverance in pursuit of a goal or responsibility.

## Discussion

The subject of the discussion is the comparison of the results obtained by the researcher with the results of other authors' studies, which include the issue of the characteristics of training and the educational effects of practicing various sports by professional athletes. J. Czechowski's study entitled. "The humanistic dimension of the sports environment - based on own research" shows the characteristics of the sports environment, among others, based on the opinions of athletes (soccer players, tennis players, athletes, swimmers, volleyball players, cyclists). Based on his own research, the author indicated the benefits of belonging to a group of athletes, and these are: *learning discipline, respect from other people; enables friendships, shared joy, teaches respect for what one has; relaxes from everyday life; increases motor strength; provides a sense of fulfillment; enables monetary gains; induces a sense of community, causes a desire to become better* [1]. A study by A. Rogowska and S. Adamska titled. "Personality and Lifestyle of Basketball Trainers [12]" shows the effects of basketball training in the context of the development of people participating in first and second league teams. The results indicate that basketball players have developed extroverted attitudes which makes *it easier to establish social ties, agreeableness, which characterizes people who are able to cooperate in a group of non-selfish and trusting, is a trait that, on the one hand, is highly valued among sports players in team games (which basketball is one of them), and on the other hand, it can affect better social competence, which can consequently lead to better adaptation to the requirements of the environment, harmony and emotional balance* [12]. The results presented indicate that basketball players develop social skills in a dominant way, while swimming athletes "sociability" was rather unmentioned. It is worth including a comment from a coach who pointed out the importance of "discipline" in swimming training, which can influence the leveling of extroverted attitudes in swimmers. In 2015, P. Wojtaszek in her master's thesis entitled. "Educational aspects of team sports in the opinion of athletes [14]," she examined 20 athletes who had played team sports competitively for at least five years. Based on the study, the author found that the athletes, through team sports, developed such personality traits as stress resistance, perseverance, resourcefulness, responsibility, willpower, ambition and honesty. Among the negative traits shown were: selfishness, waywardness or stardom. The author proved that sports training significantly affects the nurturing of athletes, and observed a correlation between the authority of the coach and the ability to pass on more positive personality traits. Athletes who gave little affection to their coach manifested more negative attitudes. The swimmers surveyed also cited responsibility or perseverance in the formation of nurturing attitudes. There are also correlations regarding selfish attitudes among the surveyed athletes.

Taking into account the literature study, the author sees the possibility of developing the research including a standardized survey questionnaire, which would facilitate the comparison of studies with similar issues.

### Conclusions

In the conducted research, answers were obtained to the research questions posed. To the first question posed, a group of swimmers answered that playing competitive sports influences their educational process. Swimming is a demanding sport, which was confirmed by the coach of the surveyed athletes on the basis of the interview, citing the large number of training units, frequent training camps and competitions in addition to compulsory classes at school or university. Taking into account the statements of the surveyed athletes, it can be concluded that swimming training develops them mentally and hardens their spirit because it is intense (physically and mentally exhausting). In addition, swimmers mentioned that training builds in them regularity, diligence, perseverance, responsibility, humility and volitional values. Swimmers in the minority indicated that practicing swimming builds "sociability" and "teamwork skills" in them. The third research question deals with undesirable types of behavior resulting from swimming training. Swimming athletes mentioned selfishness, depression or lack of distance from life. The coach, supplementing this content, pointed out that often overzealousness can be confused with tenacity of purpose, which characterizes many swimmers in his opinion. P. Wojtaszek's research indicates that among negative attitudes, the athletes listed selfishness, waywardness and stardom. The similarity is indicated by the responses regarding selfish attitudes. In the discussion, the main difference that was observed is the degree of formation of extroverted attitudes, including sociability, where they are more developed in athletes of team sports. The fourth research question relates to the differences in the statements of athletes by gender and their coach. Taking into account the numerical disproportion between men and women in the study group, conclusions were drawn based on percentage ratios. To the questions posed, women were more likely to answer that swimming training is exhausting and shapes strength and endurance. They were more numerous in indicating that swimming can contribute to depressive states, but also influences the development of volitional values (fortitude, willpower), humility and regularity. Men, on the other hand, view swimming training more as monotonous and individualized. More numerically than women, they believe it contributes to the manifestation of selfish attitudes, when among the dominant traits they marked the pursuit of excellence, sociability and diligence. The trainer surveyed similarly to women pointed out the risk of depression through sports unfulfillment and the development of fortitude, which in his language means persistence in pursuit of a goal, but at the same time is in line with men indicating the development of diligence. Based on the research, it is possible to indicate a recommendation for the coach of the studied group on what elements to include, strengthen, what he should pay attention to in the training process when working with male and female athletes engaged in competitive sports.

1. The research unanimously indicates that swimming influences the educational process of the studied athletes. This is an indication to the coach that he has a great responsibility and duty to impart appropriate moral-social, health-physical, aesthetic and intellectual habits to the athletes. The authority of the coach, well used, can lead athletes to very good results in their professional lives.

2. swimming is an individual sport, but all training is carried out in a large group. Among undesirable behaviors, athletes point to the risk of depression and selfishness. In an educational context, the coach could pay more attention to the integration of athletes, so that they are a support for each other: look at the group as a team, not the sum of individuals. Taking the example of basketball players, the exclusion of selfish attitudes may lie in the mentality of the players. The extrovertism of basketball players makes it possible to avoid selfishness, develop social competence and empathy.

3. Taking into account the answers of the respondents, they pay attention to the competencies most often related to self-improvement (fortitude, regularity, diligence, perseverance, etc.). It is advisable not to forget to teach the values of fair play, which should go hand in hand with striving for the best possible result and competing at the Olympic Games. Sports is only one stage in the life of athletes, when, after the end of the career, the acquired skills will be transformed into social competencies based on ethics, among other things.

4. It is worth expanding the survey in the future to include not only respondents - swimmers, but also participants in other sports.

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