



SPORTS SCIENCES:
Developments in Theory and Practice

Editor: Assoc. Prof. Erdil DURUKAN

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and Practice**

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İÇİNDEKİLER

Adaptation Processes of The Cardiovascular System to Exercise Conditions	1
<i>Yusuf GÖZAÇIK</i>	
Values Education with Physical Education and Sports..	19
<i>Erdal KAYA, Özer YILDIZ</i>	
Does Sports Prevent Illegal Behaviours by Providing the Character Development of Adolescents?	41
<i>Fatma Şeyda YILDIZ, Mehtap YILDIZ</i>	

ADAPTATION PROCESSES OF THE CARDIOVASCULAR SYSTEM TO EXERCISE CONDITIONS

Yusuf GÖZAÇIK¹

1. INTRODUCTION

1.1. Cardiovascular System and Vascular Physiology

The cardiovascular system comprises the heart and blood vessels, in which the heart occupies a central location, while the vessels form a tube-like structure that originates and terminates in the heart. The fundamental role of the cardiovascular system is to maintain the blood circulation in the vascular system at a specific pressure (1).

The cardiovascular system performs several functions, such as delivering nutrients to the tissues, eliminating waste products from the tissues, transporting hormones to different parts of the body, and maintaining a favourable environment for the optimal functioning and survival of all cells. Vessels vary in function and location, and are referred to by two different names based on their function and structure (1).

Arteries are vessels that transport blood from the ventricles to various body structures. Veins collect blood from the body and take it to the atria. In contrast, capillaries are made up of an endothelial structure positioned between arteries and veins and facilitate the exchange of substances between cells throughout the body and the blood (1).

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1.2. The Anatomy of the Heart

The heart is a muscle that contracts to pump blood throughout the body. It is situated in the middle of the chest, between the lungs, and is tilted to the left (2). This vital organ has four valves and four chambers. The two upper chambers, called atria, work in unison with the two lower chambers, known as ventricles (2).

The heart consists of three layers: the epicardium, the outermost layer, the myocardium in the middle, and the innermost layer, the endocardium. Although the epicardium and endocardium are thin, the myocardium is the heart's principal layer and comprises cardiac muscle fibres (3).

The heart weight on average between 280 and 340 grams in males and between 230 and 280 grams in females. Its measurements are approximately 12 centimetres in length, 9 centimetres in width, and 6 centimetres in thickness. The volume of the heart ranges from 250 to 350 cm³. It pumps roughly 3784 litres of blood per day (3).

In healthy individuals, the heart contracts approximately 75 times per minute during rest. Various factors can influence this rate, such as ambient temperature, altitude, dietary habits, psychological well-being, age, posture, humidity, drug usage, and tobacco consumption (4).

The dimensions of the heart can vary with age and body size. In adults, a healthy heart typically exceeds the size of a closed hand. A healthy heart contracts approximately one hundred thousand times in a day and functions unceasingly. Its principal function is to transport deoxygenated, or impure, blood from the body to the lungs and to propel freshly oxygenated blood, purified by the lungs, back to the body (5).

Furthermore, the heart is entirely enclosed by the pericardium, a two-layered membrane. The heart undergoes a particular sequence of functions. The atria receive deoxygenated blood from various parts of the body, while the ventricles distribute oxygenated blood to all structures in the body. The septum, a muscular wall, divides the right and left sections of the heart. Thus, the heart functions in an uninterrupted loop to fulfil the body's requirement for oxygen and vital nutrients (5).

Oxygenated blood circulates through the pulmonary veins to the left and right pulmonary veins, before entering the left atrium. After the left atrium contracts, blood flows through the mitral valve to fill the left ventricle. As the left ventricle compresses, the mitral valve shuts and blood is pushed through the aortic valve into the aorta for distribution throughout the body. Purified blood provides the tissues with oxygen (6).

The oxygen-carrying blood returns to the heart through the inferior vena cava and superior vena cava and enters the right atrium. Subsequently, the blood flows through the tricuspid valve and fills the right ventricle upon atrial contraction. During ventricular contraction, the pulmonary valve (pulmonary artery valve) opens, allowing the blood to be directed to the lungs via the pulmonary artery. The blood, which has been purified and oxygenated, flows into the pulmonary veins and returns to the heart for systemic distribution. This circulatory process persists throughout human life (6).

1.3. Heart Rate

The initial adaptation mechanism observed during exercise is an elevation in heart rate. Whilst exercising, the heart rate may increase up to triple that of the resting rate (7, 8). In the case of low-intensity, consistent aerobic exercise, the heart rate increases initially but stabilises at a steady-state within a few minutes. As physical demand increases, the heart rate increases

proportionally. At high intensities and heavy loads, it takes progressively longer for the heart rate to reach a stable state. However, at a particular point, the correlation between workload and heart rate ceases to be linear. Beyond this point, despite any further increase in workload, heart rate remains unchanged. This point represents the individual's original maximum heart rate (7).

Numerous factors impact the rise in heart rate during exercise. These factors comprise age, exercise type (intensity and duration), ambient temperature, and psychological state. The increase in heart rate initiates before exercise begins due to preparatory muscle contraction and psychological influences. The cerebral cortex affecting the spinal cord's heart rate control centre is speculated as the cause of this initial increase. Heart rate is notably influenced by the type of exercise, with a greater increase seen in speed-based activities like sprinting, and a lower increase in strength training. This initial surge quickly peaks, then declines within seconds. The maximum level is typically achieved within 4-5 minutes. Endurance exercise brings about a more gradual spike in heart rate (8, 9).

Among individuals exposed to a given workload, physically trained individuals show a lower increase in heart rate than sedentary individuals. However, individuals who exercise regularly and those who do not exercise regularly have similar maximal heart rates when they continue to exercise to the point of breathlessness. Nonetheless, the total work completed is higher in trained individuals (8, 9). Put simply, a trained person's larger stroke volume enables them to achieve the necessary cardiac output with a lesser rise in heart rate (8, 9, 10).

Reasons for the elevation in heart rate during exercise comprise of decreased vagal tone, amplified sympathetic stimulation of the heart, increased body temperature and increased adrenaline secretion (11, 12). Sympathetic activity

amplifies the force of contraction in myocardial fibrils and heightens heart rate (12). This alteration in heart rate escalates the workload and oxygen consumption of the heart and diminishes systolic ejection time and myocardial blood flow time (13, 8, 12).

The resting bradycardia observed in athletes, alongside the physiological decrease in heart rate during exercise, results in diastole prolongation. Prolongation of diastole enables superior ventricular filling and contributes to an enhancement in stroke volume, facilitating better performance in trained individuals under greater loads through balancing the increase in minute volume with the increase in stroke volume (14, 15, 16).

1.4. Cardiac Output

Cardiac output (CO) is the amount of blood that the heart pumps per minute. It is derived by multiplying the stroke volume of the heart by the heart rate. The intensity, duration, and position of the individual during exercise influence the significant increase in cardiac output. At its maximum, cardiac output can increase to around five times the resting value (17, 18). The enhancement of cardiac output is more evident after a training period (15, 19).

Factors increasing cardiac output include systemic and pulmonary vasodilatation, which are more evident in striated muscles during physical activity (19, 20). The rhythmic contractions of the striated muscles along with thorax, abdomen and spleen contractions cause an upsurge in the volume of blood returning to the heart, thus increasing 'preload'. "Enhanced preload increases left ventricular end-diastolic volume and subsequently left ventricular end-diastolic pressure. This results in a heightened contractile capacity of the myocardial fibers through the Frank-Starling mechanism (15, 19, 21).

The length of cardiac muscle fibres varies in direct proportion to applied tension and is related to end-diastolic volume, as per these findings. Contractile energy of the heart also

varies in accordance with muscle fibre length. Increasing the end-diastolic volume of the heart in turn increases tension in the ventricle and the force of contraction. Changes in sarcomere length regulating this process are known as heterometric autoregulation (22, 23). As in skeletal muscle, the sarcomere length in cardiac muscle is approximately 2.2 μm , and it is widely acknowledged that the contractile force reaches its peak at this length.

When blood flow to the heart increases, the heart's contractile force increases due to heterometric autoregulation. Simultaneously, the heart's metabolism also increases within 0-30 seconds due to increased workload, leading to vessel dilation and better nourishment of the myocardium. As a result, energy is produced more efficiently (20, 24).

1.5. Blood Pressure Changes

The most notable alteration during exercise is in the systolic blood pressure. Blood pressure has a close connection with cardiac output and particularly with the properties of peripheral arterial resistance (25, 26). One of the most crucial factors that impact systolic blood pressure is the rise in cardiac minute volume. As a result, systolic blood pressure increases considerably with workload during exercise. Vessel diameter is the primary parameter that affects peripheral arterial resistance. As previously stated, during exercise, blood vessels in active muscles dilate while those in inactive muscles and tissues constrict, allowing blood to be redirected to active muscles. In situations like running, where there is a high muscle mass involved, the increase in blood pressure is primarily dependent on the increase in cardiac minute volume, as the total peripheral resistance of the organism decreases. (22, 25, 26).

The change in systolic blood pressure exhibits a linear increase based on exercise intensity. After reaching the maximum

level of oxygen intake during exercise, the systolic blood pressure increase ceases, and typically, blood pressure begins to decrease (8, 25). The extent of blood pressure increase is dependent on the applied workload intensity. If the workload remains the same, a gradual decline in blood pressure is commonly observed. This occurs due to the dilation of skin vessels to regulate body temperature.

As a consequence of reduced peripheral vascular resistance, the diastolic pressure generally remains stable or may slightly increase (less than 10 mmHg) or decrease (22). Yet, during workouts that involve minor muscle groups, though the number of dilated vessels is higher, the increase in constricting vessels may elevate total peripheral resistance, and potentially cause further elevation in blood pressure (17, 18).

During exercise, diastolic blood pressure may suddenly drop in highly conditioned athletes, leading to a wide pulse pressure (8). After exercise, arterial blood pressure rapidly declines, then slightly increases before returning to its normal state. The initial drop can be attributed to the sudden cessation of the pump effect caused by contracting muscles and the accumulation of blood in dilated blood vessels. This blood pressure reduction results in a subsequent increase as it elicits reflex vasoconstriction (27, 28, 29).

1.6. Athlete's Heart

In 1899, Henschen described for the first time a syndrome in athletes resulting from training in which the cardiac structure and functions differed from those of normal individuals (30). Henschen's observations revealed an increase in heart volume through percussion in cross-country ski athletes, alongside dilatation and hypertrophy in both the right and left halves of the heart, confirming normal findings in relation to sports. Henschen

has proposed that this alteration of the heart enables it to operate at an elevated standard compared to a normal heart (30).

The key cardiac changes triggered by exercise are enhanced myocardial mass (31, 32, 33). Consistent physical activity causes structural, electrical and functional changes to the heart, a condition known as "athlete's heart" (32, 34). Athlete's heart entails bradycardia, atrial arrhythmia, nodal rhythm, Wenckebach AV block, repolarisation abnormalities, left and right ventricular hypertrophy, systolic murmur and elevated cardiothoracic index (30, 35).

This is the outcome of adjusting to the haemodynamic strain of prolonged, frequent, and intense exercise (35, 36). Though a good number of athletes experience an average level of hypertrophy, some athletes may exhibit greater hypertrophy than anticipated. Exercise-triggered physiological hypertrophy frequently does not surpass a restriction of 500 g, which contrasts with the distinct characteristic of cardiac illnesses (33). In the majority of athletes, left ventricular cavity dimensions are modest (35, 36). However, this increase may occasionally reach a point that may imitate indications of heart disease with anatomic alterations (36, 37). This differentiation is essential in clinical practice since athletes can take suitable precautions regarding the risk of sudden death or disease progression by establishing the diagnosis of cardiac disease (36).

Numerous studies have demonstrated the variability of cardiovascular responses across different sports disciplines (34). Endurance sports, such as long-distance running and swimming, are distinct from strength sports, which encompass disciplines such as wrestling, weightlifting, and shot put (30, 34). Disciplines like cycling and rowing serve as examples of sports that integrate both endurance and strength exercises. Although individuals with high endurance performance generally experience increased

ventricular enlargement and wall thickness, adequate left ventricular hypertrophy is not always a necessary condition.

1.7.Adaptation of the Cardiovascular System to Exercise

The vitality of an organism relies on maintaining homeostasis, the process of regulating internal equilibrium. Exercise can create strain that disrupts this internal balance, requiring organs and systems to adapt to maintain it. The cardiovascular system's response to exercise can differ based on various factors, including age, gender, body posture, dehydration status, fitness level, and the type and intensity of the exercise (38, 39). During exercise, the central nervous system, autonomic nervous system, and neurohumoral system (epinephrine and norepinephrine levels increase by a factor of 10) as well as mechanoreceptors of skeletal muscles have a crucial role in the formation of the cardiovascular response. (40, 42). As a result of exercise, there is a rise in the heart's pumping volume per minute and modifications in the microcirculation system which direct blood from less active tissues towards the muscles.

In addition to metabolic interactions, the respiratory system assumes a pivotal function during exercise by facilitating the supply of oxygen and elimination of carbon dioxide from the body. The enhanced energy demand during exercise triggers an elevation in respiratory rate and depth, thereby augmenting oxygen intake and carbon dioxide excretion by the lungs. Consequently, these adjustments in the respiratory system enable the blood to effectively absorb oxygen and dispense it to various tissues. This process facilitates the production of energy through aerobic metabolism and is necessary for fulfilling the body's energy requirements (43, 44, 45).

To meet the heightened energy demand caused by muscle activity, the cardiovascular system alters vessel diameter via

neurons and local metabolites, thereby increasing blood flow. Simultaneously, blood is directed from the circulatory system to the active muscle tissues as the vessels leading to the internal organs contract. The developed muscular properties of the arterioles supplying the muscles result in expanded arterioles, enabling robust blood flow (40). The developed muscular properties of the arterioles supplying the muscles result in expanded arterioles, enabling robust blood flow (40). Technical abbreviations are defined upon initial use. With exercise research, blood vessels demonstrate adaptation to ensure sufficient blood supply during high-intensity exercise (40, 41, 42, 46).

Simultaneously, blood vessels in other organs experience temporary contraction or closure. Even during low-intensity exercise, blood flow is redirected from internal organs towards active muscle tissue. Two mechanisms explain this shift in blood flow towards inactive tissues: firstly, increased sympathetic stimulation (central or peripheral mechanism); secondly, the assumption that local chemical products directly stimulate contraction or other muscular factors (44).

Increased muscle activity leads to a greater need for oxygen necessary for aerobic metabolism. As a result, the primary response to exercise is the rise in oxygen consumption (VO_2). In fact, oxygen consumption is determined by the mathematical product of cardiac output and oxygen (47). During exercise, there is an increase in the arterio-venous oxygen difference in tissues, which can elevate four times beyond the resting level (48).

The coronary circulation is a crucial location for vascular regulation, supplying oxygen and nutrients to the heart muscle. Vasoconstriction and vasodilatation events that take place in this region optimise coronary perfusion by responding sensitively to the metabolic demands of the heart. This vascular regulation is essential in maintaining healthy cardiac function. At rest, the

heart utilises 75% of the oxygen in the coronary circulation. Owing to the constraining effect of heightened utilisation, myocardial oxygen demand is met by a fourfold increase in coronary blood flow velocity during exercise. Additionally, vasodilation and decreased diastolic pressure in the coronaries during exercise reduce vascular resistance, thereby facilitating oxygen consumption. Depending on these factors, exercising causes an augmented arteriovenous oxygen difference, as indicated by (48). The primary markers of alterations in heart compliance which arise due to exercise are modifications in blood pressure, heart rate and cardiac output.

2. CONCLUSION

In conclusion, the cardiovascular system is a crucial system comprising the heart and vessels in the body with a robust connection with physical activity. Multiple academic studies demonstrate positive impacts of regular exercise on this system. Aerobic exercises can reinforce the heart muscles, primarily by elevating the heart rate. This enhances the heart's ability to pump blood efficiently, thereby improving circulation in blood vessels.

Additionally, consistent physical activity can help regulate blood pressure. It can decrease arterial stiffness and blockages by improving blood vessel elasticity. This can reduce the risk of high blood pressure and improve overall cardiovascular health. Moreover, exercise can exert favourable influences on the lipid profile in the bloodstream, culminating in a decrease in harmful cholesterol levels and an elevation in beneficial cholesterol levels.

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VALUES EDUCATION WITH PHYSICAL EDUCATION AND SPORTS¹

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Özer YILDIZ³

1. INTRODUCTION

Since the individual is a social being, he has to communicate with other people throughout his life. In consequence, it is inevitable to have some social, political, moral and cultural elements and rules (Yalar and Yelke, 2011). Human beings have been learning and teaching creatures since creation. In other words, human beings initially learned some life skills from them by observing other people and other living creatures around them, and then taught the most functionally useful of these skills to people in other segments of society, starting from their immediate circle. This situation has continued since the beginning of humanity (Keskin, 2015).

Values are among the main elements that affect people's individual lives. Since people live their lives under the influence of the values they have internalized, these values construct people's individual perspectives (Kuşdil and Kağıtçıbaşı, 2000). Values are expressed as concepts that include social and cultural rules and constitute the basis for individuals to express their

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feelings and thoughts by influencing their feelings and thoughts (Çağlar, 2005).

The main goal of values education is to express the importance of universal values that concern the whole world and are accepted and adopted in societies, and to raise individuals who demonstrate their positive personality qualities, have adopted moral values, and lead their lives with a sense of responsibility. Put it differently, it is probable to tell that values education aims to provide people with very important moral values such as responsibility, respect, love, virtue, courage, faith, individual discipline, perseverance and justice. Conversely, it is signed that values education aims to support individuals in moral, ethical and academic issues, which are increasingly becoming a big problem in the social structure, and to help individuals develop themselves in a safe and livable world (Altan, 2011).

The need for values education is increasing. Especially the recent incidents of violence in educational institutions have caused the authorities to focus their attention on this situation. These problems have made it necessary to investigate whether values education is effectively given to students. Namely, it is stated that schools must be more effective in imparting values (honesty, respect, tolerance, responsibility, helpfulness, moral values, etc.) that aim to raise citizens who have developed morally positive emotional characteristics. Based on all these, it is discussed that the notion of values education should be given importance in secondary and high schools (Yıldırım, 2009). The reason why values education is implemented in educational programs is expressed as the need for the individual to internalize social norms that are appropriate for the society, as well as to develop the individual emotionally and create a positive self-perception (Kuşdil and Kağıtçıbaşı, 2000).

Since physical education and sports activities are an important part of education, it can be told that they are at an important point in developing a positive self-perception in the individual and establishing desired and positive behaviors. In regard to the objectives of teaching physical education and sports lessons in schools, it is essential to assess the individual's physical, cognitive, affective and bilateral relations in terms of development. Today, it is undeniable the importance of ensuring the continuity and integrity of education, as well as revealing how effective values education, which is very important in the adaptation process of individuals to society, can be in physical education and sports teaching programs.

2. THE RELATIONSHIP OF PHYSICAL EDUCATION AND SPORTS WITH EDUCATION

Over time, sports has become a concept that widely accepted and gained importance in many countries since the recent period, and sports competitions have gained importance on an international size. Those who watched were as happy or sad as those who performed, and an emotional unity and even a bond of love was formed. All of these reveal that sports are not just about sports, but also have a sociological dimension (Aytan, 2010). The current interpretation of sports as planned educational activities and its teaching in educational institutions began with the organization of people. Until recently, when we looked at the reasons why sports activities were held, that is, what the purpose of sports was and what its definition was, it was perceived only as physical education. Nevertheless, it has been overwatched that mental, affective and social characteristics are not included in the definitions and purposes. In the meantime, it is probable to tell that sports is a tool and an

occupation needed to train not only the body but also the biological, spiritual, mental and affective characteristics of a person (Demirhan, 2003).

It is possible to define physical education and sports as a valuable tool of the modern education system, which aims to prepare the individual for life in more than one field (Öztürk, 1998). A meaningful relationship can be mentioned between education and sports. In education for sports, sports is the target and education is used to carry out it in the most active way. In sports for education, sports is only one of the methods used to achieve the targets of education, most likely the most enjoyable and most productive when carried out effectively (Öncü, 2007).

Values are preferences that determine the individual's perspective on life and goals, play an active role in decisions he/she makes, and form individual principles. The concept of value is all the visible criteria that an individual uses to understand and interpret the events occurring around him/her, and the principles that shape behavior, influence opinions on a subject, set goals, affect the view of the world, and play an active role in decisions (Baloğlu and Balgalmış, 2005). In this sense, it can be understood that values are criteria that give meaning to culture, society and the individual. Since the value system reflects human experiences and has a direct impact on them, it is reflected in form of principles that determine what is expected from individuals and what is prohibited (Fichter, 2016).

Values, as a criterion, are social elements that give meaning and importance to both society and culture, are kept alive and transmitted with social excitement, undertake a regulatory role in society, and have a direct impact on the lives of individuals as well as reflecting their experiences. It is stated that values have functions such as directing, influencing and

guiding society and people, and that they are elements that enable a person to find the reason for existence, to make sense of it, to evaluate the events around him/her and to use criteria in his evaluations. It is expressed that values have functions such as directing, influencing and guiding society and people, and that they are elements that enable a person to find the reason for existence, to make sense of it, to evaluate the events around him/her and to use criteria in his/her evaluations (Aydın and Akyol Gürler, 2014).

3. VALUES EDUCATION

Values education is the set of all human-specific activities that give the individual human-specific qualities and make him/her different from other living things, and the activities that enable the individual to become more humane according to these goals (Ulusoy and Dilmaç, 2016). It is stated that values education is very important for people to benefit the social structure they belong to and to create and develop a moderate personality (Acun et al., 2013). Values education refers to moral, human, social and spiritual life, uniting social life, bringing people together, development, well-being, peace, protection from risks and threats, and gaining a certain sense of consciousness and belief (Yuvacı, 2013).

There are various ideas about definition of values education. Values education sometimes covers moral education, sometimes ethics education, and sometimes character education (Aydın, 2014). It is also probable to see use of the concepts of "personality education, moral education" instead of values education. In addition, character education is defined as any intentional, explicit effort to advance desired personal skills and abilities (Kesgin, 2015). Thanks to character education, the individual exhibits conscious behavior in order to adopt moral

virtues through all activities carried out in educational institutions. The activities mentioned can be listed as peer relations, maintaining discipline, conflict resolution skills, teaching adult examples, and involving families in the process. Activities at school and everything related to school life are related to character education. This situation can be expressed as almost everything affects the character (Kesgin and Kesgin, 2014). Accordingly, "character education" and "values education" are interrelated concepts. Sometimes it is used as "moral and values education" and it is expressed that it is more comprehensive (Kaymakcan and Meydan, 2014).

3.1.Necessity of Values Education

In today's modern societies, great advances have been made in the fields of industry and technology, societies have progressed further in science and art, but alongside this progress, there has also been an increase in human and moral problems (Genç, 2014). As well, it is recognized that it is becoming increasingly troublesome to conduct values education due to social conditions. While many values that were previously accepted in society could be easily transferred to children without making any special effort, today it is probable to tell that parents and educators will have more difficulty in this regard. Since children no longer lead a life dependent only on family, school and friends, they become aware of and are affected by the changes in the world more quickly than their parents. In order for the society to survive, values such as respect, love, honesty, justice and tolerance must live in that society and be embraced by people. Thus, it has been stated that adults and educators must act consciously and actively for the development of these values in children (Ayдын, 2014).

It would not be incorrect to tell that individuals who learn and implement values take great steps towards having a

beautiful life and achieving inner peace. A person who has received values education and is committed to his/her values limits his needs in life to the real ones and rates his/her needs. However, after meeting its needs at a certain level, it shares its resources with other people. In some situations, he/she prefers the needs of others to his/her own needs. It draws attention to importance of existence of individuals who actively embrace values such as sharing and helping each other and prefer the benefit of others to their own benefit, instead of the selfish type of people that are active in modern Western societies (Ceyhan and Zelka, 2014).

The main purpose of values education is to raise individuals who know significance of values that are common to all humanity and that are accepted and adopted in societies and concern all humanity, who show positive personality traits, who are committed to moral values and who live their lives with a sense of responsibility. Put another way, it is probable to tell that values education aims to help people acquire moral values that are of great importance, such as responsibility, respect, love, virtue, courage, faith, individual discipline, perseverance and justice. When evaluated from another perspective, it can be told that values education aims to support people in moral, ethical and academic aspects, which are increasingly becoming a big problem in society, and to help people develop themselves positively in a safe and livable world (Altan, 2011).

Education has a mission to foster a sense of having good virtues such as honesty, humility, dignity, patience, understanding, justice, positivity, optimism, loyalty, compassion, tolerance, trust and simplicity. Because educational programs belonging to the socio-cultural structure try to increase this awareness (Meydan, 2014). In this regard, education programs are prepared considering that the sufficient number of attitudes and values that children acquire at an early age will

affect the lives of schools, families and societies in the later stage. It is thought that successful implementation depends on school-family cooperation, teacher monitoring of student development, and maximum harmony between the school and parents. (Acun et al., 2013).

3.2.The Need for Values Education

In today's world where the world is not similar as before, interaction between countries is increasing, and globalization is accelerating, it is of great importance for societies to continue their development both socially and culturally by preserving their own cultural values. It is not possible for nations that cannot protect their own cultural values to continue their existence (Acun et al., 2013). In order to prevent this extinction and moral degradation, values must be protected. In this regard, education has a great importance and function in strengthening the bond between society and the individual. It is obvious that to eliminate existing or potential problems in society, community members must first be taught tolerance and necessary values. It is expressed that the values education that will be imparted to individuals will contribute to the happiness of individuals, the peace of the society, the strengthening of inter-communal relations, and the promise of a better future for all humanity as a whole (Kolaç, 2010). Today's understanding of education aims to raise students as individuals who can adapt to different current and possible conditions and reason flexibly. It can generally be registered as awareness of thought structures or their effects on attitudes and actions. Nonetheless, considering that the ability to think freely and creatively can be imparted to students at an early age, it is probable to tell that assumptions, generalizations, pictures and images embedded in the self affect the perspective on the world and actions. Therefore, the need for values education, which is necessary to raise individuals who question, look critically and value cognitive elements, continues

to increase today (Akınoğlu, 2003). It is observed that many educators have common ideas about teaching students values such as respect, love, hope, belief and trust in the classroom, but they have difficulty in how and in what form they can provide this education and they also experience problems in the implementation phase (Kasapoğlu, 2013). Considering the educational life of individuals, it is probable to tell that one of the most crucial periods is primary education. It is thought that the knowledge, skills and values to be acquired in primary education can affect the entire lives of these students, and apart from this, it is clear that the knowledge, skills and values obtained in the primary education period will form the basis for what they will experience in the subsequent educational stages and in life. In this sense, it can be said that the values gained in primary education are very important in the continuity of values (Özmen and Gürgil, 2012).

4. VALUES IN PHYSICAL EDUCATION AND SPORTS

Alongside being a source of togetherness, cooperation, love and respect, physical education and sports may also be a source of conflict, conflict, acrimony, etc. It can be told that doing sports not only develops positive values, but also reveals the values inherent in the athlete. In order to provide an effective value education in physical education and sports, it is clearly declared that it is necessary to create a system with certain objectives, activities for this system and techniques that make these activities applicable, and then evaluation methods that will measure whether there is a change in students' tendencies (Martin and Gonzalez, 2012). Moreover, it is expressed that the education curriculum for physical education and sports is very significant from the point of values education, and that efforts to

enable students to acquire positive, active, social and mental skills should generally be taken into account when preparing curricula for physical education and sports courses. It is also stated that social goals were used as process goals in the past, and today these goals are the products of the physical education and sports course education curriculum that need the most attention. Besides, it would not be wrong to say that physical education and sports teachers individually give more importance to one of the values in their value systems and that they generally make content decisions and implementation methods in line with their priority orientation (Ennis, 1994).

It can be told that in the general education program of physical education and sports, ways to increase its effectiveness are intended to be addressed not only from a physiological perspective, but also from human and moral aspects (Makula, 2003). Value orientations in physical education and sports are frequently classified in 6 ways. These orientations (Ennis and Chen, 1993; Ennis, Ross and Chen, 1992; Jewett, 1994);

- Adequate level of discipline
- Period in which skills are acquired
- Self-actualization
- Harmony with the outside world
- Environmental responsibility
- Belief systems

it is possible to sort as.

While adequate level of discipline includes a traditional approach to developing the educational program in which the content is important, it can also be identified as a cognitive order. It is understood that educators who rely on adequate level of discipline state that academic knowledge of the subject in the curriculum is the most important issue at school. Hence, it is probable to tell that teachers who provide physical education

and sports education with this value orientation, which prioritizes disciplinary competence, focus on individuals showing sufficient activity in sports and an understanding based on academic knowledge related to this activity (Ennis and Chen, 1995).

This view, which accepts that the period in which skills are acquired or the social activity value orientation, how the individual acquires a skill is as important as the acquisition, is based on understanding the rules and principles of learning and teaching to use the acquisition of skills and new acquisitions. Based on this, it is predicated that it is crucial for individual to learn how to learn according to the content of physical education and sports (Ennis and Chen, 1995).

Self-actualization or learner-oriented value orientation, the orientation that advocates that the educational program should be directly directed to the learner, states that the curriculum should be learner-centered and should be presented in a way that creates individuals who respect their own self and the happiness of learning something new. Since the individual learner is considered responsible for knowing and reflecting on his/her own goals in the direction of personal learning, the learner is considered to have autonomy and self-direction through individual responsibility (Gillespie, 2003).

The value orientation of harmony with the outside world emphasizes an inclusive concept. It is explained that a balanced curriculum should take into account the student's needs, content, educational level and social events. Furthermore, it is stated that the basis is to encourage students to find their own meaning and value by participating in sportive and physical activities planned for students to gain full and effective skills and develop awareness of their environment (Gillespie, 2003).

Environmental responsibility value orientation is an approach that prioritizes social needs over personal needs. It accepts that it will contribute to social change by addressing society's problems and including them in curriculum. In this context, it is known that planned sports activities will help students learn to evaluate their personal and social needs in a holistic manner. On the other side, the dominant educational program goal is expressed as an orientation that forces students to be socially responsible (Gillespie, 2003). It is also explained that this social value orientation can be used within the scope of many issues and trends related to social change and social responsibility, as it not only enables students to communicate positively with other individuals, but also directs them to become aware of unequal situations and develop techniques that will bring the school and society to better levels (Ennis and Chen, 1995).

Belief systems value orientation is defined as the dynamic state of individual in the process of thoughts, feelings and actions. The development of belief systems is expressed as a process of value change that affects the individual's existence in the process of thoughts, feelings and actions without the individuals being aware of it. Education is a teaching and learning process that is carried out according to a certain plan and formally targets the moral system and development of the individual in his/her daily life. There are many interrelated elements in success of teaching and learning process, one of which is the spirituality of the students. When sports are examined in terms of belief systems, the general vision of the International Olympic Committee (IOC) is to increase the developmental characteristics of the affective and physical abilities that form the basis of sports and to create a safer and more peaceful world. Likewise, it is to develop new generations through sports with a more moderate approach and

understanding of friendship towards other individuals and to create a global peaceful environment. As well, when teaching moral and spiritual values and presenting them consciously are evaluated within the scope of physical education discipline, the education and training program comes to the fore. In this regard, if an evaluation is made, it is important how it will be implemented in a way that includes experience or ability during the physical education learning phase, which is both real and comprehensive (Mulyana, 2012).

The problem encountered during physical education and sports education is whether behavioral and moral value tendencies are included or not included in the learning process. The learning process of showing and doing for physical education and sports can develop the expected skills and behavior, but it would not be incorrect to tell that this will be a difficult and long-term process. Because attitudes are a phenomenon that develops spontaneously and depends on the students' own value systems. Thus, it can be told that it is difficult to develop spiritual values in sports. Also, in physical education and sports, the process of imparting spiritual values depends on the students' existing characteristics and their ability to reason, analyze and make learning efficient (Mulyana, 2012).

5. CONCLUSION

Physical education and sports are effective educational activities that improve both physical and mental health of the individual, enable the formation of a positive personality in the individual, increase morale by prioritizing the spiritual aspect, and raise nationally strong individuals (MEB, 2000). Physical education and sports is a process that affects the development of the individual in physical, mental and behavioral areas. Since physical education and sports are complex terms, they include

psychology, physiology and other fields, revealing the integration of body and mind and the human mechanism as a whole. Physical education and sports can be expressed as an crucial step of behavioral change depending on the individual's work and activity potential and resistance to reactions (Tekin et al., 2009). It can also be told that it is education of the individual's personality regarding all personality areas to improve the physical and mental health of the individual through physical work and activities (Yaldız, 2013). In physical education and sports, it may be possible to provide a healthy personality perception as well as physical and mental health. In brief, physical education and sports are effective educational activities related to improving a person's physical and psychological health, developing a good character, feeling happy and well spiritually, and raising people in accordance with socially adopted national values (MEB, 2000).

The general aims of physical education and sports in all institutions and organizations affiliated with the Ministry of National Education are as follows: The main purpose of physical education and sports course is to ensure the physical and mental development of students, to develop them personally and socially as healthy, happy, balanced, constructive, moral, creative and productive individuals who have personalities that adhere to the culture and values of their country and who have adopted the basic principles of democratic life (MEB, 2000).

In researches examining effects of physical education and sports on value development, it has been found that physical education and sports is very important in the development of values such as socialization, self-confidence, morality, unity and solidarity, respect, tolerance, obeying the rules, responsibility, discipline, sacrifice, work, cooperation, sportsmanship, empathy, willpower, leadership, patience, perseverance, recognition of one's own talent, modesty, peer communication,

team spirit, ability to compete under equal conditions, self-realization, analytical skills, and it has an important function in imparting national and cultural values to future generations, and in transferring them to future generations, and reduces negative social behavior (Yıldız, Deveci and Yıldız, 2021; Yıldız and Uslu, 2021; Yıldız and Güven, 2019; Yıldız, 2019; Kromerova and Sukys, 2016; Valentini, 2014; Kavussanu, Boardley, Sagar and Ring, 2013; Veronica, 2012; Camire and Trudel, 2010; Holt, Tamminen, Tink and Black, 2009; Bailey, 2006; Ha and Xu, 2002; Chen and Ennis, 1996; Cothran, 1996).

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DOES SPORTS PREVENT ILLEGAL BEHAVIOURS BY PROVIDING THE CHARACTER DEVELOPMENT OF ADOLESCENTS?¹

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Mehtap YILDIZ³

1. INTRODUCTION

The rapid changes taking place in the world bring positive as well as negative effects in many areas. On the negative side of the change, which causes great harm to humanity, there are difficulties in understanding each other between generations and problems are observed in people's communication with each other. As a natural consequence of this situation, the material and moral collapse of societies begins or this process accelerates. However, since personal improvements will be the determining factor in the recovery of societies, the governments of the countries try to carry out activities that will directly affect the characters of the people and the country governments make various plans in this direction (Görgüt and Tuncel, 2017).

Character is the stereotypical, continuous and consistent state of personality. Character is defined as the set of features

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that enable the individual to be in harmony with herself/himself, to be consistent and solid in his actions, and to dominate herself/himself (Öztürk, 1998). According to Holden (2001), character is the values and beliefs that will affect a person's behavior regarding her/his wrong and right decisions. Benninga and Wynne (1998) define character as a person's behavioral style or a person's moral disposition.

The development of character occurs naturally and consciously and unconsciously within the individual's social environment such as family, school, and the outside environment. It is also based on the individual's personal choice to transform these values into virtues in her/his own person by using the motivation and dynamism source she/he needs to educate her/his own conscience and character within the national, cultural and religious values of the society she/he lives in. In this sense, in order for individuals' moral behavior to become a character trait, they must demonstrate these behaviors with their own decisions and preferences and be able to exhibit them consistently everywhere and at all times (Kanger, 2007).

Sports improves the mental and physical health of the human being, which is the basic ingredient of cultural, social and economic development, contributes to the formation of personality and character traits, facilitates adaptation to the environment by enabling the individual to gain skills, talents and knowledge, and increases the individual's fighting power as well as fighting in accordance with the rules, excitement can be defined as activities carried out for the purpose of winning in the competition (Baltacı, 2008).

Sportive activities enable individuals to embrace their individual responsibilities and put them into practice. Sportive activities direct people to do useful things instead of aggressive behavior. It is also an important element in personality and

moral development. An individual who has received physical education and sports training can show compliance with the values of society through his behavior (Tazegül, 2014).

In this context, adolescence is a very important period in the formation of an individual's personality. It is thought that young people in this period experience identity crises and acquire negative habits, which will negatively affect their adulthood. Sportive activities have an important place in a person's character development as they keep the person away from harmful habits and provide many positive features such as self-confidence and self-control.

2. ILLEGAL BEHAVIORS DURING ADOLESCENCE AND SPORTS

It can be seen that many concepts are actually used when researching problematic behaviors in adolescents. While the concepts of illegal and crime are used interchangeably, antisocial behavior, risky behavior, bullying, violence, etc. and it was observed that these concepts were used instead of the illegal and crime. Adolescent individuals sometimes experience problems such as following the instructions given and complying with the rules. Even though this is a situation that can pass over time and is not permanent, at some times they may experience conflicts with authority figures and adults, their families and schools. The behaviors that young people are asked not to do or do in terms of discipline, called rules, are based on some norms. Rules are a basic reference source in determining whether the student's behavior is right or wrong at school and in the classroom. The abnormal attitudes exhibited by adolescent individuals in their behavior, in other words their behavior and adaptation and disorders, are actually of concern to everyone in society from both a sociological and psychological perspective,

as they can be harmful to both their environment and themselves (Korkmaz, 2014).

Crime refers to a specific case of deviation defined by social norms and officially included in the criminal law (Bozkurt, 2011). Crime is defined as “actions accepted and specified by legislators that are considered dangerous or harmful to society”. Crime, as defined by criminal law, is behavior punished by law (Dönmezer, 2006).

Juvenile delinquency is defined in Turkey's legal system as the violation of a legal norm by individuals under the age of 18. The word “child” refers to adolescents who are not yet legal adults and the 11-18 age group. The most important factor that distinguishes juvenile delinquency from crime committed in adulthood is that this period coincides with adolescence, which is defined as the “transitional phase” or “problem phase”. For this reason, it is impossible to isolate the crime committed by a young person at such a critical stage from the characteristics of adolescence and view the teenager as an ordinary criminal. Crimes committed by adolescents differ from adult crimes in terms of the type of crime and the reason for the crime. For this reason, it is quite erroneous and difficult to characterize the phenomenon of guilt in this period with the definitions of classical Criminal Law such as “the crime specified by the law, the person who commits this crime is also guilty”. Crime and child are two different phenomena that do not overlap and contradict each other. The phenomenon of child or childhood expresses innocence, while the phenomenon of crime refers to something bad that does not suit the child. The concept of juvenile delinquency, which is very complex in terms of criminal law and very interesting in terms of criminological studies, contains different terms and meanings (Yavuzer, 1992).

Adolescent individuals who engage in criminal behavior may develop thoughts such as “it is better to turn to crime than to be nothing.” because being “guilty” is also an element that requires having certain roles and values. The only difference is that these values and roles are far from being the choice of society (Özgen, 1999).

Children’s law-breaking behavior primarily reveals a normal (within the framework of basic developmental conditions) appearance. Children cannot distinguish the world of imagination and play from reality and seriousness. They may be looking for games, joy, mischief, adventurousness, exuberance, attraction to prohibitions, entertainment, sports, relief of anger, and excitement of adventure through actions that reveal the crime due to youthful feelings or childish motivations. Unintentionally or intentionally, children often show these behaviors in order to gain prestige through criminal behavior, to belong to a certain group, to be recognized, to achieve their goals, to measure their own power, to want to be accepted by others, to become famous or a hero, and to appear strong (Schwind, 2005). Many factors play an effective role in young people's tendency towards crime during high school age. Factors such as people’s individual characteristics, school, circle of friends, income level, family relationships have many different dimensions and expansions within themselves (Kızmaz, 2002).

The rate at which attitudes and behaviors that were deemed inappropriate by society in the past have been practiced within society has increasingly become commonplace. There is an increase in incidents such as violence, drug use and sexuality. People now prefer to live alone rather than living their lives in harmony in society. The prevailing feeling among people has been the feeling of selfishness. People's increasing distance from society has brought about their alienation from their essence and, as a result, the problems of suicide. Similarly, there is an

increase in cases such as infidelity behavior, divorce, discord, unmarried partnership and abortion within families, which are one of the most important institutions created by individuals. This situation has become a threat to social dynamics. As a result of all these situations, there is an increase in the frequency of violence cases, which are frequently encountered and unstoppable among students in primary and secondary education institutions all over the world, murders, injuries, theft, fraud, lying, self-harm, blackmail, threats, hateful fanatic attitudes, abusive language, etc. Negative character behaviors such as speaking in slang and slang, ignoring ethical values in exams and lessons, strengthening the sense of selfishness and weakening the sense of responsibility, accelerating moral decline, indifference and decreasing respect for national and moral values are encountered (Kanger, 2012).

The adolescent copes with the crises caused by some changes and expectations in her/his areas of development, with the ego strength she has gained until then, reaches her/his personality integrity and reconciles her contradictions. Some adolescents, on the other hand, cannot withstand this type of stress and may turn to unhealthy solutions that lead to the destruction of their personality structure, and different mental disorders may manifest themselves. These disorders may begin in childhood and continue in adolescence, or they may begin for the first time in adolescence. During adolescence, young people may experience psychiatric disorders such as depression and suicide, schizophrenia, and anorexia nervosa. They may also experience some problems such as vandalism, running away from school or home, smoking, drug use, internet addiction, and loss of self-confidence. Also during this period, young people may exhibit aggressive behavior and criminal behavior (Çuhadaroğlu et al., 2004; Ekşi, 2003; Kılıçcı, 2003; Morris, 1996; Türküm, 2000).

Adolescents may stray from the rules by engaging in some risky behaviors and display problematic behaviors called crimes. Criminal behavior seen in adolescents may also result from characteristics specific to adolescence. Adolescent individuals have the potential to encounter many problems, some of which stem from personality traits and biological structure, and some from environmental stimuli (Türküm, 2000). A number of factors such as an individual's efforts to prove himself to the environment, inability to predict the consequences of his behavior, hoping for a benefit as a result of his behavior, inexperience (Irwin and Millstein, 1992), and seeking excitement may cause destructive behavior (Arnett, 1996).

Adolescence is very important because it is a period in which the individual reviews her/his past, evaluates her experiences, and determines her/his future intellectually. Resolving the identity crisis and other developmental problems in a healthy way during adolescence, which is a complex and difficult period, enables the individual to become a productive, psychologically healthy, successful and functioning adult (Çuhadaroglu et al., 2004).

According to Yavuzer (2006), the family environment, which gives people social value judgments and creates the opportunity to gain social experience for the first time, is of great importance in the education and development process. However, the presence of bad models within the family or lack of social interaction causes the family institution to be a source of negative stimulation for the person. If the family institution is missing or inadequate, the organized and strongest social institutions that will fill the gap in this institution are schools. Almost all of adolescence is spent in the education process, in other words, in schools. Schools, as social institutions, should be institutions that fill the gap at this point by preparing the positive interaction area that the immediate environment and family

cannot provide to the individual. The school, which is the institution where young individuals spend the most time after their own family, has a greater responsibility and function in preventing crime than other institutions. While schools, on the one hand, serve to prevent criminal behavior in society by ensuring the healthy socialization of young people through direct education and training, on the other hand, they take measures to prevent young people from committing crimes within the school. There is an inverse relationship between school education and criminality in adolescents. This situation proves how important school is in the social adaptation process of the young person (Yörükoğlu, 2000).

It is very important to raise young people, especially those in high school who have reached adolescence, as balanced and healthy individuals. Rather than acting and speaking in an accusatory manner towards these young people, it is very important to know what can be done for them and where and how to act in order to prevent these negative behaviors. At this point, family, environment and educators have great duties (Selçuk, 2000).

According to Turkish Statistical Institute data for 2020, the number of incidents involving children brought or brought to security institutions in 2020 was 450 thousand 803. It was determined that in these incidents, 37.9% of the children were victims, 25.3% were accused of committing an act defined as a crime by law (being dragged into a crime), 18.5% were accused of committing a crime, 13% were accused of committing an act defined as a crime by law, and 13% were accused of committing a crime, 5% of them were brought to security institutions because they were lost (a lost application was filed and found later), and 0.2% were brought to security institutions due to other reasons other than these reasons. It was observed that 60.7% of the children coming to security units were between the

ages of 15-17, 20.2% were between the ages of 12-14, and 19% were children aged 11 and under 11. Of the children who came to security institutions in 2020, 31.3% were girls and 68.7% were boys. 114 thousand 38 of the incidents involving children brought to security institutions occurred due to being dragged into crime. 31.4% of these children were accused of injury, 30.5% were convicted of theft, 5% were convicted of using, selling or buying drugs, 4.4% were threatened, and 3.4% were charged with a passport crimes against the law (TÜİK, 2020).

During adolescence, physical education and sports lessons are important in terms of supporting character development with practices that include physical activity. Physical education and sports activities create a positive and safe learning environment with appropriate curriculum and content that supports the development of young people. In addition, sports activities contribute to character development by encouraging people to exhibit appropriate behavior and by supporting the training of young people to use their minds in finding the truth (Sullivan, 2007). The goal in physical education and sports is the education of the whole personality. Through sports, children learn unity, love, obeying the rules, friendship, fulfilling their duties and helping each other. Thanks to sports, they make new friends and socialize. Sportive activities enable young people to accept their individual responsibilities and fulfill their accepted responsibilities. Due to the sports activities, young people are directed to perform useful activities instead of engaging in aggressive behavior. In addition to all these elements, sports activities are effective in the positive development of personality and morality (Binbaşıoğlu, 1995).

Sports is an important part of education in creating modern societies and raising healthy generations. While sports activities contribute to the formation of mentally and physically

healthy and socially developed personalities of young generations, they also enable young people to grow up as creative, productive, personality-oriented, constructive, tolerant, prudent, moral, self-confident, gentlemanly individuals with good human relations (Saygin, 2012).

As a result, sports, regardless of whether they are amateur or professional, are activities that manage to control the individual at some points, complement the individual's deficiencies, and prepare the environment for the individual to spend her/his excesses in a positive way (Stegelin, 2005).

3. SPORTS AND CHARACTER DEVELOPMENT DURING ADOLESCENCE

Character development is a process that begins in infancy and continues throughout life. However, the speed of this development varies from time to time. Considering the chronology of all aspects, especially adolescence and childhood constitute the most critical times in terms of character development. The reason for this is that during infancy, the person only communicates with his family. However, during childhood, she/he begins to communicate with her/his social circle outside the family. Therefore, the school environment, especially the primary and secondary school periods, is of great importance in terms of character development. Because in this period, the person becomes involved in a larger social environment than before. The reason why adolescence is important for character development is that moral thinking constantly develops and a moral identity is formed during this period. It is also the development of one's cognitive capacity to think about right and wrong situations that allows for mature moral decision making, moral thinking, and increased moral judgments (Berkowitz, 2002).

The development of character occurs naturally, unconsciously and consciously, within the person's social environment, school, family and external environment, that is, within the integrity of life. A person can find the source of motivation and dynamism she/he needs while educating her/his own character within the national, religious and cultural values of the society in which she/he lives or in her/his own conscience. Using the mentioned dynamism, turning these values into virtues in one's own essence is based on one's own choice. In this sense, in order for individuals' moral behaviors to become character traits, they must reveal these values through their own decisions and choices and be able to display them consistently everywhere and at all times (Kanger, 2007).

Sports enters people's lives from an early age, with birth, and is accepted as the most important and most appropriate method for the development and education of children (Aydoğan, Özyürek and Akduman, 2015). Sport, as a moral term, is above all of these, parallel to and indirectly related to them, just like daily life and ordinary life. What distinguishes sport from other concepts is that it represents morality due to its essence and structure. The characteristics and principles that determine sports also determine this morality or way of living (Erdemli, 2016). The idea that sports build character is an idea that continues from past to present. But the debate on this topic is about the direction of the character. While some studies say that the changes that sports create in a person's character are positive, some studies indicate that these effects may be negative (İmamli and Ünver, 2018).

The concept of character in sports is a subject that scientists have been interested in for many years (Arnold, 1999; Igbanugo, 2004; Oelstrom, 2003). The word character is often used synonymously with sportsmanship, fair play or morality in sports (Weiss, Smith and Stuntz, 2008). The word character

comes from the Greek root “charassein” and means “to carve, to handle” (Ryan, 2008). Doty (2005) defined character in sports as behaviors that show integrity and respect. In 19th century England, where people were instilled with a sense of justice, righteousness and virtue through sports, it was thought that sports shaped character. In fact, acting in accordance with the rules, competing without cheating, being respectful to the opponent, “how should a good winner and a good loser be?” It is believed that learning the answer to the question will contribute to the development of a good character (Robbins, 1996). In other words, due to the large mass that sports communicate with, the character of the athlete is shaped by values such as compassion, fairness, sociability and honesty, and a high level of such values contributes to the beginning of professionalization or to the continuation of a quality sports life. Additionally, fighting against problems that may occur in the sports environment will play an important role in character development. However, when one is left alone with the personal decision-making process, some moral deficiencies related to the character emerge and negativities come with it (Görgüt and Tuncel, 2017). On the other hand, it has been stated that being involved in sports can have negative and positive effects on character (Josephine Institute Center for Sports Ethics, 2006; İmamalı and Ünver, 2018). According to Robbins (1996), these effects do not arise from participation in sports, but rather from the essence of sports.

The concept of character in sports is generally used in a close sense with sportsmanship, fair play and sports ethics (Weiss et al., 2008). Sports managers, coaches and athletes use the word character as loyalty, good citizenship, self-sacrifice and teamwork, etc. They express values from a social perspective. However, sports scientists also define character from a moral perspective as the ability to adopt values such as

impartiality, honesty, truthfulness and justice in one's behavior (Camire and Trudel, 2010). Shields and Bredemeier (1995) described character in sports as four virtues, including individual characteristics or virtues that facilitate the consistent display of moral actions: integrity, compassion, sportsmanship, and justice. While integrity explains the individual's ability to maintain her/his beliefs and morals, compassion explains the ability to feel and understand other people's feelings, sportsmanship is one of the character qualities and knows the standards and rules of behavior in sports, and justice explains the ability to comply with the rules of the game while competing and staying true to the spirit of the rules, Doty (2005) defines character as behaviors that show honesty, integrity and respect in the sports environment.

The term sportsmanship is stated as a moral concept. In this sense, people interested in sports are expected to practice certain behavioral patterns. These types of behavior are directly related to all people in the sport (Abad, 2010). Athletes must adhere to the rules fully consciously, patiently and consistently even in difficult situations during the competition, reject unfair disadvantages by being sensitive to equal opportunities, refuse to benefit from the unfair disadvantages of the opposing player, see the opponent as a part of the game, not as an enemy, and have equal rights. Accepting that they are individuals like themselves and valuing their opponents are also issues that need to be emphasized (Elik, 2017). Such elements are explained by the word sportsmanship. The concept of sportsmanship is expressed as a virtuous or normative behavioral tendency that explains how a person should behave according to the spirit of sports (Stornes and Bru, 2002). Stewart (2014) defined sportsmanship as all of the concepts used when explaining the basic principles of ethical education, moral development, character and participation in sports activities.

Kalyoncu (2008) stated that activities are an important issue in sports education and that when a person uses her/his body as a tool, she/he provides development, growth and behavior in a positive way through activities. Since movement is the most distinctive feature of living things, he pointed out the importance of turning the concept of sports into a state policy, considering the need for sports education in order for the individual's intellectual, spiritual and physical development to be durable and strong.

Sports education also includes task areas such as providing individuals with group working techniques, faith, respect for authority, and self-confidence as a result of a sense of togetherness (Aracı, 2006), supporting the development of spiritual and moral character, and creating opportunities for the development of new enthusiasms and values (Eraslan et al., 2015). Sports is an important institution that affects all aspects of daily life. Sports helps to create and sustain highly valued social values. These values include sacrifice, hard work, responsibility, loyalty, fairness, self-discipline and reliability (Berrebi, 2018).

4. TODAY'S SPORTS

With the developing technology, the increasing number of spectators of sports through media tools has caused sports to become an industrial sector rather than a hobby (Balcıoğlu, Yıldırım and Balcıoğlu, 2016). As the number of people earning financial income from sports increases, as well as the competition and the pressure on athletes, the philosophy of winning at all costs distances the athlete from the concepts of sportsmanship and character and causes attitudes such as aggression and anger to come to the fore (Tanrıverdi, 2012).

The positive effects of sports on character are a point that is constantly drawn attention to in societies. However, in the personal decision-making process, some negative situations and moral deficiencies related to character can be seen in this area (Bredemeier and Shields, 1994; Shields and Bredemeier, 1995). Sports causes the development of anti-social behaviors such as racism, doping use, match-fixing, and moral problems arise when the motivation to win factor comes into play (Jang, 2013).

While the solutions to the incidents such as match-fixing, racism and doping, which are frequently encountered in sports, have not yet been found, the number of disrespectful behaviors and aggressive attitudes contrary to the spirit of sportsmanship is increasing and this situation leads to going beyond the main purposes of sports, creating prejudices and negative thoughts against the athlete and the sport (Görgüt and Tuncel, 2017). Sportsmanship behavior, which indicates honest and fair play, is expected from moral and healthy people who make up the society. However, today, competition environments are turning into a platform for acquiring and displaying attitudes that are not directly in line with the morality of sports. Due to these negative attitudes in sports, behaviors and attitudes within the framework of sportsmanship gradually lost their real importance and the idea of "I must win at all costs" emerged in sports. Increasing commercial and political expectations from sports throughout the 20th century caused the amateur spirit of sports to lose value in the face of professionalism, pushing moral considerations into the background (Yıldıran, 2005). However, sports are accepted as a means of learning certain values such as sportsmanship, justice, team loyalty and teamwork, cooperating with teammates, consulting and finding solutions to moral conflicts (Jang, 2013).

The excessive desire or ambition to win, which is created in athletes for various reasons or already exists in the athlete's

own personality, causes the athlete to exhibit behaviors far from sports ethics (Türksoy Işım, Güvendi and Toros, 2019). Sports is an area where attention is constantly drawn to its positive effects on society and character. However, when the personal decision-making process comes into play, some moral deficiencies and negative situations related to the concept of character are observed in this area (Görgüt and Tuncel, 2017).

Sport is within the acquired and behavioral dimension of morality for the individual. An action that occurs alone may not concern morality. However, if these actions concern another person, they become moral issues. For this reason, all sports-related activities are closely related to morality. Because sports activities provide interaction with other people (Arslan, 2018). Although it is a way of thinking that is quite contrary to the spirit of sports, there are many elements that reinforce the idea of "winning under all circumstances" and therefore affect the behavior of the athlete. Factors such as the athlete's ambition to win, financial interests, the importance of the match, the pressures on the athlete (coach, fan, manager, etc.) cause the idea of morality in sports to remain in the background, and its place is replaced by the idea of "win no matter what" affects the behavior of athletes. The difference between the "real thing" and the "ideal thing" in sports becomes quite evident (Sezen Balçıkanlı, 2017). Elite sports that require higher performance have a structure that is completely focused on success and failure is not welcomed. Athletes who fail in elite sports experience a fear of failure for some reasons such as being exposed to criticism over time, fear of making mistakes, anxiety about failing again, and having high expectations from the athlete, and this affects the athletes' sports lives (Yıldız, Var and Yıldız, 2019).

When we want to identify some special virtues created by sporting activities, virtues related to achievements such as

perseverance and hard work usually come to mind. Some talk about certain social virtues, such as vulnerability and teamwork. In fact, many coaches and athletes think when asked whether participation in sporting activities teaches people other moral virtues, such as honesty and justice. It is worth noting that Lance Armstrong, a former American road racing cyclist, listed three qualities to describe his character: “helpful, optimistic, and strong.” Looking at this definition, honesty and justice are not mentioned (Power and Sheehan, 2014).

5. CONCLUSION

Educators have reached a consensus that sports are a very important tool in building character and that, when the right conditions are provided, it is a determining factor in the formation of people's characters (Bredemeier and Shields, 2006). Success in sports is directly related to the existence of professional ethics as well as a person's hard work. Athletes must fully concentrate on their games, apply the written rules fairly, benefit equally from the opportunities offered, avoid substances such as doping, stay away from scandals and match-fixing, and stay away from harmful habits such as gambling, drugs and alcohol (Rein, Kotler and Shields, 2007). Success can also be achieved by trampling on values, but the most important point is valuable success. This success can be achieved through a change in the individual's consciousness. Sporting value is more important than sporting success. In other words, while athletes improve their physical characteristics, they should also improve their mentality in the same process. When sporting success is prioritized over values, valuable success is damaged and the process of ethical evaluations begins. In order to develop value consciousness, a person must have sporting virtues (Şahin, 2003).

The main purpose of sports training is the education of the whole personality. Sports training aimed at this goal envisages mental as well as moral and physical training and aims to develop the person in all aspects. Therefore, sports education means not only ensuring the development of the individual in the most appropriate way for the benefit of society without harming the spiritual and physical integrity of the person, but also training to acquire happy, strong, healthy moral values, personality, character, socialization and acculturation (Eraslan, Çalışkan and Baş, 2015).

The reason why many researchers and educators today focus on character in sports from a moral perspective is that sports is a moral activity. Because sports are played according to written rules (Rudd, 1998). In other words, sports includes moral concepts such as responsibility, fair play, justice, respect and honesty.

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