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## **Thoughts on physical education in the scientific creativity of Polish pedagogues and physicians of the modern era (1492-1918)**

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## **Summary**

In the modern era (1492-1918), physical activity functioning on the basis of Polish thought about upbringing appeared to be vague. The care for high level of physical fitness and good health in the educational concepts of this era resulted from the need to adapt the education system to the progress of science and social transformations. The pedagogues and physicians in a remarkably mature way perceived the universal values of physical activity, the cognition of which by means of science has created the possibility of understanding the educational and health sense of physical exercises and their place in the education system of children and youth. In extensive writing, as well as speeches presented at conferences and congresses of this period, we find the theoretical and methodical justification for the need for physical activity of the young generation. This publication, which is of illustrative nature, is the author's recognition of the achievements of these known and less known pioneers of Polish thought about physical education, to whom representatives of contemporary scientific disciplines dealing with upbringing refer.

**Keywords:** modern era, theory of physical education, views of pedagogues and physicians.

## **Introduction**

It is widely accepted that history is identified with historical experience, and exploring it gives the opportunity to evaluate the achievements of human activity. The history that teaches responsibility and shapes national identity, commands respect for tradition, refers to facts, phenomena and thoughts that had a crucial significance for the development of various areas of social life.

Polish thinkers of the modern era originating from pedagogical and medical environments presented their views on the role and importance of physical education, from the time when the revival of educational ideals, care for health and physical perfection became an important element of the Renaissance concept of "a complete man". The role played by eminent scholars of that period in creating the theory and practice of physical and hygienic education is evidenced by the fact that their pioneering achievements have not been completely shelved in the history, because they still complement the current scientific reality with their contents, quotes and mottoes.

## **Objective of the work**

The present study will present the scientific achievements of Polish pedagogues and physicians of the modern era (1492-1918), influencing the development of progressive for those times, thoughts about physical education together with its educational and health values.

### **Physical education in the scientific creativity of pedagogues and doctors**

Assuming that in the pedagogical literature the priority in creating the Enlightenment concept of physical education is attributed to J.Locke, it should be remembered that similar ideas – almost a hundred years earlier – were expressed by Sebastian Petrycy (1554-1626). This talented physician from Pilzno, influenced by Aristotle's works, promoted the idea of parallel exercise of mind and body with a special emphasis on care for hygiene and health. He described the original thoughts and indications on physical education of boys in the work "Complement to Aristotle's Policy" (1605), constituting his own comments on Aristotle's works translated into Polish. Not limiting himself in this area to the thoughts of the Greek sophists, he advised parents and educators rational nutrition, the use of appropriate clothing and constant concern for the physical development of the child [21].

Considering the role of physical activity, S.Petrycy divided its functions into medical (for health), practical (for physical improvement), political (for military service), aesthetic (for beauty of human body). They included, in practice, long walks, ball games, various forms of jumps, throwing stones, archery and learning to swim. As an experienced physician, he emphasizes that these exercises should be conducted with moderation so that they do not cause physical and mental fatigue [18]. Faithful to Aristotle's ideals, he clearly stresses the thesis that physical activity should not be an end in itself, but should take into account the needs of mind training and moral education. Physical exercises of older boys [...] *were on the one hand to be entertainment in intellectual activities, and on the other hand, to prepare for military service* [12]. Although S.Petrycy did not succeed in fully including physical education in system of education, certainly his advice and recommendations aimed at parents and educators often went beyond modern pedagogical and hygienic thought.

The Renaissance concepts of physical education in Poland were also presented by a political writer Łukasz Górnicki (1527-1603), who in the work "Polish Courtier" (1566), presented a vision of a nobleman's education, well-educated, distinguished by high intellectual and artistic culture, and additionally in good physical shape. Noteworthy is the work "On various ailments of the human body" (1581) by a court physician Wojciech Oczko (1537-1599) who emphasized the health function of various physical activities such as wrestling, fencing, weightlifting, dancing and movement games [25]. The dictum he preached" [...] *The movement can replace almost any medicine, but no medicine can replace the movement*, has its timeless value and social acceptance also in modern times.

Physical activity recognized as a significant educational value in the Renaissance, gained importance and found a permanent place in the concepts of pedagogy and educational systems

of that period. Five of the most important centers of this new pedagogy functioned in Europe, the first promoted the pedagogical system of J.J.Rousseau, the second concerned the activities of German philanthropists J.B.Basedow, Ch.Salzmann, F.GutsMuths. The third included the views and reforms of the education of the Helvetic pedagogue J.H.Pestalozzi, the fourth - referred to the Scandinavian traditions through the activities of the Danish pedagogue F. Nachttegalla. The fifth center promoting modern pedagogical concepts in the field of physical education - making a significant contribution to the development of physical culture of modern Europe - was the reformatory activity of the National Education Commission. It is worth noting that even before the founding of KEN, the pedagogue and reformer of education, priest S. Konarski (1700-1773) introduced physical exercise and hygienic procedures to the Collegium Nobilium syllabus, whose main goal was to educate "honest man and good citizen" [13].

The importance of physical activity in the process of upbringing was raised by the creators and activists of the National Education Committee: A.Kamieński in the "Citizenship Education" (1774), A.Popławski in the project "On the Regulation and Improvement of Citizenship Education" (1774) and G.Piramowicz (1787) a pioneer of the school hygiene assumptions, who in the second part of the pedagogical study "About the Teacher's Duties" wrote about the importance of physical activity in the upbringing of the young generation. The National Education Commission Acts sanctioned the high rank of physical education in the school education system setting goals, functions and tasks for teachers and parents as well as outlining the desired forms of physical activity in the school and non-school environment. The high level of physical activity in the field of pedagogical experience and its relation to moral education is exemplified in XXV Act, entitled "Physical Education"; [...] *You cannot be happy, you cannot gain enlightenment of the mind, courage of the soul, ease in using its powers, fitness and dexterity in performing the duties of your state - without your body being in good and lasting shape* [24]. In the last sentences of the XXV Act, the axiom about the place of physical activity in upbringing is clearly underlined; [...] *With such an inseparable connection, moral education with physical education will be able to give the community a virtuous man, and homeland a good Citizen* [7]. The postulates of educators of the Polish Enlightenment and the National Education Commission Act have not been fully implemented according to the objectives set due to political events and independence loss. Nevertheless, the historians commonly stress the fact that the educational ideas of the National Education Commission were a source of inspiration for further actions concerning the development of

the theory and practice of physical education in the entire 19th century and the beginning of the 20th century.

The natural consequence of the educational views of the Commission of National Education is J.Śniadecki's thesis "Remarks on the Physical Education of Children", published for the first time in 1805 in "Dziennik Vilnius". Jędrzej Śniadecki (1738-1638), aware of his social role as a teacher put the content of physical education into a compact system of pedagogical rules and guidelines filled with humanistic thought, simultaneously proclaiming the idea of full, harmonious development of all spiritual and physical powers. In his work he outlined the fundamental laws governing the process of physical and mental human development, and also scientifically analyzed the advantages of physical activity in the process of bringing up the young generation [26]. J. Śniadecki listed among the superior elements of education the following : restraint, freedom in education (in certain forms), learning through play and harmony (balance) which he described; [...] *the whole mystery of good education depends on it, so that both the body and the mind can be perfectly educated in order to maintain a decent balance between each other* [23]. According to J.Śniadecki's concept, health is a superior value in child's development, while physical education - implemented through play, physical exercise - is the central point of the educational process, perfecting the physical, mental and moral sphere of the student. J.Śniadecki's work is credited with pioneering activities in the field of inclusive pedagogy and the originality of his thoughts on the subject of "disability and infirmity" is stressed. In advocating the universality of physical education, he did not omit in his pedagogical ideas people for whom "nature has failed", or children of special care. He confirmed the above thesis saying that [...] *physical education, arranged for human happiness, should be such that everyone could use it. This is also true in itself, which proves that only nature requires such education* [23, 15]. Certainly in his pedagogical views, J.Śniadecki did not show such liberal views as J. J.Rousseau, claiming that excessive care and protection is harmful, as well as the carelessness of parents and educators in natural upbringing. Devoted to the principle of moderation, he also did not fully support the toughening program of the child created by J.Locke, recommending in this case moderation in "hard education" [3]. It is worth emphasizing that "Notes on the physical upbringing of children" - filled with timeless wisdom and relevant thoughts - constitute a primary meaning for the theory of physical education, the assumptions of which were implemented in the original didactic and educational model conducted by Tadeusz Czacki in the Krzemieniecki grammar school (1805). The physical education curriculum for all levels of education at the Wołyń junior secondary school (the original name of the Krzemieniecki grammar school) was

developed by an activist of the National Education Commission, a reformer of the Kraków Academy, Hugo Kołłątaj (1750-1812).

A recognized surgeon, founder of the Polish orthopedics, Ludwik Bierkowski (1801-1860) showed a significant interest in the problems of preventive care conditioned by the acquisition and maintenance of high level of physical fitness. His critical assessment of the level of physical education of children and adolescents was the motivation to found a junior secondary school in Krakow, which he expressed in the theses contained in the brochure "A few words about the importance, need and use of gymnastics". In the first lines of the guide, he already states that the civilization progress of societies unjustifiably prefers the education of the mind over the physical education of the young generation. L.Bierkowski explained that high physical fitness is a valuable virtue that allows to overcome many problems and life dangers [5].

In the second half of the nineteenth century, an increased journalistic movement relating to physical education with original views of scientific explanation is noticeable. Polish theoretical thought of physical education in the period of the Partitions was manifested mainly in the dissertations and pedagogical and medical publications presented in specialist magazines. In those conditions, the "Sokol" Gymnastic Society, founded in Lvov in 1867, played a significant role in promoting physical activity among the young generation of Poles. In countless activities for the promotion of a healthy lifestyle, the leading thought of the association was the Latin sentence of the Roman poet Juvenalis "mens sana in corpore sano". The statute of the association operating in the period of the Partitions in Poland planned the organization of gymnastic shows, the presentation of summer and winter sports, sightseeing tours and the implementation of cultural and social activities. The activities of the Gymnastic association "Sokół" were also related to the establishment of elite sports association (rowing, cycling, ) created in line with the British unions, which in later years of dynamic economic and social transformations became more and more common in Polish society.

The group of eminent pedagogical representatives of physical education thought of this period included the philosopher and educator Bronisław Trentowski (1808-1869), who in the work "Chowanna, or the system of national pedagogy as a skill of science and education in the word of guidance of our youth" developed an independent pedagogical theory showing significant tolerance and understanding for physical exercise. The pupil's body is the highest value of his existence - claimed B.Trentowski - hence he also recommended care for health, care for the beauty of the body and physical fitness, as he believed that the mentioned advantages would be approved in every culture. In his work he emphasized the attributes of

children's games in the open air, distinguishing physical exercise as values educating the child's mind in the context of improving the senses, imagination and creative forces [20].

At this point, it is difficult not to mention an educational activist Ewaryst Estkowski (1820-1856), a zealous representative of folk education, who in the magazine "Polish School" refers to physical and health education as an integral component of the folk school curriculum. Similar benefits and health functions of physical activity were popularized by the pioneer of therapeutic gymnastics Edward Madeyski (1832-1906). As a creative educator and promoter of the so-called rational gymnastics, he developed the first textbook on school gymnastics, creating health and hygiene trend in physical education. In his research concept he analyzed, first of all, health and beneficial values of gymnastics, which he recommended to cultivate in an intentional way, taking into account the effects of impact on the body or depending on the type of work performed. Due to the presented criteria, he classified gymnastic exercises into healing, craft, fire, military or spectacular ones. In schools, he saw the use of educational gymnastics, the role of which he perceived as the [...] *comprehensive training of the body and the development of physical and mental powers such as; dexterity, consciousness, strength and courage – preparing for discipline and love for order and maintaining fitness of the body and mind* [14].

Disadvantageous in many areas of human development, dynamic socio-economic changes of the nineteenth century Europe, revealed disturbing health phenomena and initiated increased activities of medical and pedagogical communities for the health of children and adolescents. The expression of these activities was the promotion of broadly understood physical activity in scientific and methodological publications, congresses, pedagogical and medical symposia. Educational and teaching conventions organized since 1869, alternating with conventions of Polish doctors and naturalists covered the issues of hygiene and physical activity of school children and youth. Also at the first "Congress of Polish Educators" organized in 1894 in Lvov, apart from important issues regarding school modernization, development of vocational education, creation of curricula for folk schools and teacher education system, issues related to physical education of children and youth were raised, with particular emphasis on shaping pro-health attitudes, gymnastics and games involving physical movement [21].

Among the representatives of Polish positivism who appreciate the functions of physical education in school programs, is Adolf Dygasiński (1839-1902), writer and pedagogue, interested in teaching methodology, shaping emotions in education, teaching religion, nature and improving the physical fitness of children and youth. An advocate of hiking and cycling, writer Bolesław Prus (1847-1912), however, postulated a reform of school education with a

clear indication of the student's physical exercise. Therefore, he saw the need to organize children's gardens, in which a proper system of games involving physical movement together with gymnastic exercises and ball games carried out in the open air, was supposed to positively shape the physical and psychological side of the child's development. Henryk Wernic (1829-1905), an educator and journalist in the article "Necessary need to introduce gymnastic exercises in women's schools", emphasized the legitimacy of the existence of physical and hygienic education in school curricula of teaching girls [17].

Issues related to the health function of physical education were included in the pedagogical achievements of Jan Władysław Dawid (1859-1914), who in the "Pedagogical Review" responding to readers' questions in "Pedagogical Review" suggested natural forms of physical activity in the peer group; [...] *It's best for a child living in normal conditions to do gymnastics, [...] not knowing about it, so in natural games* [2]. The issue of physical activity carried out in the form of games involving physical movement and its health-hygienic impact was especially emphasized in the work of J.W.Dawida. Two articles provide evidence of his lively interest in this subject; "Public playgrounds for children" and "Outdoor games" in which he criticizes the physical education system existing in the Polish education under the partitions [19].

An outstanding precursor of physical recreation - whose pedagogical achievements constituted an educational and health model imitated in many European countries - was a doctor, scientist and social activist Henryk Jordan (1842-1907). The primary goal of his educational system was to create optimal conditions for the psychophysical development of children and adolescents. H.Jordan pointed to the health and educational role of games and outdoor activities in the open space, in the sun and water, as a spontaneous and natural manifestation of physical activity of students in non- school environment. Presenting a paper on "About games of the youth", he stressed the duality (health and development, and educational) of fun function as follows;

*[...] they teach the perseverance and patience indispensable to acquire the necessary skill in the game, - teach them to focus their thoughts in order to be able to act immediately and seize the moment - they teach caution, control of oneself ", [...] force us to make a quick decision; they develop independence in action, they arouse the drive to act* [8]. The greatest work of H.Jordan's life, which at the same time became a symbol of his pedagogical activity, was the creation in Krakow (1889) of a recreational area of 8 hectares, which was called: "City Park of Dr. Henry Jordan". The Park's functioning system was based on an innovative organizational concept, because its site has differently designed 12 sports fields where various



types of physical exercises were practiced. The most common forms of activity include exercises in the field of sports gymnastics (rods, handrails, horses, trestles, wheels, handrails, platforms and balance beams), strength shape through rope pulling, wrestling, walking on stilts, throwing a disc, boomerang, spear and javelin. Young people were prepared for new sports games (football, croquet, tennis) water sports, which for the first time in Poland were introduced in the City Park of Henry Jordan. Despite the fact that today's Jordanian gardens perform slightly different organizational and educational roles, having moved away from the norms created by H.Jordan, they still mostly nurture the pedagogical ethos of its creator [4].

Equally important role in promoting movement and sports games played the editor and publisher of *Ruch*, Władysław Kozłowski (1866-1915). Acting as the main instructor of Gardens of W. E. Raua in Warsaw, he emphasized the health and hygienic assets of sports games and sports in the open air, indicating their place in the physical education system. He recognized their higher value over other exercises, claiming that they develop their independence and motor creativity to a greater extent, and above all give the educator the opportunity to assess individual personality traits of the trainees [6].

The forerunner of institutional education of young children was Maria Weryho-Radziwiłłowiczowa (1858-1944). In her pedagogical work, modeled on the educational system of F.Froebel, she became interested in the possibility of introducing games and movement exercises for children in pre-school education institutions. Therefore in her own private kindergarten, she implemented the author's program of comprehensive child development, whose expressive accent is movement exercise and games [16]. In 1887 she published "Gymnastics for children aged 4 to 9" in which she justified the need of movement of a small child, presenting a set of movement exercises for pre-school children along with the methods of their use.

The accomplished group of representatives of positivist thought of physical activity at the turn of the 19th and 20th centuries includes Helena Kuczalska h.Prawdżic (1854-1927), educator and pioneer of physical education and sport of women and Edmund Cenar (1856-1913), activist of the Lviv "Sokol", an innovator and initiator of new sports and movement games [11,1]. We should also mention the accomplishments of the Warsaw pedagogue, propagator of outdoor games Stanisław Karpowicz (1864-1921), and the historian of education Antoni Karbowski (1856-1919), who in the pages of the magazine "Museum" recreated the achievements of the National Education Commission in the field of physical education [9,10]. It is also worth noting that the early years of the activity of Eugeniusz Piasecki (1872-1947), Walerian Sikorski (1876-1940) and Teodor Drabczyk (1865-1937) aiming at raising the level

of physical education of the young generation made a significant contribution to the development of Polish theory and practice of physical education on the verge of Poland regaining its independence.

## **Conclusion**

Educational and health functions of physical activity have a centuries-old history - as old as human culture. The concept of perceiving physical activity as a pedagogical and health value in the modern era had outstanding representatives, who saw in the exercise of the body not only a system of physical and health treatments, but noticed in physical education an important element of social life.

This approach was an example of a contemporary understanding of the importance of physical activity in the process of upbringing and shaping conscious pro-health attitudes of the young generation. Unquestionably important areas of physical culture such as physical education, school hygiene, sport, physical activity of the disabled and physiotherapy, originate from the activities of outstanding representatives of those times. The achievements of pedagogues and doctors in the development of thoughts about physical activity of that period constituted the foundation on which contemporary theory and practice of physical education was created. It was a valuable achievement - detached from theocentrism and free from the limitations of medieval schematicism - at the same time reflecting innovative trends in views on the functions of physical education of those times.

Certainly the indicated trends of thought - starting from the reflections of Polish thinkers of the Renaissance, continued through the decisions of the National Education Commission, and then developed by an outstanding group of educators and doctors of the Enlightenment and Positivist thinking - to initiate the creation of an educative-health pattern of physical activity of the young generation, free from Poland's partitions.

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