



NATIONAL SPORTS ACADEMY “VASIL LEVSKI”
FACULTY OF “SPORT”
DEPARTMENT OF “WEIGHTLIFTING, BOXING, FENCING
AND SPORT FOR ALL”

Mihail Georgiev Kouzev

**“The Impact of Physical Culture and Sports Specialisations on the
Harmonious Development, Well-being, Physical, Social, and Emotional Health
of Students Aged 11 to 14 in the UAE.”**

AUTHOR’S ABSTRACT

**of a dissertation submitted for the award
of the educational and scientific degree “Doctor”**

Sofia, 2026

NATIONAL SPORTS ACADEMY “VASIL LEVSKI”
FACULTY OF “SPORT”
DEPARTMENT OF “WEIGHTLIFTING, BOXING, FENCING
AND SPORT FOR ALL”

Mihail Georgiev Kouzev

**“The Impact of Physical Culture and Sports Specialisations on the
Harmonious Development, Well-being, Physical, Social, and Emotional Health
of Students Aged 11 to 14 in the UAE.”**

AUTHOR’S ABSTRACT

of a dissertation submitted for the award
of the educational and scientific degree **“Doctor”**
Doctoral Programme **“Theory and Methodology of Sports Science”**
in Professional Field 7.6 **“Sport”**

Scientific Supervisor:
Prof. Krasimir Petkov, DSc

INTRODUCTION

I. OVERVIEW OF THE DISSERTATION'S GENERAL CHARACTERISTICS

In the modern era, adolescent health is becoming an increasingly significant concern, especially considering the rapidly evolving circumstances of globalisation, digitalisation, and pandemics. Ensuring the physical and mental well-being of students has evolved beyond being solely an educational responsibility, becoming a multifaceted challenge that necessitates coordinated efforts among health and social institutions. This is particularly important given the increasing prevalence of adolescents suffering from chronic conditions such as diabetes, hypertension, musculoskeletal deformities, and mental health disorders. These conditions not only diminish the quality of life for young individuals but also constrain their prospects for future professional and personal growth.

The primary factors contributing to this phenomenon include the absence of consistent physical activity, limited motivation among students to pursue a healthy lifestyle, and the insufficient emphasis of school curricula on the promotion of physical health and well-being. It is essential to recognise that these issues are not limited solely to a national context but have an impact on adolescents globally. According to a 2010 study by the World Health Organisation (WHO), 81% of adolescents worldwide aged between 11 and 17 fail to achieve the recommended 60 minutes of daily physical activity, indicating a significant deficiency in their health and physical development.

Under circumstances of pandemic and social distancing, the adoption of remote learning in numerous countries, including the United Arab Emirates (UAE), further hindered access to physical education and sports. Distance learning is linked to diminished access to essential resources, such as consistent physical education classes, resulting in an increased deficiency of physical activity among students. In this context, a fundamental question emerges: what is the significance of physical education for adolescents, and how does it impact their comprehensive development?

Research conducted by the Centres for Disease Control and Prevention (CDC) demonstrates that consistent engagement in sports activities enhances children's cognitive development, augments their academic performance, and promotes higher achievement in standardised assessments. This is because physical activity enhances brain function and fosters conducive conditions for enhanced learning performance. Physical education is not solely a vehicle for physical development but also a comprehensive process that fosters vital life skills including discipline, collaboration, and self-regulation.

Scientific evidence underscores that physical literacy and health education are crucial in preventing a variety of future health issues that may manifest at both physical and mental levels. Therefore, physical education in schools should be regarded not merely as a method of preserving physical fitness, but as an essential component of the educational process that fosters the comprehensive development of children and young people.

Given the global challenges confronting modern societies, it is crucial to underscore the significance of international collaboration among educational institutions, health organisations, and sports agencies. Coordination among the World Health Organisation, the Ministry of Health, the Ministry of Education, the Ministry of Youth and Sport, and other essential stakeholders is necessary to establish a supportive environment conducive to the physical and mental development of adolescents.

Special consideration should be directed towards the significance of physical education within educational institutions in the UAE. As the number of institutions implementing innovative methods of distance education continues to grow, it has become clear that physical education must not be marginalised. Conversely, it is necessary to incorporate new methods and practices to encourage physical activity, even within the context of remote learning. Parents and educators must collaborate to identify effective strategies for motivating students to engage in sports activities and to cultivate enduring movement habits.

It is of paramount importance to promote physical activity among students not only during school hours but also outside of them, as an integral component of a comprehensive approach to enhancing the physical and mental well-being of young individuals. Regrettably, despite the importance of this subject, it remains comparatively under-represented in scientific literature and research, highlighting the necessity for comprehensive investigation and analysis.

In conclusion, increased physical activity during school age can substantially enhance an individual's health potential while concurrently cultivating functional capacities that may be utilised in future stressful situations. This perspective necessitates recognising students' physical development as a crucial element in their health and adaptive abilities in the contemporary world.

II. GOALS AND OBJECTIVES OF THE DISSERTATION

Goal: To investigate, analyse, and assess the influence of physical culture and sports specialisations on the comprehensive development of school-aged students and, based on the findings, to develop practical models for optimising school sports within a multicultural environment.

Objectives:

1. To analyse the present status of the issue within the global scientific literature, emphasising school education, physical culture, and holistic development.
2. To examine the impact of sports specialisations on students' physical, cognitive, and socio-emotional competencies.
3. To perform sports-pedagogical assessments (Illinois Agility Test, standing long leap, push-ups, sit-ups).

4. To conduct cognitive assessments (CAT4, NGRT) in order to investigate the correlation between participation in sports and academic abilities.
5. To utilise psychometric techniques for evaluating stress levels, affective well-being, and social integration.
6. To utilise mathematical and statistical techniques for data analysis and comparative evaluation.
7. To present practical recommendations for school sports in Dubai and Bulgaria, relevant within the context of a modern, dynamic, and swiftly evolving world.

OBJECT AND SUBJECT

Object: pupils aged 11–14 attending international institutions in Dubai.

Subject: The Impact of Physical Culture and Sports Specialisations on Physical, Cognitive, Social, and Emotional Development

Research Methodologies

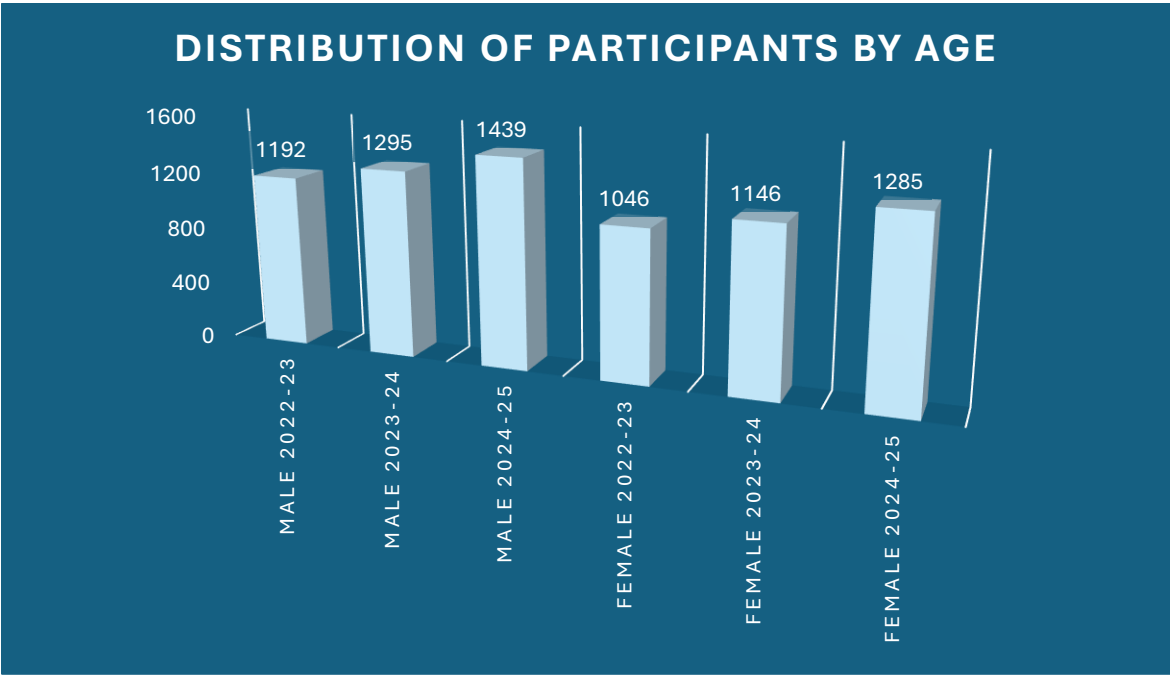
- Theoretical examination of scientific literature and policies of UNESCO, OECD, and IB.
- Sports-pedagogical assessments: Illinois Agility Test, standing long leap, push-ups, sit-ups — for evaluating physical capacity and motor skills.
- Cognitive assessments: CAT4, NGRT.
- Psychometric assessments evaluating stress levels and overall well-being.

- Mathematical and statistical techniques: correlation analysis, regression analysis, and comparative evaluation.
- Examination of psychological techniques: mindfulness, visualisation, and mental conditioning.
- Questionnaire method – employed to assess attitudes, motivation, awareness, and sporting behaviours.
- Medical evaluations: height, weight, and body mass index (BMI).
- Variational analysis – employed to identify essential statistical metrics.
- Correlation analysis – to determine associations among physical activity levels, health behaviours, and psychosocial factors.
- Comparative analysis – segmented by gender, age categories, and academic periods.
- Analysis of findings in accordance with normative and scientific standards.

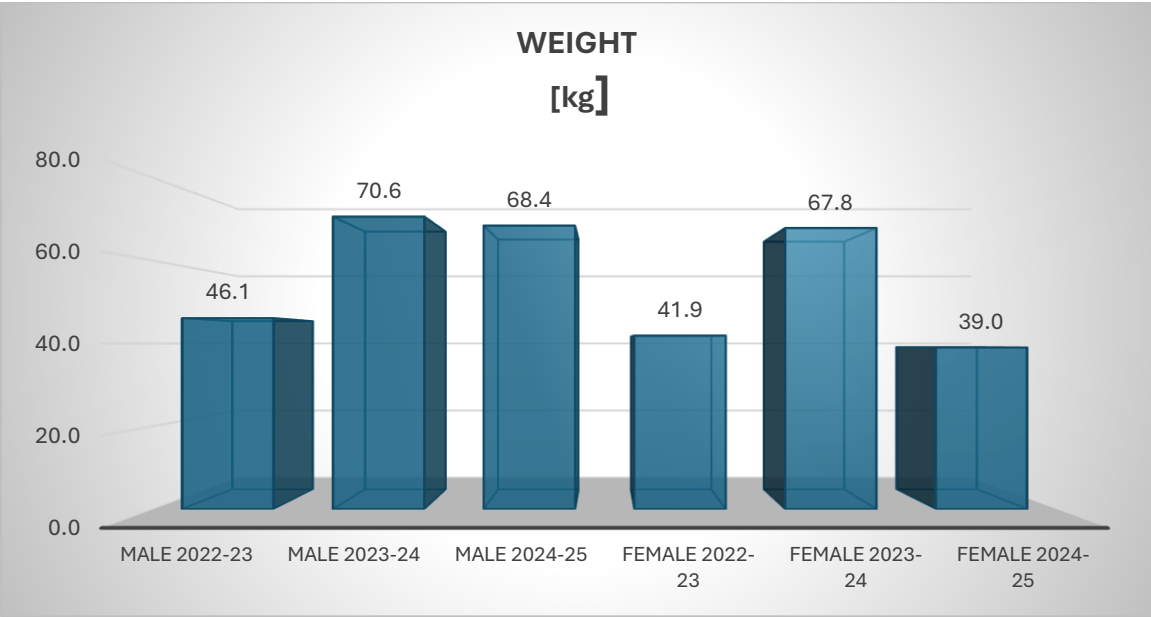
Main Outcomes

- A statistically significant correlation was observed between consistent engagement in sports specialisations and enhancements in students' physical fitness, social adaptability, and emotional resilience.
- It was demonstrated that engagement in sports enhances cognitive outcomes (CAT4, NGRT), with students exhibiting enhanced concentration and elevated academic performance.
- The implementation of mindfulness and visualisation techniques enhanced students' concentration and resilience, while mental preparation was reaffirmed as a crucial element in managing stress.
- A comprehensive framework for inclusive sports education was established, suitable for implementation within a multicultural environment, encompassing physical education, mental well-being, and social integration.

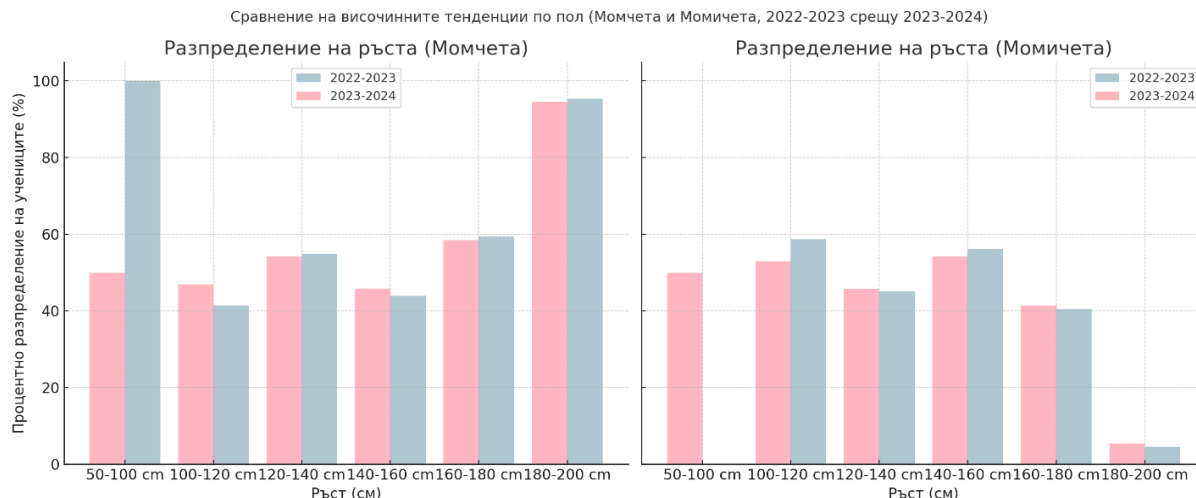
III. 1. RESULTS AND ANALYSIS



Distribution of Surveyed Participants by Age



Distribution of the Examined Participants According to Body Weight

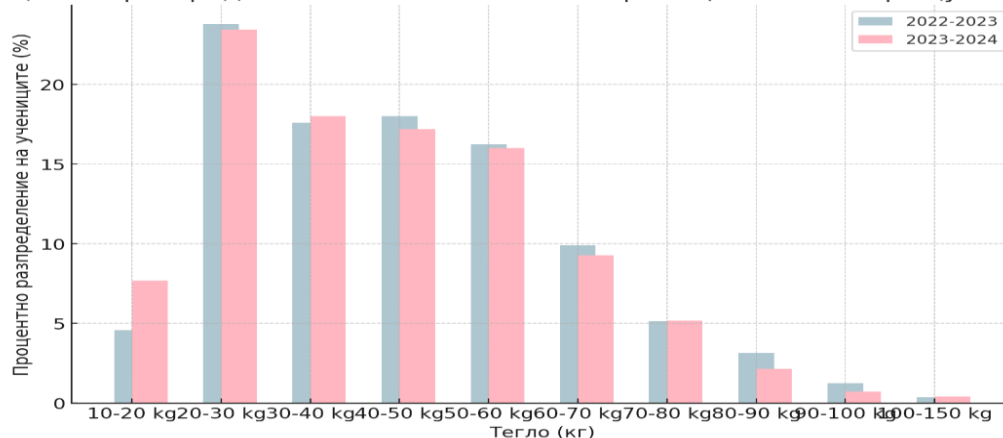


Distribution of Participants by Height (in Centimetres)

During the two academic years, the majority of students (both boys and girls) fell within the height ranges of 140–160 cm and 160–180 cm, accounting for approximately 70–75% of all participants. A slight increase in height during the 2023–2024 academic year is evident for both boys and girls, with a noticeable shift towards the higher range (160–180 cm).

These data reflect the normal physical development of children in the 11–14 age group, during which most experience a critical period of growth and physical maturation. Based on the analysis, it can be concluded that students demonstrate relatively even growth, and the slight increase in height observed in the second year is indicative of stable and consistent physical development.

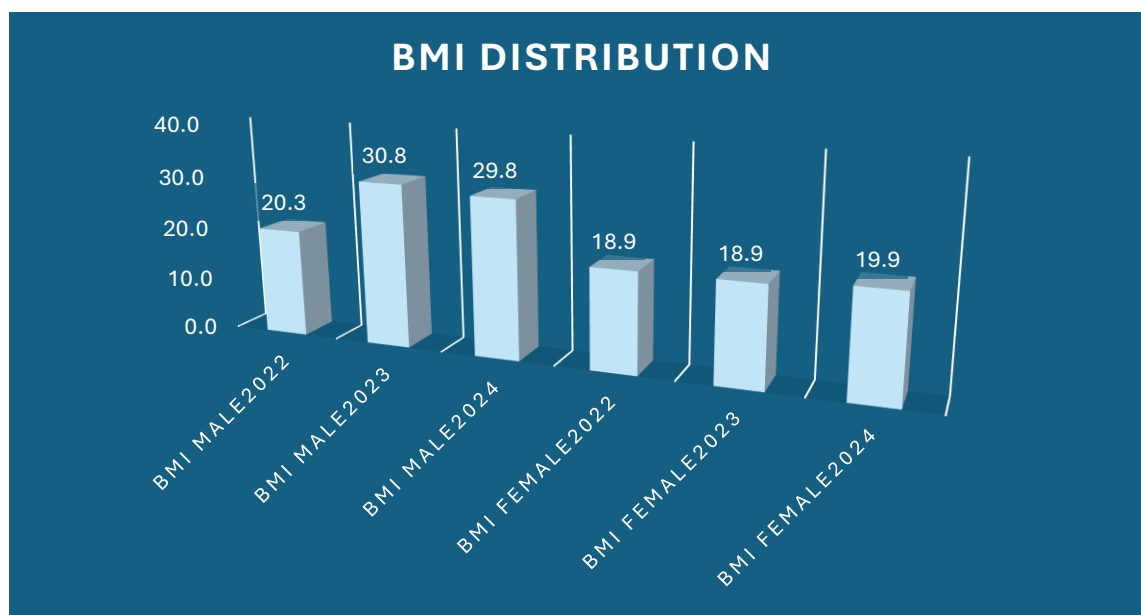
Процентно разпределение на теглото в килограми (2022-2023 срещу 2023-2024)



Percentage Distribution of Body Weight (in Kilograms)

Main Conclusions:

Stability in weight categories: The data indicate that the percentage distribution of body weight among students remains relatively stable across the two academic years. This suggests that no significant changes are observed in dietary habits, levels of physical activity, or the overall health status of the students.



Distribution of BMI During the Examined Time Period

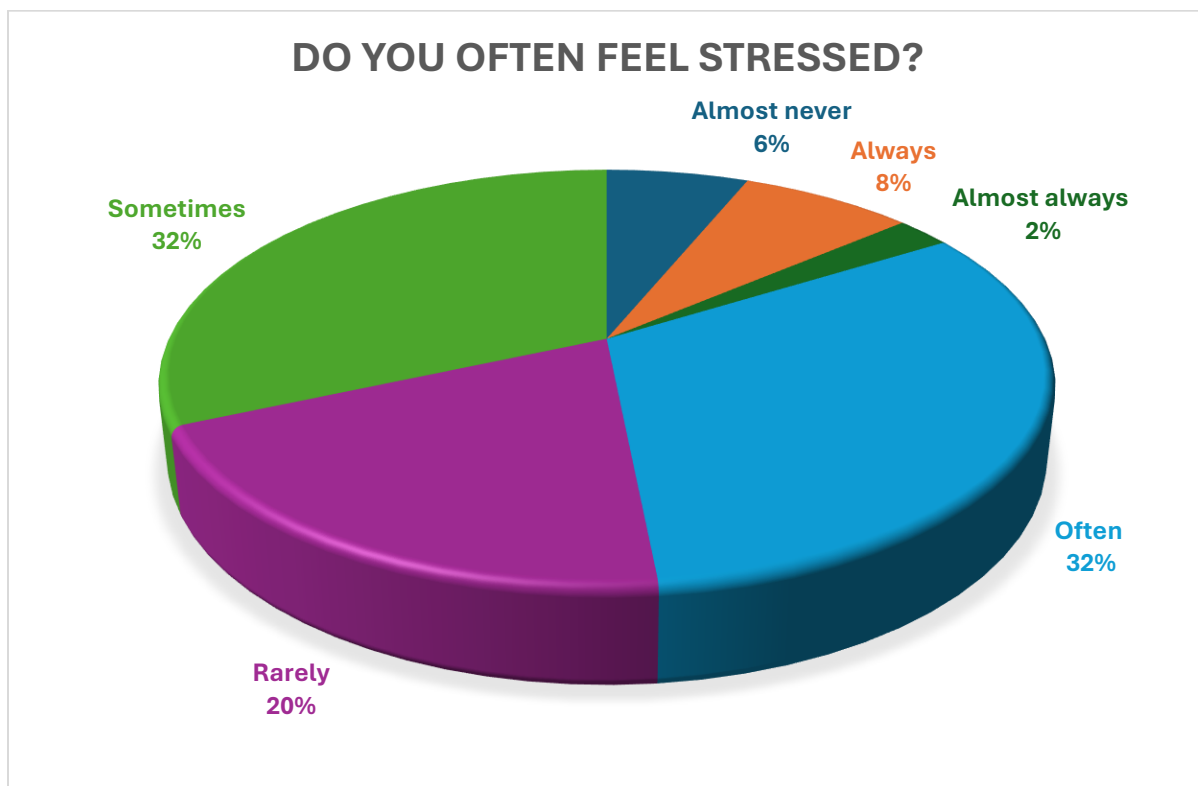
Conclusion:

The overall trend indicates a slight decrease in BMI during the 2023–2024 academic year compared to 2022–2023. This change may be attributed to improved dietary habits, increased levels of physical activity, or targeted efforts to maintain a healthy body weight. The slight reduction observed in both boys and girls reflects positive and healthy trends.

III. 2. Analysis of the Questionnaire Survey Results

Questionnaire: “Students’ Health and Lifestyle”

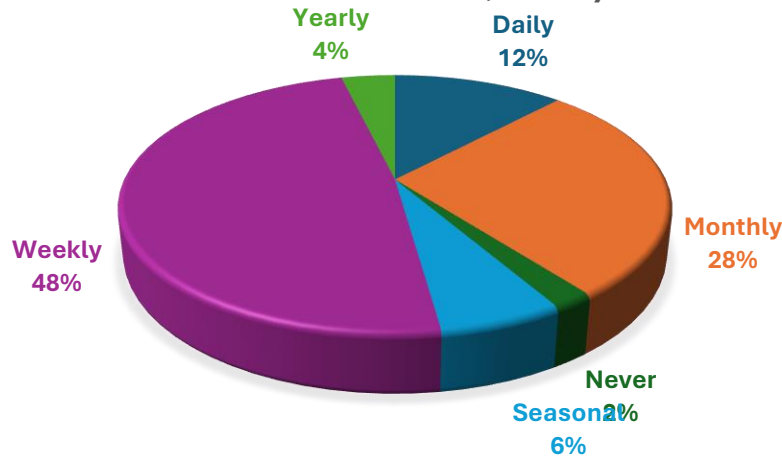
The questionnaire consists of 9 main questions, primarily using closed-ended items, with the possibility for additional open-ended responses.



Frequency of Experiencing Stress

The predominant responses indicate that students experience stress often (32%), sometimes (32%), and rarely (20%).

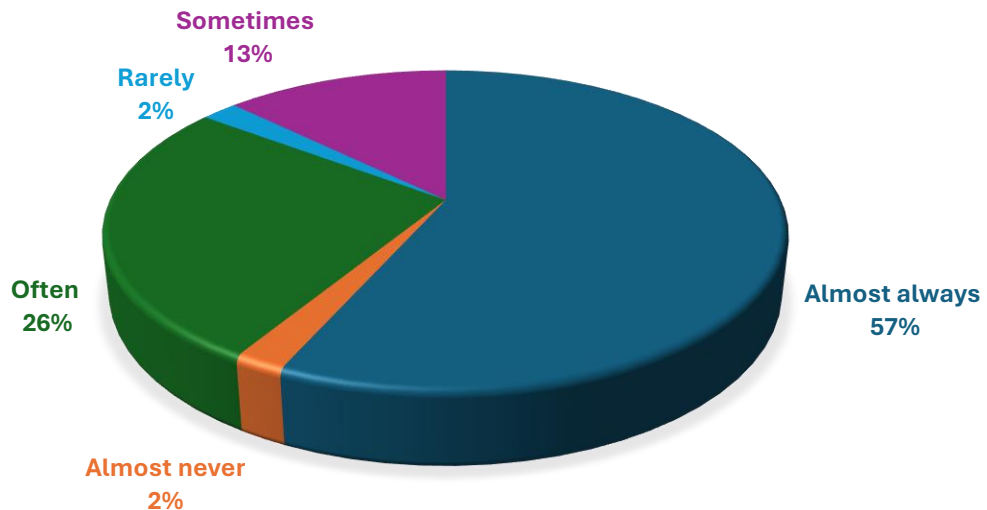
HOW OFTEN DO YOU ENGAGE IN UNHEALTHY EATING HABITS (E.G. CONSUMING FAST FOOD, SUGARY DRINKS, ETC.)?



Frequency of Unhealthy Eating

The predominant responses indicate weekly consumption (48%), followed by monthly consumption (28%).

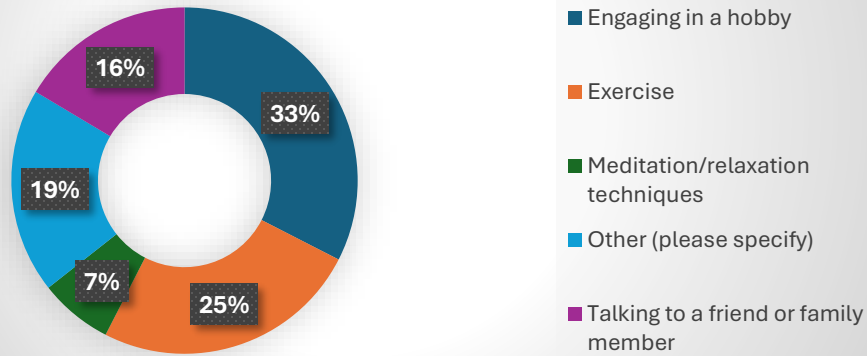
HOW OFTEN DO YOU ENGAGE IN PHYSICAL ACTIVITY (E.G. EXERCISE, SPORT, ETC.)?



Frequency of Physical Activity

The predominant responses indicate almost always (57%), followed by often (26%).

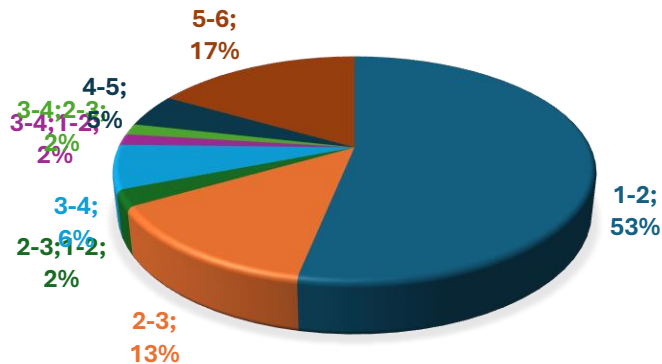
HOW DO YOU USUALLY COPE WITH STRESS?



Ways of Coping with Stress

Questionnaire: “Impact of Physical and Health Education Lessons on Students’ Health and Happiness”

WHICH GRADE ARE YOU CURRENTLY IN? HOW MANY PHYSICAL AND HEALTH EDUCATION LESSONS DO YOU HAVE PER WEEK?



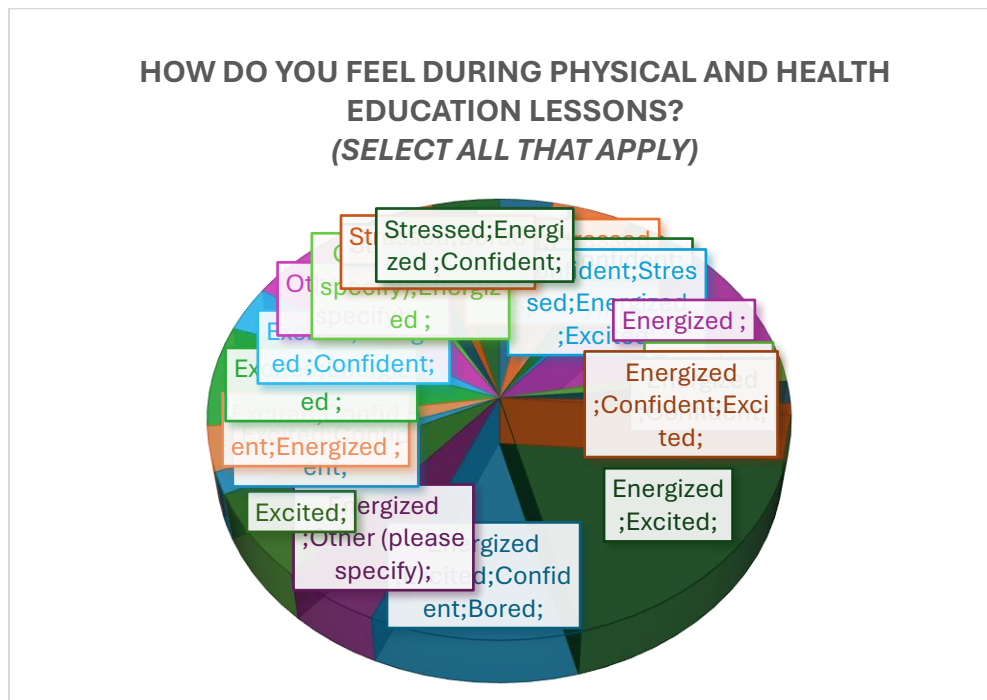
Physical and Health Education per Week

How would you rate your interest in Physical and Health Education lessons?
(Scale: 1–10, where 1 indicates no interest and 10 indicates very high interest)

Rating	Percentage
1	19%
2	21%
3	16%
4	13%
5	7%
6	7%
7	4%
8	4%
9	3%
10	6%

Rating Scale (1–10) for Interest in Physical and Health Education Lessons

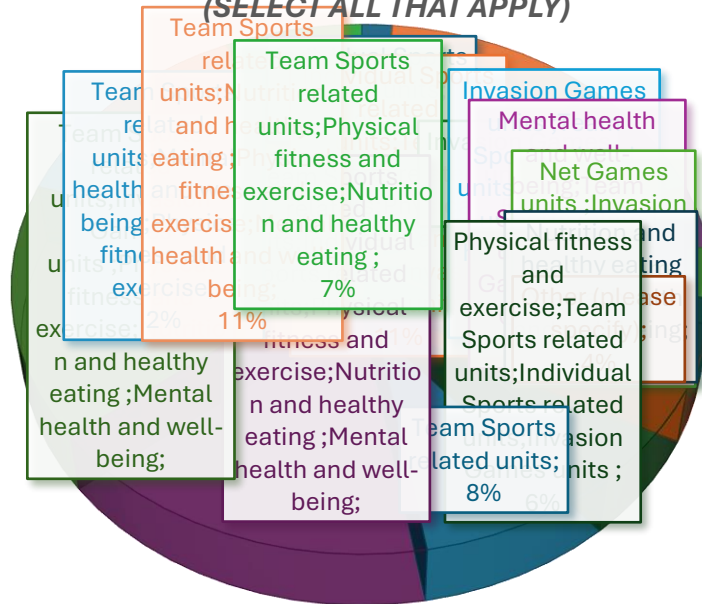
Преобладават положителните отговори (88%).



Structure of Motivation Derived from Sports Lessons

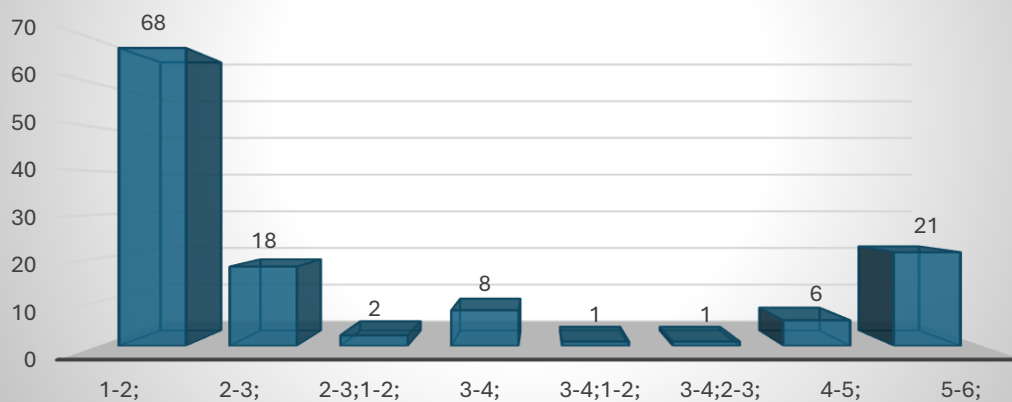
WHICH TOPICS DO YOU FIND MOST VALUABLE IN PHYSICAL AND HEALTH EDUCATION LESSONS?

(SELECT ALL THAT APPLY)

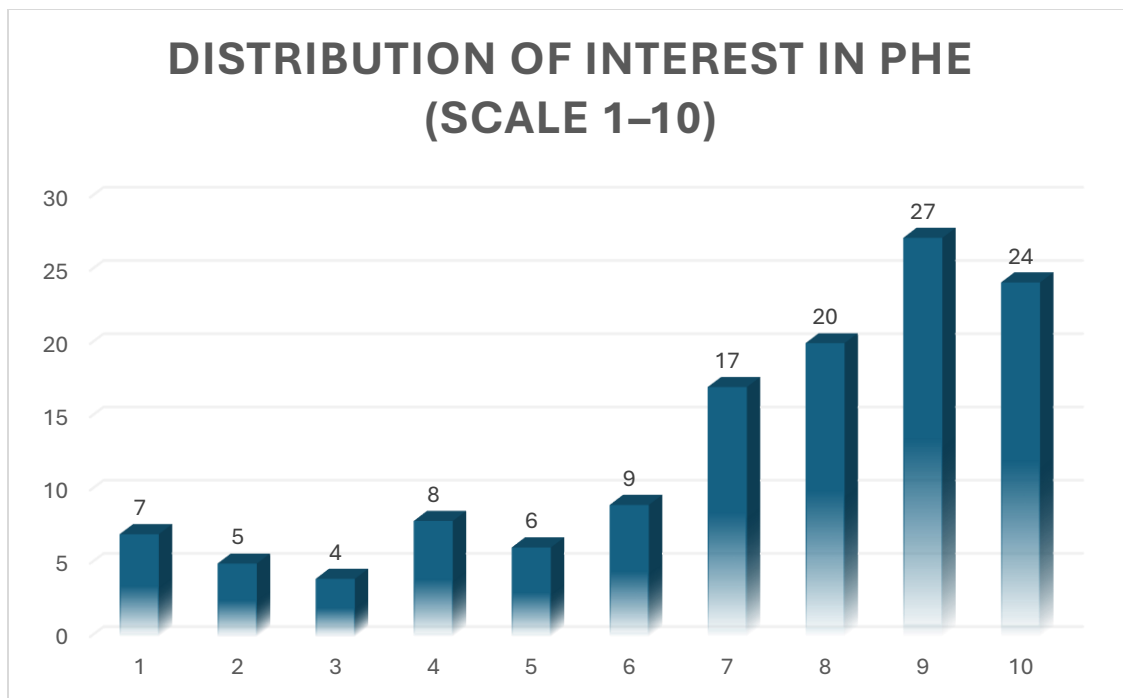


Structure of the Proposed Topics for Sports Activities

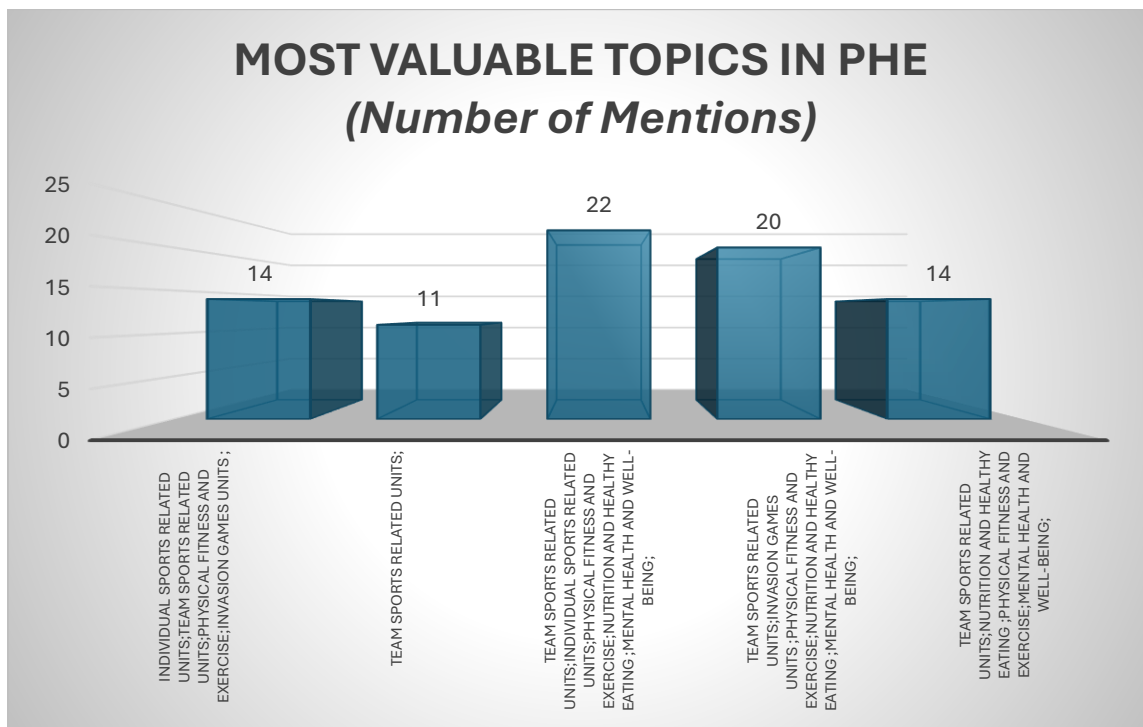
DISTRIBUTION BY NUMBER OF PHYSICAL AND HEALTH EDUCATION LESSONS PER WEEK



Distribution by Number of PHE Lessons per Week



Distribution of Interest in PHE (Scale 1-10)



Most Prominent Topics in PHE (Frequency of Mentions by Subject)

Within the context of the UAE and international institutions, where cultural diversity and a highly competitive academic environment introduce new challenges, Physical and Health Education (PHE) can serve a vital role in alleviating tension, social isolation, and psychosomatic complaints among students.

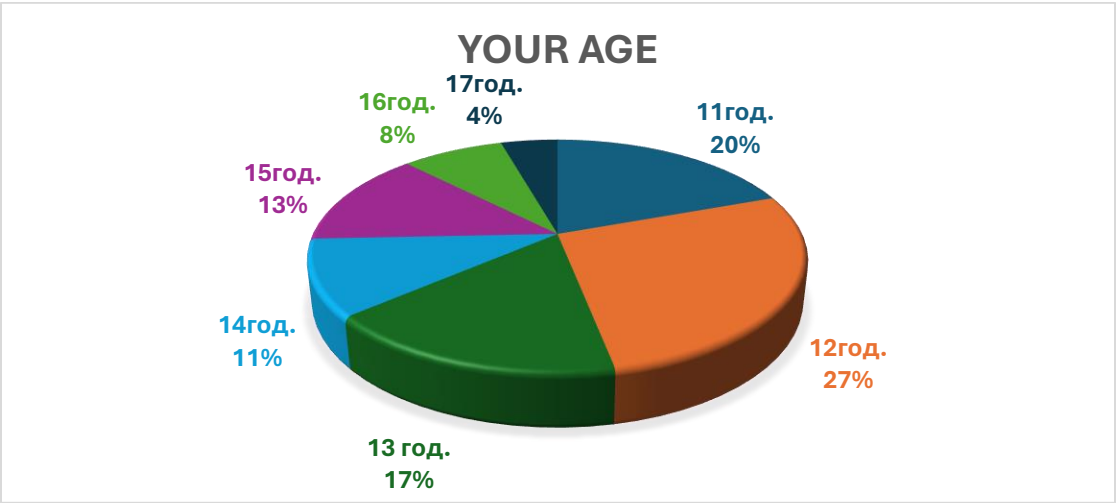
Questionnaire: Sports Provision and Sports Culture at DIA

The data indicate that students' levels of sports participation are notably high: • 38.8% of students participate in sports more than six times per week.

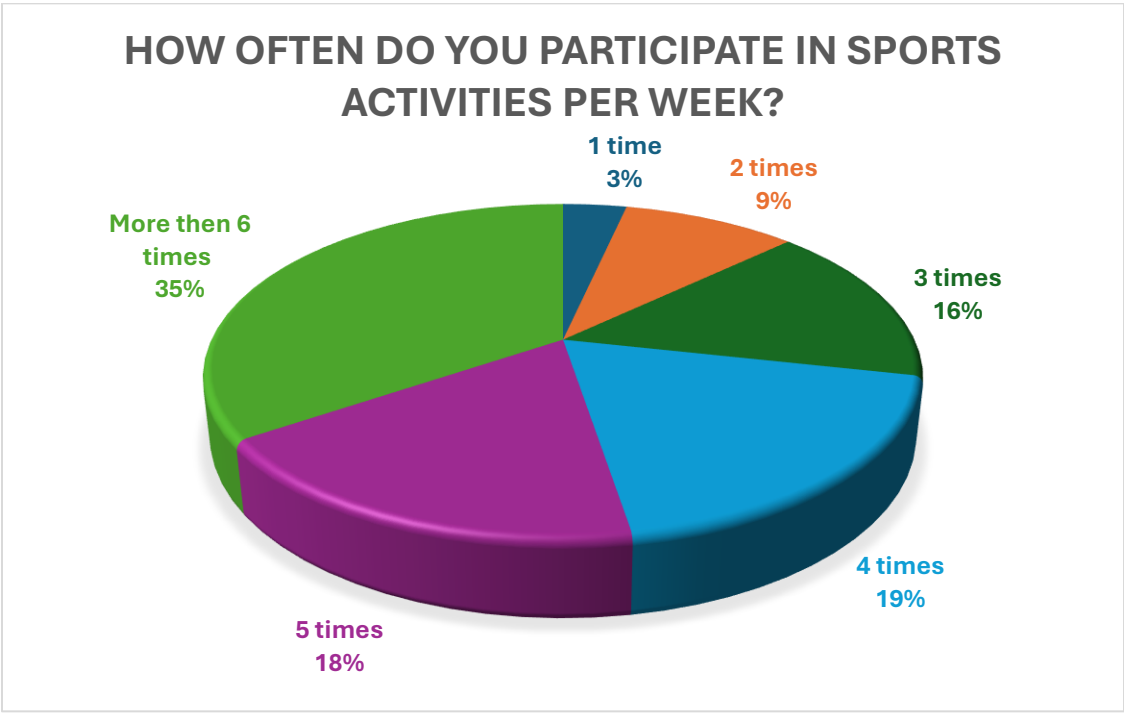
- Train three times per week, achieving a 21.5% improvement.
- 14.9% engage in training five times per week, whereas only 2.5% train once weekly.

This frequency surpasses the average levels documented in international research (UNESCO, 2021; Aspen Institute, 2023), which suggest that merely 20–30% of students globally participate in sports more than three times per week.

SURVEY ON SPORTS PROVISION AND SPORTS CULTURE AT DIA

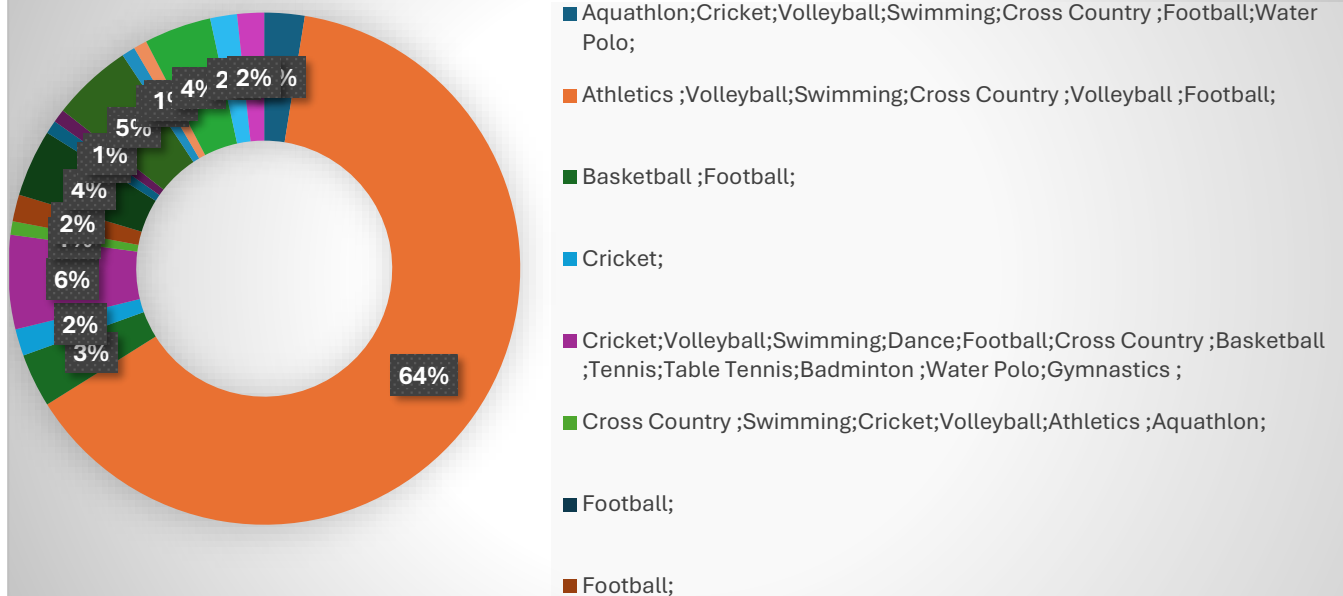


Distribution by Age



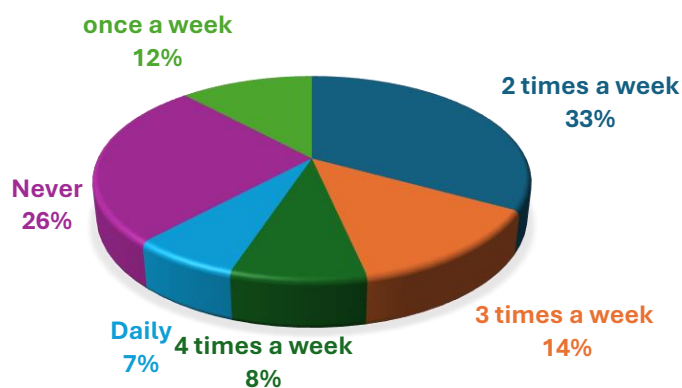
Frequency of Sports Activities

What sports programmes are currently offered at your school? (Select all that apply)



Distribution of Types of Sports Programmes

HOW OFTEN DO YOU PARTICIPATE IN THE SPORTS PROGRAMMES OFFERED AT YOUR SCHOOL?

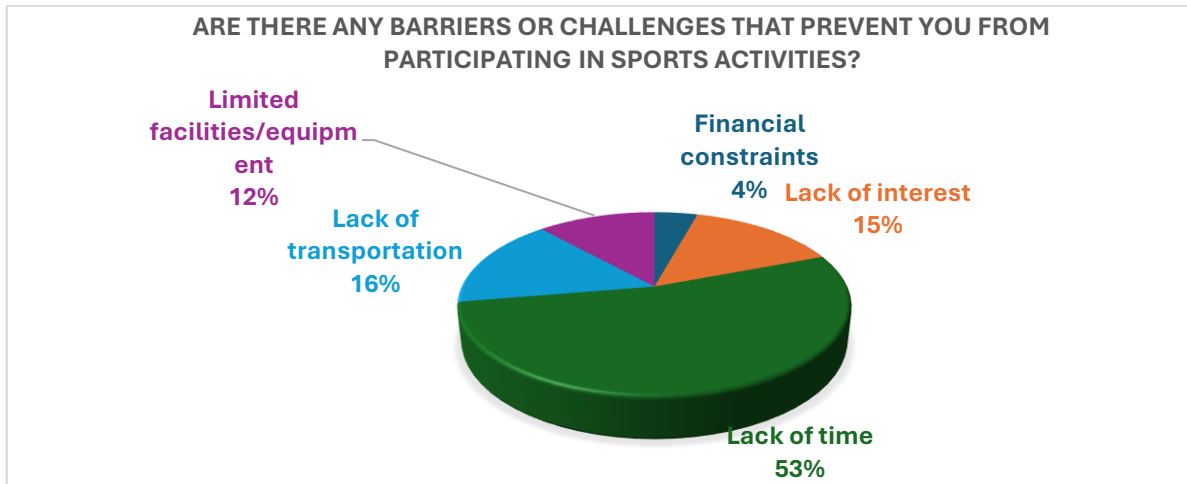


Frequency of Participation in School Sports Programmes

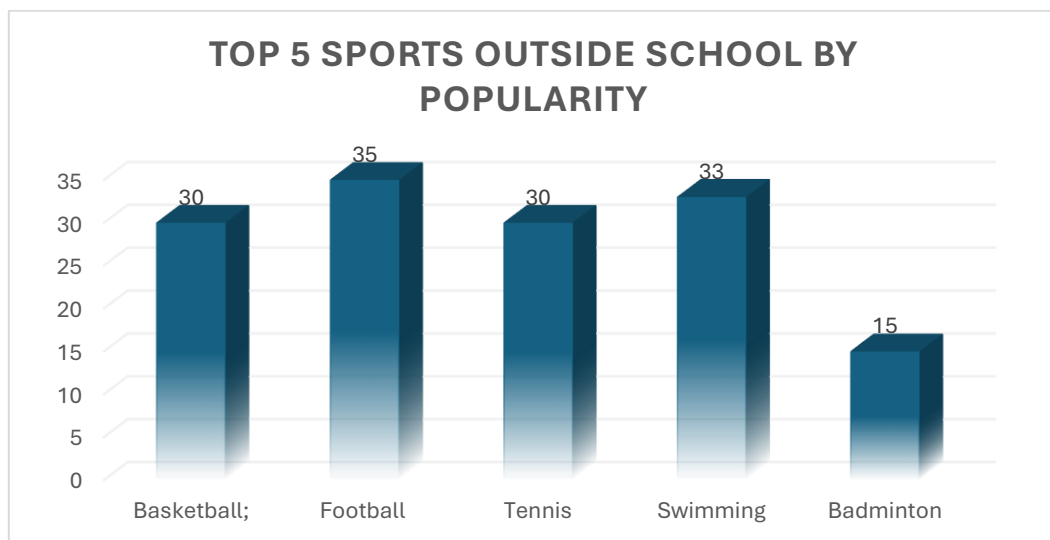
What improvements or changes would you like to see in the existing sports programmes at your school?

The sports programmes at the school are generally of a good standard; however, the organisation and delivery of the Sports Day are not sufficiently

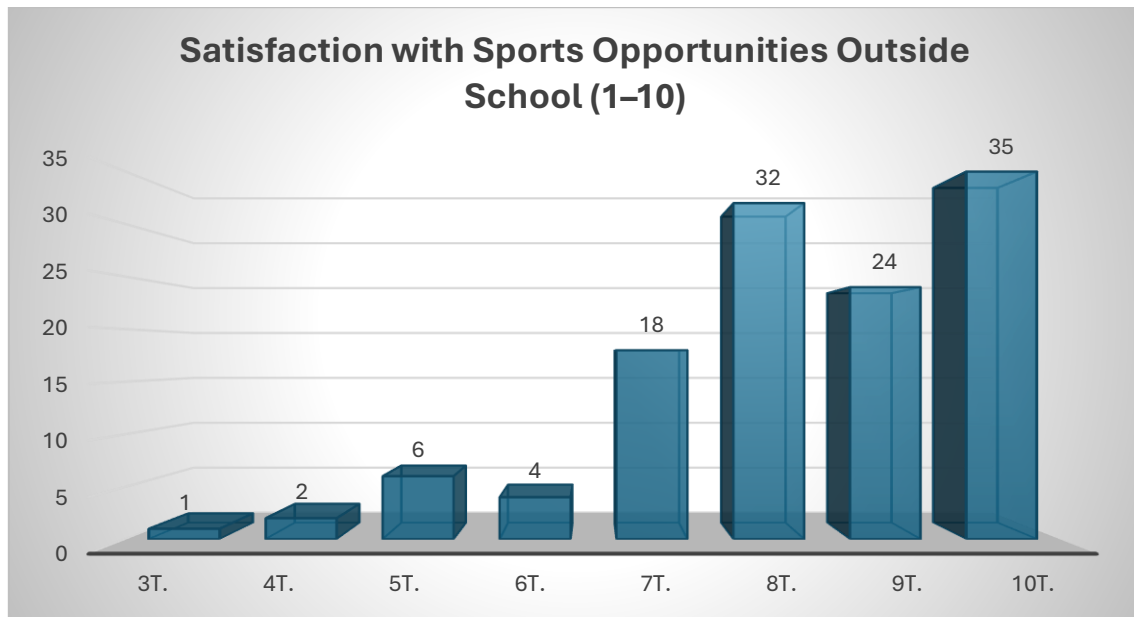
comprehensive. It would be preferable for a highly regarded school such as DIA EH to maintain its high standards by hiring external facilities in order to host such prestigious events in a more appropriate and professional setting.



Barriers to Regular Participation in Sports Activities



Top 5 Sports Outside School by Popularity

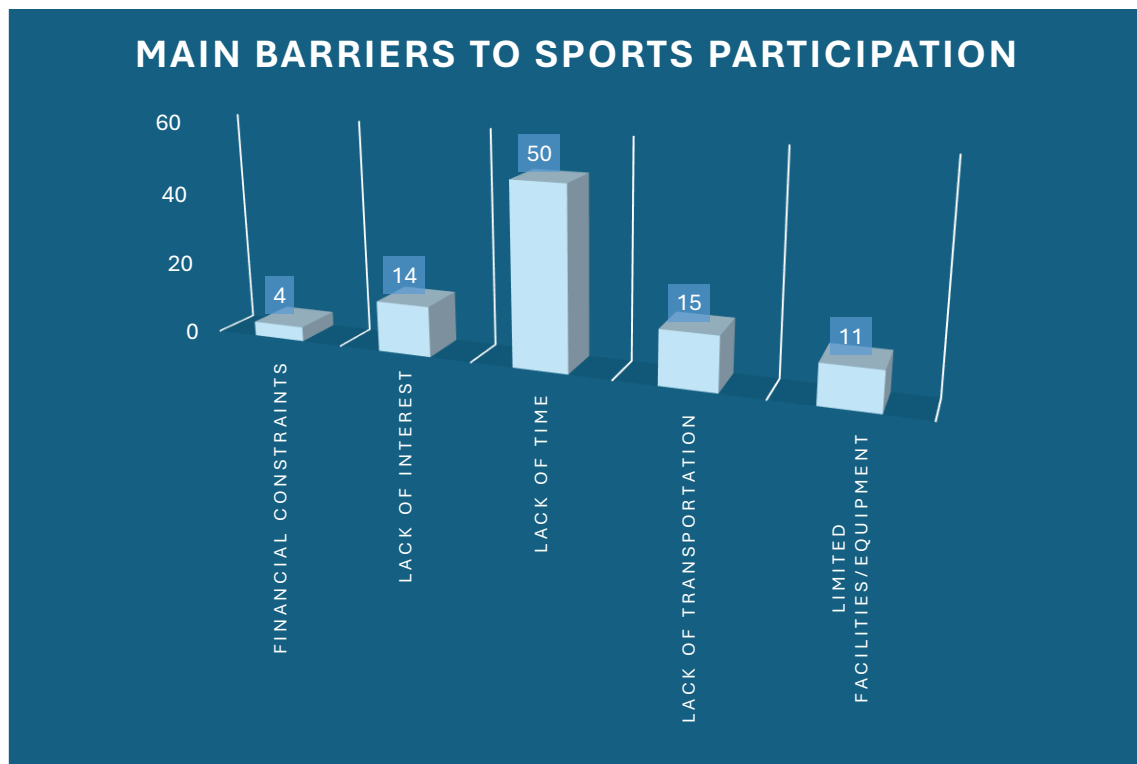


Satisfaction with Sports Opportunities (1–10)

Main Barriers to Participation in Sport

- Lack of transport: 19% (23 students)
- Lack of time: 13.2% (16 students)
- Financial constraints: 7.4% (9 students)
- Other barriers (injuries, lack of interest, social factors): approximately 10%

These results are consistent with global trends reported by the WHO (2020), CDC (2022), and the Aspen Institute (2023), according to which time, transport, and cost are the leading barriers to mass participation in sport.



Main Barriers to Sports Participation

International Context and Examples

UNESCO (2021): On average, 70% of students worldwide participate in at least one sport; however, only 25–35% achieve the recommended level of daily physical activity.

Aspen Institute (2023, USA): The primary barriers are time, transport, and cost. Students who are part of well-informed and supportive school communities demonstrate higher levels of engagement and satisfaction.

UAE: National initiatives such as the Dubai Fitness Challenge and Vision 2021 promote an active lifestyle and create favourable conditions for the integration of new sports within schools.

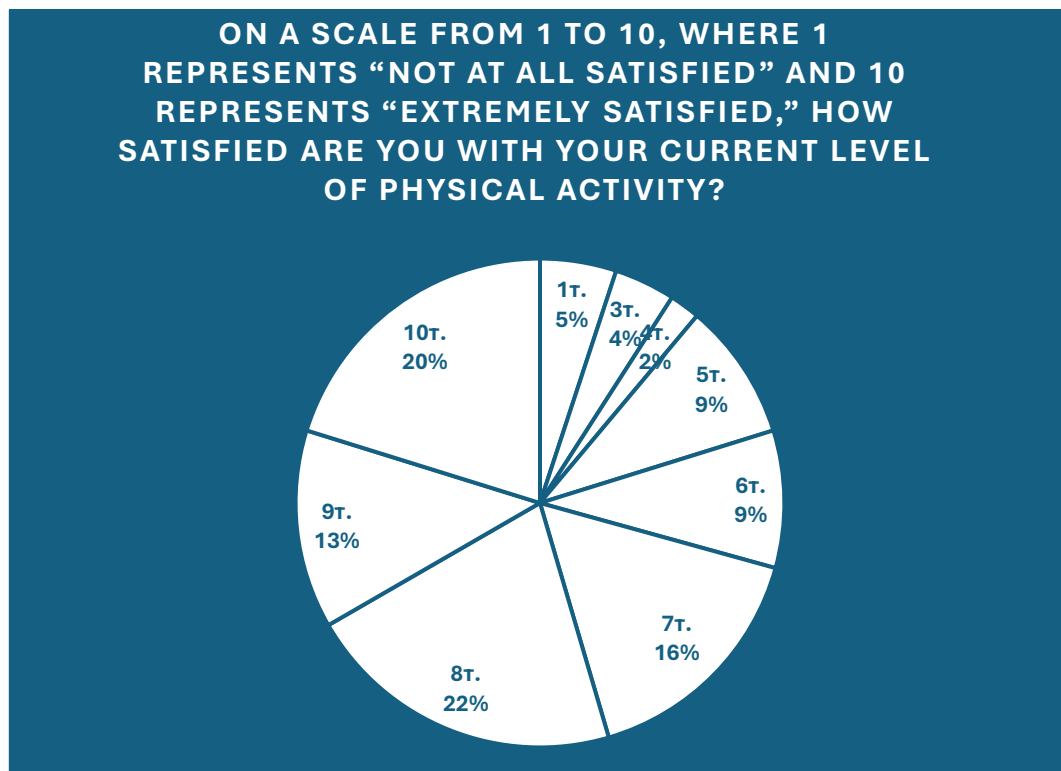


Fig. 62 Level of satisfaction

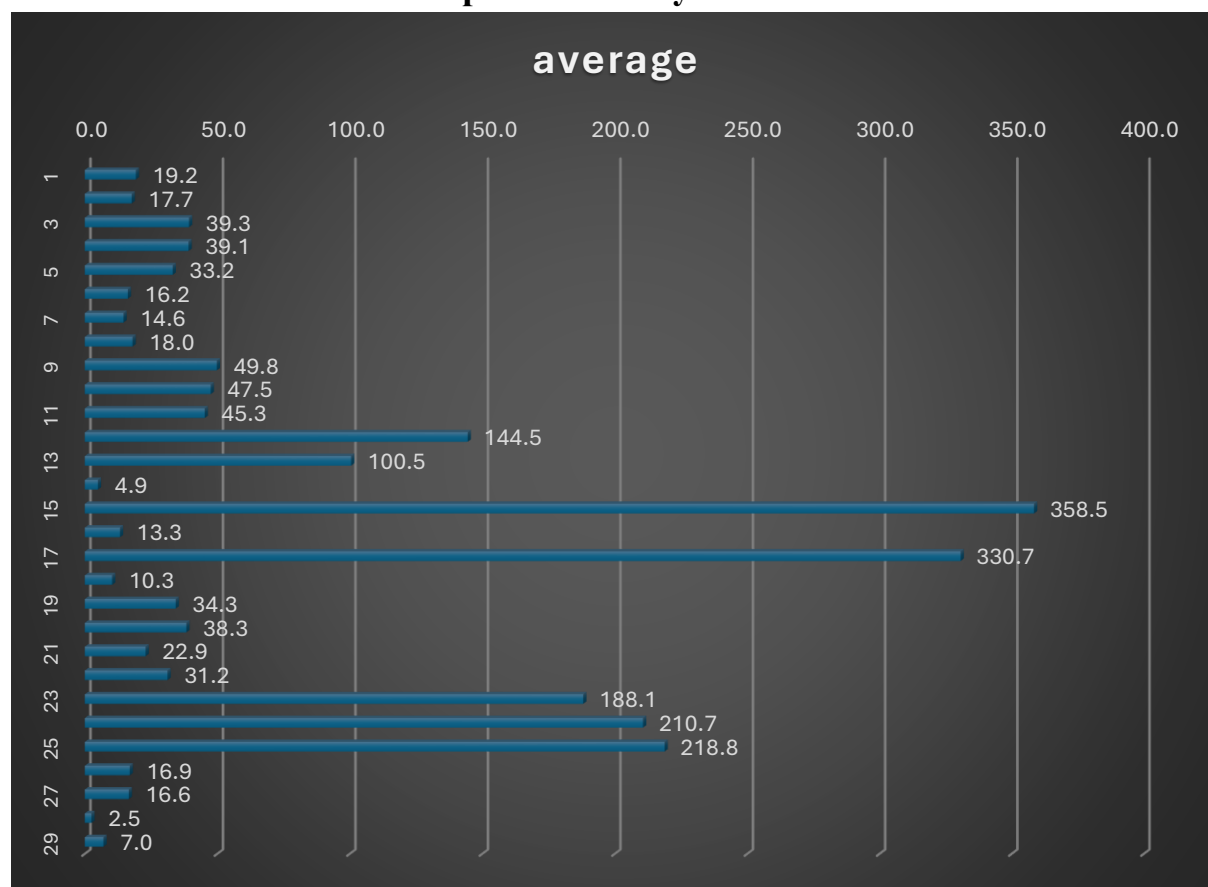
The level of satisfaction with sports activities is highest at scores of 8, 9, and 10.

Do you have any suggestions or ideas for improving the availability or accessibility of physical activities for students like you? If the answer is “yes”, please provide your suggestions.

If DIA has a gym, it could allow students to use it after school, “It’s good, but it could be better if the teacher listens to what the students want to do, join more sports teams, ensure the school gym is open on weekends, I’m sure there are many people like me who are eager to practice some sport in the gym, make martial arts an activity in our Physical and Health Education.

III. 2. Analysis of the results of the sports-pedagogical experiment

III. 2.1. Variational and comparative analyses



Mean Values of the Test Indicators

The calculation of variation indicators is the method by which the limits of the studied samples, their mean values, and the degree of homogeneity are determined. An essential assessment of the normality of the distribution is provided by the coefficient of variation. A distribution is considered normal when the coefficient of variation does not exceed 0.3 or 30%, representing the ratio of the standard deviation (S) to the mean value of the indicator.

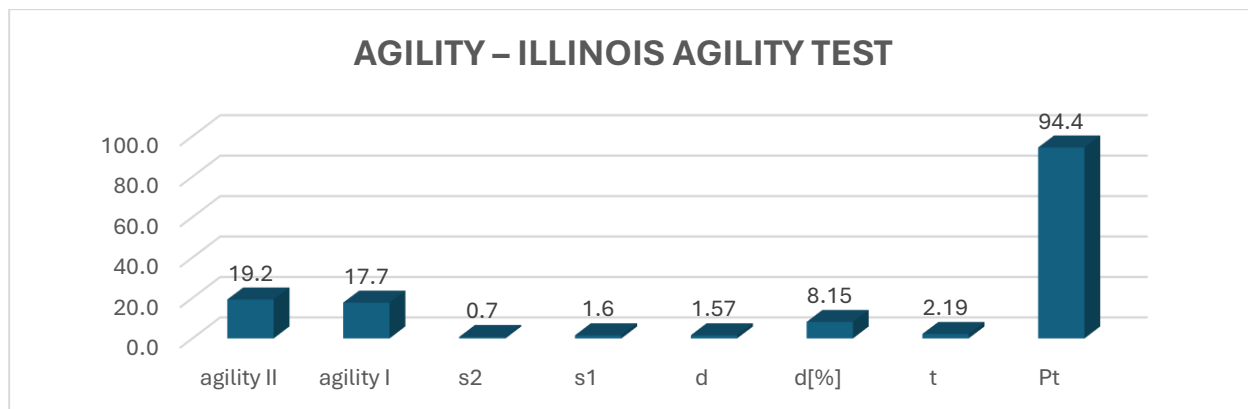
It is recommended that data with a normal distribution be compared using Student's t-test, whereas for non-normal distributions the Wilcoxon (Z) criterion should be applied. For convenience, the presence of a statistically significant improvement is verified through the confidence (guarantee) probability, which

corresponds to the value of sig (significance). When the confidence probability exceeds 95% ($Pt > 95\%$), the observed improvement is considered statistically significant and not the result of random variation.

Comparative Analysis (Student's *t*-test / Wilcoxon Criterion)

agility II	agility I	s2	s1	d	d[%]	t	Pt
19.2	17.7	0.7	1.6	1.57	8.15	2.19	94.4
tenis alt handsII	tenis alt handsI	s2	s1	d	d[%]	t	Pt
49.83	39.33	4.96	10.43	10.5	21.1	-8.64	99.999
tenis left handsII	tenis left handsI	s2	s1	d	d[%]	t	Pt
39.14	47.50	5.11	13.74	-8.4	-21.4	-7.17	99.995
tenis right handsII	tenis right handsI	s2	s1	d	d[%]	t	Pt
33.17	45.25	6.96	11.53	-12.1	-36.4	-7.23	99.995
PLANK I I	PLANK I	s2	s1	d	d[%]	Z	Pt
144.5	100.5	70.13	32.82	44.0	30.4	2.288	95.2
Reaction test II	Reaction test I	s2	s1	d	d[%]	t	Pt
13.3	10.3	3.33	1.85	2.97	22.40	0.31	23.3
Balance test II	Balance test I	s2	s1	d	d[%]	Z	Pt
358.5	330.7	331.6	154.8	27.79	7.75	1.67	86.7
Sit ups [sec] II	Sit ups [sec]	s2	s1	d	d[%]	t	Pt
34.3	38.3	4.99	7.79	-4.03	-11.75	-1.22	74.65
PUSH UP II [sec]	PUSH UP I [sec]	s2	s1	d	d[%]	Z	Pt
22.9	31.2	6.96	15.32	-8.29	-36.19	-1.43	81.43
St. long jump [cm]II	St. long jump [cm]I	s2	s1	d	d[%]	t	Pt
188.1	218.8	13.1	12.7	-30.69	-16.31	-.89	59.91
Sprint 100m [sec]II	Sprint 100m [sec]I	s2	s1	d	d[%]	t	Pt
16.94	16.58	1.39	1.87	0.36	2.13	-.30	22.78

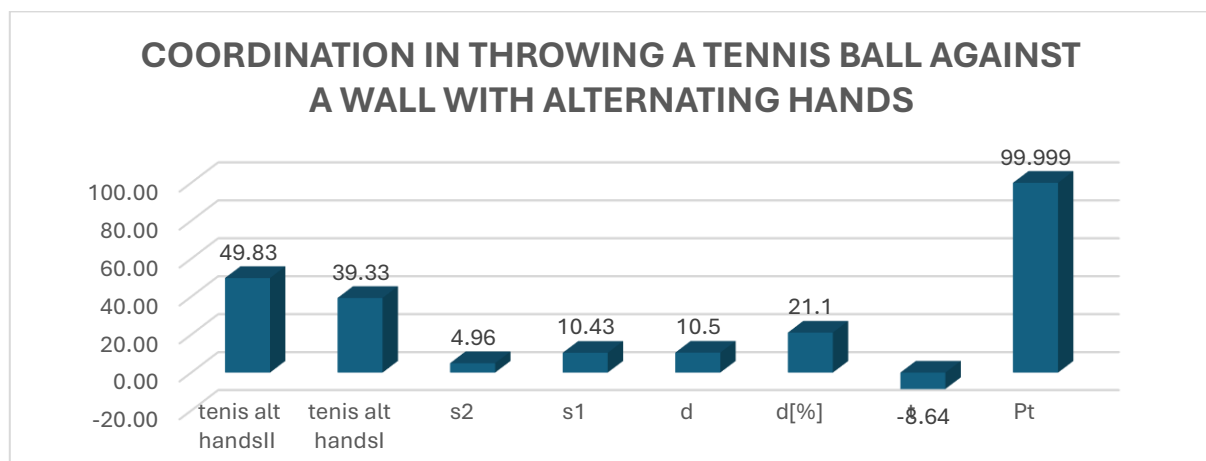
According to Table 2, the agility test ($Pt = 94.4\%$), the alternative coordination test ($Pt = 99.9\%$), the left-hand coordination test ($Pt = 99.9\%$), the right-hand coordination test ($Pt = 99.9\%$), and the Plank test ($Pt = 95.2\%$) confirm the presence of statistically significant improvements in the studied variables between the beginning and the end of the period of the pedagogical experiment. Consequently, the non-null hypothesis for the existence of a significant improvement is accepted based on the results of the statistical analysis.



Agility Test

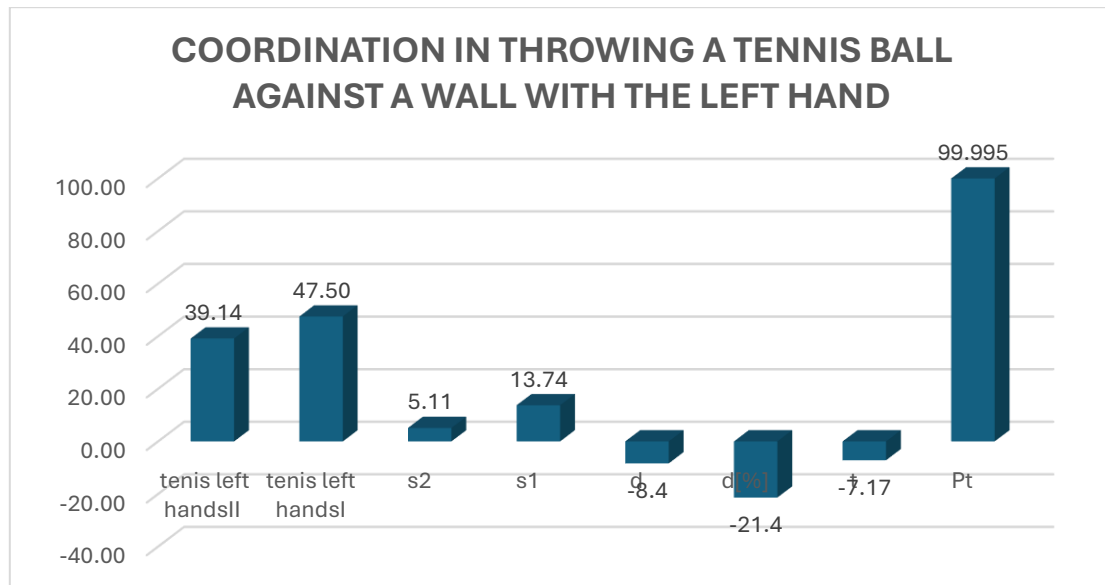
The Illinois Agility Test measures the ability to rapidly change direction and body position, incorporating sprinting, weaving, and running in different directions around four cones. This test is widely used in sport to assess agility, with key elements including cones that mark the start and finish points as well as the turning points.

The improvement d (absolute value) is 1.57, and $d[\%]$ reaches 8.15% for the Illinois Test, with $Pt > 95\%$. This clearly indicates that speed, lower-limb strength, body weight, and agility are the predominant performance determinants.



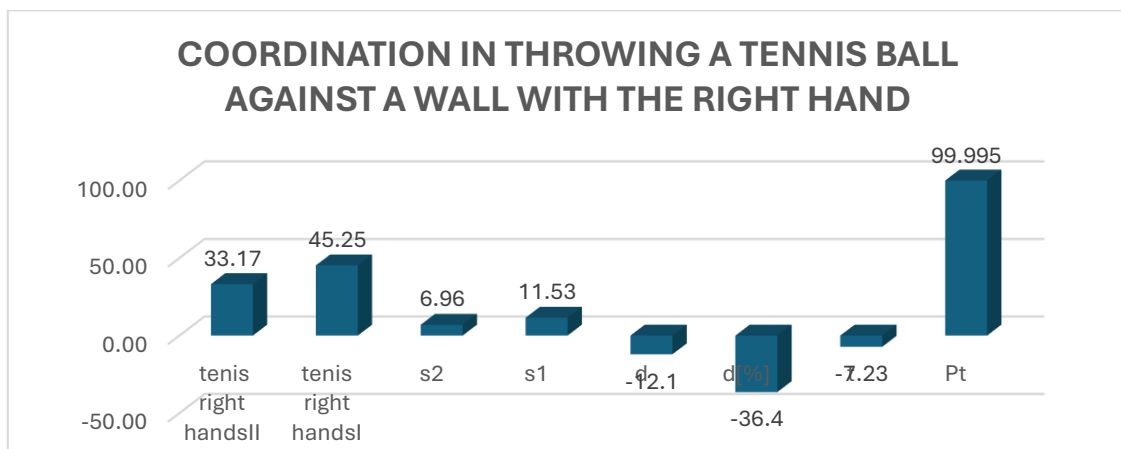
Coordination Test with Alternating Hands

Part of the performance also depends on the size and weight of the ball (or object) being thrown. Naturally, throwing ability improves with additional practice. The improvement d (absolute value) is 10.5, and $d[\%]$ reaches 21.1% for the alternative tennis ball test at $Pt > 95\%$. A key characteristic in this test is the dexterity of the upper limbs.



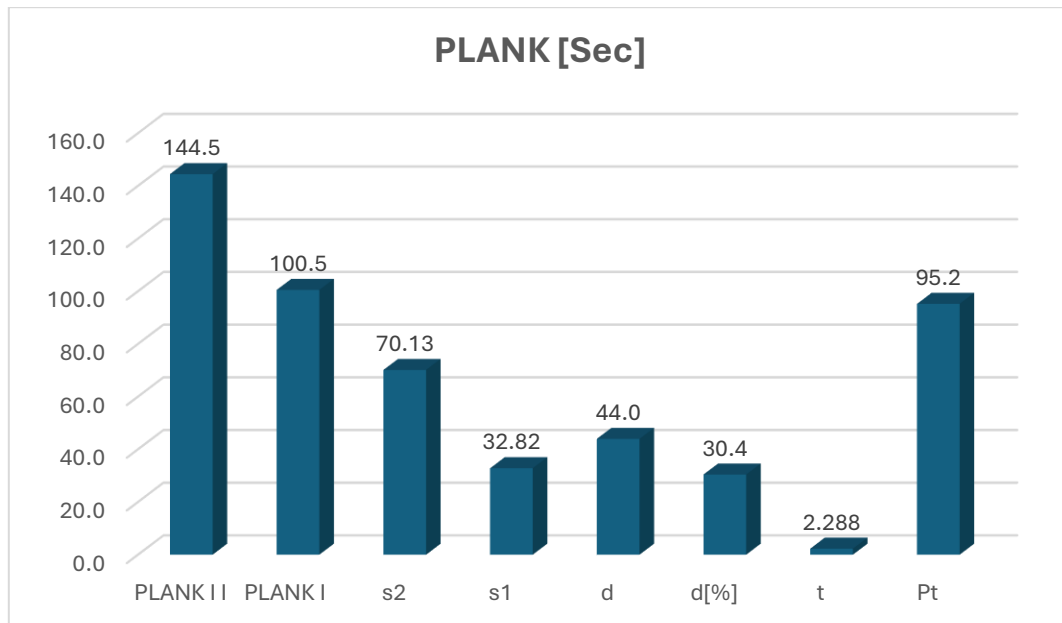
Coordination Test with the Left Hand

The improvement d (absolute value) is -8.4 , and $d[\%]$ reaches -21.4% in the tennis ball test at $Pt > 95\%$. The evident change confirms the existence of a significant difference between the measurements taken at the beginning and at the end of the studied time period.



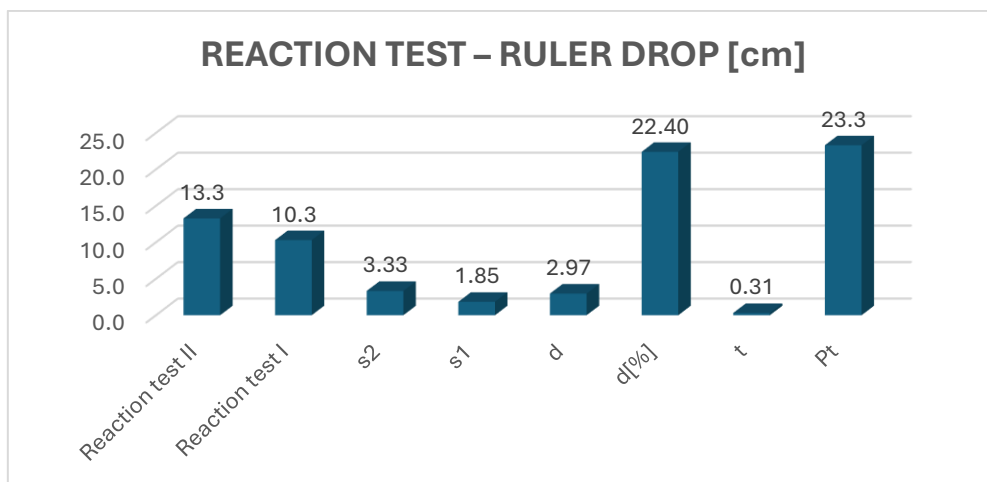
Coordination Test with the Right Hand

The improvement d (absolute value) is -12.1 , and $d[\%]$ reaches -36.4% in the tennis ball test at $Pt > 95\%$. This result confirms the presence of a statistically significant difference between the measurements at the beginning and at the end of the studied period.



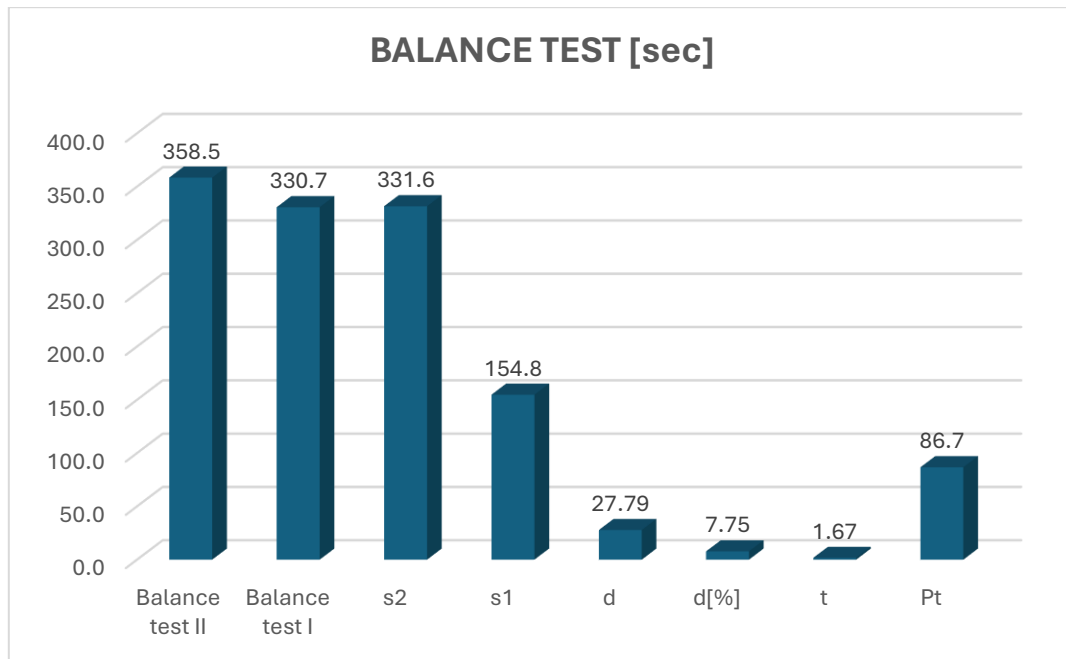
Plank Test

It is used to determine the fitness level of the core muscles. The improvement d (absolute value) is 44, and $d[\%]$ reaches 30.4% for the Plank test at $Pt > 95\%$.



Simple reaction test

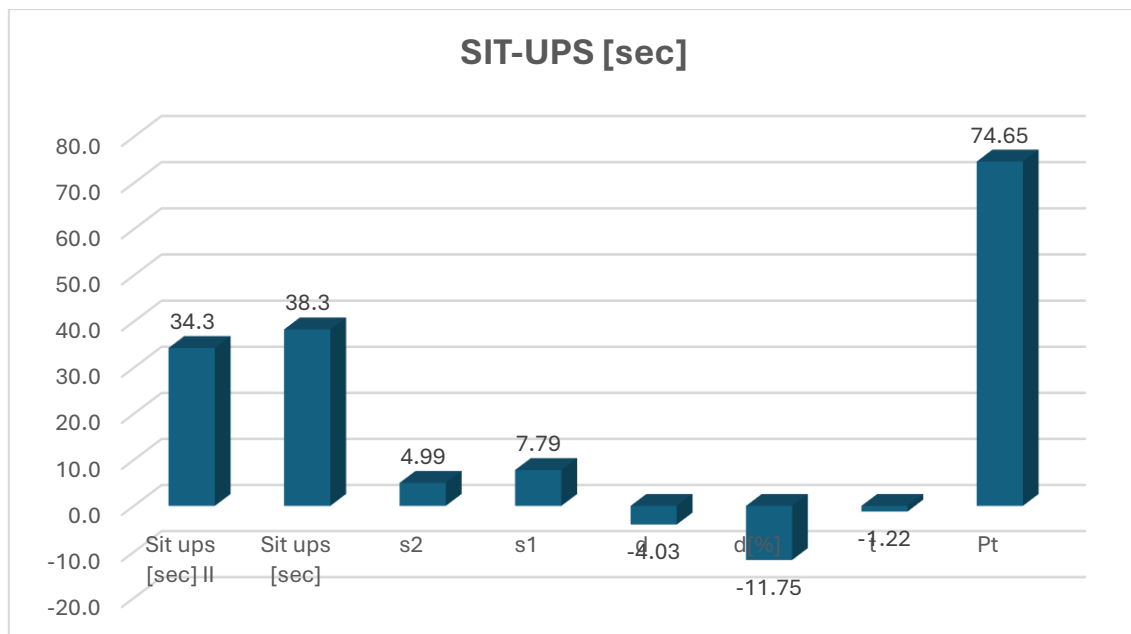
It is applied to precisely measure the time between the stimulus and the moment of contact, which represents simple reaction time. This is a relatively easy reaction test to administer; however, it does not demonstrate a statistically significant improvement, despite the sufficiently long duration of the experimental period.



Balance Test

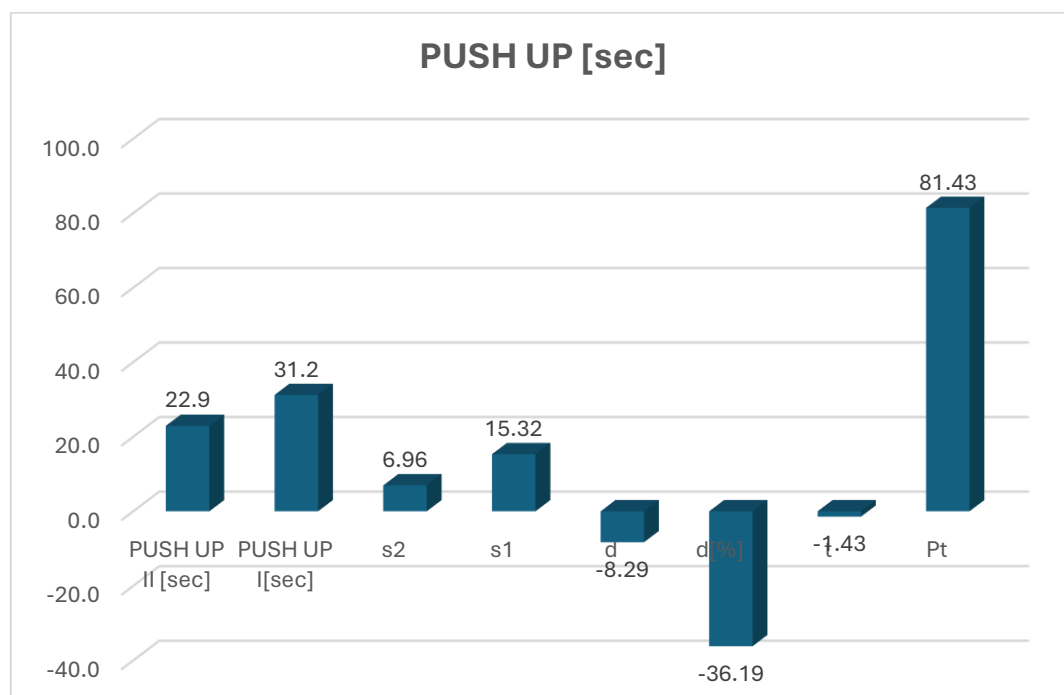
The balance test assesses postural control, range of motion (ROM), strength, and proprioception, and is frequently used in decision-making related to return to play (RTP). Postural control is associated with the involuntary actions of the neuromuscular system aimed at maintaining the projection of the body's centre of gravity (COG) within the base of support of the lower limb. Oscillations of the COG typically occur at a frequency of 3 to 6 times per second; however, in certain athletes, such as acrobats, skiers, and others, this frequency may reach up to 9 times per second.

The average amplitude of these oscillations is entirely individual and is closely related to the athlete's motor structure and neuromuscular characteristics. The assessment of balance stability is conducted using devices that record the spontaneous movement of the projection of the COG relative to the support surface. Of particular importance is the magnitude of the maximum deviations observed within a defined time interval, usually ranging from 30 seconds to one minute.

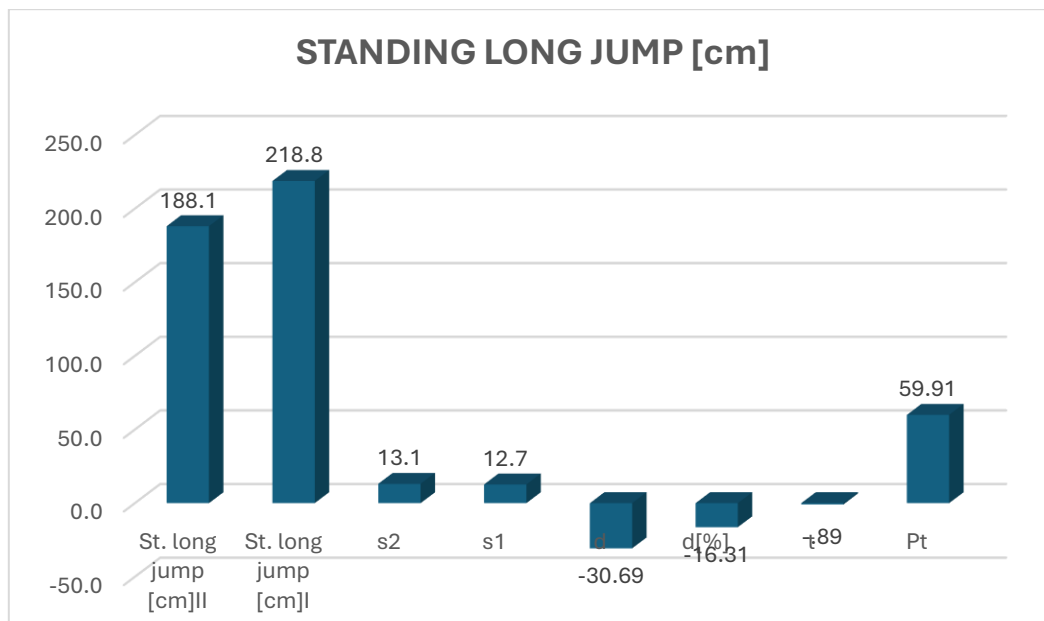


Abdominal Muscle Strength Test

The strength of the abdominal muscles is an important factor indicating the current condition of the musculoskeletal system. It is evident that over the investigated time period, the results do not reach statistically significant values.



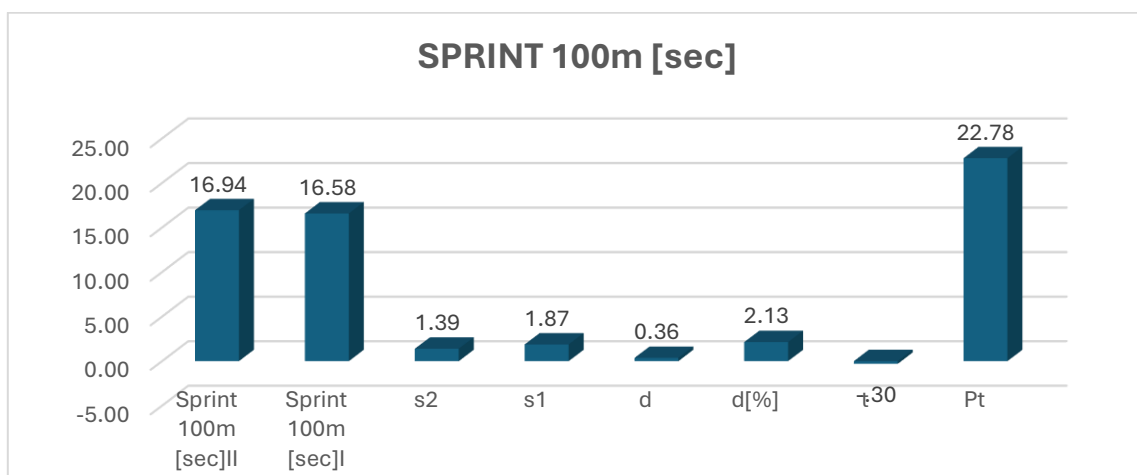
Chest Muscle Strength Test



Standing Long Jump Test

The standing long jump test is a physical exercise in which the distance an individual can cover with a single two-footed jump from a standing position is measured. To perform the test, the participant stands behind a starting line with the feet placed shoulder-width apart, swings the arms forward and upward, and executes a powerful jump forward using both legs, landing simultaneously on both feet.

In this test, the participants did not achieve statistically significant results over the studied period.



100 m Sprint Test

Sprint running requires a high level of coordination and well-developed

muscular strength in the lower limbs, oriented toward short, high-intensity efforts, during which the body operates predominantly in an anaerobic mode.

III. 2 . 2 . Correlation Analysis (Spearman, Pearson)

The correlation analysis examines 14 indicators included in the variation and comparative analyses. It confirms the presence of intragroup correlational relationships, since the set of tests includes coordination tests with a tennis ball, the Illinois test, the Plank test, the Sit-Up test, the Push-Up test, the 30 m sprint test, and the 100 m sprint test. This correlational structure forms a system of correlational relationships, where those within the same group are considered intragroup. According to Table 3, there are statistically significant intragroup correlations between the alternative tennis ball test and the left-hand tennis ball test (0.742) and the right-hand tennis ball test (0.796), between the Plank test and the Sit-Ups test (0.792) and the Push-Ups test (0.643), between the 30 m sprint and the 100 m sprint (0.742), between body weight and BMI (0.758), and between the left-hand and right-hand tennis ball tests (0.853). Thus, the total number of significant correlation coefficients reaches 10, and they are marked with shaded rectangles in Table 3.

The Illinois test shows a direct correlation (0.745) with the 30 m sprint and an inverse correlation (-0.654) with the Plank test. There is also a significant correlation between the Sit-Ups test and the Push-Ups test (0.766), and between the Standing Long Jump test and the Push-Ups test (0.661). A small difference is observed in the coefficients obtained through Pearson's and Spearman's analyses. The positive values of the correlation coefficients between the Agility test and the result of the 30 m sprint test, as well as between the Plank test and the results of the Sit-Ups and Push-Ups tests, are logically justified, since muscle groups of

identical nature are involved. Logically, body weight and BMI are in a direct correlation with a positive character.

[illegible]

Таблица 4

[illegible]

IV. CONCLUSIONS

1. A detailed analysis of contemporary sources has been conducted, focusing on the influence of physical culture and sports specialisations on the development of students within the specified age group in the context of the UAE, where climatic conditions and cultural differences may affect levels of physical activity.
2. The percentage distribution of body weight remains stable over the examined two-year period, and no significant changes are observed in nutritional habits, physical activity levels, or overall health status, in accordance with the natural course of physiological development during this stage.
3. The significance of the study lies in its provision of current empirical data for the specific social and cultural environment of the UAE, which is characterised by a high degree of multiculturalism and intensive educational and social dynamics.
4. The research presented within this thematic framework reflects the real impact of systematic Physical and Health Education (PHE) instruction throughout the academic year.
5. In the context of the UAE and international schools, where cultural diversity and a competitive academic environment create new challenges, PHE plays an essential role in reducing stress, social isolation, and psychosomatic complaints among students.
6. The results are consistent with global trends reported by the WHO (2020), CDC (2022), and the Aspen Institute (2023), which identify “time,” “transport,” and “costs” as the leading barriers to mass participation in physical activity and sport.

7. The total number of statistically significant correlation coefficients reaches 10 out of the 14 indicators included in the variation and comparative analyses.
8. The comparative analysis confirms the positive outcomes of the sport-pedagogical experiment and identifies effective practices that can be adapted to the local context.
9. The analysis demonstrates that the sports culture and opportunities at DIA are of a very high standard, with levels of participation, awareness, and satisfaction significantly exceeding global benchmarks. The main challenges remain logistics (access and transport), lack of time, and the need for greater diversity in sports offerings in order to engage less active students.

IV.2. Recommendations

1. Based on the conducted research applied to a large population sample, we recommend the use of carefully designed and comprehensive questionnaires that are sufficiently detailed to allow for an exhaustive analysis of all possible outcomes.
2. The proposed system of physical tests is universal and can be implemented in different settings and under various geographical and environmental conditions.

CONTRIBUTIONS

Scientific and Practical Contributions

1. Integration of physical, cognitive, and psycho-social factors into a unified research framework.
2. Adaptation of international cognitive tests for the purposes of sports-pedagogical analysis.
3. Incorporation of psychological techniques (mindfulness, visualisation, and mental preparation) into school sport programmes.

4. Development of a model for the harmonious development of students through sport, validated by national and royal recognition – the *Hamdan bin Mohammed Order of Merit for Sports*.
5. Comparative analysis between the experiences of Dubai and Bulgaria, proposing adaptive models applicable across different educational systems.

PUBLICATIONS

- Recognised with the Royal Hamdan bin Mohammed Order of Merit for Best Sports Education School
- World School Games - Making History - Gulf Youth Sport, January 2020
- Teamwork makes the dream work - Gulf Youth Sport , December 2019
- DIA wins the U18 DASSA Cup - Gulf Youth Sports, November 2017
- Fencing can be a sport for everybody - Gulf News, October 26, 2013
- Dubai Education Hot Seat - Time Out Dubai, September 27, 2012
- Development of Fencing in UAE - Sports Science Magazine, NSA Bulgaria, edition 1 / 2010, page 63
- Achieving success by the sword - Gulf News, May 30, 2009
- Kouzev aims to be sporting ambassador for UAE—Gulf News May 21, 2001
- Kouzev wins Men's Open in triathlon - Gulf News, January 27, 2001

Conclusion

This dissertation demonstrates with scientific rigour and strong practical relevance that sport and Physical and Health Education are not supplementary elements of schooling, but essential pillars in the holistic formation of healthy, cognitively aware, emotionally resilient, and socially responsible individuals. In an era marked by accelerated technological development, digital dependency, and increasingly sedentary lifestyles, schools must assume a leading role in shaping sustainable behavioural models grounded in movement, health, balance, and values. Education can no longer be confined to academic or cognitive attainment alone; it must actively cultivate Physical and Health Education literacy and promote active lifestyle habits that support lifelong health and well-being.

The integration of cognitive processes within sport education is one of the core strengths of this research. Through ideomotor training, mindfulness practices, visualisation, and structured mental preparation, the study establishes cognition as a central regulatory mechanism that connects physical performance with psychological stability and social adaptation. Sport thus becomes a dynamic learning environment in which attention, concentration, decision-making, self-regulation, and emotional control are developed alongside physical capacities. This confirms that modern Physical and Health Education is inherently multidimensional, fostering not only physical competence but also cognitive maturity and personal responsibility.

A major scientific contribution of this research lies in defining sport as a unifying framework linking physical, cognitive, and psycho-social development. Sport is not an end in itself, nor is it merely a pathway to competitive achievement. It is a strategic educational instrument and a long-term investment in human potential and longevity. Longevity is understood here not simply as extended lifespan, but as a high-quality, functional, and balanced life sustained through the interaction of physical activity, cognitive engagement, mental well-being, nutrition, recovery, and social connectedness. Through this perspective, sport becomes a foundation for sustainable health and lifelong vitality.

The concept of Physical and Health Education literacy emerges as central to this vision. It reflects the capacity of students to understand, apply, and sustain knowledge related to movement, health, mental resilience, and active living. By developing this literacy, schools empower young people to make informed decisions, adopt active lifestyle habits, and take long-term responsibility for their

own well-being. Sport education therefore becomes a lifelong competence, rather than a temporary school experience.

Moreover, this study affirms that sport functions as a universal language of development, capable of transcending cultural, national, and socio-economic boundaries. It offers a powerful platform for inclusion, equity, and social cohesion. Every child, regardless of ability, background, or identity, has the right to access sport that is meaningful, empowering, and transformative. When guided by educational values and scientific principles, sport becomes a vehicle for dignity, opportunity, and self-realisation.

In conclusion, this research is both scientifically grounded and profoundly humanistic. Sport is not merely physical activity. It is a cognitive, educational, and social force. It is an investment in longevity, a safeguard for public health, and a cornerstone for building societies that are healthier, more resilient, more cohesive, and more compassionate. Through Physical and Health Education literacy and the formation of lifelong active habits, sport becomes one of the most powerful tools for shaping a sustainable, balanced, and prosperous future.