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Article

Issues of physical development among the Mongolian youth

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At the beginning of the research, we proposed the goal of studying the modern trends in physical education at the Mongolian University of Science and Technology through analysis and comparative assessments. As a result of the study, it was observed that comprehensive education in England, sports education using technical and technological advances in Australia, sports teaching for happiness in Japan and China and skills education and physical education in Mongolia are the dominant teaching approaches. In the course of the analysis, it has been found out that there is a lack of attitude towards physical education in Mongolia, and we have determined the extent to which it has been effective through a test study.

One of the main goals of our work is to study the issue of physical development of the Mongolian youth in years past. The article presents the results of the unprecedented physical development test of the first-year students enrolled in the Mongolian University of Science and Technology from 2008 to 2018. We used the "Test to Determine the Level of Physical Development and Fitness of the Population". Actually, this test named after the President of Mongolia Mr. Tsakhiagiin Elbegdorj has been implemented at the national level.



During the test, height, weight, speed, strength, flexibility and endurance of students were studied by the movement test method. The test was evaluated according to the approved methodology. And as a result, we used quantitative and statistical research methods, performed reliability and statistical tests for each questionnaire and data obtained and analyzed the correlation of factors. If we look at physical development levels of all students, there were 14 percent with poor results and 44 percent with insufficient ones. The physical development of the majority of participants (58 percent) was rated below the sufficient level (17 points) that a person of that age should have. In terms of gender, 53 percent of male students and 65 percent of female students had insufficient physical development.



According to the data of a sociological questionnaire survey of students participating in the test, 58.1 percent did not exercise or play sports. It was an interesting observation that coincided with the result that 58.0 percent of the test participants had insufficient physical development. According to our research, the majority of Mongolian students and young people had a low level of physical fitness, and one of every six students had weight problems. This may indicate that the approach to teaching skills development and physical education is somewhat ineffective.

The theoretical and practical significance of the research is that the current situation regarding physical development of students and youth can be determined and the results can serve as a basis for making detailed policies and decisions for the development of physical activity and sports among young people.

Today, students and youth are the most important segment of the population that drives the economy and human development of Mongolia, so it is important to cultivate a healthy and physically fit nation relying on the fact that physical activity and sports should be available for all people.


Keywords: student; physical education; sports; sports management; Mongolia



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Проблемы физического развития монгольской молодежи

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На начальном этапе исследования мы поставили цель изучить современные тенденции физического воспитания в Монгольском государственном университете науки и технологий посредством анализа и сравнительных оценок. В результате наблюдается преобладание следующих подходов к обучению: в Великобритании — комплексное образование, в Австралии — образование, основанное на техническо-технологическом прогрессе, в Японии и Китае — счастливое спортивное обучение, а в Монголии — обучение умениям и физической культуре. В ходе анализа было отмечено, что в Монголии отсутствуют установки к обучению физкультуре. Была определена степень его эффективности посредством тестового исследования.

Одной из основных задач нашей работы является изучение проблемы физического развития монгольской молодежи в прошлые годы. В статье представлены результаты данного не имевшего аналогов тестирования физической подготовки первокурсников Монгольского государственного университета науки и технологий, поступивших с 2008 по 2018 год. При этом был использован «Тест для определения уровня физического развития и подготовки населения», который был назван в честь Президента Монголии господина Цахиагийн Элбэгдоржа и внедрен на национальном уровне.

В процессе тестирования рост, вес, скорость, сила и гибкость учащихся проверялись с помощью двигательного теста. Тест оценивался по утвержденной методике, в результате чего с использованием количественных и статистических методов исследования была проведена проверка достоверности критериев каждого опросника и полученных данных, а также проанализирована корреляция факторов. Что касается уровней физического развития учащихся, то 14% имели низкие результаты, а 44% — недостаточные. Физическое развитие большинства участников (58%) было оценено ниже достаточного уровня (17 баллов), который должен быть у человека этого возраста. Что касается гендерного распределения, то 53% учащихся мужского пола и 65% учащихся женского пола имели недостаточное физическое развитие.

На основе данных социологического анкетирования студентов было определено, что 58,1% не занимались активно физкультурой и спортом. Данный результат совпадает с полученными данными о том, что 58% всех участников тестирования имели недостаточное физическое развитие.

По данным нашего исследования, большинство монгольских студентов и молодых людей имеют слабую физическую подготовку, а у каждого из шести студентов имеется проблема с весом, что может свидетельствовать о том, что подход к преподаванию развития навыков и физического воспитания несколько неэффективен.

Теоретическая и практическая значимость исследования заключается в том, что можно определить современное состояние физического развития студентов и молодежи, использовать результаты в качестве основы для разработки детальной политики и решений по развитию физкультуры и спорта среди молодых людей.

Сегодня, поскольку студенты и молодежь являются наиболее важным сегментом населения для социальноэкономического развития Монголии, важно построить здоровую нацию посредством поддержки физической культуры и спорта, доступных для всего населения.


Ключевые слова: студент; физическое воспитание; спорт; спортивный менеджмент; Монголия



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Introduction

In the world, the level of development of a country is considered together with the issues of economic growth, human development, and the quality of human life. According to the United Nations Human Development Index, Mongolia was ranked 92nd out of 189 countries with a score of 0.744 in 2019¹. Mongolia's long-term development policy goal is to improve the well-being of Mongolian people by working creatively, living healthy and for a long time. The Mongolian government is aiming to reach the human development index of 0.9 points in 2050².

As of 2019, the average life expectancy of the Mongolians, which is the main indicator of the quality of life of the population, is 66.3 years for men and 75.9 years for women³. Non-communicable diseases account for 85.9 percent of the mortality of the population of Mongolia⁴, and physical inactivity is one of the 10 risk factors affecting life expectancy.

As of 2022, in the education sector of the country, there were 145,297 students in 61 universities. 115,250 of them were studying at the bachelor's level⁵. The researcher Ragchaa Gantulga found out that 24 percent of all students were engaged in active sports⁶. Scientists such as Dr. Altantsetseg Lkhagvasuren have studied the problems that hinder the universal use of physical education and sports in Mongolia. They have pointed out that there is no active exercise program suitable for physical development of young people aged 18–24 and 25–40 (Altantsetseg, 2019).

We conducted a study of physical development among students and youth in 2008–2018 in accordance with the “Test to Determine the Level of Physical Development and Fitness of the Population” approved by the presidential decree No. 53 on March 26, 2010⁷.

As a result, a statistical survey questionnaire, data reliability and statistical tests were used, and factor correlation analysis was performed. In addition, we aimed to determine the body mass index of students and youth as well as the current status of sports and physical activities. Many scientists have studied the issue of making a healthy lifestyle a habit by examining the process of acquiring a profession in combination with physical education.

We had studied the dynamics of physical development (height and weight of young Mongolian people) over a span of 11 years. In our opinion, this is innovative and advantageous⁸.

Literature review

University physical education classes focus on developing the physical fitness of students and arousing interest in sports. Physical education is evolving in many ways today.

Skills education. The purpose of training is to improve students' physical conditions by increasing their motor skills and through acquisition of sports techniques. In this case, it develops to better prepare students for competitions.

¹ Human development insights. Access and explore human development data for 193 countries and territories worldwide. Human Development Reports [online] Available at: <https://hdr.undp.org/data-center/country-insights/#/ranks> (accessed 27.07.2024).

² Vision 2050 [online] Available at: <https://vision2050.gov.mn/eng/> (accessed 27.07.2024).

³ Life expectancy at birth, by sex, aimags and the Capital. Mongolian Statistical Information Service [online] Available at: https://www2.1212.mn/tables.aspx?tbl_id=DT_NS0_0300_030V1&13999001_select_all=0&13999001SingleSelect=_T2_T3&SOUSelect_all=0&SOUSelectSingleSelect=_0&YearY_select_all=0&YearYSingleSelect=_2019&viewtype=table (accessed 27.07.2024).

⁴ Mongolian Statistical Information Service [online] Available at: <https://1212.mn/en> (accessed 27.07.2024).

⁵ Ibid.

⁶ Gantulga R. Oyuutny khödölgöönii dutagdlaas uridchilan sergiilekhed biyeiin tamiryng dasgalyn nölöög sudlakh ni [Studying the effect of physical exercise on preventing student physical inactivity]: Doctoral dissertation. Ulaanbaatar, National University of Mongolia Publishing House, 2014. Pp. 4–90. (In Mongolian).

⁷ Mongolian presidential decree No. 53, “Test to Determine the Level of Physical Development and Fitness of the Population”. Unified Legal Information System [online] Available at: <https://legalinfo.mn/law/details/760> (accessed 27.07.2024). (In Mongolian).

⁸ Bat-Ochir M. Oyuutny sportyng khögjüülekh myenjejmyentiin asuudal [Problems of management of student sports development]: Doctoral dissertation. Ulaanbaatar, University of Science and Technology Publishing House, 2021. Pp. 20–55. (In Mongolian).



Physical education. The purpose of this approach is to develop the physical fitness of students and to strengthen their health, but there is a lack of development of sports habits that they need.

Sports teaching for happiness (Japan, China). This concept originated in Japan and aims to bring happiness and joy to students by teaching movements through a variety of sports, so there is a progress in the quality of student life. The content, form, and methods of physical education lessons taught in this approach take into account the needs, interests, psychology, and experience of students and create a favorable learning environment that features the starting point for lifelong sports.

Lifelong sports education (Japan). It implies shaping and developing lifelong physical activities, skills, abilities, and knowledge in sports. University sports support the physical, mental, and health development of students, become one of the integral factors of their healthy lives, and lay the foundation for lifelong physical activities and sports.

Sports education using technical and technological advances (Australia). It is based on monitoring and analyzing the performance of physical activities with the use of technological advances in the development of student’s physical fitness and sports, and studying muscle development and its effects using motion measures.

Comprehensive education (Great Britain). It aims to comprehensively develop students’ moral, educational, intellectual, and physical education.

Portuguese scientists state that engaging children in sports from childhood to the end of student life not only develop physical fitness, but also provides a wide range of opportunities, such as having less stress, feeling optimism, acquiring improved concentration, and learning about other cultures.

Although the approaches mentioned above are different from each other, they are not only interdependent, but also complementary rather than mutually exclusive. This approach to in-depth development places higher demands on the advancement of university physical education and sports.

However, it is effective to develop extracurricular sports activities under the management of sports clubs. Researchers claim that for-profit and non-profit sports clubs are essential to promote and develop sports activities and their role is growing. Today commercial or professional sports clubs and non-profit amateur sports clubs are becoming more and more active. They organize sporting events to make health, recreation, and leisure activities more available and effective.

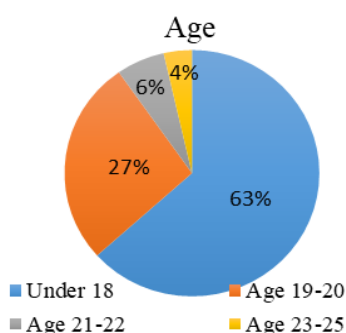
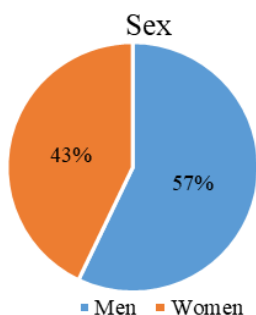
The results of the study will help to determine the effectiveness of physical education in the Mongolian higher education sector in terms of providing skills education and physical education. We also examine how the absence of extracurricular activities affects students’ physical development.

Methods and materials

Research time and sampling. We have measured factors such as height, weight, and physical development levels of 977 participants who enrolled in the Mongolian University of Science and Technology from 2008 to 2018 academic years.

As for the age structure, there were 619 students under the age of 18, 263 students aged 19–20, 60 students aged 21–22, and 35 students aged 23–25. A total number of 977 students, 558 males and 419 females, were selected for the sample survey.

Research methodology. The study was conducted with the help of the “Test to Determine the Level of Physical Development and Fitness of the Population”. We used IBM SPSS 22.0 for analyzing the data. The





test measures person’s capacities such as speed, strength (arms, legs, abdomen), balance, endurance, and resilience. These abilities are key factors for the development of the human body. Speed, strength, flexibility, agility and endurance determine the level of its development.

Table 1. Evaluation of Physical Development of the Students

| Capacities | Gender | Age | 1 point-F | 2 points-D | 3 points-C | 4 points-B | 5 points-A |
|----------------------------|--------|-------|-----------|------------|------------|------------|------------|
| Strength of arms /times/ | Male | 15–24 | 0–2 | 3–5 | 6–10 | 11–20 | 21 ≤ |
| | Female | 15–24 | 0–1 | 2 | 3–5 | 6–10 | 11 ≤ |
| Strength of legs /times/ | Male | 15–24 | 0–7 | 8–10 | 11–12 | 13–14 | 15 ≤ |
| | Female | 15–24 | 0–4 | 5 | 6 | 7 | 8 ≤ |
| Abdominal strength /times/ | Male | 15–24 | 12–15 | 16–21 | 22–26 | 27–32 | 33 ≤ |
| | Female | 15–24 | 7–10 | 11–14 | 15–19 | 20–25 | 26 ≤ |
| Speed /times/ | Male | 15–24 | 0–20 | 21–35 | 36–45 | 45–55 | 56 ≤ |
| | Female | 15–24 | 0–20 | 21–25 | 26–35 | 36–45 | 46 ≤ |
| Resilience /cm/ | Male | 15–24 | 0–27 | 28–38 | 39–48 | 49–57 | 58 ≤ |
| | Female | 15–24 | 0–30 | 31–39 | 40–48 | 49–57 | 58 ≤ |
| Balance /cm/ | Male | 15–24 | 21 ≤ | 20–16 | 15–11 | 10–6 | ≤5 |
| | Female | 15–24 | 21 ≤ | 20–16 | 15–11 | 10–6 | ≤5 |
| Endurance /sec/ | Male | 15–24 | ≤20 | 21–25 | 26–30 | 31–35 | 36 ≤ |
| | Female | 15–24 | ≤15 | 16–20 | 21–25 | 26–30 | 31 ≤ |

Source: The testing methodology book.

The number of performed tasks per 30 seconds is evaluated on a scale of 1–5 points and transferred into an alphabet grading system (A, B, C, D and F).

Table 2. Evaluation

| Score | ≤12 | 13–16 | 17–20 | 21–24 | | ≤25 |
|------------|------|--------------|------------|-------|--|-----------|
| | Poor | Insufficient | Sufficient | Good | | Excellent |
| Evaluation | F | D | C | B | | A |

Source: The testing methodology book

Research results. The levels of physical development of male students in 2008–2013 and 2016–2018 were unsatisfactory. The highest levels were in 2014 and 2015.

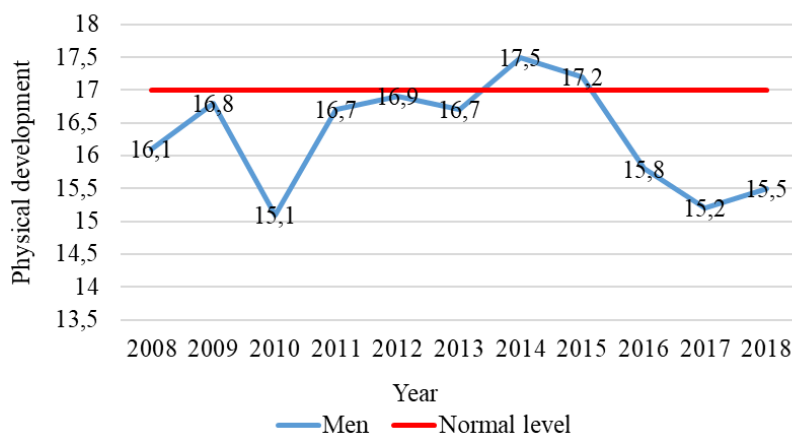


Fig. 1. Physical Development of Male Students /Comparison over the period of 11 years/

Source: Study results obtained by the authors.



The levels of physical development of female students were insufficient in all years except 2012.

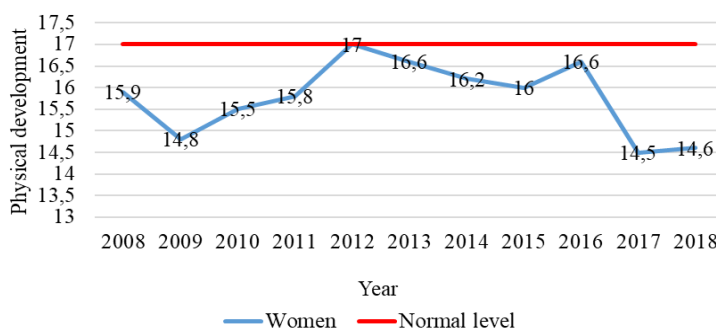


Fig. 2. Physical Development of Female Students /Comparison over the period of 11 years/
Source: Study results obtained by the authors.

To sum up, the levels of physical development of the students who were born in 1990–1997 and studied in 2008–2015 academic years were lower, but this tendency was increasing.

This may be related to the social and economic crisis and the transition to a market economy in Mongolia at that time. The physical development levels of students who were born in 1998–2000 and studied in 2016–2018 academic years decreased back to D level (to 14.5/14.6 and 15.2–15.5). This could be due to the increased height of the students, as well as because of technical and technological development and lifestyle changes.

As for the physical development levels of all the students, 14 percent had poor results (F) and 44 percent had insufficient scores (D), and the physical development of the majority of the participants (58.0 percent) was rated below the C level (17 points). This is the level that a person of that age should have. In terms of gender, 53 percent of male students (D, F) and 65 percent of female students (D, F) had insufficient physical development.

Moreover, indices of underweight, overweight, normal weight, or body mass of the students were also identified.

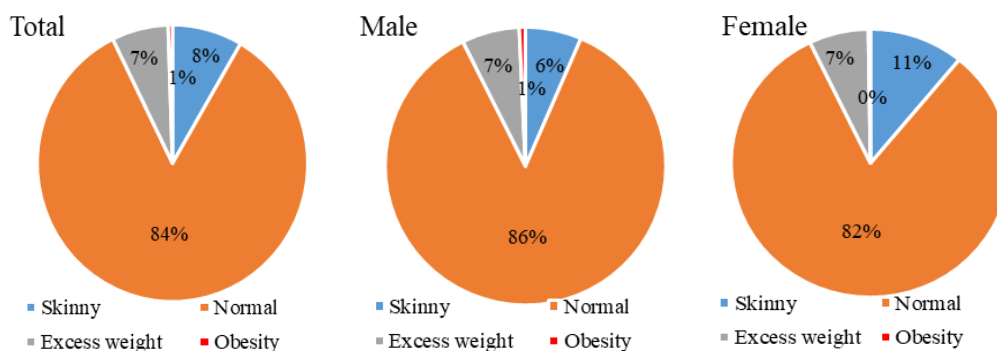


Fig. 3, 4, 5. Students' Body Mass Indices
Source: Test results of students' physical development.

The lowest body mass index in the samples was 16.6, indicating underweight, and the highest one was 32.2, indicating the first degree obesity. The average body mass index was 21.2, revealing that the sampling was generally representative.

Specifically, five out of six students surveyed (84%) were healthy or average in weight, while one out of six was overweight and obese or underweight. Overweight and obesity result in health disorders that can lead to disease complications such as poor metabolism, high blood pressure, heart disease, diabetes, high cholesterol, and cancer.

The reliability of the questionnaire and data and statistical tests had been checked before the analysis of outcomes of the study was conducted and the correlation between factors was determined. A reliability

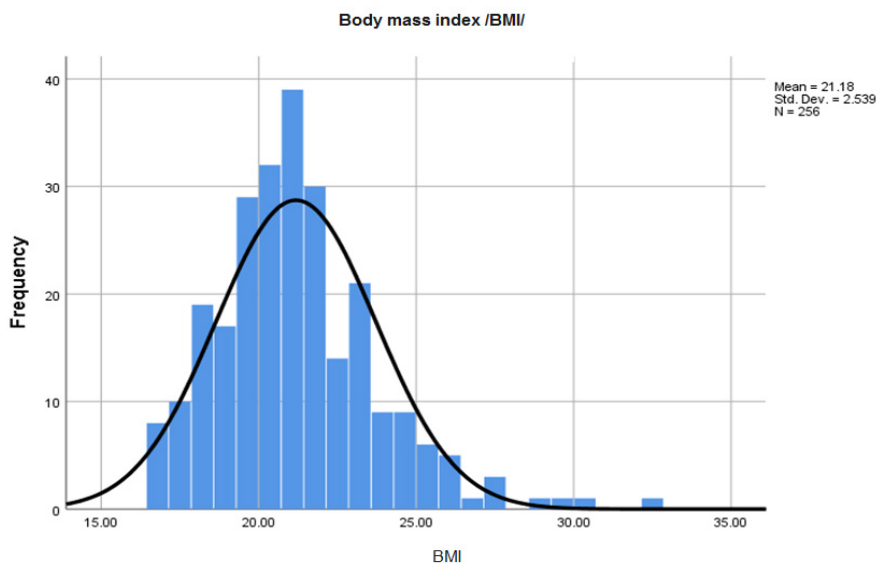


Fig. 6. Body Mass Index

Source: Study results obtained by the authors.

analysis of physical development level and resilience, endurance, balance, speed, and strength capacity was performed and the results were analyzed. The sampling adequacy of the study was determined by Kaiser-Meyer-Olkin (KMO) and Bartlett’s measures. The KMO coefficient is 0.900, indicating that the sample size is sufficient or representative.

Table 3. Kaiser-Meyer-Olkin (KMO) and Bartlett’s Test

| | | |
|-------------------------------------------------|--------------------|----------|
| Kaiser-Meyer-Olkin Measure of Sampling Adequacy | | 0.900 |
| Bartlett’s Test of Sphericity | Approx. Chi-Square | 4929.478 |
| | df | 1275 |
| | Sig. | 0.000 |

Source: Study results obtained by the authors.

When the results of a statistical test are found to be reliable, you can be sure that they are accurate.

Table 4. Reliability Statistics

| | |
|------------------|------------|
| Cronbach’s Alpha | N of Items |
| 0.819 | 19 |

Source: Study results obtained by the authors.

The study results are considered to be sufficient as Cronbach’s Alpha coefficient of this questionnaire is 0.819.

Table 5. Analysis of Reliability Statistics (Item-Total Statistics)

| | Scale mean if item deleted | Scale variance if item deleted | Corrected item-total correlation | Cronbach’s Alpha if item deleted |
|--------|----------------------------|--------------------------------|----------------------------------|----------------------------------|
| Age | 100.859 | 73.947 | 0.387 | 0.814 |
| Gender | 101.000 | 75.419 | 0.140 | 0.819 |
| Height | 100.814 | 75.613 | 0.165 | 0.818 |



| | | | | |
|----------------------------|---------|--------|--------|-------|
| Weight | 100.851 | 74.816 | 0.265 | 0.816 |
| Body mass index | 100.805 | 74.506 | 0.349 | 0.815 |
| Strength | 101.429 | 77.541 | -0.123 | 0.824 |
| Speed | 100.896 | 75.388 | 0.165 | 0.818 |
| Resilience | 101.185 | 74.791 | 0.204 | 0.818 |
| Balance | 101.049 | 74.985 | 0.186 | 0.818 |
| Endurance | 100.855 | 75.485 | 0.166 | 0.818 |
| Physical development level | 101.388 | 75.799 | 0.106 | 0.820 |

Source: Study results obtained by the authors.

The study questionnaires were tested if they were suitable for the study with the Cronbach’s Alpha coefficient which was above 0.7 <. This indicated that all the questionnaires were found to be reliable and the results of the physical development test were accurate and error-free.

Table 6. Factor Analysis. Communalities

| | Extraction |
|-------------------------------------------------|------------|
| Age | 0.500 |
| Gender | 0.791 |
| Height | 0.769 |
| Weight | 0.901 |
| Body mass index | 0.841 |
| Strength | 0.666 |
| Speed | 0.779 |
| Resilience | 0.789 |
| Balance | 0.747 |
| Endurance | 0.667 |
| Physical development level | 0.909 |
| Extraction method: principal component analysis | |

Source: Study results obtained by the authors.

From the table above, it can be seen that all the variables can be included in the further analysis as the coefficients are greater than 0.5 according to the criteria for showing the results of the factor analysis of the variables.

Table 7. Summary Item Statistics

| | Mean | Minimum | Maximum | Range | Maximum / Minimum | Variance | N of items |
|-------------------------|-------|---------|---------|-------|-------------------|----------|------------|
| Item means | 3.189 | 2.227 | 4.588 | 2.361 | 2.060 | .226 | 53 |
| Item variances | 1.401 | .682 | 1.890 | 1.208 | 2.771 | .068 | 53 |
| Inter-item covariances | .649 | .053 | 1.370 | 1.317 | 26.037 | .057 | 53 |
| Inter-item correlations | .460 | .049 | .862 | .813 | 17.604 | .020 | 53 |

Source: Study results obtained by the authors.

According to Joseph F. Hair and his co-authors the inter-item correlation coefficient of a questionnaire should be greater than 0.3, and the above result of 0.460 proves that the questionnaire is equally reliable (Hair et al., 1998: 431–453).



Therefore, it was found out that the test results could be used and they were suitable for results can be used and all research questions were found to be reliable.

Error criteria with normal distribution

In the normal distribution test, the mean values of the explanatory factors in the data are distributed according to the Gaussian normal distribution model. Normal distribution criteria are tested using a histogram and a P-P plot as shown in the figures below.

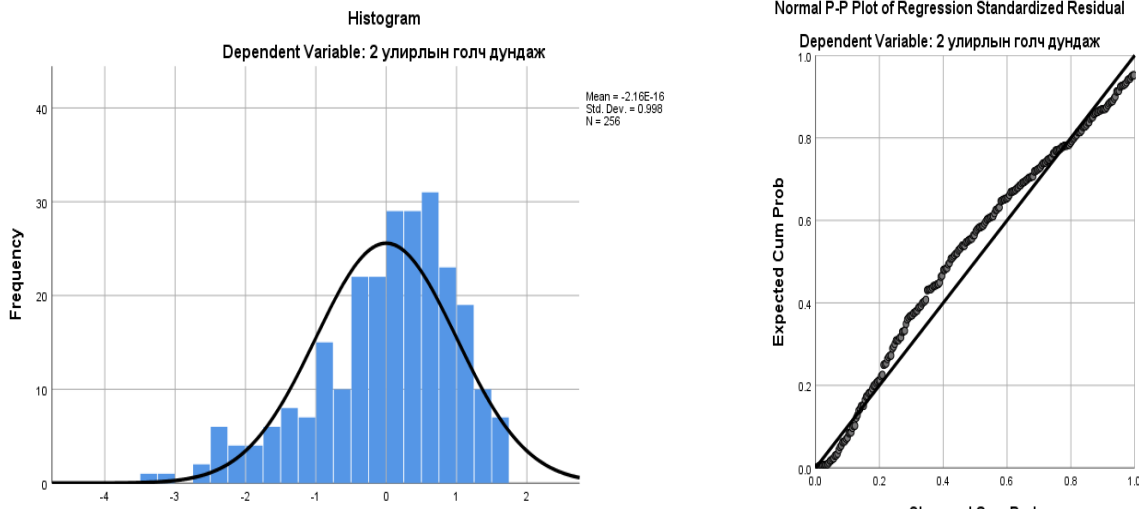


Fig. 7. Factor Histogram. Fig. 8. Factor P-P Plot
Source: Study results obtained by the authors.

Criteria for homoskedastic conditions

Too much or too little of the residual value indicates a design error. As can be seen from the figure below, the residual is generally unevenly distributed, and therefore the homoskedastic condition is assumed to be met.

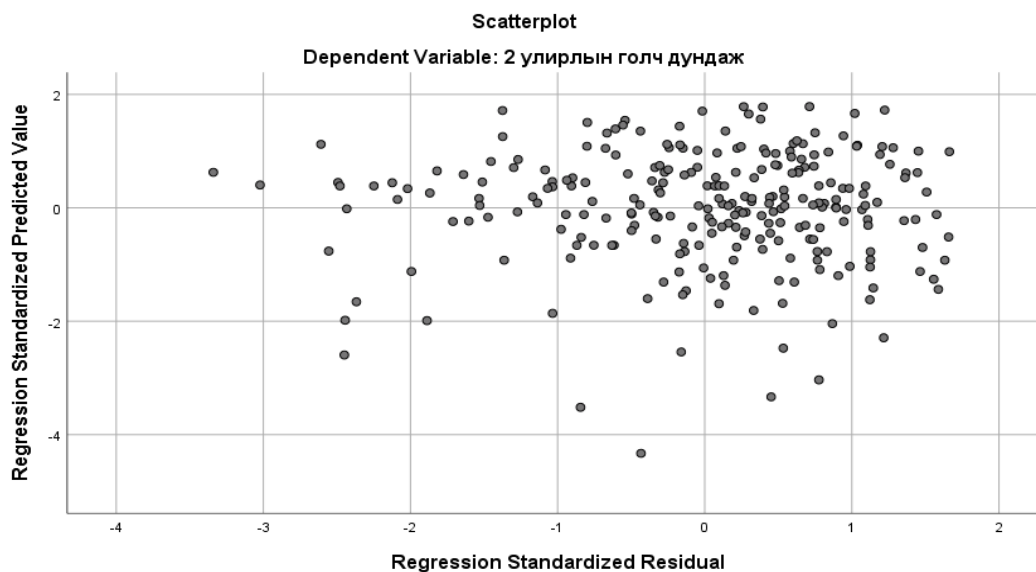


Fig. 8. Mapping of Regression Standardized Residual Distribution
Source: Study results obtained by the authors.



The ANOVA test was used to examine whether there were differences in significance levels of statistics between groups. The ANOVA test was performed at a confidence level of 5 percent. As a result, the capabilities of speed, flexibility, and balance were not different for the male and female samples, while the capabilities of strength and endurance were different. In terms of the overall assessment of physical development, we had different assessments of the male and female samples. The strength qualities of the male students are much higher, so they are relatively more resilient. However, speed, flexibility, and balance were found to be independent of gender.

Table 8. Comparison of Physical Development by Gender
Analysis of Variance

| | | Sum of squares | DF | Mean square | F | Sig. |
|----------------------------|----------------|----------------|-----|-------------|---------|-------|
| Strength | Between groups | 3236.221 | 1 | 3236.221 | 136.551 | 0.000 |
| | Within groups | 6019.720 | 254 | 23.700 | | |
| | Total | 9255.942 | 255 | | | |
| Speed | Between groups | 551.541 | 1 | 551.541 | 3.830 | 0.051 |
| | Within groups | 36573.768 | 254 | 143.991 | | |
| | Total | 37125.309 | 255 | | | |
| Resilience | Between groups | 62.302 | 1 | 62.302 | 0.131 | 0.718 |
| | Within groups | 120992.307 | 254 | 476.348 | | |
| | Total | 121054.609 | 255 | | | |
| Balance | Between groups | 261.807 | 1 | 261.807 | 0.605 | 0.438 |
| | Within groups | 109999.631 | 254 | 433.069 | | |
| | Total | 110261.437 | 255 | | | |
| Endurance | Between groups | 1175.574 | 1 | 1175.574 | 9.079 | 0.003 |
| | Within groups | 32889.766 | 254 | 129.487 | | |
| | Total | 34065.340 | 255 | | | |
| Physical development level | Between groups | 8205.775 | 1 | 8205.775 | 6.621 | 0.011 |
| | Within groups | 314800.080 | 254 | 1239.370 | | |
| | Total | 323005.856 | 255 | | | |

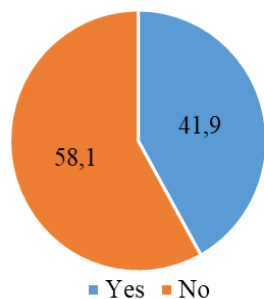
Source: Study results obtained by the authors.

As of 2020, 119,200 students were studying in undergraduate programs in Mongolia. In a survey conducted among 385 students in early 2021, 58.1 percent of the respondents said they had not been engaged in any extracurricular active exercises and sports activities, while 41.9 percent said they had been doing sports regularly. 20.3 percent of these respondents trained systematically to succeed in a sport, while the remaining 21.6 percent trained to improve their health and fitness.

The scientist Ganjuur Tserendorj noted that “Training systematically in various physical exercises increases the structure and functions of the human body to the appropriate level by the age of 25, and makes the role and functions of the body perfect” (Tserendorj, 1990: 62–63). B. K. Zamarenov, a researcher in the field



Do you do active exercises and play sports regularly?



Do you work hard to succeed in sports?

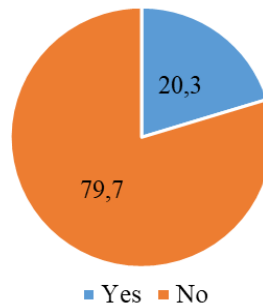


Fig. 9, 10. Status of Active Participation of Students in Work-out and Sports
Source: Results of the survey on attitudes to sports

of the theory and methodology of sports training, found that “Young people aged 17–25 meet their physical needs by exercising 5–8 hours a week” (Zamarenov, 1972)¹.

Conclusion

The American scientists Pamela V. Trembarche, Ellyn M. Robinson and Louise B. Graham have proven that students’ physical development is very important in their daily life (Tremarche, Robinson, Graham, 2007). Mikhail Ya. Vilenskii², Vladimir L. Aleshkevich, Sergei S. Ogorodnikov, Elena A. Azarova³, Onalbay A. Ayashev⁴, Lyudmila I. Lubysheva⁵, and Galsan-Yondon Sukhbat (Sukhbat, 2002) have observed the important effect of physical activity and sports activities on people’s physical development in their student years. In the article, it is proved that the level of physical development increases if a person can always be active while growing up.

Students and young people are the leaders of Mongolia’s economy in terms of human development. The researchers are confident that sports can be an avenue for the inclusive development of all people with an active lifestyle.

We observed an interesting fact that in the sports attitude questionnaire there were 58.1 percent of students who did not participate in physical education and sports, and 58.0 percent of the participants in the physical development test had an insufficient level of physique. The fact that 58 percent of the students in Mongolian higher education institutions have a low level of physical development and one of every six students has a weight problem is a sign of concern. Student sports and training in Mongolia have been offered according to the approach to skills development and physical education. One of the reasons why this approach does not provide students with opportunities to get physically prepared is that it is ineffective and thus not many of them engage in active physical activities and sports on their own.

¹ Cited in: Gantulga R. Oyuutny khödölgöönii dutagdlaas uridchilan sergiilekhed biyeiin tamiryn dasgalyn nölöög sudlakh ni [Studying the effect of physical exercise on preventing student physical inactivity]: Doctoral dissertation. Ulaanbaatar, National University of Mongolia Publishing House, 2014. P. 31. (In Mongolian).

² Vilenskii M. Ya. Physical education in scientific organization of learning process in higher education: A study guide. Moscow, Moscow State Pedagogical University, 1982. 156 p. (In Russ.); Vilenskii M. Ya. Formation of physical culture of the teacher’s personality in the process of their professional training: Diss. for the degree of Doctor of Pedagogy in the form of a research report. Moscow, 1990. 84 p. (In Russ.).

³ Aleshkevich V. L., Ogorodnikov S. S. and Azarova E. A. Ways of improving the work on physical education at a HEI. Maxim Tank Belarusian State Pedagogical University. 2019, December 30. [online] Available at: <https://bspu.by/blog/ogorodnikov/article/publish/puti-sovershenstvovaniya-raboty-po-fizicheskomu-vospitaniiyu-v-vuze> (accessed 31.07.2024). (In Russ.).

⁴ Ayashev O. A. Formation of professional readiness of the future teacher for educational work by means of physical culture: Diss. for the degree of Doctor of Pedagogy. Moscow, 1991. 405 p. (In Russ.).

⁵ Lubysheva L. I. Theoretical, methodological and organizational foundations of the development of physical culture of students: Diss. for the degree of Doctor of Pedagogy. Moscow, 1992. 481 p. (In Russ.).



In the field of higher education, there is a need to start a reform of physical education in line with the development of the electronic age and increasing the effectiveness of sports activities and levels of fitness among students.

To this end, we propose the following recommendations:

1. Higher education institutions should improve their sports management and curriculum design to develop healthy lifestyles and sports talents;

2. Physical education programs need to be reformed in line with the development of trends “Sports teaching for happiness” and “Lifelong sports education”. It is also necessary to make them a compulsory three-credit-hour course during three semesters. It is possible to organize national teams of higher education institutions as sports clubs, so their business development will begin by linking the achievements of the sports communities to the marketing of Mongolian higher education in accordance with international standards;

3. Part of the management structure for the development of student sports at higher education institutions is the optimal organization and management of physical education and extracurricular activities. Extracurricular sports for non-athletes are multifaceted and it is wise to develop them in the form of voluntary clubs in a variety of sports. There is a need to create an environment and conditions for the development of sports clubs and shape a system of incentives, management, organization, and control that supports their activities;

4. Providing support for sports talents among students through scholarships from the government, higher education institutions and sponsors;

5. The Ministry of Education and Science of Mongolia and the National Committee of Physical Education and Sports should set a new policy and institutions on all levels should comply with the regulations of those authorities;

6. Developing a more up-to-date government policy on physical education for students and youth. It should be based on technological advances by looking comprehensively at its implementation system. Sports infrastructure of higher education institutions is one of the foundations for improving the physical development of students and reducing the negative factors of the electronic age.

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