



**PROJECT ATLETAS DE OURO®: AN INNOVATION TO SPORTING TALENT
DETECTION**

**PROJETO ATLETAS DE OURO®: UMA INOVAÇÃO NA DETECÇÃO DE
TALENTOS ESPORTIVOS**

**PROJETO ATLETAS DE OURO®: UNA INNOVACIÓN EN LA DETECCIÓN DEL
TALENTO DEPORTIVO**

Francisco Zacaron Werneck¹
Emerson Filipino Coelho²
Luciano Miranda³

Abstract: Every young person has a potential that must be evaluated to be properly developed. The Projeto Atletas de Ouro® aims to estimate the sporting potential of schoolchildren and young athletes. The aim of this study was to present the main results obtained at the Military College of Juiz de Fora (CMJF). Between 2015 and 2019, 2917 individual diagnoses were performed in students aged 10 to 19 years. 14% of the students had high sporting potential and were three times more likely to be medalists in competition. One of the students became a professional soccer athlete. The GoldFit – Atletas de Ouro System proved to be valid and reliable for identifying talents in the school. The actions of orientation and talent development were positive in the school Physical Education and in the performance of the CMJF in school competitions. The goal is to expand the Projeto Atletas de Ouro® to other schools and programs as a model for identifying and developing sporting talents.

Keywords: Schoolchildren; Sporting talent; Talent identification; Expert systems.

Resumo: Todo jovem possui um potencial que deve ser avaliado para ser desenvolvido adequadamente. O Projeto Atletas de Ouro® tem por finalidade estimar o potencial esportivo de escolares e jovens atletas. O objetivo deste estudo foi apresentar os principais resultados obtidos no Colégio Militar de Juiz de Fora (CMJF). Entre 2015 e 2019, foram realizados 2917 diagnósticos individualizados em alunos de 10 a 19 anos. 14% dos escolares apresentaram elevado potencial esportivo e tinham três vezes mais chances de

¹ Professor at the School of Physical Education at the Federal University of Ouro Preto (EEF-UFOP), PhD in Sciences, coordinator of the Laboratory of Exercise and Sport Studies and Research (LABESPEE), coordinator of the Atletas de Ouro® Project and leader of the Study Group of the Young Athlete. (f.zacaron@ufop.edu.br).

² Professor at the School of Physical Education at the Federal University of Ouro Preto (EEF-UFOP), post-doctoral fellow in Science, member of the Laboratory of Exercise and Sport Studies and Research (LABESPEE) and researcher at the Atletas de Ouro® Project. (emersoncoelho@hotmail.com).

³ Professor at Colégio Militar de Juiz de Fora (CMJF), Master in Physical Education and researcher at the Atletas de Ouro® Project. (lujumm@yahoo.com.br).

serem medalhistas em competição. Um aluno tornou-se atleta profissional de futebol. O GoldFit – Sistema Atletas de Ouro mostrou-se válido e fidedigno para identificação de talentos na escola. As ações de orientação e desenvolvimento dos talentos foram positivas na Educação Física escolar e no desempenho do CMJF em competições escolares. A meta é ampliar o Projeto Atletas de Ouro® para outras escolas e programas como modelo de identificação e desenvolvimento de talentos esportivos.

Palavra-chave: Escolares; Talento esportivo; Identificação de talentos; Sistemas especialistas.

Resumen: Todo joven tiene un potencial que debe evaluarse para desarrollarse adecuadamente. El Proyecto Atletas de Ouro® tiene como objetivo estimar el potencial deportivo de los escolares y jóvenes deportistas. El objetivo de este estudio fue presentar los principales resultados obtenidos en el Colegio Militar de Juiz de Fora (CMJF). Entre 2015 y 2019 se realizaron 2917 diagnósticos individuales en estudiantes de 10 a 19 años. El 14% de los estudiantes tenían un alto potencial deportivo y tenían tres veces más probabilidades de ser medallistas en la competición. Un estudiante se convirtió en atleta de fútbol profesional. El GoldFit – Sistema Atletas de Ouro demostró ser válido y confiable para identificar talentos en la escuela. Las acciones de orientación y desarrollo de talentos fueron positivas en Educación Física escolar y en el desempeño del CMJF en competiciones escolares. El objetivo es expandir el Proyecto Atletas de Ouro® a otras escuelas y programas como un modelo para la identificación y desarrollo del talento deportivo.

Palabras clave: Niños de escuela; Talento deportivo; Identificación de talentos; Sistemas expertos.

1 Introduction

Talent identification and development in sport is one of the pillars of international sporting success (DE BOSSCHER et al., 2009; VAEYENS et al., 2008). Every child and adolescent have a sporting potential that needs to be assessed in order to be properly developed. The existing consensus is that this process must start at school (BAILEY; MORLEY, 2006; FISHER, 2008; PRIETO-AYUSO et al., 2020). Physical Education is responsible for promoting the practice of sports both from the perspective of a physically active lifestyle and social inclusion and for the development of talents. Besides offering supervised, diversified and quality sports practice to all students, the teacher must identify those with high abilities and offer them the conditions for development (CÔTÉ; LIDOR; HACKFORT, 2009; GAYA; TORRES; CARDOSO, 2014; PLATVOET et al., 2015).

The Olympic potentials have systematic models in order for talented youngsters to become elite athletes (DIGEL, 2002; PLATONOV, 2018). Scientific evidence shows that talent is identifiable and that performance can be predicted, although it is difficult after growth, maturation, and training to know who will be the successful ones in the future (BAKER et al., 2017). The fact is that the talented young person is an essential element to sport and that talent

identification models are beneficial, as long as they are not understood solely as performance prediction. The assessment of sporting potential is the first step in the process of discovering new talents and it should be understood as a process that collaborates for many rather than for a few, that is, it should be carried out using an inclusive approach (COBLEY et al., 2014). In practice, sports professionals need tools capable of quantifying in a valid and reliable way not only the current performance, but especially the development potential of their student-athletes.

Sporting potential is synonymous with aptitude for sport, and it has a multidimensional, measurable, and dynamic structure that implies the notion of potentiality for future performance - Figure 1. The sporting potential results from the interaction of multiple indicators related to the individual, the task and the environment, such as anthropometric characteristics, physical abilities, psychological and cognitive skills, sport skills, family support, qualified coaches, quantity and quality of training and the type of sport, which interact among themselves, change over time and determine the development of sport performance in the long term (WERNECK; COELHO, 2020).

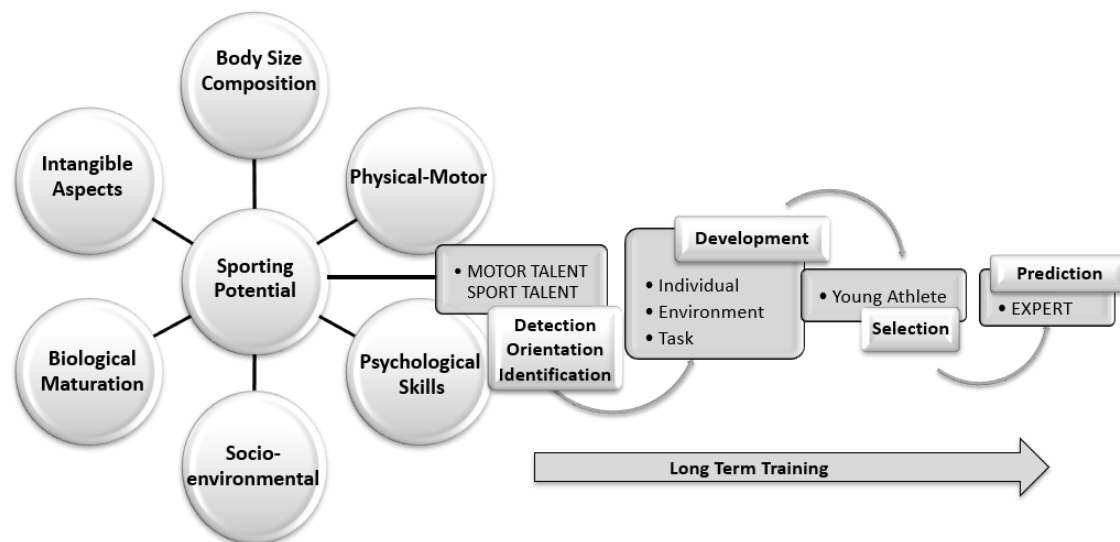


Figure 1 - Factors of sporting potential and the process of transformation from talent to expert. **Source:** Adapted from Werneck and Coelho (2020).

Youth who present the greatest number of requirements needed to perform well in a sport and who respond favorably to training and competition are likely to have a greater chance of future success (ISSURIN, 2017; PAPIĆ et al., 2009; PION, 2015). Those who demonstrate superior or atypical motor performance, situated beyond the 98th percentile, within the same age group and gender, in one or more physical abilities, such as strength, speed, agility, and endurance are called motor talents (GAYA; TORRES; CARDOSO, 2014). Motor talents are easily identified, from the application of test batteries in schools (MIRANDA et al., 2019). The high motor performance and with stability is one of the characteristics of sporting talent, but not a sufficient condition.

Identifying sporting talent is a complex task, since there is not even consensus on its definition. In this study, the sporting talent is defined as the young athlete with high potential to become an elite athlete, who possesses a set of characteristics that allows him to obtain superior performance compared to his peers of the same age and who develops these characteristics even more when submitted to a favorable environment (WERNECK; COELHO, 2020). But what is the sporting potential of a young person and what would be the most suitable modality for him to be successful? In order to answer these questions, researchers have used Data Science, which combines Sports Science, Statistics, Computer Science and Information Technology within an innovation context (OFOGHI et al., 2013).

In Brazil, the Z-Celafiscs Strategy, developed by Victor Matsudo in the 1980s, was the first scientific method used to identify talents in sport (MATSUDO, 1996). In the 2000s, based on Australia's Talent Search Program, Adroaldo Gaya created the Esporte Brasil Project, having as one of its purposes the detection of motor talents in Brazilian schools (GAYA, 2002). Other countries have developed intelligent systems for talent identification at school, such as the Sport Interactive in the United Kingdom (ABBOTT; COLLINS, 2002), the Sport Talent in Croatia (PAPIĆ et al., 2009), and the Flemish Sports Compass in Belgium (PION, 2015). These methodologies have made an important contribution to the theme of sporting talent, but they operationalize the identification of talent based only on current performance, particularly on the performance obtained in batteries of physical-motor tests, not taking into account the biological maturation and the subjective perception of coaches.

In order to properly assess sporting potential and select athletes for higher levels of performance, scientific knowledge (test batteries) and the knowledge of the coaches (coach's eye) must be combined, through computational statistical analysis procedures, in an interdisciplinary and longitudinal perspective (FRANSEN; GÜLLICH, 2019; REES et al., 2016; SIEGHARTSLEITNER et al., 2019). According to Johnston and Baker (2020), a simple linear equation that combines different variables and their respective weights can be effective for modeling the sporting potential of a young athlete. The sporting potential modeling comprises a set of procedures that aims to obtain a valid and reliable estimate of the sporting potential in young athletes for a determined modality, from the analytical and heuristic processing of multiple indicators of sporting talent, and it is operationally represented by a mathematical equation (WERNECK et al., 2020).

In face of the exposed and considering that the Brazilian sport still lacks a systematization in the detection of sports talent, the Projeto Atletas de Ouro® was created at the Federal University of Ouro Preto (UFOP) with the purpose of developing an intelligent system of multidimensional and longitudinal evaluation of the sporting potential in children and adolescents. It is a multidisciplinary research of technology development and innovation, according to Federal Law 13243 of 2016. The Projeto Atletas de Ouro® is an innovative scientific

model for identifying sporting talents that identifies young people with the greatest potential for excellence in sports and helps teacher-coaches in the development process of their student-athletes.

At the school, we apply a general battery of test that measures several indicators of sporting potential, including biological maturation and the subjective perception of the teacher-coaches. The data collected are analyzed through statistical modeling, generating an individualized report with a diagnosis of the potential for the sport. The information obtained generates feedback to young people, parents, and teacher-coaches, who make decisions in the training and development process of the student-athletes. Throughout the year, they develop and participate in sports competitions, and the process is repeated annually. The data collected is entered and analyzed by the GoldFit – Atletas de Ouro System (WERNECK et al., 2020) - Figure 2.

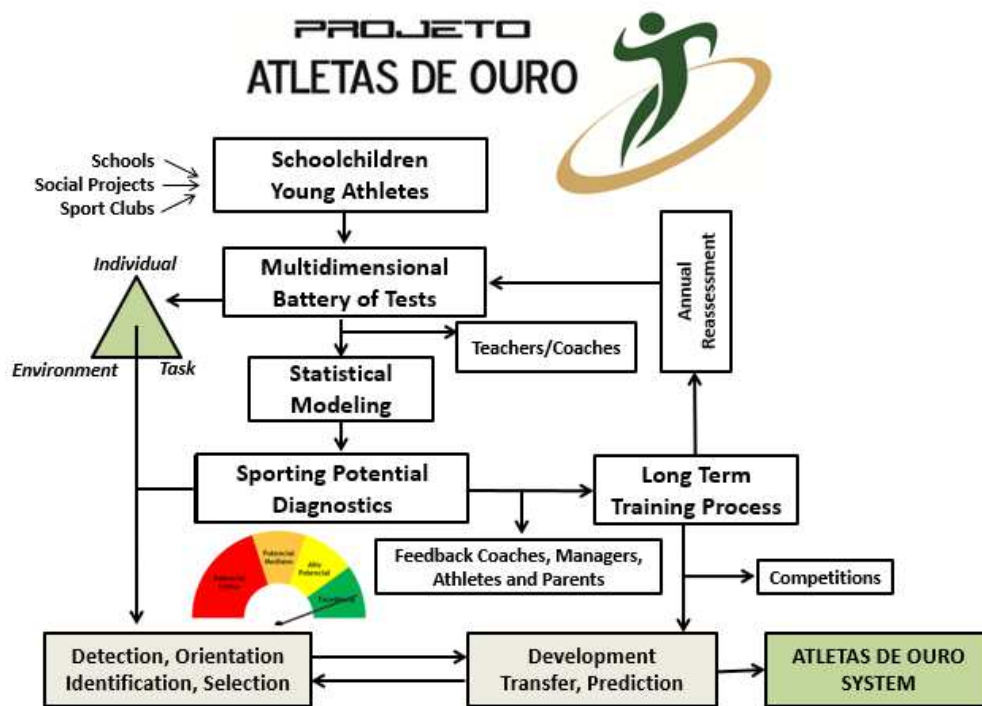


Figure 2 - Schematic representation of the Golden Athletes Model of identification and development of sports talents.

Source: Adapted from Werneck and Coelho (2020).

The pilot study for the implementation of the Projeto Atletas de Ouro® was conducted at the Military School of Juiz de Fora (CMJF) in 2015. After technical analysis by the Army Sports Commission (CDE) and the Army Research and Physical Training Institute (IPCFEx), the evaluation protocol was considered valid, and was then recommended by the Army Physical Training Center (CCFEx) for application in the Brazilian Military College System (SCMB). In 2018, it culminated in the signing of a Research Cooperation Agreement, signed between the Brazilian Army and UFOP, for a period of five years. Therefore, the aim of this study was to

present the main results obtained by the Projeto Atletas de Ouro® performed at the Military College of Juiz de Fora - CMJF.

2 Methods

2.1 Sample

The target population of this study was the students of the Brazilian Military College System (SCMB). For convenience, this research was conducted in the Military School of Juiz de Fora (CMJF), which serves approximately 900 students per year in Basic Education - Elementary School (6th to 9th grade) and High School. Most of the students are children of military personnel from the Armed Forces and the remaining students enter through public competitive examinations. The sample was composed of 1300 schoolchildren, aged between 10 and 19 years, evaluated in the period from August 2015 to March 2019, totaling 2917 test records, which were considered as a unit of analysis. The schoolchildren were divided into: young athletes, those who practice sport extracurricularly, at least three times a week, and participate in regular competitions; and non-athletes, those who participate only in school Physical Education classes. The inclusion criteria were: to be enrolled and regularly attending classes at CMJF and to be present on the day of data collection. We excluded the students who did not hand in the TCLE signed by their legal guardians or who refused to participate, besides those who had any physical or clinical condition that interfered with the tests. The consent of legal guardians and the assent of the students were obtained prior to participation in the study. Ten teachers-coaches from the Physical Education Section of CMJF (mean age 41.0 ± 8.0 years and mean time of experience 12.5 ± 9.8 years) specialized in different modalities (soccer, volleyball, running orienteering, swimming, fencing, military triathlon, basketball, volleyball, handball, and track and field) and with undergraduate academic background ($n=2$), specialization ($n=3$) and master's degree ($n=5$), most of them being former athletes, also participated. The research was approved by the Research Ethics Committee of the Federal University of Ouro Preto (UFOP) with registration CAAE: 32959814.4.1001.5150 and approval nº 817.671.

2.2 The Battery of Tests

At the beginning of each school year, the students underwent a multidimensional battery of tests to measure anthropometric, physical-motor, psychological, environmental, and maturational indicators. In addition, the teachers evaluated their students regarding the intangible aspects of sporting potential and the expectation of future success - Figure 3. The indicators of sporting potential evaluated as well as the procedures for the tests and measurements are described in the book *Manual do Jovem Atleta*, organized by Werneck, Coelho, and Ferreira (2020). The test manual can be obtained at <https://labespee.ufop.br/atletas-de-ouro>. The battery of tests was

applied during the Physical Education classes, being divided into 3 days: 1st) Questionnaire application and evaluation by the teacher-coaches; 2nd) Anthropometric and Physical-motor tests; 3rd) Aerobic test. The application of the Projeto Atletas de Ouro® in the school can be seen at: <https://www.youtube.com/watch?v=xQUKP8Zawgk&t=43s>.



Figure 3 - Application of the battery of tests of the Projeto Atletas de Ouro® at the Military School of Juiz de Fora.

Source: Werneck et al. (2020).

It is known that selection in youth sports has a maturational gradient that privileges early maturation. Biologically advanced youngsters have greater body size and higher physical-motor performance and, consequently, a greater chance of to be identified as talents and selected by coaches (MIRANDA et al., 2019). This condition opens the doors of the centers of sports excellence to them, creating better training conditions for their development. On the other hand, the temporary advantages provided by early maturation may not result in future success, causing this selection bias to imply the loss of talent (JOHNSTON; BAKER, 2020).

In the Projeto Atletas de Ouro®, we assess biological maturation through BioFit® - software that estimates indicators of status and timing of somatic maturation, classifies the maturational stage, predicts the age of peak height velocity and adult height of children and adolescents. BioFit® is freely available at: <https://labespee.ufop.br/atletas-de-ouro>.

2.3 Sporting Potential Modeling

Statistical modeling is the operational way in which scientific models of talent identification quantify the sporting potential of young people. After the battery of tests, the data were tabulated in an electronic spreadsheet and analyzed. Initially, a univariate descriptive

analysis was performed to calculate the measures of central tendency, dispersion, position, and distribution of the data. Quantitative variables were normalized according to the procedures adopted by the Z-Strategy Celafiscs (MATSUDO, 1996). The Z score of tests in which performance was against time was inverted (10m speed run, for example), so that higher values always represented higher performance. In order to calculate the Z score in each test, we used as reference value, the mean and standard deviation of the sample itself, by sex and age group. Based on the standardized normal distribution, the Z score of each indicator evaluated was converted to the corresponding percentile value, so that the student was classified in relation to the reference population, based on a scale of 0 to 100%.

In the next step, a top-down performance prediction approach was adopted (RÉGNIER; SALMELA; RUSSELL, 1993) in order to investigate differences and similarities among athletes, relationships among variables, and possible determinants of performance and/or sporting potential. For this purpose, bivariate statistical analyses (t-test, ANOVA, correlation, Chi-square test) and multivariate analyses (multiple linear regression, logistic regression, cluster analysis, and exploratory factor analysis) were performed. In this case, the evaluation made by the coach, the competitive level of the athletes, and the achievement of victories in competition were considered the dependent variables (performance criteria). Next, a "bottom-up" approach was adopted to acquire knowledge of the factors necessary for the development of young elite athletes. For this, we used two sources of information: the knowledge of coaches (experts) and the available scientific literature, including retrospective longitudinal studies conducted with elite athletes and Olympic athletes, in order to obtain evidence and search for patterns regarding the characteristics that explain sport success.

Finally, based on the analytical and heuristic procedures used in the previous steps, we created a hybrid index to estimate the sporting potential of students, called the Gold Score. The Gold Score results from a linear mathematical equation, composed of 6 factors and 28 indicators of sporting potential, including body size, speed, flexibility, vertical jump, upper limb strength, aerobic endurance, motivation, psychological skills, family support, biological maturation, experience and sporting preference, intangible aspects, and coach evaluation. The relative importance of the factors and indicators of sporting potential was defined from exploratory data analysis, literature review, and expert knowledge. The Gold Score, therefore, is a multidimensional hybrid model that combines the performance observed in tests and the developmental potential assessed by teacher-coaches, generating a quantitative estimate of the sporting potential of the students. For the classification of sport potential, the following cut-off points were adopted for the Gold Score: <40% Developing Sporting Potential; 40-60% Average Sporting Potential; 60-80% High Sporting Potential; >80% Excellence Sportint Potential.

2.4 The Atletas de Ouro System

In order to give support to the collection and storage of data from the Projeto Atletas de

Ouro®, we created an intelligent system called Goldfit – Atletas de Ouro System, in its preliminary version using an electronic spreadsheet. The Web version is under development. Intelligent systems are computerized decision support systems. GoldFit is an innovative intelligent system that quantifies the sporting potential of students, through a multidimensional battery of tests, subjective assessment by coaches and statistical modeling - Figure 4. The system issues individualized and managerial reports that support the decisions of the teachers-coaches to optimize the process of sports training, reducing errors and the loss of potential talent. The system is by excellence a tool for potential development and not only for talent identification.

The practical applications of the Atletas de Ouro System are: identifies students with high sporting potential; identifies the strengths and weaknesses to be developed; classifies the physical fitness related to health and motor performance; guides to sports modalities more suitable to the profile of the student; can be used in sports selection and prediction of future performance; offers individualized feedback and motivates students; assists in the organization and prescription of training and in injury prevention; monitors the evolution of sporting potential and the effects of training; enables the management of the sporting potential of students, optimizing the process of sports training, avoiding waste of time and resources; and improves the quality of school Physical Education by contributing to the base sport.

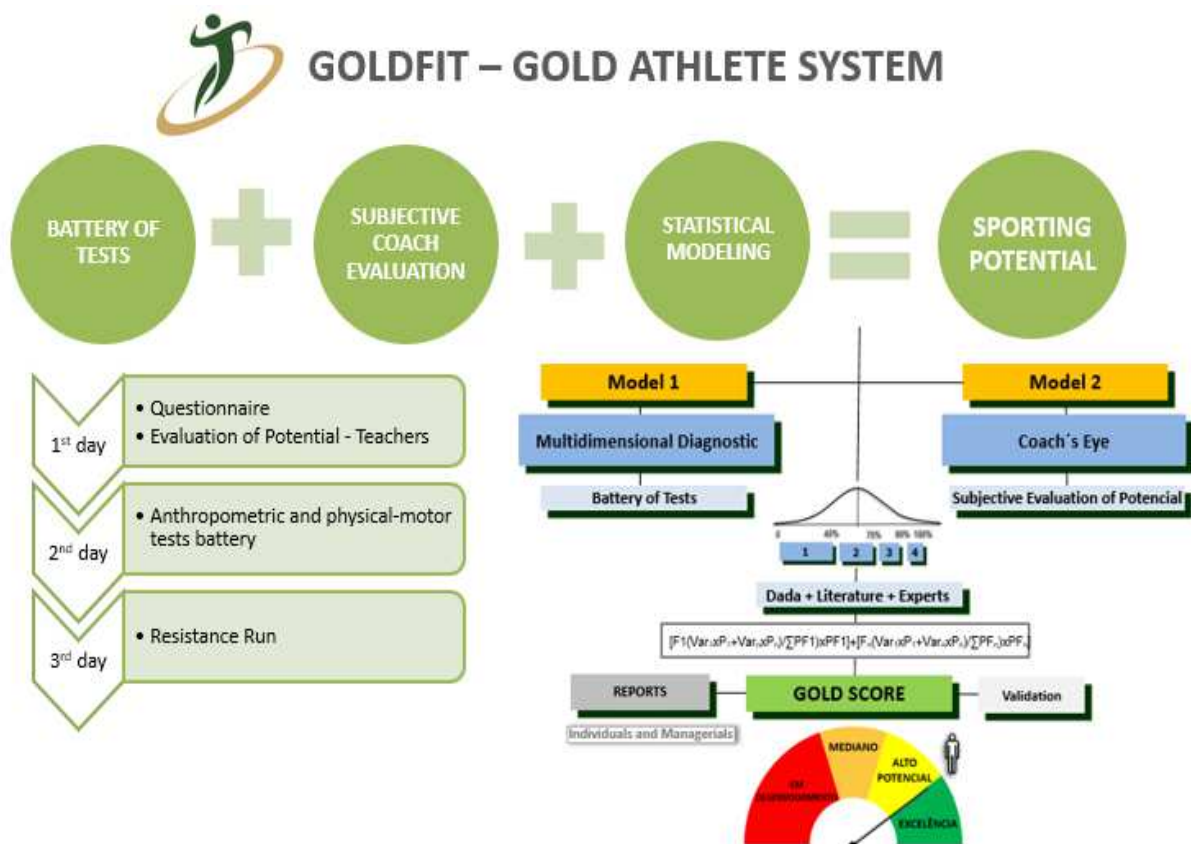


Figure 4 - Schematic representation of GoldFit - Golden Athletes System to assess the sporting potential of schoolchildren and young athletes.

Source: The authors.

3 Results

3.1 Diagnosis of Sporting Potential

In the period from 2015 to 2019, 2917 assessments of the sporting potential of CMJF students were performed. On average, 14% of the students have high sporting potential (Gold Score >60%) - Figure 5. Each student received an individualized report and were oriented by their teacher-coaches regarding the results obtained - Figure 6.

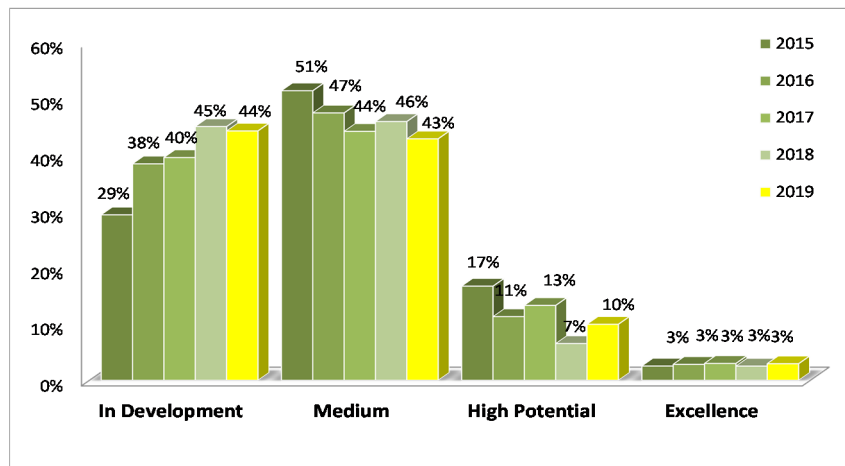


Figure 5 - Classification of the sporting potential of student-athletes from the Military School of Juiz de Fora (CMJF), according to the methodology of the Projeto Atletas de Ouro®.

Source: The authors.

3.2 Motor Talents

Considering 2452 evaluations conducted from 2016 to 2019, it was found that 11.3% of students aged 11 to 17 years were classified as motor talents, that is, they presented results above the 98th percentile in at least one of the indicators of body size (stature and wingspan) or physical abilities (flexibility, strength, speed or endurance), according to criteria established by Miranda et al. (2019). Only 1.5% of the students were motor talents in two indicators at the same time and 0.4% considering three indicators.

3.3 Sports Orientation

In 2015, teacher-coaches were asked to indicate the modality in which the student-athlete would be most likely to succeed in the future. 98 student-athletes who took the battery of tests in 2015 were re-evaluated in 2019. They responded as to the type of preferred modality and the one(s) they practiced (individual and team modalities). An absolute agreement of 75.5% was observed between the modality suggested by the teacher-coaches and the modality practiced by the student-athlete 4 years later ($K = 0.49$; $p < 0.05$).

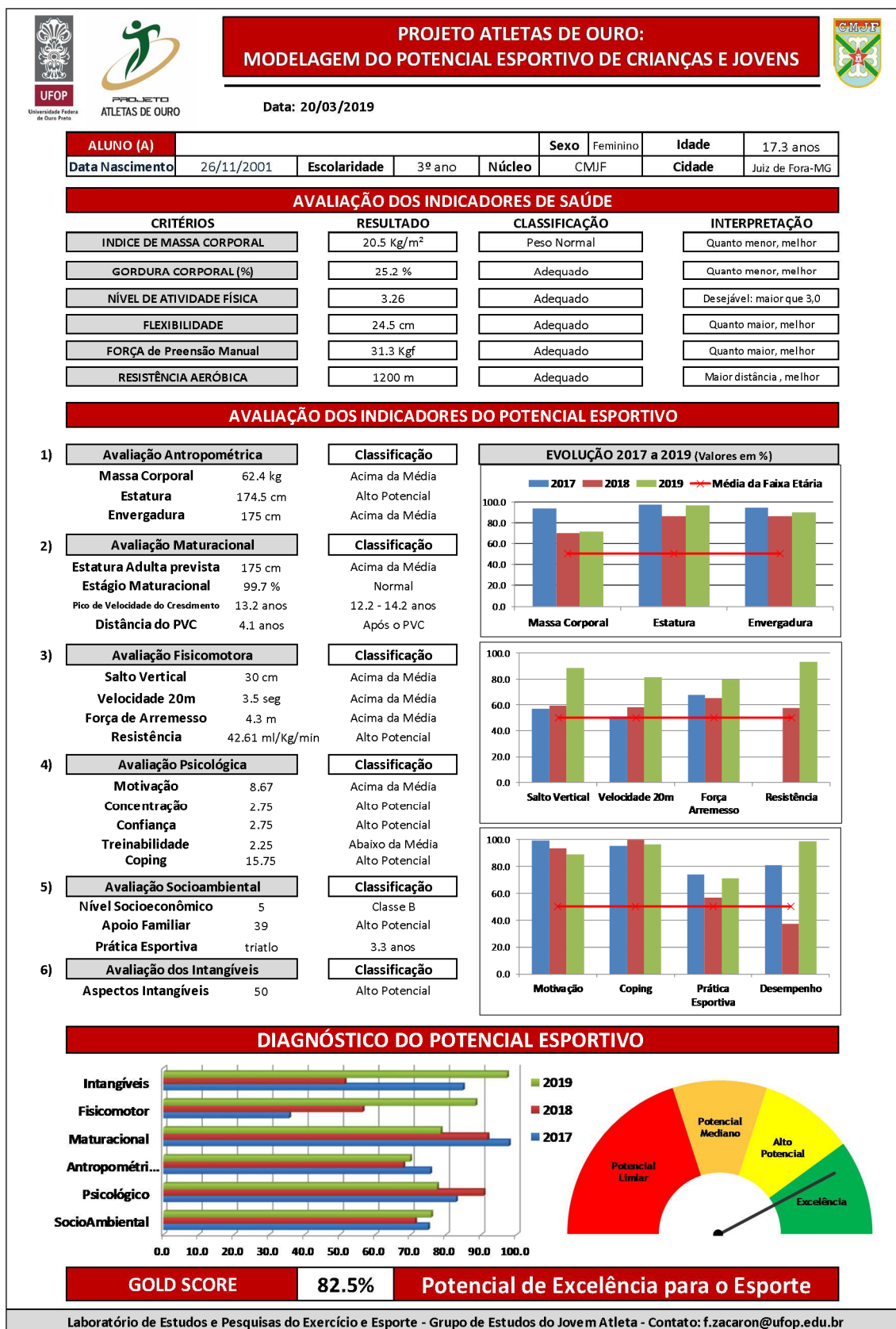


Figure 6 - Example of an individualized modeling report of the student sporting potential after performing the Atletas de Ouro battery of test – Portuguese school version.
 Source: Authors.

Regarding systematized sports practice, it was observed that of the 32 students who trained in 2015, 24 (75%) continued training in 2019; and from the 66 students who did not train in 2015, 32 (48.5%) trained in 2019 ($X^2 = 6.187$; $p = 0.01$; $k = 0.22$). The student-athlete who trained in 2015 was 3 times more likely to continue training 4 years later ($OR = 3.2$; $95\% CI = 1.2 - 8.1$). The web version being developed of GoldFit will estimate student athletic potential for different sport modalities, as presented in Figure 7.

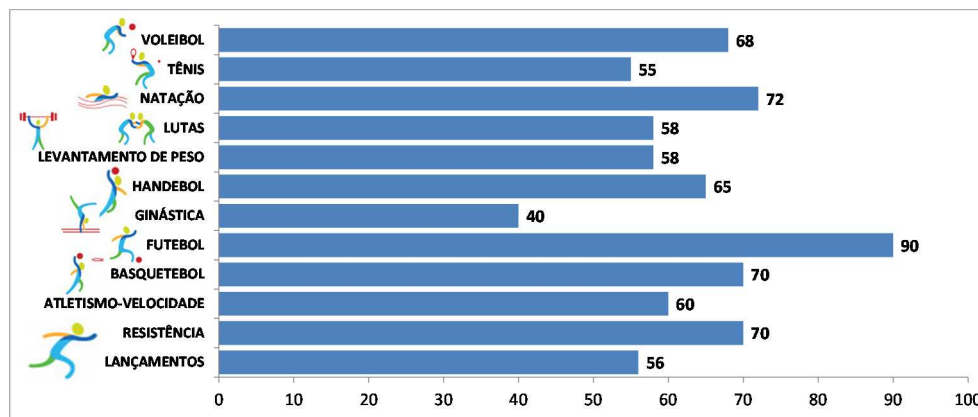


Figure 7 - Example of potential evaluation for talent orientation of the web version of GoldFit – Atletas de Ouro System.

Source: Adapted from Werneck et al (2020).

3.4 Validity and Reliability of GoldFit - Golden Athletes System

For the analysis of the psychometric properties of the model, 770 schoolchildren (448 boys) aged 13 to 17 years old from the Military College of Juiz de Fora, evaluated between 2016 and 2017, participated. The model was composed of 6 factors (Anthropometric, Physical-motor, Psychological, Socioenvironmental, Maturational, and Intangibles) and 28 indicators. The weights of the factors and indicators of sport potential were defined based on statistical analysis of the data, literature review, and the opinion of teachers and researchers from different sport modalities. Generalized linear mixed models (GLMM) and generalized estimating equations (GEE) were used. 15.6% of the students had high potential (Gold Score $\geq 60\%$). Diagnostic stability at 12 months was high ($ICC=0.81$). Schoolchildren selected for the Jogos da Amizade had higher Gold Score (boys: $56 \pm 12\%$ vs. $44 \pm 15\%$; $p < 0.001$; girls: $51 \pm 13\%$ vs. $41 \pm 14\%$; $p < 0.001$) - construct validity. Schoolchildren who were medalists in the Jogos da Amizade had higher Gold Score ($67 \pm 12\%$ vs. $57 \pm 12\%$; $p = 0.002$) - criterion validity.

In the analysis of the predictive validity of the Gold Score, it was found that in the 429 student-athletes who were selected to participate in the Jogos da Amizade - a national-level school competition held annually among the 14 colleges of the Brazilian Military College System - student-athletes classified as high potential had an almost 3-fold greater chance of being medalists than those classified as low potential ($OR = 2.8$; $95\% CI = 1.6 - 5.0$). Of the 96 high-potential

student-athletes 35% won medals compared to only 16% among the low-potential ones ($X^2=12.690$; $p<0.001$). It is noteworthy that the men's basketball team that won the Jogos da Amizade twice in 2016 and 2017 was composed of 70-80% high potential student-athletes.

3.5 Practical implications

For the adequate pedagogical planning of school Physical Education classes, it is necessary that teachers know who their students are, so that they can propose activities that are appropriate to the level of their motor competence, in order to serve them adequately according to their needs and potentialities. CMJF was a pioneer in Brazil in implementing a model for assessing the sporting potential of its students. The Golden Athletes Project enables Physical Education teachers at CMJF to objectively and individually assess the health-related physical fitness and sporting potential of students, allowing them to recognize those with high motor skills (motor talents), as recommended by Resolution No. 2 of 11/09/2001 of the National Education Council (CNE).

The test battery of the Golden Athletes Project is applied annually and provides important information about the nutritional status, health indicators, growth, biological maturation, and motor performance of the students, factors that directly or indirectly influence the organization of classes, with implications on the choice of activities to be offered, on health promotion strategies to be adopted, on the guidance of students to the sports that are more appropriate to their profile, on the selection of athletes for the teams that will represent CMJF in sports competitions, and, finally, on the sports training of the student-athletes.

The individualized evaluation report allows the teacher to see a complete x-ray of the physical-motor profile of the student, identifying his strengths and weaknesses. With this information in hand, it is possible to organize classes, guide students, and prescribe training sessions, respecting the individuality of the student and stage of development. The management reports delivered to the teachers inform and guide them on possible action and development strategies for the students. Year-by-year longitudinal monitoring allows the teacher to observe how much his or her students are progressing in relation to their health and motor skills profile, as well as the effects of the interventions made.

Physical education teachers have access to the database, where they can consult the individualized reports of the students. From the point of view of the students, this evaluation serves as a starting point for self-knowledge and motivation to practice sports and physical activities. Students like to know who is the fastest, the strongest, the tallest. The individualized report allows them to visualize their strengths and weaknesses and how they are evolving over the years, as well as discovering previously unknown potentials.

The information obtained also serves as guidance for the parents of the students, because many times they put no or too much expectation on their children, regarding the possibility of being athletes. Parents know if their child is good or not in Math, Portuguese or Science, but they

have no information about Physical Education. The diagnosis of the sporting potential allows us to classify the students based on a holistic evaluation where several indicators are weighted to obtain the final score. Thus, the Golden Athletes Project® materializes all this information, being a diagnostic tool and a support to the pedagogical decision-making of Physical Education professionals for the development of student-athletes, which has improved the quality of Physical Education at CMJF.

4 Final considerations

The longitudinal mapping of the sporting potential of students from the Military School of Juiz de Fora confirmed the high human potential that exists in schools and that the Projeto Atletas de Ouro® is a valid and reliable scientific model for detecting sporting talent in school and can be used as a public policy to detect talent for Brazilian sport. The sporting talent exists, needs to be discovered and given the necessary support to be transformed into a performance of excellence. The country that wants to create a sports culture and achieve success at the level of the great Olympic powers must adopt public policies that favor talent detection and development since the school Physical Education. The Brazilian Military School System and the Program Forces in Sports (PROFESP), for example, have the infrastructure and qualified professionals to implement a systematic process of detection and development of sporting talents. It is expected to implement the GoldFit System in the Brazilian context, attract partnerships and establish a new model of ecosystem for talent identification, in order to reduce the loss of talented young people and maximize investments in the training of new talent for the Brazilian sport.

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