¿QUÉ FACTORES CONDUCEN A UNA POLÍTICA EXITOSA DE DEPORTES DE ÉLITE?

WHAT ARE THE FACTORS LEADING TO A SUCCESSFUL NATIONAL ELITE SPORT POLICY?

Nadim Nassif
Notre Dame University – Louaize, Lebanon
Nadim Nassif, nnassif@ndu.edu.lb

RESUMEN

Numerosos investigadores que buscan identificar los factores macro que determinan el éxito de los países en los deportes de élite han propuesto contemplar la riqueza y la magnitud demográfica como catalizadores del rendimiento de los países en las competiciones internacionales. Los autores que analizan el éxito de las políticas de deportes de élite han defendido que los factores meso (financiación, gobernanza, organización de competiciones…) son los que habría que considerar principalmente. Este trabajo pretende revisar y evaluar dichos componentes y proponer las bases de un nuevo marco holístico de análisis que incluya factores macro, meso y micro.

El punto de partida de esta investigación comienza con la evaluación del rendimiento de los países basándose en el ranking propuesto por Nassif, que mide los resultados de 206 países con Comité Olímpico Nacional en todos los deportes reconocidos por la Global Assembly of International Sport Federations (GAISF). Para evaluar el impacto de la población, la riqueza y los factores meso en los resultados deportivos, hemos calculado, para los años 2014, 2015 y 2016, las correlaciones entre el ranking de Nassif y los del PIB, población e investigación científica, el último de los cuales resulta ser un vector fundamental para el éxito de las estrategias a nivel meso y micro.

PALABRAS CLAVE:
factores; éxito; élite; deporte; políticas.

ABSTRACT

Many researchers working on the identification of the macro-level factors determining countries' success in elite sport have suggested looking at wealth and demographic size as a catalyst for countries' performances in international competitions. Scholars analyzing the success of national elite sport policies have advocated that meso-level factors (funding, governance, organization of competitions, …) are mainly those that need to be taken into consideration. This work aims at reviewing, evaluating these components and proposing the bases of a new holistic framework of analysis that include the macro, meso and micro-level factors.

The starting point of this research begins with an evaluation of the performance of nations based on the ranking proposed by Nassif, which measures the performance of the 206 countries having National Olympic Committees in all the sports recognized by the Global Assembly of International Sport Federations (GAISF). For evaluating the impact of the population, the wealth and the meso-level factors in the sports results, we have calculated, for the years 2014, 2015 and 2016, the correlations between the ranking of Nassif and the GDP, population and scientific research, the last of which is a fundamental vector for the success of the strategies at meso and micro-level.
Federations (GAISF). In order to evaluate the impact of population, wealth and the meso-level factors on sports results, we calculated, for the years 2014, 2015 and 2016, the correlations between Nassif’s ranking and the rankings of the Gross Domestic Product, population and scientific research, the latter being an essential vector of success of the meso and micro level strategies.

**KEYWORDS:**
factors; success; elite; sport; policy.

**INTRODUCTION**
Scholars working on the identification of the factors behind success in international sport generally use the number of medal won in the Olympics as a starting point of their analyses. Some of these authors have suggested analyzing the country’s political (seeking international prestige)\(^{13}\), economic (the Gross Domestic Product)\(^{14}\), and demographical (population’s size)\(^{15}\), situations at a macro-level, as a means to understand its performance. Other models like the SPLISS (Sport Policies Leading to International Sport Success), developed by De Bosscher and WISE (Women, Institutionalization, Specialization, Early Learning), developed by Reiche have advocated that more specific factors at the meso and micro levels should also be considered in a comprehensive model of a country’s success.

Since our goal in this paper is to identify the elements that constitute a successful elite sport policy, we will first go through an account of the SPLISS and WISE models. We will then contest the Olympic Medal Table methodology, that serves as a reference for these analyses. Finally, based on countries results in the World Ranking of Countries in Elite Sport (WRCES)\(^{16}\), that will replace the Olympic Medal Table by giving an annual ranking of all the National Olympic Committees in all the sports recognized by GAISF, we will propose a framework of analysis that will include the macro, meso and micro level components.

**METHOD**
After going through the SPLISS and WISE models, we will explain about the limits of the Olympic Medal Table, measurement used to conduct these researches. We will then put forward the methodology of the WRCES, which compute the results obtained by all the countries taking part in the international sport movement. This performance index will allow us to have a more holistic approach to identify what it takes for a country to achieve a good performance in sport.

---


\(^{16}\) Registration certificate number 2553 signed on August 17th 2017 by the Lebanese Ministry of Economy and Commerce.

The SPLISS network, created in 2003 and led by De Bosscher, develops and shares expertise in elite sport policy in cooperation with policymakers, National Olympic Committees, international sports organizations, and researchers worldwide. Its goal was to create a framework for analysis related to successful elite sport policy.

The SPLISS model is based on nine pillars of elite sport success, which are divided into three phases: input, throughput, and output. The input phase consists of the first pillar: financial support. The second phase, the throughput, is made of the eight other pillars:

- Governance, organization, and structure of elite sport policies;
- Participation in sports;
- Talent identification and development system;
- Athletic and post-career support;
- Training facilities;
- Coaching and coach development;
- (Inter)national competition; and
- Scientific research.

The third and last phase, output, is concerned with the degree to which an organization has achieved its goal. In the case of the Olympics, output is related to the success or failure to win medals. Reiche has identified four elements that he deems significantly more relevant, and brings them together to form the WISE formula:

- Promotion of women (W) in sport. Developing women’s elite sport will strongly enhance the potential of a country to win medals;
- Institutionalization (I) of the promotion of Olympic sports. Setting up a centralized governmental sports system that offers the proper structure for athletes to develop their skills is crucial to obtain results;
- Specialization (S) in medal-promising sports. Focusing on sports where there are higher chances to win medals is a commonly used method for countries to achieve success;
- Early (E) learning in sports newly added to the Olympic program gives countries opting for this strategy an advantage over their rivals.


The Olympic Medal Table, which only rewards the top three placed competitors, can only include a limited number of countries. In fact, in the last Olympic cycle (2014 Winter Olympics and 2016 Summer Olympics), despite having a record number of countries winning medals, only 87 countries were ranked. In order to address this issue, Nassif proposed the WRCES, previously called the I3SAW ranking that allows the 206 countries that have National Olympic Committees to be included:19

- The introduction of universality and popularity coefficients for each sport; and
- A computation model that attributes to each country its share of points in at least one sport, and, consequently, its ranking based on the total number of points, which this country would have garnered in all sports.

RESULTS

By ranking all the countries, our goal is to give a holistic comparative approach to determine a framework of analysis of the factors behind success in elite sport. For this purpose, the correlations of the 2014, 2015, and 2016 versions of this ranking20 with the population, Gross Domestic Product (GDP) and scientific research output rankings of the same years were measured. This comparative study is undertaken for the following reasons:

- Population and GDP rankings21 will show the impact

---


20 See the official website of the WRCES (www.worldsportranking.com)

21 Information taken by the CIA World Factbook website (www.cia.gov/library/publications/the-world-factbook)
of demography and wealth, which were two of the macro-level factors identified by researchers in the field.\textsuperscript{22}

- Research output ranking\textsuperscript{23} will be examined, because the establishment and optimization of meso and micro factors which were identified by De Bosscher et al, and Reiche,\textsuperscript{24} cannot be achieved without an extensive knowledge in sports sciences.

There will be no comparative study between sport performance with any indicator related to political power because the political factor is related to a decision taken to succeed in sport—not a tool like wealth and population that have a direct impact on the countries performances.

The following were the results of the correlations calculus between the WRCES and the ones of the population, GDP, and research output for the years 2014, 2015, and 2016:

Table 1. Results of the correlations between the WRCES, population, GDP and research rankings for the years 2014, 2015 and 2016

<table>
<thead>
<tr>
<th>Correlation sports ranking</th>
<th>Correlation population ranking</th>
<th>Correlation GDP ranking</th>
<th>Correlation research output ranking</th>
</tr>
</thead>
<tbody>
<tr>
<td>Correlation sports ranking</td>
<td>Correlation population ranking</td>
<td>Correlation GDP ranking</td>
<td>Correlation research output ranking</td>
</tr>
<tr>
<td>2014</td>
<td>0.39</td>
<td>0.78</td>
<td>0.82</td>
</tr>
<tr>
<td>Correlation sports ranking</td>
<td>Correlation research output ranking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2014</td>
<td>0.82</td>
<td>0.76</td>
<td>0.81</td>
</tr>
</tbody>
</table>

By looking at the correlations calculus between the WRCES and the ones of the population, GDP, and research output for the years 2014, 2015, and 2016, the correlation between a large population and good sport results is weak, the correlation between a high GDP and good sport results is strong, and the one between a high research output and good sport results is very strong. Following these calculations, we can conclude that having a large population, therefore, is not an asset. Why?

Actually, the importance of wealth is strongly diminishing the importance of population. Indeed, as stated by De Bosscher and al\textsuperscript{25}, since the financial support is the first link to the performance chain, even with a limited population, an economically wealthy country will have a higher capacity to provide the resources needed to succeed.

\textsuperscript{22} See the introduction.
\textsuperscript{23} Information taken by the Scimago Journal & Country Rank, a database gathering all the papers that have been accepted for publication (www.scimagojr.com).
\textsuperscript{24} See the method.
To verify this fact, we have compared the GDP of six of the twenty most populated countries (Pakistan, Bangladesh, Philippines, Ethiopia, Vietnam and the Democratic Republic of Congo) that each have more than 75 million inhabitants with six countries that each have less than 12 million inhabitants (Belgium, Sweden, Austria, Switzerland, Denmark and Norway). Although much less populated, because of their higher GDPs, the mentioned six small countries have all better sport results than the large ones.

The same countries’ comparison has been made for the scientific research. The following table will also show how a country advanced in terms of scientific knowledge will succeed in sport even with a reduced population.

Another reason limiting the importance of population is the political interest. Without a national will to access to international recog-

Table 3. Research output, population and sport results comparisons between Pakistan, Bangladesh, Philippines, Ethiopia, Vietnam, the Democratic Republic of Congo, Belgium, Sweden, Austria, Switzerland, Denmark and Norway

<table>
<thead>
<tr>
<th>Countries</th>
<th>Population (inhab)</th>
<th>Number of publications 2014</th>
<th>Number of publications 2015</th>
<th>Number of publications 2016</th>
<th>2014 sport rank</th>
<th>2015 sport rank</th>
<th>2016 sport rank</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pakistan</td>
<td>189 000 000</td>
<td>11537</td>
<td>10962</td>
<td>13772</td>
<td>107</td>
<td>96</td>
<td>92</td>
</tr>
<tr>
<td>Bangladesh</td>
<td>161 000 000</td>
<td>3727</td>
<td>3011</td>
<td>3995</td>
<td>140</td>
<td>128</td>
<td>134</td>
</tr>
<tr>
<td>Philippines</td>
<td>100 700 00</td>
<td>2022</td>
<td>2091</td>
<td>2642</td>
<td>72</td>
<td>64</td>
<td>64</td>
</tr>
<tr>
<td>Ethiopia</td>
<td>99 390 750</td>
<td>1733</td>
<td>1691</td>
<td>1962</td>
<td>128</td>
<td>151</td>
<td>144</td>
</tr>
<tr>
<td>Vietnam</td>
<td>93 447 601</td>
<td>3955</td>
<td>4092</td>
<td>5563</td>
<td>74</td>
<td>77</td>
<td>74</td>
</tr>
<tr>
<td>D.R. Congo</td>
<td>77 266 814</td>
<td>37</td>
<td>75</td>
<td>89</td>
<td>119</td>
<td>125</td>
<td>135</td>
</tr>
<tr>
<td>Belgium</td>
<td>11 299 192</td>
<td>31464</td>
<td>29180</td>
<td>31307</td>
<td>26</td>
<td>16</td>
<td>30</td>
</tr>
<tr>
<td>Sweden</td>
<td>9 779 426</td>
<td>37326</td>
<td>35039</td>
<td>38702</td>
<td>31</td>
<td>20</td>
<td>17</td>
</tr>
<tr>
<td>Austria</td>
<td>8 544 586</td>
<td>23202</td>
<td>21818</td>
<td>23639</td>
<td>30</td>
<td>25</td>
<td>23</td>
</tr>
<tr>
<td>Switzerland</td>
<td>8 298 663</td>
<td>42000</td>
<td>39358</td>
<td>43031</td>
<td>35</td>
<td>23</td>
<td>21</td>
</tr>
<tr>
<td>Denmark</td>
<td>5 669 081</td>
<td>24338</td>
<td>23081</td>
<td>25610</td>
<td>21</td>
<td>29</td>
<td>20</td>
</tr>
<tr>
<td>Norway</td>
<td>5 210 967</td>
<td>19483</td>
<td>18228</td>
<td>20646</td>
<td>32</td>
<td>24</td>
<td>22</td>
</tr>
</tbody>
</table>

habitants with six countries that each have less than 12 million inhabitants (Belgium, Sweden, Austria, Switzerland, Denmark and Norway). Although much less populated, because of their higher GDPs, the mentioned six small countries have all better sport results than the large ones.

The same countries’ comparison has been made for the scientific research. The following table will also show how a country ad-

cognition through elite sport, winning becomes impossible. By comparing Lebanon to Estonia and Jamaica, we can see how some countries benefiting from a governmental interest in sport can perform better than others that have larger populations and even higher financial resources. Indeed, Lebanon has a population of 6.2 Millions inhabitants, more than twice the one of Jamaica (2.9 Millions) and five times the one of Estonia.

Also, the expenditures of the Lebanese government (US$ 13.53 billions in 2015) are more than three times higher than the Jamaican government (US$ 3.941 billions) and 1.5 higher than the one of Estonia (US$ 8.975 billion).

When it comes to sport however, the annual budget allocated by the Lebanese government for sport is US$2 million\textsuperscript{26}, 200 times lower than that of Jamaica (US$400 million)\textsuperscript{27} and 175 times lower than that of Estonia (US$350 million)\textsuperscript{28}.

So, as it is schematized in figure 2, we can see that the success of a country in elite sport starts first with the government will to succeed, which will allow a proper funding of the sport structure. This funding, which is highly dependent on the country’s wealth, will allow the setting up of meso and micro-level policies that require expertise in management, coaching and sports sciences, which are highly correlated to the level of research of a country.

CONCLUSION

By doing an accurate evaluation of countries performances in sport, the main finding of this work was to show that a large population is not a pre-requisite to succeed. Another one is to demonstrate that the factors determining success cannot be separated between Macro, meso and micro.

\begin{figure}[h]
\centering
\includegraphics[width=\textwidth]{figure2.png}
\caption{Factors determining countries success in sport}
\end{figure}

Success in sport requires a complex mechanism involving key-elements that must be present at all the stages, political interest and wealth at a macro-level and

\begin{itemize}
  \item \textsuperscript{26} Information given by Mr. Mazen Ramadan, head of the Lebanese Olympic delegation to Rio de Janeiro 2016.
  \item \textsuperscript{27} http://www.jamaicaobserver.com/latest-news/Government-serious-about-sport--says-PM
  \item \textsuperscript{28} European Programme of National Cultural Policy Reviews, Cultural Policy in Estonia, Council for Cultural Co-operation Starsbourg 1996245
\end{itemize}
elite sport policies at a meso and micro level.

These components need to be more deeply explored and this work therefore aims to open the door for future analysis on elite sport performance.

REFERENCES

Journal articles


Books


Documents

Registration certificate number 2553 signed on August 17th 2017 by the Lebanese Ministry of Economy and Commerce

European Programme of National Cultural Policy Reviews, Cultural Policy in Estonia, Council for Cultural Cooperation Starsbourg 1996245

Websites links

www.worldsportranking.com Official website of the World Ranking of Countries in Elite Sport

www.cia.gov/library/publications/the-world-factbook CIA World Factbook website

www.scimagojr.com Scimago Journal & Country website

http://www.jamaicaobserver.com/latestnews/GoVERNMENT-serious-about-sport--says--PM

Interviews

Information given by Mr. Mazen Ramadan, head of the Lebanese Olympic delegation to Rio de Janeiro 2016.