Abstract: This paper analyses the "Information model for the enhancement of human intelligence, for the period 2009 – 2020." The analysis and evaluation of the respective model variables, as well as the resulting growth rates have been aimed at a scientific formulation of the research results, using the most relevant theoretical principles of synergistic relations between human intelligence and memory. The basic scientific hypothesis has been proven through the direct growth rates of the given model variables: with scientific insights into synergistic relations between human intelligence and memory, it is possible to propose a new "Information model for the enhancement of human intelligence, for the period 2009 – 2020."

Key words: model, intelligence, memory, learning, health.

1 Introduction
To date a "Information model for the enhancement of human intelligence, for the period 2009 – 2020" has not been designed. With reference to the determined subject of the research, the basic hypothesis has been formulated: scientific insights into training the brain to enhance human intelligence and enable a fast and easy acquirement of information during life time, will create the prerequisites allowing individuals to adapt to globalisation requirements for life-long learning, thus ensuring their personal and general prosperity on the planet Earth.

The characteristic of people endowed with spatial and visual intelligence is that they use all senses. Persons endowed with linguistic intelligence like to listen, write, and read [1]. Persons endowed with interpersonal or "social" intelligence are characterised by good communication skills, mediation, and manipulation. Persons endowed with a balanced combination of various types of intelligence find pleasure in reading, writing, and telling stories. The worst educational innovation of the twentieth century is the introduction of IQ testing [4].

On the basis of the formulated hypothesis the basic variables of the "Information model for the enhancement of human intelligence, for the period 2009 – 2020" have been set: 1. Musical intelligence, 2. Logical-mathematical intelligence, 3. Spatial and visual intelligence, 4. Linguistic intelligence, 5. Physical-kinaesthetic intelligence, 6. Interpersonal or "social" intelligence, 7. Intrapersonal or intuitive intelligence, 8. Balanced intelligence, and 9. Intelligence testing.

The quantification of the "Information model for the enhancement of human intelligence and memory, for the period 2009 – 2020" will stem from qualitative researches, by transforming qualitative materials of the set model variables into a numerical pattern. The transformation of the world's educational system should be carried out through adequate combinations of acquiring information styles, appreciating each person's talents, and encouraging the overall development of all skills and abilities.

2 Enhancement of human intelligence
A high degree of intelligence is an advanced and accelerated brain function. Scientific researches have proved that each person has at least seven, probably even more, various "intelligence centres". People are endowed with several different types of intelligence such as linguistic, logical or mathematical, spatial and visual, musical, kinaesthetic or physical, interpersonal, and intrapersonal or introspective intelligence.

2.1 Musical Intelligence
Features of this type of intelligence include sensitivity to the pitch, rhythm, and colour of tones, sensitivity to the emotional power of music, sensitivity to the complex organisation of music, profound spirituality, and ability to play musical instruments [2].

With regard to the above assertions, the value of the variable "Musical intelligence" has been quantified for the year 2009 on a scale from 1 to 100: 51.
2.2 Logical-Mathematical Intelligence
Persons having this type of intelligence excel in accuracy, planning, using logical structure; they find pleasure in computing and using computers [2].
With regard to the above assertions, the value of the variable "Logical-mathematical intelligence" has been quantified for the year 2009 on a scale from 1 to 100: 70.

2.3 Spatial and Visual Intelligence
People having this type of intelligence use all senses, think using images, and love arts: drawing, painting, and sculpturing. They have sensibility to colours and use images for acquiring information[1].
With regard to the above assertions, the value of the variable "Spatial and visual intelligence" has been quantified for the year 2009 on a scale from 1 to 100: 70.

2.4 Linguistic Intelligence
People having this type of intelligence like listening, reading, writing, and order[1].
With regard to the above assertions, the value of the variable "Linguistic intelligence" has been quantified for the year 2009 on a scale from 1 to 100: 70.

2.5 Physical-Kinaesthetic Intelligence
People having this type of intelligence can learn best while moving, they like physical activities and sports, they are skillful craftsmen. They better remember what was done than what was said or seen, they play with objects while listening and short breaks make them nervous[4].
With regard to the above assertions, the value of the variable "Physical-kinaesthetic intelligence" has been quantified for the year 2009 on a scale from 1 to 100: 50.

2.6 Interpersonal or "Social" Intelligence
People endowed with this type of intelligence are good negotiators, have good relationships, socialise easily, have many friends, enjoy team activities, and are good at dealing with social issues[4].
With regard to the above assertions, the value of the variable "Interpersonal or "social" intelligence" has been quantified for the year 2009 on a scale from 1 to 100: 71.

2.7 Intrapersonal or Intuitive Intelligence
The features of this type of intelligence include intuition, sensitivity to one's own values, profound consciousness of one's own feelings, profound consciousness of one's own advantages and weaknesses, and appreciation of privacy in particular[3].
With regard to the above assertions, the value of the variable "Intrapersonal or intuitive intelligence" has been quantified for the year 2009 on a scale from 1 to 100: 55.

2.8 Balanced Intelligence
A person endowed with a balanced intelligence has a type of intelligence which has resulted from the approximately even synergistic impact of the above mentioned types of intelligence: musical, logical-mathematical, spatial and visual, linguistic, physical-kinaesthetic, interpersonal or "social", and intrapersonal or intuitive intelligence[4].
With regard to the above assertions, the value of the variable "Balanced intelligence" has been quantified for the year 2009 on a scale from 1 to 100: 62.

2.9 Intelligence Testing
Therefore it is necessary to constantly improve intelligence tests in order to include the elements of reviewing specific types of intelligence of an individual. This is a process that needs to be constantly upgraded on the global level [4].
With regard to the above assertions, the value of the variable "Intelligence testing" has been quantified for the year 2009 on a scale from 1 to 100: 32.

3 Quantification of the information model for the enhancement of human intelligence, for the period 2009 – 2020
The assessment of the model variables will take into consideration the synergistic impact of the following scientific aspects:
- scientific theoretical aspects of the model variables,
- values and importance of the model variables over the period which has been analysed in the research, i.e. from 2009 to 2020,
- expected values of the variables in 2015, and
- expected values of the variables in 2020.
Based on previously elaborated basic researches and on assumed estimation of the variable growths (on a scale from 1 to 100), the values of the variables have been quantified (Table 1).
Table 1  Values of the model variables

<table>
<thead>
<tr>
<th>Variables of the Model</th>
<th>Inputs yit</th>
<th>Growth</th>
<th>2009</th>
<th>2015</th>
<th>2020</th>
<th>2009/20</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Musical intelligence</td>
<td>51</td>
<td>56</td>
<td>60</td>
<td>9</td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Logical-mathematical intelligence</td>
<td>70</td>
<td>71</td>
<td>71</td>
<td>1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Spatial and visual intelligence</td>
<td>70</td>
<td>72</td>
<td>74</td>
<td>4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>4. Linguistic intelligence</td>
<td>70</td>
<td>72</td>
<td>73</td>
<td>3</td>
<td></td>
<td></td>
</tr>
<tr>
<td>5. Physical-kinaesthetic intelligence</td>
<td>50</td>
<td>52</td>
<td>55</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>6. Interpersonal or &quot;social&quot; intelligence</td>
<td>70</td>
<td>74</td>
<td>76</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>7. Intrapersonal or intuitive intelligence</td>
<td>55</td>
<td>57</td>
<td>60</td>
<td>5</td>
<td></td>
<td></td>
</tr>
<tr>
<td>8. Balanced intelligence</td>
<td>62</td>
<td>72</td>
<td>80</td>
<td>18</td>
<td></td>
<td></td>
</tr>
<tr>
<td>9. Intelligence testing</td>
<td>32</td>
<td>42</td>
<td>60</td>
<td>28</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Source: by the authors

3.1 Growth Matrix of the Information Model for the enhancement of human intelligence, for the period 2009 – 2020

Now we are about to show the growth matrix of the model:

Table 2  Growth matrix of the model

<table>
<thead>
<tr>
<th>Model variables (in %)</th>
<th>1.</th>
<th>2.</th>
<th>3.</th>
<th>4.</th>
<th>5.</th>
<th>6.</th>
<th>7.</th>
<th>8.</th>
<th>9.</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>15.0</td>
<td>12.7</td>
<td>18.2</td>
<td>12.3</td>
<td>16.4</td>
<td>11.8</td>
<td>15.0</td>
<td>11.3</td>
<td>15.0</td>
</tr>
<tr>
<td>2.</td>
<td>1.7</td>
<td>1.4</td>
<td>1.4</td>
<td>1.4</td>
<td>1.2</td>
<td>1.3</td>
<td>1.7</td>
<td>1.3</td>
<td>1.7</td>
</tr>
<tr>
<td>3.</td>
<td>6.7</td>
<td>5.6</td>
<td>5.4</td>
<td>5.5</td>
<td>7.3</td>
<td>5.3</td>
<td>6.7</td>
<td>5.3</td>
<td>6.7</td>
</tr>
<tr>
<td>4.</td>
<td>5.0</td>
<td>4.2</td>
<td>4.1</td>
<td>4.1</td>
<td>5.5</td>
<td>3.9</td>
<td>5.0</td>
<td>3.8</td>
<td>5.0</td>
</tr>
<tr>
<td>5.</td>
<td>8.3</td>
<td>7.0</td>
<td>6.8</td>
<td>6.8</td>
<td>9.1</td>
<td>6.6</td>
<td>8.3</td>
<td>6.3</td>
<td>8.3</td>
</tr>
<tr>
<td>6.</td>
<td>8.3</td>
<td>7.0</td>
<td>6.8</td>
<td>6.8</td>
<td>9.1</td>
<td>6.6</td>
<td>8.3</td>
<td>6.3</td>
<td>8.3</td>
</tr>
<tr>
<td>7.</td>
<td>8.3</td>
<td>7.0</td>
<td>6.8</td>
<td>6.8</td>
<td>9.1</td>
<td>6.6</td>
<td>8.3</td>
<td>6.3</td>
<td>8.3</td>
</tr>
<tr>
<td>8.</td>
<td>30.0</td>
<td>25.4</td>
<td>24.3</td>
<td>24.7</td>
<td>52.7</td>
<td>23.7</td>
<td>30.0</td>
<td>22.5</td>
<td>30.0</td>
</tr>
<tr>
<td>9.</td>
<td>46.7</td>
<td>39.4</td>
<td>37.8</td>
<td>38.4</td>
<td>50.9</td>
<td>36.8</td>
<td>46.7</td>
<td>35.0</td>
<td>46.7</td>
</tr>
</tbody>
</table>

Source: by the authors

3.2. Direct Growth Rates of the variables of the Information model for the enhancement of human intelligence, for the period 2009 – 2020

It is evident that the variables with the highest direct growth rates in the model will be Intelligence testing (46.7%), Balanced intelligence (22.5%), Musical intelligence (15.0%), Physical-kinaesthetic intelligence (9.1%), and Intrapersonal or intuitive intelligence (8.3%), whereas the variables with the lowest direct growth rates will include Interpersonal or "social" intelligence (6.6%), Spatial and visual intelligence (5.4%), Linguistic intelligence (4.1%), and Logical-mathematical intelligence (1.4%) (Graph 2).

After all that has been said and presented, the validity of the quantification of the set variables of the model is obvious.

Graph 2  Direct growth rates of the model

Source: Table 3

4 Conclusion

An Information model for the enhancement of human intelligence, for the period 2009 – 2020 has been designed for the very first time. Prior to designing the model, the scientific research field was determined: how to ensure that people, with the aid of their own intelligence and ability to acquire information, achieve material prerequisites and personal happiness in the globalised world.

The hypothesis has been proven through the direct growth rates of the "Information model for the enhancement of human intelligence, for the period 2009 – 2020". Likewise, all auxiliary hypotheses have been proven.

Within the Global (information) model for the enhancement of human intelligence and memory, for the period 2009 – 2020, the variable Intelligence testing will have the highest direct growth rate (46.7%) which, along with the enhancement of the Balanced intelligence (22.5%), will have impacts on the Musical intelligence (15.0%) around the world. All of this will result in the growth of the Physical-kinaesthetic intelligence (9.1%), Intrapersonal or intuitive intelligence (8.3%), and Interpersonal or "social" intelligence (6.6%). Likewise, further enhancement of the Spatial and visual intelligence (5.4%), Linguistic intelligence (4.1%), and Logical-mathematical intelligence (1.4%) is expected to take place globally by the year of 2020. These direct growth rates will lead to a rapid development worldwide, particularly in the countries with large populations, e.g. China, India, Brazil, Mexico, etc.

In compliance with the growth model, we have chosen in this paper the variables which are essential for the enhancement of human intelligence and memory. Using modelling and taking the qualitative analysis as the basis of the research, we have
determined the value of the respective variables and their inter-dependence.

REFERENCES