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Research On Effective Ways To Intelligence Quotient Of Perception Through Mobile Games

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ABSTRACT

Various methods and methods have been developed to increase human intelligence. But due to the increasing demand for mobile applications today, many teaching methods are also preparing for this stage. In particular, programs that sharpen human thinking have been developed, and from this mobile application are considered the main source. In the course of the study, we can say that it is possible to determine the quantum of perception not only by tests, but also using mobile games, where it is possible to pinpoint the activity of the human brain.

KEYWORDS

Intelligence quotient, brain-train, mathematical logic, mobile application, mobile design, algorithm, artificial intelligence, mobile games.

INTRODUCTION

Usually for the comprehensive development of children, parents' resort to various methods that allow a person of any age to learn how to increase IQ. The modern world offers many different ways to increase the brain activity of each child. As a result, it will be easier for the baby to perceive and absorb new information. Tests of cognition assess the mental activity of a person and make it possible to compare it

with others. Over the years, research has led to various debates about the fact that the mental activity of a person is related to birth, family environment or other circumstances. Psychologists have debated whether intelligence is learned or inherited, culturally specific or universal, and one ability or several abilities. While these debates are ongoing, evidence is increasing that traditional

intelligence tests measure specific forms of cognitive ability that are predictive of school functioning, but do not measure the many forms of intelligence that are beyond these more specific skills, such as music, art, and interpersonal and intrapersonal abilities. Human mental activity begins to develop growth from childhood. The IQ level of middle-aged people will be around 100-120 if we focus on the outcome of the thought test. This is the average accuracy. This means that the development of thinking should begin from childhood. The best progressive method of mental growth of children is this-arithmetic examples. This includes verbal calculation, simple mathematical actions, the ability to remember numbers and other methods. The main problem is how to correctly explain this to children. Simple lessons have not yielded their results over the years, and parents are resorting to additional lessons to cultivate their children's mental abilities. We want to announce through our research that mobile games can be the same effective solution. Mobile games are becoming more powerful in the sphere of influence on children than books and notebooks.

MATERIALS AND METHODS

The constant development of human thinking will have an inseparable link to mathematics. The organization of non-traditional forms of the process of lessons of teachers aimed at teaching mathematics subjects, the achievement of the design of the educational process based on an excellent template, the ability to make rational use of these projects will be the guarantee of thorough, in-depth acquisition of theoretical knowledge by the educators, the formation of practical skills But the science of mathematics in educational institutions did not serve to increase the test of thinking in children as expected.

The impact of technology on children and education was enormous, which led to the development of mobile applications in this

area. Children and adolescents now have their smartphones and other similar electronic devices built-in. But the introduction of mobile applications for education was profitable. Now the reader can get the desired information from anywhere, at his fingertips. Reading is a continuous process, and the focus has now completely gone to eLearning. With smartphones and training programs focused on a variety of features, students can learn what they want and take the time to understand different things, because everything is simply pressed.

The popularity of mobile games would be desirable if they served human thinking. Usually, such games are based on mathematics and mental arithmetic. Of course, logical games will need more artificial intelligence algorithms. The reason is repetitive arrays, if necessary, are also used from the database.

During the research, it became known that mobile games can be divided into 3 types. These games will help step by step to increase the quantum of intelligence.

1. First-round games:

- 1.1 Examples of simple mathematical operations. That is, we can take examples that consist of four operations and have a minimum of 5 seconds allocated for each. This game is necessary for children and is considered a minimum diet for the brain. To do this correctly, of course, it is necessary to have sufficient knowledge of numbers, numbers, and mathematical actions. For this reason, we recommend that you familiarize yourself with elementary knowledge before recommending any IQ games to children.
- 1.2 Choosing the right action. In the case of the opposite of the first game, it will consist of creating the correct equality by putting one of the four actions into

the given equation. The time given is a minimum of 5 seconds, and when you switch to a new instance, 5 seconds are given regardless of the second remaining in the previous example.

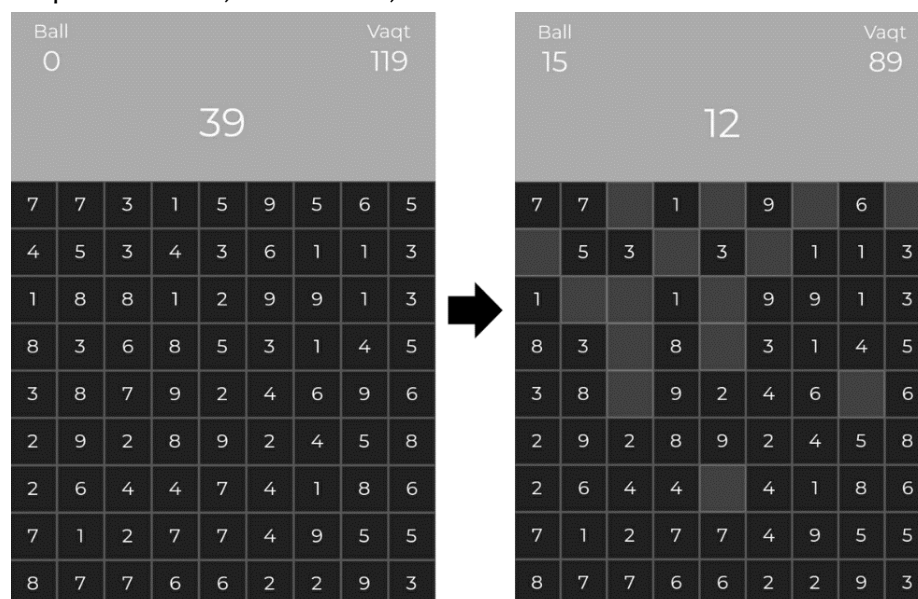
- 1.3 The usual one-point equations. Such equations are of the type of initial logical examples. At this stage, the user reaches the stage of simple perception.
- 1.4 Fast counting game. Examples of rapid calculation, which are considered the type of Mental arithmetic, serve to increase brain activity. Through it, Feelings of attraction and quick thinking begin to develop. Since the game falls into the category of the first round, only one action is drawn from the examples.

2. Second-round games:

1. Mental arithmetic. Mental arithmetic is defined as the act of adding numbers together, multiplying them and the like, in your mind, without writing them down. This technique applies primarily to the simple addition, subtraction,

multiplication and division facts with single-digit numbers. Arithmetic involves various cognitive processes and strategies depending on types of operation, numerical symbols used and so on, as evidenced by double dissociations found in brain-damaged patients with impairment of function.

2. Square root. After the first phase of basic mathematics, new concepts are now introduced. Those are root examples. It will be necessary to extract a square root from the given numbers in this. These types of games will test your ability to remember. The reason is whether we want or not, all the same, we have to remember the square root table. So, we can understand that the second round of games serves to strengthen memory.
3. Mathematical grid. To form the sum of a given number from several numbers for a given period of time. Bringing as many numbers as possible to the sum of numbers for a Minimum of 120 seconds is considered a rule of the game (Figure 1).



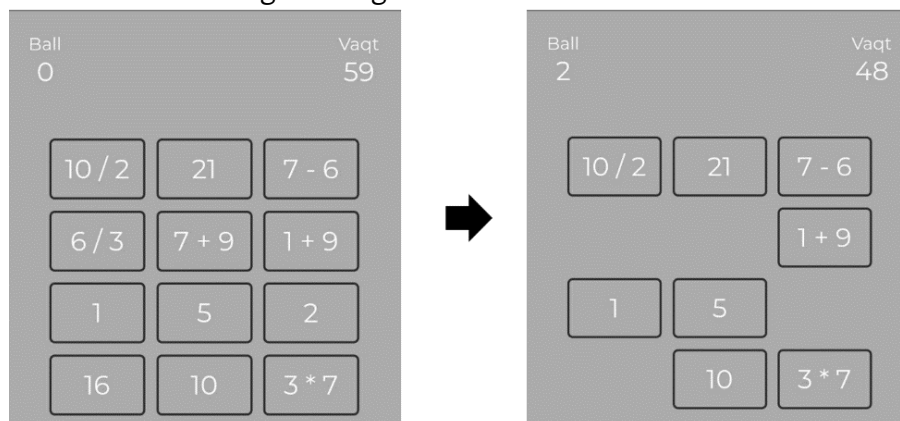
(Figure 1). The structure and principle of operation of the mathematical grid game.

4. Mathematical couples. Unlike the usual examples, through this game,

you will also have to focus, activate the memory, and solve the example

given at high speed. In the simplest form, an equal number of examples in 4x4 squares and the answer to these examples are mixed. Programming

examples of this type creates some difficulties (Figure 2).

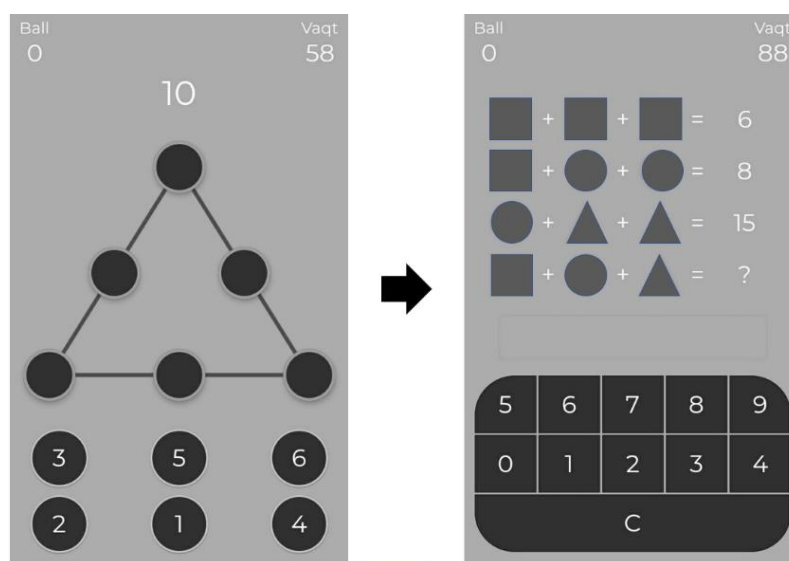


(Figure 2). The structure and principle of operation of the game of mathematical pairs.

3. Third-round games:

- 1) Magic triangle. The final stage will arrive at the actual “mind Attack” Games. In particular, the game of magic triangles requires logical calculation, unlike games that consist of simple mental arithmetic and actions. In six of the triangles, the circle will be separated and will be located at each end and in the middle of the sides. This will increase the complexity of the game by increasing the number of circles, counting the minimum appearance. When the number is poured into the circles on the three sides, their sum will have to form the given number. Such games require more logical thinking (Figure 3(a)).

- 2) Picture puzzle. In many quizzes on social networks, these games are very popular. The reason is that such games have a huge impact on the increase in attention and the ability to count. Usually in the game, polygons, animals, and fruits are used. We offer the usual polygons. The reason is that polygons serve not only to remember but also to increase mathematical ability. The game has a huge impact on the ability to remember. In primary schools, attempts are made to use pictorial data for children's memorization. Painting increases the ability to remember information. That is, if the calculation uses pictures, this will serve to increase the calculation technique (Figure 3(b)).



(Figure 3) a) Magic triangle, b) Picture puzzle

3.3 Pyramid of numbers. The game is highly ranked in terms of complexity. In the form of a pyramid, only one row of the dialed cages is poured into the number and given to the user. The participant will also need to fill the remaining folds with numbers and bring the sum of the folds in the entire row to the same appearance. The game not only embodies the ability to think mathematically but also realistically.

RESULTS

The study found that the above-mentioned game forms and similar games serve to sharpen the human brain and increase the quantum of the mind.

It is extremely difficult to predict in which area a child will be able to prove himself best and achieve success. Parents enroll their children in several classes and expect great results from each. But first, it is better to give the child the opportunity to prepare - to develop the skill of concentration, perseverance, and improve memory. Mental arithmetic will help with this. Why is mental arithmetic the best way to develop a child's IQ? There are several reasons for this:

- Mental arithmetic classes are aimed at the equal development of the left and right hemispheres of the brain. A high level of development of both hemispheres, for example, like that of Einstein, is considered a sign of genius and the key to success. Various interesting lessons in mental arithmetic can captivate any child, thereby strengthening his interest in knowledge and creativity.
- The results of mental arithmetic classes are photographic memory, increased concentration and the ability to count.
- Within 2–3 months of regular attendance at school, children can see an increase in school performance. The child completes lessons faster, manages to attend additional interesting circles and courses.

DISCUSSION

Exercises for the brain are becoming more and more familiar to us every time. This is due to the fact that the more scientists learn about the functioning of the brain, the more we realize the importance of maintaining the health of not only the body, but also our brain.

The idea that aging leads to mental breakdown is not a recent discovery in cognitive research. As William Shakespeare wrote in his play "Much Ado About Nothing", "When age comes, intelligence leaves". The good news is that recent research has shown that this idea is not entirely correct. Today's discovery suggests that the brain is flexible and renewable and, despite age, can maintain and even improve its level of productivity, especially if a person leads an active and mind-stimulating lifestyle.

CONCLUSIONS

Anyone who has ever played video games or watched the gameplay from the side can attest that immersed in virtual reality, a person experiences a huge amount of positive emotions. The fact is that at this time in the player's body the levels of the hormones endorphin and dopamine rise sharply. As a result, his psychophysiological status improves, his mood rises and the feeling of fatigue dulls.

Mobile games may not serve to increase the quantum of intelligence, which will require more reading and learning. But games can improve thinking, attention, and memory. Games for memory development, like other motor and sensory skills, lead to changes in the activated areas of the brain. Areas responsible for storing information in working memory can be as flexible as other parts of the brain. It was found that reading, chess, playing music and dancing contribute to the relative improvement of cognitive abilities and prevent the risk of acquired dementia. At the same time, scientists came to the conclusion that only constant training gave positive results. For example, if the patient played chess only once a week, then this did not give positive results.

In the course of our research, we learned about games that mainly develop the mind quantum. Human thinking has evolved over

the years, and we are achieving this very slowly. If the human brain develops faster than normal, civilization will begin to develop rapidly. For this reason, the development of human thinking is expedient.

REFERENCES

1. Ellen B. Braaten and Dennis Norman. Pediatrics in Review November 2006, 27 (11) 403-408; DOI: <https://doi.org/10.1542/pir.27-11-403>
2. Adkins, S.S. (December 2008). "The US Market for Mobile Learning Products and Services: 2008-2013 Forecast and Analysis". Ambient Insight. p. 5. Retrieved June 8, 2009.
3. Tolipov U.Q., Usmanboyeva M. Pedagogik texnologiya: nazariya va amaliyot. - Tashkent: Fan. 2005.
4. Longman. (2010). Dictionary of Contemporary English. United Kingdom, Pearson Education Limited.
5. T., Georgieva, E. and Smrikarov, A. (2004). M E-Learning: A new stage of E-Learning. Proceedings International conference on Computer Systems and Technologies, CompSysTech 2004, IV.28, 1-5.
6. McEachern, Claire, ed. (2016). "Introduction". Much Ado About Nothing. The Arden Shakespeare, Third Series (2nd revised ed.). Bloomsbury Publishing. p. 2. ISBN 978-1-903436-83-7.
7. Murphy, C., Chertoff, D., Guerrero, M., & Moffitt, K. (2014). Design Better Games. In T. Hussain & S. Coleman (Eds.), Design and Development of Training Games: Practical Guidelines from a Multidisciplinary Perspective (pp. 146-178). Cambridge: Cambridge University Press. doi:10.1017/CBO9781107280137.007
8. Burkart, J. M., Schubiger, M. N., & van Schaik, C. P. (2016). The evolution of general intelligence. Behavioral and Brain Sciences.

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9. Shipstead, Z., Redick, T. S., & Engle, R. W. (2012). Is working memory training effective? *Psychological Bulletin*, 138(4).