

MATH  
Mountains of Absolutely Terrifying Height  
(2017-1-DE03-KA201-035644)

## Evaluation Report – Usability Study of MATH App (TAM Model)

Project title: MATH  
Reference number: 2017-1-DE03-KA201-035644  
Project partner: Emilia Bogdanova

### **The setting of the testing and target group:**

This report presents the results of the usability study of Math App within the European Erasmus+ project – MATH (Mountains of absolutely terrifying height).

This evaluation document shall give an overview of the feedback about regarding the usability of the MATH Serious Game which was developed within the MATH project.

This report includes the following aspects:

Demographic data;  
Perceived Ease of Use;  
Attitude Towards Use;  
Perceived Usefulness  
Intention to use.  
The sample size is 36.

## Demographic data:

The **first chart** shows that the participants in the study are 36, divided by age, as follows:

- 12 are 11 years old, which is 33.3%;
- 1 is 11 and a half years old, which is 2.8%;
- 15 are 12 years old, which is 41.7%;
- 1 is 12 and a half years old, which is 2.8%;
- 3 are 13 years old, which is 8.3%;
- 1 is 38 years old, which is 2.8%;
- 1 is 42 years old, which is 2.8%;
- 1 is 50 years old, which is 2.8%;
- 1 is 53 years old, which is 2.8%;

36 отговора

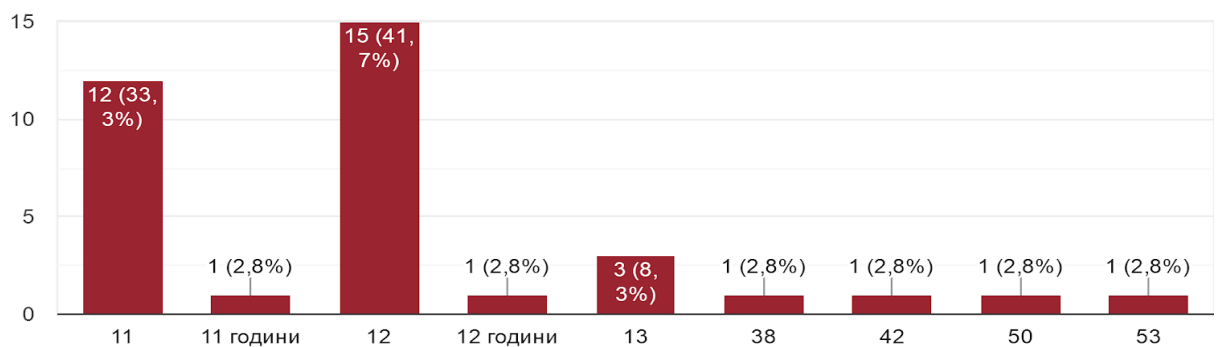


chart:1

The **second chart** shows the distribution of participants by gender:

- 10 are male, which is 27.8%;

- 26 are female, which is 72.2%.

ПОЛ:

36 отговора

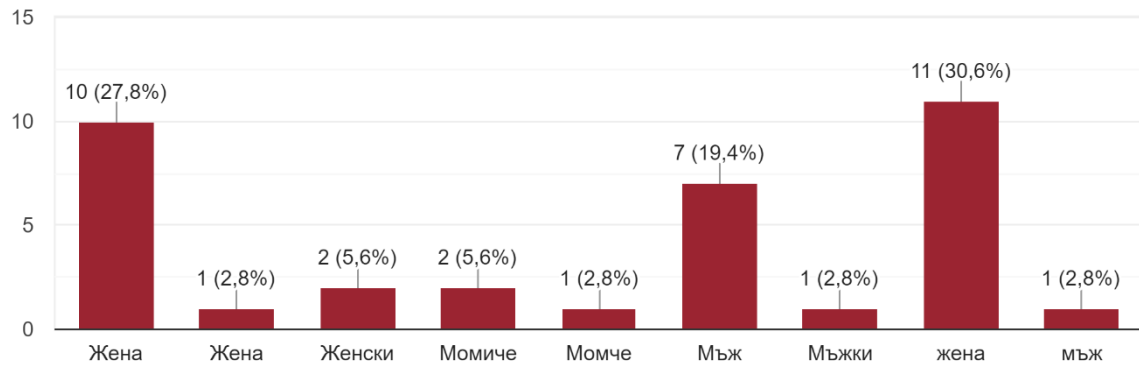


chart:2

The **third diagram** shows that the participants are:

- 35 from Bulgaria, which is 100%.
- 1 answer is incorrect, which is 2,8%

## държава:

36 отговора

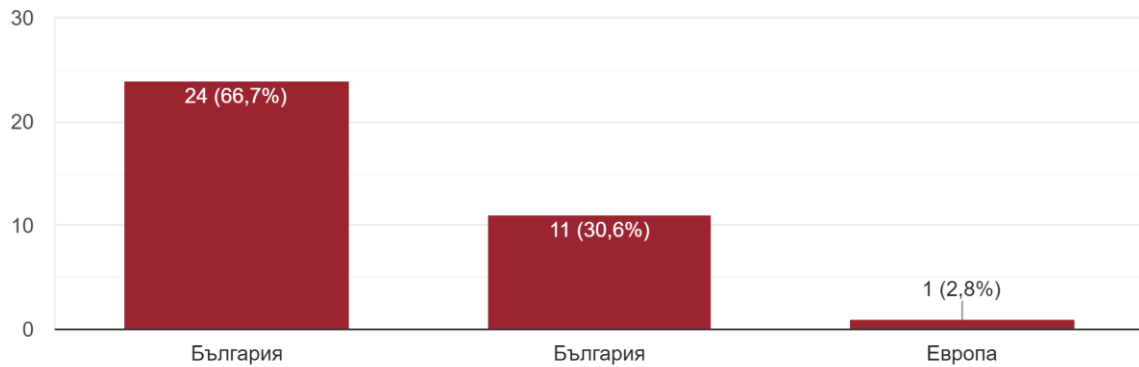


chart:3

## Perceived Ease of Use;

The **fourth diagram** shows the distribution of participants in terms of "ease of use of the game":

- On the question "My interaction with MAT is clear and understandable", only 2 strongly disagree and 34 strongly agree;

- On the question "My interaction with MAT does not require much mental effort", 13 strongly disagree and the other 23 strongly agree.
- With the statement "I found that MAT is easy to use", only 2 strongly disagree and the remaining 34 strongly agree;
- "I find it easy for the MAT to do what I want" - here 6 strongly disagree and 30 strongly agree.
- With the opposite position "Learning to use MAT would not be easy for me" - 26 participants strongly disagree and 10 strongly agree, which is encouraging for the easy introduction of the game into the learning process;
- "It would not be easy to teach or study with the help of MAT" - with this reverse position 28 strongly disagree and 8 strongly agree, which indicates the willingness of the participants to work with the game.

#### Лекота на използване (PEOU)

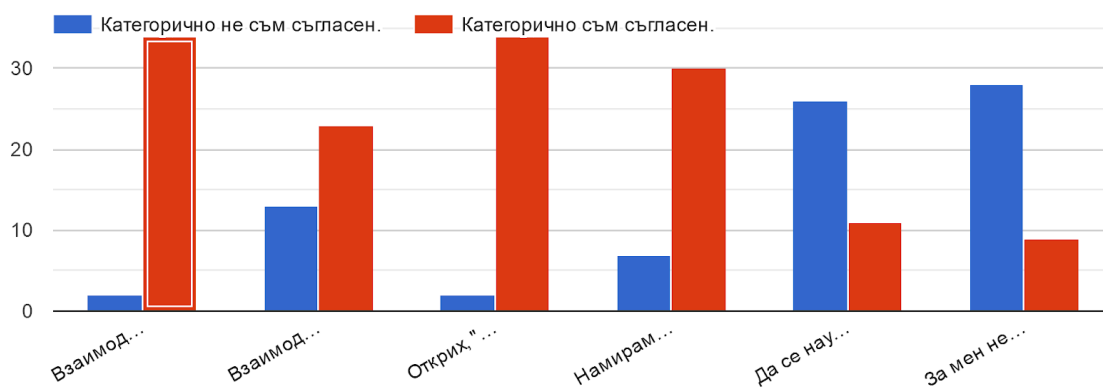


chart:4

### Attitude toward Use;

The **Fifth Diagram** observes the following results:

- "I do not like the idea of use" - only 2 strongly agree, the remaining 34 strongly disagree, indicating a desire to diversify the learning process and make more meaningful use of technology in lessons.
- "I have an overall favourable attitude towards the use of MAT" - 32 strongly agree and only 4 strongly disagree.
- "I believe it would be a good idea to use MAT" - 33 are convinced in this statement - they gave a definite agreement, which once again demonstrates the willingness of the participants to diversify and change the learning process - both learning and teaching - only 3 are strongly in disagreement.
- "Using MAT is a stupid idea" - only 1 agrees with this statement, the other 35 strongly disagree.
- "Use of MAT is useful" - 34 strongly agree, which is a huge percentage of approval for the introduction of the game in the learning process, and only 2 participants strongly disagree that the game is useful.
- "Use of MAT is interesting" - 33 strongly agree and 3 strongly disagree.

## Отношение

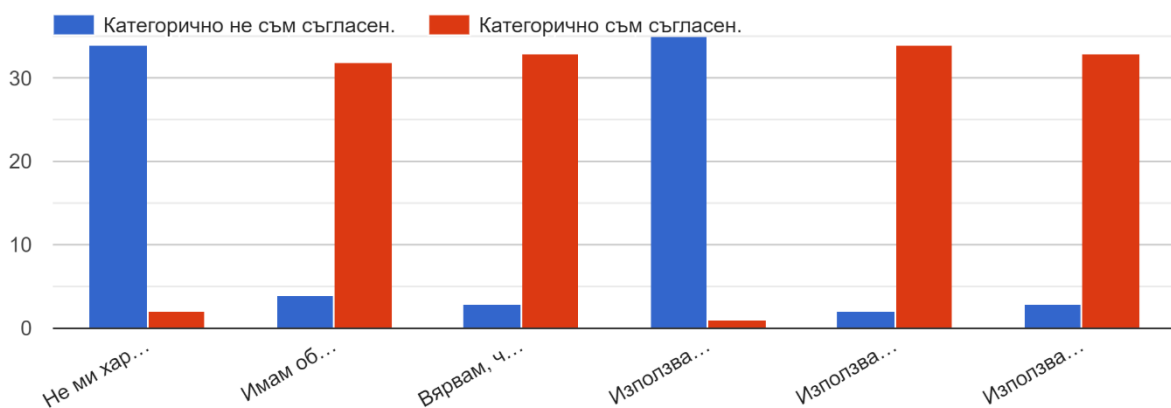


chart:5

## Perceived Usefulness;

The following chart provides information on Perceptions of usefulness by survey participants:

- 29 of the respondents strongly agree that MAT is useful in dealing with serious games; 7 strongly disagree.
- “Using MAT improves my perceptions of teaching and learning” - 30 strongly agree and 6 strongly disagree.
- "Using MAT in my work increases my productivity ..." - 31 strongly agree, and only 5 strongly disagree.
- "Using MAT enhances my performance ..." - 32 strongly agree, and only 4 strongly disagree.
- “Having a MAT is not helpful” - 26 people strongly disagree with this reverse position and 10 participants strongly agree.
- “MAT cannot improve me in the use of serious games” - 30 of the participants strongly disagree with this position and only 6 agree.

Възприемане на полезността.

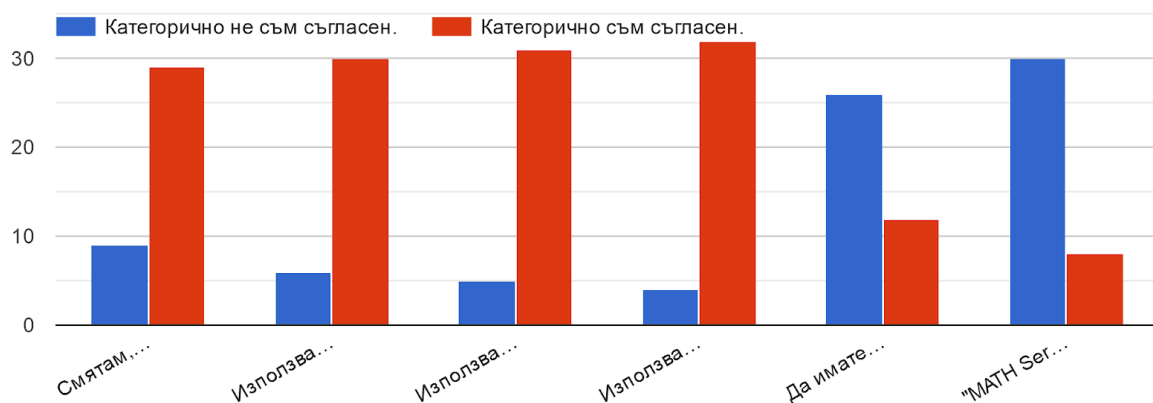


chart:6

## Intention to use;

Regarding “Intent to use”:

- "If I have access to the MAT, I do not intend to use it" - 29 of the participants strongly disagree, which means that they declare their readiness and willingness to use the game; 7 of the participants maybe will not use it and give the answer "I strongly agree" - we admit that they might have not understood the question asked, because the next question provides information about 3 who would definitely not use the game if they had it.
- Here: "If I have access, I think I would use it" - 33 strongly agree.
- "I do not intend to use MAT in the future" - 31 strongly disagree with this statement.
- "I will take another look at MAT" - 10 participants strongly disagree and 27 strongly agree.
- 34 would categorically visit MAT for teaching or teaching purposes, and only 2 would categorically not do so.
- 34 of the participants are categorically planning to use MAT, and only 2 are categorically not planning to use it.

## Намерение за употреба

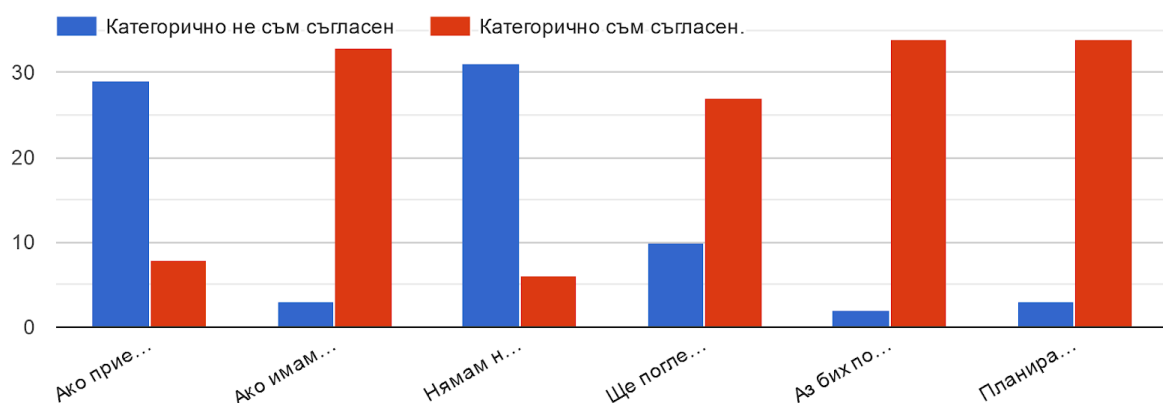


chart:7